

## **Appendix A**

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### ***Existing Information Sources***

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**APPENDIX A****EXISTING INFORMATION SOURCES**

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## **Appendix B**

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### ***Pre-PAD Questionnaire and Consultation Document***

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## APPENDIX B

## PRE-PAD QUESTIONNAIRE AND CONSULTATION DOCUMENT

This table represents organizations that received and replied to the pre-PAD Questionnaire distributed by the Licensees as well as any pre- or post-questionnaire outreach conducted. The returned questionnaires follow.

Organization Name	Address	City	State	Zip	Pre-Questionnaire Outreach	Post-Questionnaire Outreach
					X = contacted, M = left message	
California Department of Forestry and Fire Protection	1416 9th Street	Sacramento	CA	95814	X	
California Department of Parks and Recreation, Division of Boating and Waterways	1725 23rd Street, Suite 200	Sacramento	CA	95816	X	M
California Department of Fish and Wildlife	3883 Ruffin Road	San Diego	CA	92123	X	X
California Department of Parks and Recreation, Division of Boating and Waterways	One Capitol Mall, Suite 500	Sacramento	CA	95814	X	
California Department of Parks and Recreation, Hungry Valley SVRA	46001 Orwin Way	Gorman	CA	93243	M	X
California Highway Patrol, Newhall Office	28648 The Old Road	Valencia	CA	91355	X	
Castaic Lake Water Agency	27234 Bouquet Canyon Road	Santa Clarita	CA	91350	X	X
Federal Emergency Management Agency, Region IX	1111 Broadway Suite 1200	Oakland	CA	94607		
Friends of the Santa Clara River	660 Randy Drive	Newbury Park	CA	91320		
Ken Kules	3235 Lombardy Road	Pasadena	CA	91107		
City of Lancaster	44933 Fern Avenue	Lancaster	CA	93534		
City of Los Angeles	200 North Spring Street, Room 303	Los Angeles	CA	90012	X	
County of Los Angeles, Sheriff's Department	4700 Ramona Boulevard	Monterey Park	CA	91754		
Dept. of the Interior (DOI) U.S. Geological Survey (USGS) Earthquake Science Center (ESC)	525 South Wilson Avenue	Pasadena	CA	91106		
The Metropolitan Water District Of Southern California	P.O. Box 54153	Los Angeles	CA	90054	X	X

Organization Name	Address	City	State	Zip	Pre-Questionnaire Outreach	Post-Questionnaire Outreach
					X = contacted, M = left message	
Office of Historic Preservation	1725 23rd Street, Suite 100	Sacramento	CA	95816	X	X
San Geronio Pass Water Agency	1210 Beaumont Avenue	Beaumont	CA	92223		
Sierra Club, Los Padres Chapter	P.O. Box 31241	Santa Barbara	CA	93130		
State Water Resources Control Board, Division of Water Rights	1001 I Street, 14th Floor	Sacramento	CA	95814	X	X
U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service	777 Sonoma Avenue, Room 325	Santa Rosa	CA	95404	M	M
U.S. Environmental Protection Agency, Region 9, Environmental Review Section ENF 4-2	75 Hawthorne Street	San Francisco	CA	94105		X

Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

**PRE-PAD QUESTIONNAIRE**

*If you would like to receive an electronic version of the questionnaire, please contact Sherida Schouweiler at (916) 557-4550 or [sherida.schouweiler@water.ca.gov](mailto:sherida.schouweiler@water.ca.gov).*

The California Department of Water Resources (DWR) and the Los Angeles Department of Water and Power (LADWP) are preparing to relicense the Warne and Castaic Power Developments which are licensed under South SWP Hydropower, Federal Energy Regulatory Commission (FERC) Project No. 2426 (Project).

The Project is located in Los Angeles County along the West Branch of the State Water Project. The Warne Power Development facilities include Quail Lake, Lower Quail Canal, Peace Valley Pipeline Intake Embankment, Peace Valley Pipeline, William A. Warne Powerplant, and associated structures. The Castaic Power Development facilities include Pyramid Lake, Pyramid Dam, Angeles Tunnel, Castaic Powerplant, Elderberry Forebay, Elderberry Forebay Dam, and Castaic Transmission Line. LADWP owns and operates the Castaic and Elderberry Facilities; DWR owns and operates all other facilities as described above.

The existing FERC Project Boundary surrounding the Warne and Castaic Power Developments includes federal land managed by the United States Department of Agriculture, Forest Service as part of the Los Padres and Angeles National Forests and federal land administered by the United States Department of the Interior, Bureau of Land Management. The location of the Project facilities is shown on the attached map.

DWR and LADWP are preparing a Pre-Application Document (PAD) that provides FERC and other parties that may be interested in the South SWP Hydropower Relicensing with existing, relevant, and reasonably available information pertaining to the Project to help identify issues and related information needs, develop study requests, and prepare documents analyzing potential Project effects. DWR and LADWP will file the PAD with FERC and make it available to parties interested in the relicensing sometime between August 1, 2016 and January 31, 2017.

DWR and LADWP respectfully request that you complete this Pre-PAD Questionnaire to the best of your ability to help identify: 1) sources of existing, relevant and reasonably available information; 2) known or potential effects or issues associated with the operation and maintenance of the Project; and 3) the potential need for information gathering and/or studies.

**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	Chris Browder, Deputy Chief Environmental Protection
Organization:	California Dept. of Forestry & Fire Protection
Address:	PO Box 944246
	Sacramento, CA 94244-2460
Phone:	916-654-4995
Email Address:	cris.browder@fire.ca.gov

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

**2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?**

- Yes (If yes, please complete 2a thru 2f.)                       No (If no, please go to 3.)

a. If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:

<input type="checkbox"/> Geology and soils	<input type="checkbox"/> Recreation
<input type="checkbox"/> Water quantity and quality	<input type="checkbox"/> Land use
<input type="checkbox"/> Fish and aquatic resources	<input type="checkbox"/> Aesthetic resources
<input type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
<input type="checkbox"/> Species protected under the Endangered Species Act	<input type="checkbox"/> Other resources information

b. Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)


c. Where can DWR and LADWP obtain this information?


Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

d. Please indicate whether there is a specific representative (and alternate) you wish to designate for a potential follow-up contact by a DWR and LADWP representative for the resource area(s) checked above: (Additional information may be provided on sheet 5 of this questionnaire.)

**Representative Contact Information:**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

**Alternate Contact Information**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

e. Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list specific issues below.)                       No

Resource Area	Specific Issue

Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

f. *Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)*

- Yes (Please list potential studies or information needs below.)       No

Resource Area	Potential Studies or Information Needs

**3. Do you or your organization plan to participate in the Project relicensing?**

- Yes       No

**4. We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. (Additional information may be provided on sheet 5 of this questionnaire.)**

**Comments**


**To allow for any follow-up contacts that may be needed by a DWR and LADWP representative, within 45 days please return this completed Pre-PAD Questionnaire in the enclosed, stamped envelope to the address shown on the envelop.**

Alternatively, you may email a \*.pdf copy of the completed Pre-PAD Questionnaire to:

[gwen.scholl@water.ca.gov](mailto:gwen.scholl@water.ca.gov)

Thank you for your consideration.





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Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

**PRE-PAD QUESTIONNAIRE**

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The Project is located in Los Angeles County along the West Branch of the State Water Project. The Warne Power Development facilities include Quail Lake, Lower Quail Canal, Peace Valley Pipeline Intake Embankment, Peace Valley Pipeline, William A. Warne Powerplant, and associated structures. The Castaic Power Development facilities include Pyramid Lake, Pyramid Dam, Angeles Tunnel, Castaic Powerplant, Elderberry Forebay, Elderberry Forebay Dam, and Castaic Transmission Line. LADWP owns and operates the Castaic and Elderberry Facilities; DWR owns and operates all other facilities as described above.

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DWR and LADWP are preparing a Pre-Application Document (PAD) that provides FERC and other parties that may be interested in the South SWP Hydropower Relicensing with existing, relevant, and reasonably available information pertaining to the Project to help identify issues and related information needs, develop study requests, and prepare documents analyzing potential Project effects. DWR and LADWP will file the PAD with FERC and make it available to parties interested in the relicensing sometime between August 1, 2016 and January 31, 2017.

DWR and LADWP respectfully request that you complete this Pre-PAD Questionnaire to the best of your ability to help identify: 1) sources of existing, relevant and reasonably available information; 2) known or potential effects or issues associated with the operation and maintenance of the Project; and 3) the potential need for information gathering and/or studies.

**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	Don Canfield, Planning Manager
Organization:	California State Parks
Address:	1725 23rd St.
	Sacramento, CA 95816
Phone:	916-324-1574
Email Address:	don.canfield@parks.ca.gov

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

**2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?**

- Yes (If yes, please complete 2a thru 2f.)       No (If no, please go to 3.)

a. *If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:*

<input type="checkbox"/> Geology and soils	<input type="checkbox"/> Recreation
<input type="checkbox"/> Water quantity and quality	<input type="checkbox"/> Land use
<input type="checkbox"/> Fish and aquatic resources	<input type="checkbox"/> Aesthetic resources
<input type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
<input type="checkbox"/> Species protected under the Endangered Species Act	<input type="checkbox"/> Other resources information

b. *Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)*


c. *Where can DWR and LADWP obtain this information?*


Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

d. Please indicate whether there is a specific representative (and alternate) you wish to designate for a potential follow-up contact by a DWR and LADWP representative for the resource area(s) checked above: (Additional information may be provided on sheet 5 of this questionnaire.)

**Representative Contact Information:**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

**Alternate Contact Information**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

e. Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list specific issues below.)                       No

Resource Area	Specific Issue

Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

f. *Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)*

Yes (Please list potential studies or information needs below.)  No

Resource Area	Potential Studies or Information Needs

3. Do you or your organization plan to participate in the Project relicensing?

Yes  No

4. We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. (Additional information may be provided on sheet 5 of this questionnaire.)

Comments

None

To allow for any follow-up contacts that may be needed by a DWR and LADWP representative, within 45 days please return this completed Pre-PAD Questionnaire in the enclosed, stamped envelope to the address shown on the envelop.

Alternatively, you may email a \*.pdf copy of the completed Pre-PAD Questionnaire to:

[gwen.scholl@water.ca.gov](mailto:gwen.scholl@water.ca.gov)

Thank you for your consideration.



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State of California – Natural Resources Agency  
DEPARTMENT OF FISH AND WILDLIFE  
South Coast Region  
3883 Ruffin Road  
San Diego, CA 92123  
(858) 467-4201  
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor  
CHARLTON H. BONHAM, Director



August 25, 2015

Ms. Gwen Scholl  
Department of Water Resources  
P.O. Box 942836  
Sacramento, CA 95814  
gwen.scholl@water.ca.gov

**Subject: Comments on the South SWP Hydropower Relicensing, FERC Project No. 2426, Notice and Information Request for Relicensing Pre-Application (Pre-PAD) Document, Los Angeles County.**

Dear Ms. Scholl:

The California Department of Fish and Wildlife (Department) has reviewed the above-referenced Pre-Project Questionnaire for the South SWP Hydropower Relicensing, FERC Project No. 2426 (Project). The Project area is located in Los Angeles County along the West Branch of the State Water Project. The Project includes the following facilities: Quail Lake, Lower Quail Canal, Peace Valley Pipeline Intake Embankment, Peace Valley Pipeline, William A. Warne Power plant and associated structures, Pyramid Lake, Pyramid Dam, Angeles Tunnel, Castaic Power plant, Elderberry Forebay, Elderberry Forebay Dam, and Castaic Transmission Line. Los Angeles Department of Water and Power owns and operates the Castaic and Elderberry Facilities; Department of Water Resources (DWR) owns and operates all other facilities as described above.

CDFW is designated as a trustee for California's fish and wildlife (Fish and Game Code (FGC) §711.7) and has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations (FGC §1802).

Under Section 10(j) of the Federal Power Act, when issuing licenses FERC must include conditions to adequately and equitably protect, mitigate damage to, and enhance fish and wildlife (and their habitats), based on the recommendations of state and federal fish and wildlife agencies.

The Department's recommendations included in the attached Pre-Project Questionnaire (Attachment 1) have been prepared pursuant to the Department's authority as a Responsible Agency under California Environmental Quality Act (CEQA) Guidelines section 15381 over those aspects of the proposed Project that come under the purview of the California Endangered Species Act (Fish and Game Code § 2050 *et seq.*) and Fish and Game Code section 1600 *et seq.*, and pursuant to our authority as Trustee Agency with jurisdiction over natural resources affected by the Project (CEQA Guidelines § 15386) to assist DWR in avoiding or minimizing potential project impacts on biological resources.

*Conserving California's Wildlife Since 1870*

Ms. Gwen Scholl  
Department of Water Resources  
August 25, 2015  
Page 2 of 2

We appreciate the opportunity to comment on the referenced Pre-application Pre-Project Questionnaire. Questions regarding this letter and further coordination on these issues should be directed to Kelly Schmoker, Senior Environmental Scientist at (949-581-1015) and [Kelly.schmoker@wildlife.ca.gov](mailto:Kelly.schmoker@wildlife.ca.gov).

Sincerely,



Betty J. Courtney  
Environmental Program Manager I  
South Coast Region

ec: Dan Blankenship (CDFW)  
Russell Black (CDFW)  
Scott Harris (CDFW)  
Erinn Wilson (CDFW)  
Christine Found-Jackson (CDFW)  
Joanna Gibson (CDFW)  
Joshua Grover (CDFW)  
Scott Morgan (State Clearinghouse)

Attachment 1: Pre-PAD Questionnaire

# Attachment 1

Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

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## PRE-PAD QUESTIONNAIRE

*If you would like to receive an electronic version of the questionnaire, please contact Sherida Schouweiler at (916) 557-4550 or [sherida.schouweiler@water.ca.gov](mailto:sherida.schouweiler@water.ca.gov).*

The California Department of Water Resources (DWR) and the Los Angeles Department of Water and Power (LADWP) are preparing to relicense the Warne and Castaic Power Developments which are licensed under South SWP Hydropower, Federal Energy Regulatory Commission (FERC) Project No. 2426 (Project).

The Project is located in Los Angeles County along the West Branch of the State Water Project. The Warne Power Development facilities include Quail Lake, Lower Quail Canal, Peace Valley Pipeline Intake Embankment, Peace Valley Pipeline, William A. Warne Powerplant, and associated structures. The Castaic Power Development facilities include Pyramid Lake, Pyramid Dam, Angeles Tunnel, Castaic Powerplant, Elderberry Forebay, Elderberry Forebay Dam, and Castaic Transmission Line. LADWP owns and operates the Castaic and Elderberry Facilities; DWR owns and operates all other facilities as described above.

The existing FERC Project Boundary surrounding the Warne and Castaic Power Developments includes federal land managed by the United States Department of Agriculture, Forest Service as part of the Los Padres and Angeles National Forests and federal land administered by the United States Department of the Interior, Bureau of Land Management. The location of the Project facilities is shown on the attached map.

DWR and LADWP are preparing a Pre-Application Document (PAD) that provides FERC and other parties that may be interested in the South SWP Hydropower Relicensing with existing, relevant, and reasonably available information pertaining to the Project to help identify issues and related information needs, develop study requests, and prepare documents analyzing potential Project effects. DWR and LADWP will file the PAD with FERC and make it available to parties interested in the relicensing sometime between August 1, 2016 and January 31, 2017.

DWR and LADWP respectfully request that you complete this Pre-PAD Questionnaire to the best of your ability to help identify: 1) sources of existing, relevant and reasonably available information; 2) known or potential effects or issues associated with the operation and maintenance of the Project; and 3) the potential need for information gathering and/or studies.

### 1. Information about person completing the Pre-PAD Questionnaire:

Name & Title:	Kelly Schmoker, Senior Environmental Scientist
Organization:	California Department of Fish and Wildlife
Address:	3883 Ruffin Road, San Diego CA 92123
Phone:	949-581-1015
Email Address:	<a href="mailto:Kelly.schmoker@Wildlife.ca.gov">Kelly.schmoker@Wildlife.ca.gov</a>

# Attachment 1

## Pre-PAD Questionnaire

South SWP Hydropower Relicensing, FERC Project No. 2426

**2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?**

- Yes (If yes, please complete 2a thru 2f.)                       No (If no, please go to 3.)

a. If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:

<input type="checkbox"/> Geology and soils	<input checked="" type="checkbox"/> Recreation
<input checked="" type="checkbox"/> Water quantity and quality	<input type="checkbox"/> Land use
<input checked="" type="checkbox"/> Fish and aquatic resources	<input type="checkbox"/> Aesthetic resources
<input checked="" type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input checked="" type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input checked="" type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
<input checked="" type="checkbox"/> Species protected under the Endangered Species Act	<input type="checkbox"/> Other resources information

b. Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)

1) The California Natural Diversity Database (species list attached)
2) California Native Plant Society Inventory of Rare and Endangered Plants
3) Calflora Plant Database
4) CDFW fish and amphibian studies
5) Newhall Ranch Environmental Impact Report
6) Centennial Development/Tejon Ranch Environmental Impact Report
7) USFS Forest Plans and Sensitive Species Lists for Los Padres and Angeles National Forests
8) Incidental observations of birds by birders: Cornell Lab of Ornithology and National Audubon Society eBird online checklist program
9) Potential occurrences of special status wildlife species based on habitat within and adjacent to the FERC boundary: CDFW California Wildlife Habitat Relationships (CWHR) database
10) Largemouth bass population estimate for Castaic Lake, 2013.
11) General fish survey for Pyramid and Castaic lakes, 2012.
12) Creel census at Pyramid and Castaic lakes.

c. Where can DWR and LADWP obtain this information?

1) <a href="https://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp">https://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp</a>
2) <a href="http://www.cnps.org/cnps/rareplants/inventory/">http://www.cnps.org/cnps/rareplants/inventory/</a>
3) <a href="http://www.calflora.org/">http://www.calflora.org/</a>
4) Russell Black (CDFW) – 858-467-4262
5) <a href="https://nrm.dfg.ca.gov/documents/ContextDocs.aspx?cat=NewhallRanchFinal">https://nrm.dfg.ca.gov/documents/ContextDocs.aspx?cat=NewhallRanchFinal</a>
6) <a href="http://planning.lacounty.gov/case/view/specific_plan_no_02_232_centennial_specific_plan/">http://planning.lacounty.gov/case/view/specific_plan_no_02_232_centennial_specific_plan/</a> Tejon Ranch Company 4436 Lebec Road Tejon Ranch, CA 93243 (661)248-3000
7) <a href="http://www.fs.usda.gov/main/angeles/landmanagement/planning">http://www.fs.usda.gov/main/angeles/landmanagement/planning</a> and

# Attachment 1

## Pre-PAD Questionnaire

South SWP Hydropower Relicensing, FERC Project No. 2426

<a href="http://www.fs.usda.gov/main/lpnf/landmanagement/planning">http://www.fs.usda.gov/main/lpnf/landmanagement/planning</a>
8) <a href="http://www.ebird.org">www.ebird.org</a>
9) <a href="http://www.dfg.ca.gov/biogeodata/cwhr/">http://www.dfg.ca.gov/biogeodata/cwhr/</a>
10) Russell Black, CDFW 858-467-4262
11) Russell Black, CDFW 858-467-4262
12) Russell Black, CDFW 858-467-4262

d. *Please indicate whether there is a specific representative (and alternate) you wish to designate for a potential follow-up contact by a DWR and LADWP representative for the resource area(s) checked above: (Additional information may be provided on sheet 5 of this questionnaire.)*

**Representative Contact Information:**

Name & Title:	Kelly Schmoker
Organization:	California Department of Fish and Wildlife
Address:	3883 Ruffin Road, San Diego, CA 92123
Phone:	949-581-1015
Email Address:	<a href="mailto:Kelly.schmoker@wildlife.ca.gov">Kelly.schmoker@wildlife.ca.gov</a>
Resource Area(s)	Biological resources, animals, plants, fish, habitat

**Alternate Contact Information**

Name & Title:	Erinn Wilson
Organization:	California Department of Fish and Wildlife
Address:	4655 Lampson Ave., Los Alamitos, CA 90720
Phone:	562-342-7172
Email Address:	<a href="mailto:Erinn.Wilson@Wildlife.ca.gov">Erinn.Wilson@Wildlife.ca.gov</a>
Resource Area(s)	Biological resources, animals, plants, fish, habitat

e. *Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)*

Yes *(Please list specific issues below.)*

No

**Resource Area**

**Specific Issue**

# Attachment 1

## Pre-PAD Questionnaire

South SWP Hydropower Relicensing, FERC Project No. 2426

- **SE=State Endangered ST=State Threatened SSC=Ca. Species of Special Concern FP=State Fully Protected**

Fish and aquatic resources: Effects to water quantity and quality, including temperature, due to project operations and maintenance may adversely affect fish and aquatic resources as follows:

- BMI diversity.
- Fish/amphibians and their habitat, including special status species such as unarmored three-spine stickleback, SE FP (*Gasterosteus aculeatus williamsoni*), arroyo chub, SSC (*Gila orcuttii*), Santa Ana sucker, SSC (*Catostomus santaanae*), western pond turtle, SSC (*Emys marmorata*), arroyo toad, SSC (*Bufo californicus*), California red-legged frog, SSC (*Rana aurora draytonii*), and foothill yellow-legged frog, SSC (*Rana boylei*).
- Diversity, quantity, and composition of fish species.
- Fish spawning and habitat.
- Entrainment of eggs and larval fish through the hydro intake towers.
- Dewatering of fish spawning habitat.
- Western pond turtles and their habitat.

Wildlife resources:

- Project operations and maintenance may impact the migration, foraging, and nesting of bird species including special status species such as: bald eagle, FP (*Haliaeetus leucocephalus*), California condor, SE FP (*Gymnogyps californianus*), bank swallow, ST (*Riparia riparia*), Townsend's big-eared bat, ST (*Corynorhinus townsendii*), and least Bell's vireo, SE (*Vireo bellii pusillus*); and watch-list species such as osprey (*Pandion haliaetus*).
- Project operations and maintenance may impact the movement, foraging, and reproductive habits of amphibian, reptile, and mammal species, including special status species such as: arroyo toad, California red-legged frog, foothill yellow-legged frog, western spadefoot toad, SSC (*Spea hammondi*), coast horned lizard, SSC (*Phrynosoma coronatum blainvillii*), two-striped garter snake, SSC (*Thamnophis hammondi*), western pond turtle, and American badger, SSC (*Taxidea taxus*).
- Aquatic invasive species may be introduced to Quail, Pyramid and Castaic lakes and tributaries downstream of the California Aqueduct West Branch split.
- Project transmission lines may present collision and electrocution hazards to bird species, including special status and watch-list species such as bald eagle and osprey.
- Project operations and maintenance may disturb bat colonies roosting within Project structures.

Botanical resources (numbers indicate rarity ranking):

- Project operations and maintenance may disturb habitat for and displace special-status plants, such as: spreading navarretia, FE (*Navarretia fossalis*), slender-horned spineflower, SE (*Dodecahema leptoceras*) Palmer's grapplinghook, 4.2 (*Harpagonella palmeri*), slender and late-flowered mariposa-lily, 1B.2 (*Calochortus clavatus var gracilis* and *Calochortus fimbriatus*), Plummer's mariposa-lily, 4.2 (*Calochortus plummarae*), short-joint beavertail, 1B.2 (*Opuntia basilaris var. brachyclada*), San Fernando Valley spineflower, SE (*Chorizanthe parryi var. fernandina*), round-leaved filaree, 1B.1 (*California macrophylla*), California Orcutt grass, SE (*Orcuttia californica*), Nevin's barberry, SE (*Berberis nevinii*) and natural communities.
- Project effects to water quality and quantity may affect the growth, reproduction, and extent of populations of special status plants and natural communities.
- Project operations and maintenance may facilitate the spread of invasive plan.

Wetlands, riparian, and littoral habitat:

- Project effects on water quantity and quality may adversely affect the plant diversity, quantity, composition, and extent of wetland, riparian, and littoral habitats.

Species protected under the Endangered Species Act (ESA), California Endangered Species Act (CESA), State Fully Protected Species:

- Project may have impacts on reproduction, foraging, and movement/migration of ESA-listed, CESA-listed, and State Fully Protected species as referenced above in the fish and aquatic, wildlife, and botanical resources sections.

Recreation (Fish Stocking and Angling):

- The Project provides a recreational fishery; Project operations and maintenance may impede access to anglers in Quail, Pyramid and Castaic Lakes.

# Attachment 1

## Pre-PAD Questionnaire

South SWP Hydropower Relicensing, FERC Project No. 2426

- Entrainment of eggs and larval fish through the intake tower(s) may affect the forage base of the fishery in the lakes, thereby affecting angling opportunity.

f. *Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)*

- Yes (Please list potential studies or information needs below.)       No

**Resource Area**

**Potential Studies or Information Needs**

General Biological Studies (bats, mammals, birds, reptiles, amphibians, plants):

- Completion of a general biological inventory of the amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the project.
- Completion of a *recent* inventory of rare, threatened, endangered, and other sensitive species located within the project footprint and within offsite areas with the potential to be effected, including California Species of Special Concern and California Fully Protected Species (Fish and Game Code § 3511). The inventory should address seasonal variations in use of the project area and should not be limited to resident species. CDFW recommends that focused species-specific surveys be completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary.
- Bald Eagle Nesting and Wintering (including Night Roost) Surveys
- Bat Surveys
- Avian collision and electrocution
- Identification of threats to wildlife resources from operations and maintenance activities.

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Botanical Resources and Vegetation Mapping:

Completion of an assessment of the various habitat types located within the project footprint, and the creation of a map that identifies the location of each habitat type. CDFW recommends that floristic, alliance- and/or association based mapping and assessment be completed following *The Manual of California Vegetation*, second edition (Sawyer et al. 2009). Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.

- Completion of a thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see <http://www.dfg.ca.gov/habcon/plant/>).
- Non-native invasive plants.
- Seasonal wetlands and/or vernal pools.

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Stream hydrology/geomorphology studies

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Minimum flow requirements for any streams/lakes affected by the Project

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Fish Studies:

- Evaluate effects the project may have on special status fish species including on unarmored three-spine stickleback, arroyo chub, and Santa Ana sucker populations in the Project and tributaries to the Project.
- Lake fish populations, including mark-recapture population estimates for largemouth bass (*Micropterus salmoides*) (beginning of March through mid-June); surveys and population estimates should be completed over multiple seasons.
- Evaluate the changes in the lakes fisheries as a result of the new intake tower(s) construction/drawdown through comparison of pre-project fisheries data, especially the largemouth bass population, and current fisheries data.

# Attachment 1

## Pre-PAD Questionnaire

South SWP Hydropower Relicensing, FERC Project No. 2426

<ul style="list-style-type: none"> <li>• Benthic macroinvertebrates in lakes; surveys should be completed during the appropriate season.</li> <li>• Egg, larval fish, and fish survey in afterbay discharge to identify species, and estimate numbers of eggs/larval fish/fish entrained from the lake via the intake tower. Surveys should be completed over an entire season: at a minimum beginning of March through the end of August.</li> <li>• An egg, larval fish and fish survey and evaluation of impacts associated with introductions on other reservoirs receiving water from the Project.</li> <li>• Fish and aquatic invasive species surveys within Quail, Pyramid and Castaic lakes and tributaries downstream of the California Aqueduct West Branch split</li> <li>• Identification of threats to fish and aquatic resources from operations and maintenance activities.</li> </ul>
<p><u>Invasive Species Studies:</u></p> <ul style="list-style-type: none"> <li>• Aquatic, terrestrial, and botanical invasive species in and adjacent to the Project area should be surveyed for and mapped.</li> </ul>

### 3. Do you or your organization plan to participate in the Project relicensing?

Yes  No

### 4. We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. (Additional information may be provided on sheet 5 of this questionnaire.)

Comments:

Table of special status species with the potential to occur in the Project area. This is just a starting point, other species may be included as further information becomes available regarding Project size, scope, location(s), management, etc.

Species Scientific Name	Species Common Name
<i>Ammodramus savannarum</i>	grasshopper sparrow
<i>Anaxyrus californicus</i>	arroyo toad
<i>Anniella pulchra pulchra</i>	silvery legless lizard
<i>Antrozous pallidus</i>	pallid bat
<i>Artemisiospiza belli belli</i>	Bell's sage sparrow
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail
<i>Athene cunicularia</i>	burrowing owl
<i>Berberis nevinii</i>	Nevin's barberry
<i>Boechera lincolnensis</i>	Lincoln rockcress
<i>Branchinecta lynchi</i>	vernal pool fairy shrimp
<i>Buteo swainsoni</i>	Swainson's hawk
<i>California macrophylla</i>	round-leaved filaree
California Walnut Woodland	California Walnut Woodland
<i>Calochortus clavatus var. gracilis</i>	slender mariposa-lily
<i>Calochortus fimbriatus</i>	late-flowered mariposa-lily
<i>Calochortus plummerae</i>	Plummer's mariposa-lily
<i>Calystegia peirsonii</i>	Peirson's morning-glory
<i>Castilleja gleasoni</i>	Mt. Gleason paintbrush
<i>Catostomus santaanae</i>	Santa Ana sucker



# Attachment 1

## Pre-PAD Questionnaire

South SWP Hydropower Relicensing, FERC Project No. 2426

<i>Charina trivirgata</i>	rosy boa
<i>Chorizanthe parryi</i> var. <i>fernandina</i>	San Fernando Valley spineflower
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat
<i>Delphinium umbraculorum</i>	umbrella larkspur
<i>Dodecahema leptoceras</i>	slender-horned spineflower
<i>Elanus leucurus</i>	white-tailed kite
<i>Empidonax traillii extimus</i>	southwestern willow flycatcher
<i>Emys marmorata</i>	western pond turtle
<i>Eremophila alpestris actia</i>	California horned lark
<i>Euderma maculatum</i>	spotted bat
<i>Eumops perotis californicus</i>	western mastiff bat
<i>Falco mexicanus</i>	prairie falcon
<i>Gasterosteus aculeatus williamsoni</i>	unarmored threespine stickleback
<i>Gila orcuttii</i>	arroyo chub
<i>Gymnogyps californianus</i>	California condor
<i>Harpagonella palmeri</i>	Palmer's grapplinghook
<i>Helianthus inexpectatus</i>	Newhall sunflower
<i>Icteria virens</i>	yellow-breasted chat
<i>Lanius ludovicianus</i>	loggerhead shrike
<i>Lasiurus cinereus</i>	hoary bat
<i>Lepechinia rossii</i>	Ross' pitcher sage
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit
Mainland Cherry Forest	Mainland Cherry Forest
<i>Myotis yumanensis</i>	Yuma myotis
<i>Navarretia fossalis</i>	spreading navarretia
<i>Navarretia ojaiensis</i>	Ojai navarretia
<i>Navarretia setiloba</i>	Piute Mountains navarretia
<i>Neotamias speciosus speciosus</i>	lodgpole chipmunk
<i>Oncorhynchus mykiss irideus</i>	steelhead - southern California DPS
<i>Onychomys torridus ramona</i>	southern grasshopper mouse
<i>Opuntia basilaris</i> var. <i>brachyclada</i>	short-joint beavertail
<i>Orcuttia californica</i>	California Orcutt grass
<i>Phrynosoma blainvillii</i>	coast horned lizard
<i>Polioptila californica californica</i>	coastal California gnatcatcher
<i>Rana boylei</i>	foothill yellow-legged frog
<i>Rana draytonii</i>	California red-legged frog
<i>Riparia riparia</i>	bank swallow
Riversidian Alluvial Fan Sage Scrub	Riversidian Alluvial Fan Sage Scrub
<i>Salvadora hexalepis virgultea</i>	coast patch-nosed snake

# Attachment 1

## Pre-PAD Questionnaire

South SWP Hydropower Relicensing, FERC Project No. 2426

<i>Senecio aphanactis</i>	chaparral ragwort
<i>Setophaga petechia</i>	yellow warbler
Southern California Threespine Stickleback Stream	Southern California Threespine Stickleback Stream
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest
Southern Mixed Riparian Forest	Southern Mixed Riparian Forest
Southern Riparian Forest	Southern Riparian Forest
Southern Riparian Scrub	Southern Riparian Scrub
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland
Southern Willow Scrub	Southern Willow Scrub
<i>Spea hammondi</i>	western spadefoot
<i>Symphyotrichum greatae</i>	Greata's aster
<i>Taxidea taxus</i>	American badger
<i>Thamnophis hammondi</i>	two-striped garter snake
Valley Oak Woodland	Valley Oak Woodland
<i>Vireo bellii pusillus</i>	least Bell's vireo
Walnut Forest	Walnut Forest

**To allow for any follow-up contacts that may be needed by a DWR and LADWP representative, within 45 days please return this completed Pre-PAD Questionnaire in the enclosed, stamped envelope to the address shown on the envelop.**

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[gwen.scholl@water.ca.gov](mailto:gwen.scholl@water.ca.gov)

Thank you for your consideration.

**PRE-PAD QUESTIONNAIRE**

*If you would like to receive an electronic version of the questionnaire, please contact Sherida Schouweiler at (916) 557-4550 or [sherida.schouweiler@water.ca.gov](mailto:sherida.schouweiler@water.ca.gov).*

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The Project is located in Los Angeles County along the West Branch of the State Water Project. The Warne Power Development facilities include Quail Lake, Lower Quail Canal, Peace Valley Pipeline Intake Embankment, Peace Valley Pipeline, William A. Warne Powerplant, and associated structures. The Castaic Power Development facilities include Pyramid Lake, Pyramid Dam, Angeles Tunnel, Castaic Powerplant, Elderberry Forebay, Elderberry Forebay Dam, and Castaic Transmission Line. LADWP owns and operates the Castaic and Elderberry Facilities; DWR owns and operates all other facilities as described above.

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**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	Keren Dill, Chief, Loan and Grant Financial Svcs.
Organization:	Calif. State Parks, Division of Boating & Waterways
Address:	One Capitol Mall, suite 500 Sacramento CA 95814
Phone:	916-327-1809
Email Address:	Keren.Dill@Parks.ca.gov

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

**2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?**

- Yes (If yes, please complete 2a thru 2f.)                       No (If no, please go to 3.)

a. *If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:*

<input type="checkbox"/> Geology and soils	<input type="checkbox"/> Recreation
<input type="checkbox"/> Water quantity and quality	<input type="checkbox"/> Land use
<input type="checkbox"/> Fish and aquatic resources	<input type="checkbox"/> Aesthetic resources
<input type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
<input type="checkbox"/> Species protected under the Endangered Species Act	<input type="checkbox"/> Other resources information

b. *Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)*


c. *Where can DWR and LADWP obtain this information?*




Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

---

f. *Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)*

Yes (Please list potential studies or information needs below.)       No

Resource Area	Potential Studies or Information Needs

3. **Do you or your organization plan to participate in the Project relicensing?**

Yes       No

4. **We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. (Additional information may be provided on sheet 5 of this questionnaire.)**

**Comments**


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[gwen.scholl@water.ca.gov](mailto:gwen.scholl@water.ca.gov)

Thank you for your consideration.



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**PRE-PAD QUESTIONNAIRE**

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**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	CHRIS HON, SENIOR ENVIRONMENTAL SCIENTIST
Organization:	CALIFORNIA STATE PARKS - HUNGRY VALLEY
Address:	4600 ORWIN WAY GORMAN CA 93243
	P.O. BOX 1360 LEBEC CA 93243
Phone:	661-248-5719
Email Address:	Christopher.Hon@parks.ca.gov

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

**2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?**

- Yes (If yes, please complete 2a thru 2f.)                       No (If no, please go to 3.)

a. *If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:*

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<input type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
<input type="checkbox"/> Species protected under the Endangered Species Act	<input type="checkbox"/> Other resources information

b. *Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)*


c. *Where can DWR and LADWP obtain this information?*


Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

d. Please indicate whether there is a specific representative (and alternate) you wish to designate for a potential follow-up contact by a DWR and LADWP representative for the resource area(s) checked above: (Additional information may be provided on sheet 5 of this questionnaire.)

**Representative Contact Information:**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

**Alternate Contact Information**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

e. Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list specific issues below.)                       No

Resource Area	Specific Issue

Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

f. Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list potential studies or information needs below.)       No

Resource Area	Potential Studies or Information Needs

3. Do you or your organization plan to participate in the Project relicensing?

Yes       No

4. We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. (Additional information may be provided on sheet 5 of this questionnaire.)

Comments


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Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

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**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	RICK MILER, SERGEANT
Organization:	C.H.P NEWHALL AREA
Address:	28648 THE OLD RD.
	VALENCIA, CA 91355
Phone:	(661) 294-5540
Email Address:	RMILER@CHP.CA.GOV

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

**2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?**

- Yes (If yes, please complete 2a thru 2f.)                       No (If no, please go to 3.)

a. If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:

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<input type="checkbox"/> Water quantity and quality	<input type="checkbox"/> Land use
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<input type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
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b. Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)


c. Where can DWR and LADWP obtain this information?


Pre-PAD Questionnaire  
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d. Please indicate whether there is a specific representative (and alternate) you wish to designate for a potential follow-up contact by a DWR and LADWP representative for the resource area(s) checked above: (Additional information may be provided on sheet 5 of this questionnaire.)

**Representative Contact Information:**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

**Alternate Contact Information**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

e. Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list specific issues below.)                       No

Resource Area	Specific Issue

Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

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f. *Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)*

- Yes (Please list potential studies or information needs below.)       No

Resource Area	Potential Studies or Information Needs

3. **Do you or your organization plan to participate in the Project relicensing?**

- Yes       No

4. **We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. (Additional information may be provided on sheet 5 of this questionnaire.)**

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**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	<i>Dirk Marks</i>
Organization:	<i>Castaic Lake Water Agency</i>
Address:	<i>27234 Bourquet Canyon Road Santa Clarita CA 91350</i>
Phone:	<i>(661) 513-1297</i>
Email Address:	<i>dmarks@clwa.org</i>

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?

- Yes (If yes, please complete 2a thru 2f.)                       No (If no, please go to 3.)

a. If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:

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<input checked="" type="checkbox"/> Water quantity and quality	<input checked="" type="checkbox"/> Land use
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<input type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
<input type="checkbox"/> Species protected under the Endangered Species Act	<input type="checkbox"/> Other resources information

b. Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)

- |   |
|---|
| ① State Water Project Contract between CLWA and DWR   |
| ② Storage and Release of Local Runoff Agreement<br>(for Castaic Reservoir between DWR, Newhall Land<br>United Water Conservation District and Newhall County<br>Water District) |
| ③ One Valley One Vision General Plan.   |

c. Where can DWR and LADWP obtain this information?

- |   |
|---|
| Items 1 and 2 - State Water Project Analysis Office |
| Item 3 City of Santa Clarita                        |
|   |
|   |
|   |
|   |

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

d. Please indicate whether there is a specific representative (and alternate) you wish to designate for a potential follow-up contact by a DWR and LADWP representative for the resource area(s) checked above: (Additional information may be provided on sheet 5 of this questionnaire.)

**Representative Contact Information:**

Name & Title:	Dirk Marks
Organization:	Castaic Lake Water Agency
Address:	27234 Bouquet Canyon Road Santa Clarita CA 91350
Phone:	(661) 513-1297
Email Address:	dmarks@clwa.org
Resource Area(s)	Water Supply, Water Quality,

**Alternate Contact Information**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

e. Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list specific issues below.)       No

Resource Area	Specific Issue
Water Supply:	Supply Availability Facility Reliability
Water Quality:	Chloride Bromide Turbidity
	Direct or indirect potable reuse of recycled water

Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

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f. *Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)*

Yes (Please list potential studies or information needs below.)       No

**Resource Area**

**Potential Studies or Information Needs**

<i>Impact of reservoir and conveyance facility operations on bromide and chloride concentrations</i>

3. **Do you or your organization plan to participate in the Project relicensing?**

Yes       No

4. **We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. (Additional information may be provided on sheet 5 of this questionnaire.)**

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AUG 03 2015

U.S. Department of Homeland Security  
FEMA Region IX  
1111 Broadway, Suite 1200  
Oakland, CA. 94607-4052



**FEMA**

July 28, 2015

Sherida Schouweiler  
State of California, Department of Water Resources  
Hydropower License Planning and Compliance Office  
P. O. Box 942836  
2033 Howe Avenue, Suite 220  
Sacramento, California 95825

Dear Ms. Schouweiler:

This is in response to your request for comments regarding the South SWP Hydropower Relicensing, FERC Project No. 2426, Notice and Information Request for Relicensing Pre-Application Document, City of Los Angeles, CA.

Please review the current effective countywide Flood Insurance Rate Maps (FIRMs) for the County (Community Number 065043) and City of Los Angeles (Community Number 060137), Maps revised. Please note that the City of Los Angeles, Los Angeles County, California is a participant in the National Flood Insurance Program (NFIP). The minimum, basic NFIP floodplain management building requirements are described in Vol. 44 Code of Federal Regulations (44 CFR), Sections 59 through 65.

A summary of these NFIP floodplain management building requirements are as follows:

- All buildings constructed within a riverine floodplain, (i.e., Flood Zones A, AO, AH, AE, and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map.
- If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any *development* must not increase base flood elevation levels. **The term *development* means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials.** A hydrologic and hydraulic analysis must be performed *prior* to the start of development, and must demonstrate that the development would not cause any rise in base flood levels. No rise is permitted within regulatory floodways.

Sherida Schouweiler  
Page 2  
July 28, 2015

- All buildings constructed within a coastal high hazard area, (any of the “V” Flood Zones as delineated on the FIRM), must be elevated on pilings and columns, so that the lowest horizontal structural member, (excluding the pilings and columns), is elevated to or above the base flood elevation level. In addition, the posts and pilings foundation and the structure attached thereto, is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.
- Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision. In accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA’s Flood Map Revision Application Packages, please refer to the FEMA website at <http://www.fema.gov/business/nfip/forms.shtm>.

**Please Note:**

Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. Please contact the local community’s floodplain manager for more information on local floodplain management building requirements. The Los Angeles City floodplain manager can be reached by calling Gary L. Moore, City Manager, at (213) 485-4935. The Los Angeles County floodplain manager can be reached by calling George De La O, Senior Civil Engineer, at (626) 458-7155.

If you have any questions or concerns, please do not hesitate to call Michael Hornick of the Mitigation staff at (510) 627-7260.

Sincerely,



Gregor Blackburn, CFM, Branch Chief  
Floodplain Management and Insurance Branch

cc:

George De La O, Senior Civil Engineer, Watershed Management Division, Los Angeles County  
Gary L. Moore, City Manager, City of Los Angeles  
Garret Tam Sing/Salomon Miranda, State of California, Department of Water Resources,  
Southern Region Office  
Michael Hornick, NFIP Planner, DHS/FEMA Region IX  
Alessandro Amaglio, Environmental Officer, DHS/FEMA Region IX

Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

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**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	RON BOTTOFF CHAIRMAN
Organization:	FRIENDS OF THE SANTA CLARA RIVER
Address:	660 RANDY DRIVE
	NEWBURY PARK, CA 91320
Phone:	805-498-4323
Email Address:	bottorffm@verizon.net

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

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- Yes (If yes, please complete 2a thru 2f.)       No (If no, please go to 3.)

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b. Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)


c. Where can DWR and LADWP obtain this information?


Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

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**Representative Contact Information:**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

**Alternate Contact Information**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

e. Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list specific issues below.)

No

Resource Area	Specific Issue

Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

---

f. *Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)*

Yes (Please list potential studies or information needs below.)

No

**Resource Area**

**Potential Studies or Information Needs**

Resource Area	Potential Studies or Information Needs

3. **Do you or your organization plan to participate in the Project relicensing?**

Yes

No

4. **We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. (Additional information may be provided on sheet 5 of this questionnaire.)**

**Comments**


**To allow for any follow-up contacts that may be needed by a DWR and LADWP representative, within 45 days please return this completed Pre-PAD Questionnaire in the enclosed, stamped envelope to the address shown on the envelop.**

Alternatively, you may email a \*.pdf copy of the completed Pre-PAD Questionnaire to:

[gwen.scholl@water.ca.gov](mailto:gwen.scholl@water.ca.gov)

Thank you for your consideration.



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**PRE-PAD QUESTIONNAIRE**

*If you would like to receive an electronic version of the questionnaire, please contact Sherida Schouweiler at (916) 557-4550 or [sherida.schouweiler@water.ca.gov](mailto:sherida.schouweiler@water.ca.gov).*

The California Department of Water Resources (DWR) and the Los Angeles Department of Water and Power (LADWP) are preparing to relicense the Warne and Castaic Power Developments which are licensed under South SWP Hydropower, Federal Energy Regulatory Commission (FERC) Project No. 2426 (Project).

The Project is located in Los Angeles County along the West Branch of the State Water Project. The Warne Power Development facilities include Quail Lake, Lower Quail Canal, Peace Valley Pipeline Intake Embankment, Peace Valley Pipeline, William A. Warne Powerplant, and associated structures. The Castaic Power Development facilities include Pyramid Lake, Pyramid Dam, Angeles Tunnel, Castaic Powerplant, Elderberry Forebay, Elderberry Forebay Dam, and Castaic Transmission Line. LADWP owns and operates the Castaic and Elderberry Facilities; DWR owns and operates all other facilities as described above.

The existing FERC Project Boundary surrounding the Warne and Castaic Power Developments includes federal land managed by the United States Department of Agriculture, Forest Service as part of the Los Padres and Angeles National Forests and federal land administered by the United States Department of the Interior, Bureau of Land Management. The location of the Project facilities is shown on the attached map.

DWR and LADWP are preparing a Pre-Application Document (PAD) that provides FERC and other parties that may be interested in the South SWP Hydropower Relicensing with existing, relevant, and reasonably available information pertaining to the Project to help identify issues and related information needs, develop study requests, and prepare documents analyzing potential Project effects. DWR and LADWP will file the PAD with FERC and make it available to parties interested in the relicensing sometime between August 1, 2016 and January 31, 2017.

DWR and LADWP respectfully request that you complete this Pre-PAD Questionnaire to the best of your ability to help identify: 1) sources of existing, relevant and reasonably available information; 2) known or potential effects or issues associated with the operation and maintenance of the Project; and 3) the potential need for information gathering and/or studies.

**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	Ken Kules
Organization:	
Address:	3235 Lombardy Rd.
Phone:	626-755-4651
Email Address:	kules.ken@gmail.com

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

**2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?**

- Yes (If yes, please complete 2a thru 2f.)                       No (If no, please go to 3.)

a. *If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:*

<input type="checkbox"/> Geology and soils	<input type="checkbox"/> Recreation
<input type="checkbox"/> Water quantity and quality	<input type="checkbox"/> Land use
<input type="checkbox"/> Fish and aquatic resources	<input type="checkbox"/> Aesthetic resources
<input type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
<input type="checkbox"/> Species protected under the Endangered Species Act	<input type="checkbox"/> Other resources information

b. *Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)*


c. *Where can DWR and LADWP obtain this information?*


Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

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f. *Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)*

Yes (Please list potential studies or information needs below.)       No

Resource Area	Potential Studies or Information Needs

3. **Do you or your organization plan to participate in the Project relicensing?**

Yes       No

4. **We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. (Additional information may be provided on sheet 5 of this questionnaire.)**

**Comments**


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Thank you for your consideration.

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

d. Please indicate whether there is a specific representative (and alternate) you wish to designate for a potential follow-up contact by a DWR and LADWP representative for the resource area(s) checked above: (Additional information may be provided on sheet 5 of this questionnaire.)

**Representative Contact Information:**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

**Alternate Contact Information**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

e. Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list specific issues below.)                       No

Resource Area	Specific Issue

Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

**PRE-PAD QUESTIONNAIRE**

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**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	BRIAN S. LUDICKE, PLANNING DIRECTOR
Organization:	CITY OF LANCASTER
Address:	44933 FERN AVENUE
	LANCASTER, CA 93534
Phone:	661-723-6105
Email Address:	bludicke@cityoflanasterca.org

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

**2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?**

- Yes (If yes, please complete 2a thru 2f.)                       No (If no, please go to 3.)

*a. If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:*

<input type="checkbox"/> Geology and soils	<input type="checkbox"/> Recreation
<input type="checkbox"/> Water quantity and quality	<input type="checkbox"/> Land use
<input type="checkbox"/> Fish and aquatic resources	<input type="checkbox"/> Aesthetic resources
<input type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
<input type="checkbox"/> Species protected under the Endangered Species Act	<input type="checkbox"/> Other resources information

*b. Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)*


*c. Where can DWR and LADWP obtain this information?*


Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

d. Please indicate whether there is a specific representative (and alternate) you wish to designate for a potential follow-up contact by a DWR and LADWP representative for the resource area(s) checked above: (Additional information may be provided on sheet 5 of this questionnaire.)

**Representative Contact Information:**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

**Alternate Contact Information**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

e. Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list specific issues below.)                       No

Resource Area	Specific Issue







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**PRE-PAD QUESTIONNAIRE**

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**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	Sabrina Bornstein, Senior Policy Analyst
Organization:	Office of Mayor Eric Garcetti, City of Los Angeles
Address:	200 N. Spring St. Room 303 Los Angeles CA 90012
Phone:	
Email Address:	sabrina.bornstein@lacity.org

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

**2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?**

Yes (If yes, please complete 2a thru 2f.)

No (If no, please go to 3.)

a. If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:

<input type="checkbox"/> Geology and soils	<input type="checkbox"/> Recreation
<input type="checkbox"/> Water quantity and quality	<input type="checkbox"/> Land use
<input type="checkbox"/> Fish and aquatic resources	<input type="checkbox"/> Aesthetic resources
<input type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
<input type="checkbox"/> Species protected under the Endangered Species Act	<input type="checkbox"/> Other resources information

b. Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)


c. Where can DWR and LADWP obtain this information?


Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

d. Please indicate whether there is a specific representative (and alternate) you wish to designate for a potential follow-up contact by a DWR and LADWP representative for the resource area(s) checked above: (Additional information may be provided on sheet 5 of this questionnaire.)

**Representative Contact Information:**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

**Alternate Contact Information**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

e. Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list specific issues below.)                       No

Resource Area	Specific Issue

Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

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f. *Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)*

Yes (Please list potential studies or information needs below.)       No

Resource Area	Potential Studies or Information Needs

3. **Do you or your organization plan to participate in the Project relicensing?**

Yes       No

4. **We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. (Additional information may be provided on sheet 5 of this questionnaire.)**

**Comments**


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Alternatively, you may email a \*.pdf copy of the completed Pre-PAD Questionnaire to:

[gwen.scholl@water.ca.gov](mailto:gwen.scholl@water.ca.gov)

Thank you for your consideration.



*Jim McDonnell, Sheriff*

*County of Los Angeles*  
**Sheriff's Department Headquarters**

*4700 Ramona Boulevard  
Monterey Park, California 91754-2169*



August 13, 2015

Ted Craddock, Chief  
Hydropower License Planning and Compliance Office  
California Department of Water Resources  
P.O. Box 942836  
Sacramento, California 94236-0001

Dear Mr. Craddock:

**RESPONSE TO NOTICE AND INFORMATION REQUEST  
FOR RELICENSING PRE-APPLICATION DOCUMENT  
SOUTH STATE WATER PROJECT HYDROPOWER RELICENSING  
FEDERAL ENERGY REGULATORY COMMISSION PROJECT NO. 2426**

The Los Angeles County Sheriff's Department (Department) provides the attached information in response to your Notice and Information Request for Relicensing Pre-Application Document (Notice), dated July 8, 2015, for South State Water Project (SWP) Hydropower Relicensing, Federal Energy Regulatory Commission (FERC) Project No. 2426 (Project).

The Department was identified as a possible source of information pertaining to existing Warne and Castaic Power Development facilities located along the West Branch of the State Water Project in Los Angeles County. These facilities include Quail Lake, Lower Quail Canal, Peace Valley Pipeline Intake Embankment, Peace Valley Pipeline, William A. Warne Powerplant, Pyramid Lake, Pyramid Dam, Angeles Tunnel, Castaic Powerplant, Elderberry Forebay, Elderberry Forebay Dam, Castaic Transmission Line, and associated structures. The Notice included a Pre-Application Document (PAD) questionnaire, which seeks sources of existing, relevant, and reasonably available information regarding known or potential effects or issues associated with the continued operation and maintenance of the Project, and the potential need for information gathering and/or studies.

Pursuant to the Notice, the Department completed the PAD questionnaire (attached).

Also, for future reference, the Department provides the following updated contact information for all requests for information, review comments, California Environmental Quality Act documents, and other related correspondence:

Tracey Jue, Director  
Facilities Planning Bureau  
Los Angeles County Sheriff's Department  
1000 South Fremont Avenue  
Building A9-East, 5<sup>th</sup> Floor, Unit 47  
Alhambra, California 91803

Attention: Lester Miyoshi, Departmental Facilities Planner

Should you need any clarification or have further questions regarding this matter, please contact me at (626) 300-1933, or your staff may contact Lester Miyoshi at (626) 300-3012.

Sincerely,

JIM McDONNELL, SHERIFF

A handwritten signature in black ink, appearing to read 'T. Jue', is positioned above the typed name.

Tracey Jue, Director  
Facilities Planning Bureau



Mr. Craddock

-2-

August 13, 2015

TJ:LM:lm/mm

Attachment

c: David Culver, Assistant Director, Facilities Planning Bureau (FPB)  
Meghan Wang, Supervising Facilities Project Manager, FPB  
Lester Miyoshi, Departmental Facilities Planner, FPB  
Chrono  
(ENV- South SWP Hydropower Relicensing RFI)

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**PRE-PAD QUESTIONNAIRE**

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The California Department of Water Resources (DWR) and the Los Angeles Department of Water and Power (LADWP) are preparing to relicense the Warne and Castaic Power Developments which are licensed under South SWP Hydropower, Federal Energy Regulatory Commission (FERC) Project No. 2426 (Project).

The Project is located in Los Angeles County along the West Branch of the State Water Project. The Warne Power Development facilities include Quail Lake, Lower Quail Canal, Peace Valley Pipeline Intake Embankment, Peace Valley Pipeline, William A. Warne Powerplant, and associated structures. The Castaic Power Development facilities include Pyramid Lake, Pyramid Dam, Angeles Tunnel, Castaic Powerplant, Elderberry Forebay, Elderberry Forebay Dam, and Castaic Transmission Line. LADWP owns and operates the Castaic and Elderberry Facilities; DWR owns and operates all other facilities as described above.

The existing FERC Project Boundary surrounding the Warne and Castaic Power Developments includes federal land managed by the United States Department of Agriculture, Forest Service as part of the Los Padres and Angeles National Forests and federal land administered by the United States Department of the Interior, Bureau of Land Management. The location of the Project facilities is shown on the attached map.

DWR and LADWP are preparing a Pre-Application Document (PAD) that provides FERC and other parties that may be interested in the South SWP Hydropower Relicensing with existing, relevant, and reasonably available information pertaining to the Project to help identify issues and related information needs, develop study requests, and prepare documents analyzing potential Project effects. DWR and LADWP will file the PAD with FERC and make it available to parties interested in the relicensing sometime between August 1, 2016 and January 31, 2017.

DWR and LADWP respectfully request that you complete this Pre-PAD Questionnaire to the best of your ability to help identify: 1) sources of existing, relevant and reasonably available information; 2) known or potential effects or issues associated with the operation and maintenance of the Project; and 3) the potential need for information gathering and/or studies.

**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	Tracey Jue, Director
Organization:	Los Angeles County Sheriff's Department, Facilities Planning Bureau
Address:	1000 South Fremont Avenue, Building A9-East, Fifth Floor, Unit 47
	Alhambra, California 91803
	Attention: Lester Miyoshi, Departmental Facilities Planner
Phone:	(626) 300-1933
Email Address:	TJue@lasd.org

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

**2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?**

- Yes (If yes, please complete 2a thru 2f.)                       No (If no, please go to 3.)

a. *If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:*

<input type="checkbox"/> Geology and soils	<input type="checkbox"/> Recreation
<input type="checkbox"/> Water quantity and quality	<input type="checkbox"/> Land use
<input type="checkbox"/> Fish and aquatic resources	<input type="checkbox"/> Aesthetic resources
<input type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
<input type="checkbox"/> Species protected under the Endangered Species Act	<input type="checkbox"/> Other resources information

b. *Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)*


c. *Where can DWR and LADWP obtain this information?*


Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

d. Please indicate whether there is a specific representative (and alternate) you wish to designate for a potential follow-up contact by a DWR and LADWP representative for the resource area(s) checked above: (Additional information may be provided on sheet 5 of this questionnaire.)

**Representative Contact Information:**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

**Alternate Contact Information**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

e. Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list specific issues below.)                       No

Resource Area	Specific Issue

Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

f. *Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)*

Yes (Please list potential studies or information needs below.)       No

Resource Area	Potential Studies or Information Needs

**3. Do you or your organization plan to participate in the Project relicensing?**

Yes       No

**4. We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. (Additional information may be provided on sheet 5 of this questionnaire.)**

**Comments**

The Los Angeles County Sheriff's Department's Parks Bureau provides law enforcement and public safety services to various County recreational facilities. The Bureau's Lake Operations Unit patrols Castaic Lake and Pyramid Lake. Specially-trained deputies enforce all State and local boating laws, enforce Fish and Game regulations, execute open-water and underwater rescue operations, respond to and investigate boating accidents, respond to and extinguish vessel fires, provide emergency medical services, conduct Boating Under the Influence investigations, assist disabled vessels, and provide public education services regarding boating safety and security.

The Department is not a participant in relicensing procedures for the South SWP Hydropower facilities. Nor does the Department possess any information pertaining to existing environmental conditions at South SWP Hydropower facilities, or potential effects of continued operation and maintenance of those facilities.

However, should the continued operation and maintenance of South SWP Hydropower facilities involve construction activities that will affect, or could potentially affect, boating operations at Castaic and/or Pyramid Lakes, or to law enforcement resources or operations provided by the Department at those locations, please provide the appropriate notification during the planning and environmental review processes. Notification should be submitted to Tracey Jue, Director, Los Angeles County Sheriff's Department, Facilities Planning Bureau, 1000 South Fremont Avenue, Building A9-East, Fifth Floor, Unit 47, Alhambra, California, 91803, (626) 300-1933, TJue@lasd.org. Alternatively, you or your staff may contact Lester Miyoshi, Departmental Facilities Planner, at (626) 300-3012, LHMIyosh@lasd.org, regarding this matter.

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**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	Daniel Determan Geodesist / GPS Network Coordinator
Organization:	Dept. of the Interior (DOI), U.S. Geological Survey (USGS), Earthquake Science Center (ESC)
Address:	Pasadena Field Office
	525 South Wilson Avenue
	Pasadena, Ca. 91106
Phone:	(626) 583-6729
Email Address:	ddeterman@usgs.gov

**2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?**

- Yes (If yes, please complete 2a thru 2f.)                       No (If no, please go to 3.)

a. If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:

<input type="checkbox"/> Geology and soils	<input type="checkbox"/> Recreation
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<input type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
<input type="checkbox"/> Species protected under the Endangered Species Act	<input checked="" type="checkbox"/> Other resources information

b. Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)

<p>The U.S. Geological Survey (USGS) Earthquake Science Center (ESC) has recorded, and continues to record seismic and geodetic data in the area of this project. This data is freely and openly available through <a href="http://www.data.scec.org">www.data.scec.org</a> (for seismic data) and through <a href="http://www.scign.org">www.scign.org</a> (for geodetic data). For specific Geodetic Data: The daily GPS Rinex files are archived at <a href="ftp://data-out.unavco.org/pub/rinex/obs/">ftp://data-out.unavco.org/pub/rinex/obs/</a>. The daily time series GPS data are at <a href="http://earthquake.usgs.gov/monitoring/gps/">http://earthquake.usgs.gov/monitoring/gps/</a>. The real-time GPS data may be accessed at <a href="http://www.scign.org/realtime/">http://www.scign.org/realtime/</a> or <a href="http://www.escweb.wr.usgs.gov/share/highrate-ppp/sub/?region=scalif">http://www.escweb.wr.usgs.gov/share/highrate-ppp/sub/?region=scalif</a>.</p>

c. Where can DWR and LADWP obtain this information?

<p>All seismic and geodetic data are freely and openly available through <a href="http://www.data.scec.org">www.data.scec.org</a> (for seismic data) and through <a href="http://www.scign.org">www.scign.org</a> (for geodetic data).</p> <p>Specific Geodetic Data: The daily (15 second interval) GPS Rinex files are archived at <a href="ftp://data-out.unavco.org/pub/rinex/obs/">ftp://data-out.unavco.org/pub/rinex/obs/</a>. The daily time series GPS data are at <a href="http://earthquake.usgs.gov/monitoring/gps/">http://earthquake.usgs.gov/monitoring/gps/</a>. The real-time (1 second interval) GPS data may be accessed at <a href="http://www.scign.org/realtime/">http://www.scign.org/realtime/</a> or <a href="http://www.escweb.wr.usgs.gov/share/highrate-ppp/sub/?region=scalif">http://www.escweb.wr.usgs.gov/share/highrate-ppp/sub/?region=scalif</a>.</p>

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

d. Please indicate whether there is a specific representative (and alternate) you wish to designate for a potential follow-up contact by a DWR and LADWP representative for the resource area(s) checked above: (Additional information may be provided on sheet 5 of this questionnaire.)

**Representative Contact Information:**

Name & Title:	Daniel Determan Geodesist / GPS Network Coordinator
Organization:	Dept. of the Interior (DOI), U.S. Geological Survey (USGS), Earthquake Science Center (ESC)
Address:	Pasadena Field Office
	525 South Wilson Avenue
	Pasadena, CA. 91106
Phone:	(626) 583-6729
Email Address:	ddeterman@usgs.gov
Resource Area(s)	Geodesy (GPS Data)

**Alternate Contact Information**

Name & Title:	Valerie Thomas Supervisory Geophysicist / Project Manager
Organization:	Dept. of the Interior (DOI), U.S. Geological Survey (USGS), Earthquake Science Center (ESC)
Address:	Pasadena Field Office
	525 South Wilson Avenue
	Pasadena, CA. 91106
Phone:	(626) 583-7820
Email Address:	vthomas@usgs.gov
Resource Area(s)	Seismology (Seismic Data)

e. Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list specific issues below.)                       No

Resource Area	Specific Issue

Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

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f. *Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)*

Yes (Please list potential studies or information needs below.)       No

Resource Area	Potential Studies or Information Needs

3. **Do you or your organization plan to participate in the Project relicensing?**

Yes       No

4. **We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. (Additional information may be provided on sheet 5 of this questionnaire.)**

**Comments**


**To allow for any follow-up contacts that may be needed by a DWR and LADWP representative, within 45 days please return this completed Pre-PAD Questionnaire in the enclosed, stamped envelope to the address shown on the envelop.**

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[gwen.scholl@water.ca.gov](mailto:gwen.scholl@water.ca.gov)

Thank you for your consideration.



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**PRE-PAD QUESTIONNAIRE**

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The California Department of Water Resources (DWR) and the Los Angeles Department of Water and Power (LADWP) are preparing to relicense the Warne and Castaic Power Developments which are licensed under South SWP Hydropower, Federal Energy Regulatory Commission (FERC) Project No. 2426 (Project).

The Project is located in Los Angeles County along the West Branch of the State Water Project. The Warne Power Development facilities include Quail Lake, Lower Quail Canal, Peace Valley Pipeline Intake Embankment, Peace Valley Pipeline, William A. Warne Powerplant, and associated structures. The Castaic Power Development facilities include Pyramid Lake, Pyramid Dam, Angeles Tunnel, Castaic Powerplant, Elderberry Forebay, Elderberry Forebay Dam, and Castaic Transmission Line. LADWP owns and operates the Castaic and Elderberry Facilities; DWR owns and operates all other facilities as described above.

The existing FERC Project Boundary surrounding the Warne and Castaic Power Developments includes federal land managed by the United States Department of Agriculture, Forest Service as part of the Los Padres and Angeles National Forests and federal land administered by the United States Department of the Interior, Bureau of Land Management. The location of the Project facilities is shown on the attached map.

DWR and LADWP are preparing a Pre-Application Document (PAD) that provides FERC and other parties that may be interested in the South SWP Hydropower Relicensing with existing, relevant, and reasonably available information pertaining to the Project to help identify issues and related information needs, develop study requests, and prepare documents analyzing potential Project effects. DWR and LADWP will file the PAD with FERC and make it available to parties interested in the relicensing sometime between August 1, 2016 and January 31, 2017.

DWR and LADWP respectfully request that you complete this Pre-PAD Questionnaire to the best of your ability to help identify: 1) sources of existing, relevant and reasonably available information; 2) known or potential effects or issues associated with the operation and maintenance of the Project; and 3) the potential need for information gathering and/or studies.

**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	Sarah Bartlett
Organization:	Metropolitan Water District of Southern CA
Address:	700 N Alameda St Los Angeles CA 90012
Phone:	213 217 6166
Email Address:	sbarlett@mwdh2o.com

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?

Yes (If yes, please complete 2a thru 2f.)                       No (If no, please go to 3.)

a. If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:

<input type="checkbox"/> Geology and soils	<input type="checkbox"/> Recreation
<input checked="" type="checkbox"/> Water quantity and quality	<input type="checkbox"/> Land use
<input type="checkbox"/> Fish and aquatic resources	<input type="checkbox"/> Aesthetic resources
<input type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
<input type="checkbox"/> Species protected under the Endangered Species Act	<input type="checkbox"/> Other resources information

b. Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)

As previously provided to DWR in June 2015, Metropolitan collects water quality samples at Check 66 of the CA Aqueduct

c. Where can DWR and LADWP obtain this information?

Contact staff listed in d



Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

d. Please indicate whether there is a specific representative (and alternate) you wish to designate for a potential follow-up contact by a DWR and LADWP representative for the resource area(s) checked above: (Additional information may be provided on sheet 5 of this questionnaire.)

**Representative Contact Information:**

Name & Title:	Stephen Reynolds, Senior Limnologist
Organization:	Metropolitan Water District of Southern CA
Address:	700 Moreno Ave La Verne CA 91750
Phone:	909 392 5313
Email Address:	sreynolds@mwdh2o.com
Resource Area(s)	water quality

**Alternate Contact Information**

Name & Title:	Sarah Bartlett Resource Specialist
Organization:	Metropolitan Water District of Southern CA
Address:	700 N Alameda St Los Angeles CA 90012
Phone:	213 217 6166
Email Address:	sbartlett@mwdh2o.com
Resource Area(s)	water quality

e. Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list specific issues below.)       No

Resource Area	Specific Issue

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

f. *Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)*

Yes (Please list potential studies or information needs below.)      No

Resource Area	Potential Studies or Information Needs

3. **Do you or your organization plan to participate in the Project relicensing?**

Yes      No

4. **We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. (Additional information may be provided on sheet 5 of this questionnaire.)**

**Comments**


To allow for any follow-up contacts that may be needed by a DWR and LADWP representative, within 45 days please return this completed Pre-PAD Questionnaire in the enclosed, stamped envelope to the address shown on the envelop.

Alternatively, you may email a \*.pdf copy of the completed Pre-PAD Questionnaire to:  
[gwen.scholl@water.ca.gov](mailto:gwen.scholl@water.ca.gov)

Thank you for your consideration.



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**PRE-PAD QUESTIONNAIRE**

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The California Department of Water Resources (DWR) and the Los Angeles Department of Water and Power (LADWP) are preparing to relicense the Warne and Castaic Power Developments which are licensed under South SWP Hydropower, Federal Energy Regulatory Commission (FERC) Project No. 2426 (Project).

The Project is located in Los Angeles County along the West Branch of the State Water Project. The Warne Power Development facilities include Quail Lake, Lower Quail Canal, Peace Valley Pipeline Intake Embankment, Peace Valley Pipeline, William A. Warne Powerplant, and associated structures. The Castaic Power Development facilities include Pyramid Lake, Pyramid Dam, Angeles Tunnel, Castaic Powerplant, Elderberry Forebay, Elderberry Forebay Dam, and Castaic Transmission Line. LADWP owns and operates the Castaic and Elderberry Facilities; DWR owns and operates all other facilities as described above.

The existing FERC Project Boundary surrounding the Warne and Castaic Power Developments includes federal land managed by the United States Department of Agriculture, Forest Service as part of the Los Padres and Angeles National Forests and federal land administered by the United States Department of the Interior, Bureau of Land Management. The location of the Project facilities is shown on the attached map.

DWR and LADWP are preparing a Pre-Application Document (PAD) that provides FERC and other parties that may be interested in the South SWP Hydropower Relicensing with existing, relevant, and reasonably available information pertaining to the Project to help identify issues and related information needs, develop study requests, and prepare documents analyzing potential Project effects. DWR and LADWP will file the PAD with FERC and make it available to parties interested in the relicensing sometime between August 1, 2016 and January 31, 2017.

DWR and LADWP respectfully request that you complete this Pre-PAD Questionnaire to the best of your ability to help identify: 1) sources of existing, relevant and reasonably available information; 2) known or potential effects or issues associated with the operation and maintenance of the Project; and 3) the potential need for information gathering and/or studies.

**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	Kathleen Forrest, Historian II
Organization:	California Office of Historic Preservation
Address:	1725 23 <sup>rd</sup> Ave., Suite 100
	Sacramento, CA 95815
Phone:	916-445-7022
Email Address:	<a href="mailto:Kathleen.forrest@parks.ca.gov">Kathleen.forrest@parks.ca.gov</a>

**2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?**

- Yes (If yes, please complete 2a thru 2f.)                       No (If no, please go to 3.)

a. If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:

<input type="checkbox"/> Geology and soils	<input type="checkbox"/> Recreation
<input type="checkbox"/> Water quantity and quality	<input type="checkbox"/> Land use
<input type="checkbox"/> Fish and aquatic resources	<input type="checkbox"/> Aesthetic resources
<input type="checkbox"/> Wildlife resources	<input checked="" type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
<input type="checkbox"/> Species protected under the Endangered Species Act	<input type="checkbox"/> Other resources information

b. Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)

Cultural resources studies of the FERC boundary may have been previously completed.

c. Where can DWR and LADWP obtain this information?

Please contact the appropriate California Historical Resources Information System (CHRIS) facility. For a list of CHRIS facilities and which counties they serve, please see OHP's website, here
<a href="http://ohp.parks.ca.gov/pages/1068/files/IC_Roster.pdf">http://ohp.parks.ca.gov/pages/1068/files/IC_Roster.pdf</a>

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

d. Please indicate whether there is a specific representative (and alternate) you wish to designate for a potential follow-up contact by a DWR and LADWP representative for the resource area(s) checked above: (Additional information may be provided on sheet 5 of this questionnaire.)

**Representative Contact Information:**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

**Alternate Contact Information**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

e. Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list specific issues below.)                       No

Resource Area	Specific Issue
Cultural Resources	FERC is required to comply with Section 106 of the National
	Historic Preservation Act (NRHP), including the identification and evaluation of historic properties,
	finding of effect for the issuance of a FERC license (the undertaking), and resolution of effects.

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

f. *Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)*

Yes (Please list potential studies or information needs below.)       No

Resource Area	Potential Studies or Information Needs
Cultural Resources	The FERC boundary will have to be surveyed for cultural resources, including historic buildings and structures, archaeological sites, ethnographic properties, and traditional cultural properties. Any identified resources will have to be evaluated for their eligibility for the NRHP, and any effects to those resources avoided or mitigated. Additionally, Native American tribes must be consulted for the duration of the undertaking regarding effect on historic properties of significance to Indian tribes.

**3. Do you or your organization plan to participate in the Project relicensing?**

Yes       No

**4. We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. (Additional information may be provided on sheet 5 of this questionnaire.)**

Comments
The OHP participates in FERC's Section 106 consultation process.

**To allow for any follow-up contacts that may be needed by a DWR and LADWP representative, within 45 days please return this completed Pre-PAD Questionnaire in the enclosed, stamped envelope to the address shown on the envelop.**

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[gwen.scholl@water.ca.gov](mailto:gwen.scholl@water.ca.gov)

Thank you for your consideration.







Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

**PRE-PAD QUESTIONNAIRE**

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DWR and LADWP are preparing a Pre-Application Document (PAD) that provides FERC and other parties that may be interested in the South SWP Hydropower Relicensing with existing, relevant, and reasonably available information pertaining to the Project to help identify issues and related information needs, develop study requests, and prepare documents analyzing potential Project effects. DWR and LADWP will file the PAD with FERC and make it available to parties interested in the relicensing sometime between August 1, 2016 and January 31, 2017.

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**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	Jeff Davis, General Manager
Organization:	San Geronimo Pass Water Agency
Address:	1210 Beaumont Ave Beaumont, CA 92223
Phone:	951-845-2577
Email Address:	jdavis@sgpwa.com

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

**2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?**

- Yes (If yes, please complete 2a thru 2f.)                       No (If no, please go to 3.)

a. *If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:*

<input type="checkbox"/> Geology and soils	<input type="checkbox"/> Recreation
<input type="checkbox"/> Water quantity and quality	<input type="checkbox"/> Land use
<input type="checkbox"/> Fish and aquatic resources	<input type="checkbox"/> Aesthetic resources
<input type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
<input type="checkbox"/> Species protected under the Endangered Species Act	<input type="checkbox"/> Other resources information

b. *Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)*


c. *Where can DWR and LADWP obtain this information?*


JUL 22 2015

**PRE-PAD QUESTIONNAIRE**

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**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	Jim Hines, Conservation Director
Organization:	Sierra Club - Los Padres Chapter
Address:	957 Olympia Avenue Ventura, CA 93004
Phone:	(805) 340-9266
Email Address:	jhcasitas@gmail.com

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

**2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?**

- Yes (If yes, please complete 2a thru 2f.)                       No (If no, please go to 3.)

a. *If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:*

<input type="checkbox"/> Geology and soils	<input type="checkbox"/> Recreation
<input type="checkbox"/> Water quantity and quality	<input type="checkbox"/> Land use
<input type="checkbox"/> Fish and aquatic resources	<input type="checkbox"/> Aesthetic resources
<input type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
<input type="checkbox"/> Species protected under the Endangered Species Act	<input type="checkbox"/> Other resources information

b. *Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)*


c. *Where can DWR and LADWP obtain this information?*


Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

d. Please indicate whether there is a specific representative (and alternate) you wish to designate for a potential follow-up contact by a DWR and LADWP representative for the resource area(s) checked above: (Additional information may be provided on sheet 5 of this questionnaire.)

**Representative Contact Information:**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

**Alternate Contact Information**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

e. Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list specific issues below.)

No

Resource Area	Specific Issue

Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

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f. Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list potential studies or information needs below.)       No

Resource Area	Potential Studies or Information Needs

3. Do you or your organization plan to participate in the Project relicensing?

Yes       No

4. We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. (Additional information may be provided on sheet 5 of this questionnaire.)

Comments

I am concerned about any impacts which the relicensing will have on habitat for endangered Steelhead trout.

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[gwen.scholl@water.ca.gov](mailto:gwen.scholl@water.ca.gov)

Thank you for your consideration.





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AUG 31 2015



EDMUND G. BROWN JR.  
GOVERNOR



MATTHEW RODRIGUEZ  
SECRETARY FOR  
ENVIRONMENTAL PROTECTION

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**State Water Resources Control Board**

**AUG 27 2015**

Ms. Gwen Scholl  
Department of Water Resources  
Hydropower License Planning and Compliance Office  
P.O. Box 942836  
Sacramento, CA 94236

Mr. John Dennis  
Los Angeles Department of Water and Power  
Power Planning and Development  
P.O. Box 51111  
Los Angeles, CA 90051-5700

Dear Ms. Scholl and Mr. Dennis:

**PRE-PAD QUESTIONNAIRE FOR THE SOUTH STATE WATER PROJECT, FEDERAL ENERGY REGULATORY COMMISSION PROJECT NUMBER 2426**

Thank you for the opportunity to provide information related to the South State Water Project (South SWP) in the attached pre-preliminary application document (pre-PAD) questionnaire. The State Water Resources Control Board (State Water Board) intends to be an active participant in the relicensing of Federal Energy Regulatory Commission (FERC) Project No. 2426. Two separate pre-PAD questionnaires were sent out by the Department of Water Resources (DWR) and the Los Angeles Department of Water and Power (LADWP) as their intent is to separate the existing South SWP into two new licenses. Only one questionnaire is attached however, as the State Water Board information is the same for both portions of the existing project.

If there are any questions about the content of the pre-PAD questionnaire, please contact me, Jeffrey Parks, at (916) 341-5319 or at [jeff.parks@waterboards.ca.gov](mailto:jeff.parks@waterboards.ca.gov). The State Water Board looks forward to working with DWR and LADWP on the South SWP relicensing.

Written correspondence should be addressed as follows:

State Water Resources Control Board  
Division of Water Rights  
Attn: Jeffrey Parks  
P.O. Box 2000  
Sacramento, CA 95814

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FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

1001 I Street, Sacramento, CA 95814 | Mailing Address: P.O. Box 100, Sacramento, Ca 95812-0100 | [www.waterboards.ca.gov](http://www.waterboards.ca.gov)

AUG 27 2015

Ms. Gwen Scholl  
Mr. John Dennis

- 2 -

Sincerely,



Jeffrey Parks  
Water Resource Control Engineer  
Water Quality Certification Program

Enclosure

cc:

Mr. Kurt Berchtold  
Santa Ana RWQCB  
3737 Main Street, Suite 500  
Riverside, CA 92501-3348

Ms. Patty Kouyoumdjian  
Lahontan RWQCB  
14440 Civic Drive, Suite 200  
Victorville, CA 92392

Mr. Samuel Unger  
Los Angeles RWQCB  
320 W. 4th Street, Suite 200  
Los Angeles, CA 90013

**PRE-PAD QUESTIONNAIRE**

*If you would like to receive an electronic version of the questionnaire, please contact Sherida Schouweiler at (916) 557-4550 or [sherida.schouweiler@water.ca.gov](mailto:sherida.schouweiler@water.ca.gov).*

The California Department of Water Resources (DWR) and the Los Angeles Department of Water and Power (LADWP) are preparing to relicense the Warne and Castaic Power Developments which are licensed under South SWP Hydropower, Federal Energy Regulatory Commission (FERC) Project No. 2426 (Project).

The Project is located in Los Angeles County along the West Branch of the State Water Project. The Warne Power Development facilities include Quail Lake, Lower Quail Canal, Peace Valley Pipeline Intake Embankment, Peace Valley Pipeline, William A. Warne Powerplant, and associated structures. The Castaic Power Development facilities include Pyramid Lake, Pyramid Dam, Angeles Tunnel, Castaic Powerplant, Elderberry Forebay, Elderberry Forebay Dam, and Castaic Transmission Line. LADWP owns and operates the Castaic and Elderberry Facilities; DWR owns and operates all other facilities as described above.

The existing FERC Project Boundary surrounding the Warne and Castaic Power Developments includes federal land managed by the United States Department of Agriculture, Forest Service as part of the Los Padres and Angeles National Forests and federal land administered by the United States Department of the Interior, Bureau of Land Management. The location of the Project facilities is shown on the attached map.

DWR and LADWP are preparing a Pre-Application Document (PAD) that provides FERC and other parties that may be interested in the South SWP Hydropower Relicensing with existing, relevant, and reasonably available information pertaining to the Project to help identify issues and related information needs, develop study requests, and prepare documents analyzing potential Project effects. DWR and LADWP will file the PAD with FERC and make it available to parties interested in the relicensing sometime between August 1, 2016 and January 31, 2017.

DWR and LADWP respectfully request that you complete this Pre-PAD Questionnaire to the best of your ability to help identify: 1) sources of existing, relevant and reasonably available information; 2) known or potential effects or issues associated with the operation and maintenance of the Project; and 3) the potential need for information gathering and/or studies.

**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	Jeffrey Parks, Water Resource Control Engineer
Organization:	State Water Resources Control Board
Address:	1001 I Street, 14 <sup>th</sup> Floor
	Sacramento CA, 95814
Phone:	916 341-5319
Email Address:	Jeff.parks@waterboards.ca.gov

**2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?**

**Yes (If yes, please complete 2a thru 2f.)**                       **No (If no, please go to 3.)**

a. *If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:*

<input type="checkbox"/> Geology and soils	<input type="checkbox"/> Recreation
<input checked="" type="checkbox"/> Water quantity and quality	<input type="checkbox"/> Land use
<input checked="" type="checkbox"/> Fish and aquatic resources	<input type="checkbox"/> Aesthetic resources
<input type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
<input type="checkbox"/> Species protected under the Endangered Species Act	<input type="checkbox"/> Other resources information

b. *Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)*

Water Quality Certification for the Re-Operation of Pyramid Lake – Order WQ 2009-0007
Supporting Documents for the above Water Quality Certification

c. *Where can DWR and LADWP obtain this information?*

<a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/401_certifications.shtml">http://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/401_certifications.shtml</a>
<a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/ceqa_projects.shtml#aqueduct">http://www.waterboards.ca.gov/waterrights/water_issues/programs/water_quality_cert/ceqa_projects.shtml#aqueduct</a>

Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

d. Please indicate whether there is a specific representative (and alternate) you wish to designate for a potential follow-up contact by a DWR and LADWP representative for the resource area(s) checked above: (Additional information may be provided on sheet 5 of this questionnaire.)

**Representative Contact Information:**

Name & Title:	Same as above
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

**Alternate Contact Information**

Name & Title:	Susan Monheit, Senior Environmental Scientist
Organization:	State Water Resources Control Board
Address:	same
Phone:	916 341-5341
Email Address:	Susan.monheit@waterboards.ca.gov
Resource Area(s)	

e. Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list specific issues below.)  No

Resource Area	Specific Issue
Water Quality – Elevated mercury levels in Project reservoirs.	
Water Quantity/Biological – Effects on Arroyo Toad from Project stream flows.	

Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

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f. *Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)*

Yes (Please list potential studies or information needs below.)       No

Resource Area	Potential Studies or Information Needs
Water Quality – Water sampling at reservoir and stream locations throughout Project.	
Water Quantity/Biological – Instream flow studies sufficient to assess impacts to aquatic species.	
Others as identified through the relicensing process.	

3. Do you or your organization plan to participate in the Project relicensing?

Yes       No

4. We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. *(Additional information may be provided on sheet 5 of this questionnaire.)*

**Comments**

See cover letter.

**To allow for any follow-up contacts that may be needed by a DWR and LADWP representative, within 45 days please return this completed Pre-PAD Questionnaire in the enclosed, stamped envelope to the address shown on the envelop.**

Alternatively, you may email a \*.pdf copy of the completed Pre-PAD Questionnaire to:

[gwen.scholl@water.ca.gov](mailto:gwen.scholl@water.ca.gov)

Thank you for your consideration.





**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE  
WEST COAST REGION  
650 Capitol Mall, Suite 5-100  
Sacramento, California 95814-4706

October 5, 2015

In response refer to:  
WF:WCR:FERC P-2426

Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, D.C. 20426

Re: NOAA's National Marine Fisheries Service files a Pre-PAD Questionnaire for the South State Water Project's West Branch Hydroelectric Project, Federal Energy Regulatory Commission Project P-2426, Los Angeles County, California.

Dear Secretary Bose:

The U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS), West Coast Region will participate in the relicensing of the South State Water Project's (SWP) West Branch Hydroelectric Project Facilities, Federal Energy Regulatory Commission (FERC) Project P-2426 (Project). NMFS provides a Pre-PAD Questionnaire for the Project in Enclosure A to FERC and the Licensees (California Department of Water Resources and the Los Angeles Department of Water and Power).

If you have questions about NMFS' response, please contact William Foster, at 916-930-3617.

Sincerely,

A handwritten signature in black ink, appearing to read "S. Edmondson".

Steve Edmondson  
FERC Branch Supervisor  
NMFS, West Coast Region

Enclosures

cc: FERC Service List for P-2426

**Enclosure A**

**UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION**

**South State Water Project’s West Branch            )**  
**)**  
**California Department of Water Resources            )**  
**and Los Angeles Department of Water & Power        )**  
**)**  
**Piru and Castaic Creeks, California                    )**

**P-2426**

**NOAA’S NATIONAL MARINE FISHERIES SERVICE,  
WEST COAST REGION, E-FILES  
A PRE-PAD QUESTIONNAIRE FOR THE PROJECT**

**Pre-PAD Questionnaire**  
**South SWP Hydropower Relicensing, FERC Project No. 2426**

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The Project is located in Los Angeles County along the West Branch of the State Water Project. The Warne Power Development facilities include Quail Lake, Lower Quail Canal, Peace Valley Pipeline Intake Embankment, Peace Valley Pipeline, William A. Warne Powerplant, and associated structures. The Castaic Power Development facilities include Pyramid Lake, Pyramid Dam, Angeles Tunnel, Castaic Powerplant, Elderberry Forebay, Elderberry Forebay Dam, and Castaic Transmission Line. LADWP owns and operates the Castaic and Elderberry Facilities; DWR owns and operates all other facilities as described above.

The existing FERC Project Boundary surrounding the Warne and Castaic Power Developments includes federal land managed by the United States Department of Agriculture, Forest Service as part of the Los Padres and Angeles National Forests and federal land administered by the United States Department of the Interior, Bureau of Land Management. The location of the Project facilities is shown on the attached map.

DWR and LADWP are preparing a Pre-Application Document (PAD) that provides FERC and other parties that may be interested in the South SWP Hydropower Relicensing with existing, relevant, and reasonably available information pertaining to the Project to help identify issues and related information needs, develop study requests, and prepare documents analyzing potential Project effects. DWR and LADWP will file the PAD with FERC and make it available to parties interested in the relicensing sometime between August 1, 2016 and January 31, 2017.

DWR and LADWP respectfully request that you complete this Pre-PAD Questionnaire to the best of your ability to help identify: 1) sources of existing, relevant and reasonably available information; 2) known or potential effects or issues associated with the operation and maintenance of the Project; and 3) the potential need for information gathering and/or studies.

**Pre-PAD Questionnaire**  
**South SWP Hydropower Relicensing, FERC Project No. 2426**

**1. Information about person completing the Pre-PAD Questionnaire:**

Names & Titles:	Steve Edmondson, FERC Branch Supervisor, Sacramento Office; William Foster, Fishery Biologist, FERC Branch, Sacramento Office; Anthony Spina, S. California Branch Supervisor, California Coastal Office; and California Coastal Office Staff (Fishery Biologist - to be determined).
Organization:	NOAA, National Marine Fisheries Service, West Coast Region
Addresses:	Steve & Bill: 650 Capitol Mall, Suite 5-100, Sacramento, CA 95814-4706 Anthony & Staff: 501 West Ocean Blvd, Long Beach, CA 90802-4213
Phones:	Steve: 916-930-3727 / Bill: 916-930-3617 / Anthony: (562) 980-4045
Email Addresses:	Steve.Edmondson@noaa.gov; William.Foster@noaa.gov; Anthony.Spina@noaa.gov

**2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?**

Yes (If yes, please complete 2a thru 2f.)       No (If no, please go to 3.)

a. If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:

<input checked="" type="checkbox"/> Geology and soils	<input type="checkbox"/> Recreation
<input checked="" type="checkbox"/> Water quantity and quality	<input type="checkbox"/> Land use
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<input type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input checked="" type="checkbox"/> Wetlands, riparian and littoral habitat	<input checked="" type="checkbox"/> Tribal resources
<input checked="" type="checkbox"/> Species protected under the Endangered Species Act	<input checked="" type="checkbox"/> Other resources information

b. Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)

(1) Final Biological Opinion for P-2153-012, Santa Felicia FERC Project, on Piru Creek, LA County, May 5, 2008, (NMFS 2008).
(2) Southern California Steelhead Final Recovery Plan, January 2012 (NMFS 2012).
The distinct population segment of Southern California (SC) steelhead ( <i>Oncorhynchus mykiss</i> ) is Federally endangered (71 FR 834, January 5, 2006) and critical habitat has been designated downstream of the Santa Felicia Dam in Piru Creek and the lower Santa Clara River (70 FR 52488, September 2, 2005), pursuant to the Endangered Species Act (ESA). Historically, SC steelhead ranged throughout the Piru Creek and Santa Clara River watersheds. However, the historical habitat in the Piru Creek watershed was separated and blocked by both Santa Felicia Dam/Lake Piru (P-2153) and Pyramid Dam/Lake (P-2426). The Castaic Creek watershed was fragmented by the presence of Castaic Dam. Santa Felicia and Pyramid dams split Piru Creek into three segments: Upper Piru Creek (upstream of Pyramid Lake), Middle Piru Creek (between the two dams), and Lower Piru Creek (downstream of Santa Felicia Dam). NMFS (2008) states that the isolated populations of <i>O. mykiss</i> that currently reside in Piru and Pyramid lakes migrate upstream of these reservoirs and spawn in the upper tributaries of their respective, watersheds. Genetically, the <i>O. mykiss</i> in these three lakes are similar to the stock of anadromous SC steelhead that currently resides in Lower Piru Creek and in the lower Santa Clara River (NMFS 2012). NMFS will be considering new water operations plans for new instream flows

**Pre-PAD Questionnaire**  
**South SWP Hydropower Relicensing, FERC Project No. 2426**

downstream of Pyramid and Castaic dams and fish passage of SC steelhead at Pyramid Dam into the upper watershed of Piru Creek. In addition, NMFS' consideration of new instream flows from Pyramid and Castaic dams will be done in coordination with instream flows from Santa Felicia Dam, Piru Diversion, and the Vern Freeman Diversion. These actions would also accommodate those anadromous SC steelhead within middle Piru Creek that will be passed by Santa Felicia Dam as stated in NMFS (2008). These two Actions are also priority 1A Actions in the SC steelhead Recovery Plan (NMFS 2012). These are likely not the only issues that NMFS will be concerned with, as noted below in Section 2f (Information Requests), but we look forward to reviewing the PAD.

*c. Where can DWR and LADWP obtain this information?*

Final Biological Opinion for P-2153-012 (NMFS 2008), Santa Felicia FERC Project, on Piru Creek, LA County, May 5, 2008. Available at:

[http://www.westcoast.fisheries.noaa.gov/publications/recovery\\_planning/salmon\\_steelhead/domains/south\\_central\\_southern\\_california/nmfs\\_bo\\_santa\\_felicia\\_dam\\_5-5-08.pdf](http://www.westcoast.fisheries.noaa.gov/publications/recovery_planning/salmon_steelhead/domains/south_central_southern_california/nmfs_bo_santa_felicia_dam_5-5-08.pdf)

Southern California Steelhead Final Recovery Plan, January 2012 (NMFS 2012). Available at:

[http://www.westcoast.fisheries.noaa.gov/protected\\_species/salmon\\_steelhead/recovery\\_planning\\_and\\_implementation/south\\_central\\_southern\\_california\\_coast/south\\_central\\_southern\\_california\\_coast\\_recovery\\_plan\\_documents.html](http://www.westcoast.fisheries.noaa.gov/protected_species/salmon_steelhead/recovery_planning_and_implementation/south_central_southern_california_coast/south_central_southern_california_coast_recovery_plan_documents.html)

*d. Please indicate whether there is a specific representative (and alternate) you wish to designate for a potential follow-up contact by a DWR and LADWP representative for the resource area(s) checked above: (Additional information may be provided on sheet 5 of this questionnaire.)*

**Representative Contact Information:**

Name & Title:	Lead Project Manager is William Foster (See Section 1)
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

**Alternate Contact Information**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

**Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426**

e. *Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)*

**Yes** (Please list specific issues below.)       **No**

**Resource Area**                      **Specific Issue:** See discussion in Section 2b. Anadromous SC steelhead.

Pyramid Dam blocks fish passage to upper Piru Creek, historic habitat for SC steelhead. Water operations impact water flow into middle Piru Creek (downstream of Pyramid Dam). Castaic Dam captures stormwater flows that would otherwise flow downstream into the Santa Clara River. Low instream flows below Pyramid and Santa Felicia dams can impact SC steelhead’s critical habitat downstream of Santa Felicia Dam and may create passage barriers in the mainstem lower Santa Clara River and may restrict fish passage into its tributaries. Low instream flows also impact riparian habitat. All three dams block normal downstream transport of spawning gravel and large woody debris (LWD) and the dams on Piru Creek affect SC steelhead critical habitat in lower Piru Creek and Lower Santa Clara River and alter stream channel geomorphology. These may be seasonal issues, as higher flows/flood flows are captured by both dams and tend to occur during key SC steelhead migration, spawning, and rearing periods. This alteration of instream flows by the dams reduces the amount of instream flow that SC steelhead use for migration and spawning in the lower mainstem Santa Clara River or in its tributaries (NMFS 2008; 2012).

f. *Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)*

**Yes** (Please list potential studies or information needs below.)       **No**

**Resource Area**                                      **Potential Studies or Information Needs**

**Types of Information NMFS Requests For FERC Projects:**

Information Requests are to satisfy information needs and develop or improve upon the “best available science” relating to DOC/NMFS’ exercise of our Federal Power Act (FPA) Section 18 Authority to prescribe Fish Passage or a reservation of that authority. Such information is also useful by NMFS for developing FPA “recommendations and conditions” [10(j) and 10(a) potential license terms] and inform future Endangered Species Act, Section 7, consultations” (Biological Opinion) [In this particular project, consultations pursuant to the Magnuson-Stevens Fisheries Conservation and Management Act are not applicable to SC steelhead]. In addition, information can also inform the Terms from other parties, such as terms in a State Water Board 401 certification and informing FERC’s environmental analysis. Some information requests below marked with an (\*) are best done for a whole watershed and then the Project’s presence and its effects can be better ascertained. However, watershed wide data may not be available or may be too costly to achieve. Information requests are specifically tailored for each project from the types information outlined below.

**(A): Information about how the Project’s affects the watershed and species and the current state of the watershed and species.**

1) Upstream of Project:      Project Blocks Fish Passage  
 2) Downstream of Project:  
 (a) Project Blocks sediment/large wood transport and water flow.  
 (b) Project may have an entrainment potential for both resident salmonids (that may exhibit “anadromous behaviors” moving downstream) and future anadromous species.

### **Pre-PAD Questionnaire South SWP Hydropower Relicensing, FERC Project No. 2426**

<p><b><u>Types of Requests:</u></b>  Water Operations Model*  Water Temperature Model*  Gravel/Sediment Budget and Motility*  <u>Salmonid Species and Habitat Data</u>      Presence/Abundance and Abundance/Population Modeling*      Spawning; Rearing; and Holding Habitats      Migration/emigration/escapement habitats (Project reaches and into tributaries to Project reaches)      Fish Passage (up to Project)  Benthic Macro Invertebrate (BMI/food) data  Riparian/Channel Form Data  Fish Pathogen Presence/Diseases (Presence does not necessarily follow that there will be "Disease")  Water Quality (other than temperature)  Predator Presence/Habitat (facilities may create predator habitat or increase predation risk).  <b>(B): <u>Information about the state of the watershed and species outside of the Project's affects.</u></b>  (Usually means information about habitats, conditions, and species <u>upstream of the Project</u>).  <u>Types of Requests</u>  Water flow gage data*  Water Temperature Data*  Gravel/Sediment sizing and motility*  <u>Salmonid and/or Fish Presence: Salmonid Habitat Data</u> (similar to Requests A above, including  Population/Abundance Modeling*)  BMI Data (usually a good reference for downstream studies is likely upstream of Project)  Fish Passage (into / past / above Project).  Loss of Nutrients (due to blockage of salmonids that used to provide Nitrogen sources).  Fish Pathogens  Water Quality</p>
--

### **3. Do you or your organization plan to participate in the Project relicensing?**

Yes                       No

### **4. We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. (Additional information may be provided on sheet 5 of this questionnaire.)**

**Comments**

NOAA, NMFS will participate in the S. SWP, West Branch (P-2426) Relicensing proceeding.
NOAA, NMFS <u>will not</u> participate in the S. SWP's East Branch New Licensing (number to be assigned).

**To allow for any follow-up contacts that may be needed by a DWR and LADWP representative, within 45 days please return this completed Pre-PAD Questionnaire in the enclosed, stamped envelope to the address shown on the envelop.**

Alternatively, you may email a \*.pdf copy of the completed Pre-PAD Questionnaire to: [gwen.scholl@water.ca.gov](mailto:gwen.scholl@water.ca.gov)

Thank you for your consideration.

**Pre-PAD Questionnaire**  
**South SWP Hydropower Relicensing, FERC Project No. 2426**

**Additional Information or Comments: (Please indicate applicable section.)**

**SECTION 2e (Resource Interest Issues).**

**(1) Critical recovery actions for Core 1 *O. mykiss* populations within the Southern California (SC) steelhead DPS for the Santa Clara River Watershed (NMFS 2012):**

Implement operating criteria to ensure the pattern and magnitude of groundwater extractions and water releases, including bypass flows around diversions, from Vern Freeman Diversion, Santa Felicia, Pyramid, and Castaic dams provide the essential habitat functions to support the life history and habitat requirements of adult and juvenile SC steelhead. Physically modify Vern Freeman Diversion, lower Santa Paula Creek flood control channel, Harvey Diversion, Santa Felicia, and Pyramid dams to allow SC steelhead natural rates of migration to upstream spawning and rearing habitats, and passage of smolts and kelts downstream to the estuary and ocean.

**(2) The Genetics of isolated *O. mykiss* show that they are descendants from ancestral anadromous SC steelhead (NMFS 2012):**

Investigation of the genetic structure of juvenile *O. mykiss* collected from freshwater habitats, including instream areas upstream of migration barriers within Core 1 populations, confirm that the present-day populations are dominated by ancestry of indigenous southern coastal steelhead. In addition, populations of *O. mykiss* that exist upstream of introduced barriers are largely or entirely descended from relic *O. mykiss* populations ascending the watersheds historically. (as cited in NMFS 2012: Clemento *et al.* 2009; Pearse and Garza 2008; Girman and Garza 2006; Greenwald *et. al.* 2005; Nielsen *et al.* 2005, 2003, 1997;). Thus, to aid in recovery, SC steelhead should be reintroduced into historic Piru Creek and Santa Clara River watersheds.

**(3) References:**

National Marine Fisheries Service (NMFS). 2008. Final Biological Opinion for the Operation of the Santa Felicia Hydroelectric Project, Federal Energy Regulatory Commission's Project No. 2153-012. NMFS, Southwest Region, Protected Resources Division, Long Beach, California. May 5, 2008. Tracking Number SWR/2002/02704: APS.

NMFS. 2012. Southern California Steelhead Recovery Plan. NMFS, Southwest Region, Protected Resources Division, Long Beach, California. January 2012.

**Federal Register Notices:**

FR. 2005. 70 FR 52488, September 2, 2005. Endangered and Threatened Species: Designation of Critical Habitat for Seven Evolutionarily Significant Units of Pacific Salmon and Steelhead in California. Final Rule. NMFS.

FR. 2006. 71 FR 834, January 5, 2006. Endangered and Threatened Species: Final Listing Determinations for 10 Distinct Population Segments of West Coast Steelhead. Final Rule. NMFS.



Enclosure B

**UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION**

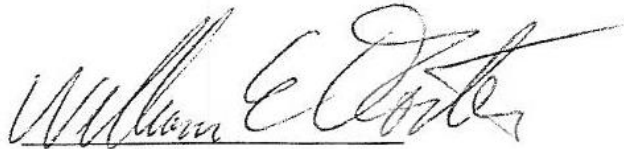
**South State Water Project's West Branch )  
Hydroelectric Project )  
)  
California Department of Water Resources )  
and Los Angeles Department of Water & Power )  
)  
Piru and Castaic Creeks, California )**

**P-2426**

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served, by first class mail or electronic mail, a letter to Secretary Bose of the Federal Energy Regulatory Commission from the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, West Coast Region a Pre-PAD Questionnaire for the above-captioned proceeding, and this Certificate of Service upon each person designated on the official service lists compiled by the Commission in the above-captioned proceeding.

Dated this 5th day of October 2015



William E. Foster  
National Marine Fisheries Service

Document Content(s)

NMFS\_P2426\_prePADQuest\_toFERC-DWR-LA \_05Oct15.PDF.....1-9

**PRE-PAD QUESTIONNAIRE**

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**1. Information about person completing the Pre-PAD Questionnaire:**

Name & Title:	Jean Prijatel, NEPA Reviewer
Organization:	U.S. Environmental Protection Agency
Address:	75 Hawthorne St. Mail Code: ENF 4-2
	San Francisco, CA 94105
Phone:	415-947-4167
Email Address:	Prijatel.jean@epa.gov

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

**2. Do you or your organization know of existing, relevant and reasonably available information that describes the existing environment or potential effects of the Project?**

Yes (If yes, please complete 2a thru 2f.)                       No (If no, please go to 3.)

a. If yes to Question 2, please check the box(es) to indicate the specific resource areas(s) that the information relates to:

<input type="checkbox"/> Geology and soils	<input type="checkbox"/> Recreation
<input checked="" type="checkbox"/> Water quantity and quality	<input type="checkbox"/> Land use
<input type="checkbox"/> Fish and aquatic resources	<input type="checkbox"/> Aesthetic resources
<input type="checkbox"/> Wildlife resources	<input type="checkbox"/> Cultural resources
<input type="checkbox"/> Botanical resources	<input type="checkbox"/> Socio-economic resources
<input type="checkbox"/> Wetlands, riparian and littoral habitat	<input type="checkbox"/> Tribal resources
<input type="checkbox"/> Species protected under the Endangered Species Act	<input checked="" type="checkbox"/> Other resources information

b. Please briefly describe the information or list available documents: (Additional information may be provided on sheet 5 of this questionnaire.)

EPA recommends that the Environmental Impact Statement for the project include:
- discussion of waters in the project area that are listed as impaired under Clean Water Act Section 303 (d)
- a detailed discussion of ambient air conditions and the project's impact on those conditions

c. Where can DWR and LADWP obtain this information?

Clean Water Act 303(d) list of impairments: <a href="http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml">http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2010.shtml</a>
National Ambient Air Quality Standards for California: <a href="http://epa.gov/region9/air/maps/index.html">http://epa.gov/region9/air/maps/index.html</a>

Pre-PAD Questionnaire  
 South SWP Hydropower Relicensing, FERC Project No. 2426

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d. Please indicate whether there is a specific representative (and alternate) you wish to designate for a potential follow-up contact by a DWR and LADWP representative for the resource area(s) checked above: (Additional information may be provided on sheet 5 of this questionnaire.)

**Representative Contact Information:**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

**Alternate Contact Information**

Name & Title:	
Organization:	
Address:	
Phone:	
Email Address:	
Resource Area(s)	

e. Based on the specific resources listed in 2a, are you aware of any specific issues pertaining to the identified resource area(s)? (Additional information may be provided on sheet 5 of this questionnaire.)

Yes (Please list specific issues below.)                       No

Resource Area	Specific Issue

Pre-PAD Questionnaire  
South SWP Hydropower Relicensing, FERC Project No. 2426

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f. *Based on the resource issues identified in 2e, are you aware of any potential studies or information needs associated with the identified issues? (Additional information may be provided on sheet 5 of this questionnaire.)*

Yes (Please list potential studies or information needs below.)  No

**Resource Area**

**Potential Studies or Information Needs**

Resource Area	Potential Studies or Information Needs

**3. Do you or your organization plan to participate in the Project relicensing?**

Yes  No

**4. We are interested in your comments. If you have comments and/or questions regarding the Project relicensing please add below. (Additional information may be provided on sheet 5 of this questionnaire.)**

**Comments**

EPA recommends that the Environmental Impact Statement for the project include:
- a clear description of the purpose and need for the project and a reasonable range of alternatives
- a determination if a Clean Water Act 404 permit will be required for the fill or discharge into waters of the U.S and, if so, appropriate analysis for such a permit
- a discussion of climate change in the project area, its impacts on the project, and the project's impacts on climate change
- a discussion of environmental justice populations within the geographic scope of the project, the potential for disproportionate adverse impacts to minority and low-income populations, and the approaches used to foster public participation by these populations. Resource: <a href="http://www2.epa.gov/ejscreen">www2.epa.gov/ejscreen</a>
- a description of the process and outcome of government-to-government consultation between FERC and each of the tribal governments within the project area, issues that were raised (if any), and how those issues were addressed in the selection of the proposed alternative.
Climate change resources: Council on Environmental Quality's 2014 revised draft guidance for Federal agencies' consideration of GHG emissions and climate change impacts in NEPA <a href="http://www.whitehouse.gov/sites/default/files/docs/nepa_revised_draft_ghg_guidance_searchable.pdf">www.whitehouse.gov/sites/default/files/docs/nepa_revised_draft_ghg_guidance_searchable.pdf</a> ; <a href="http://www.globalchange.gov">www.globalchange.gov</a> ; <a href="https://ceq.doe.gov/current_developments/GHG_accounting_methods_7Jan2015.html">https://ceq.doe.gov/current_developments/GHG_accounting_methods_7Jan2015.html</a> )

**To allow for any follow-up contacts that may be needed by a DWR and LADWP representative, within 45 days please return this completed Pre-PAD Questionnaire in the enclosed, stamped envelope to the address shown on the envelop.**

Alternatively, you may email a \*.pdf copy of the completed Pre-PAD Questionnaire to:

[gwen.scholl@water.ca.gov](mailto:gwen.scholl@water.ca.gov)

Thank you for your consideration.



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## **Appendix C**

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### ***Cell Single Line Diagrams***

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**APPENDIX C****CEII SINGLE LINE DIAGRAMS**

In accordance with Section 5.30 and 4.32(k) of FERC's regulations, and in light of heightened national security concerns, Licensees request that the single line electric diagrams included in Appendix C of the PAD be treated by FERC as CEII under Section 388.112 of FERC's regulations, and not be released to the public.

The diagrams satisfy the definition of CEII in Section 388.112(c) of FERC's regulations because they contain design information about existing critical infrastructure that relates details about the generation and transmission of electrical energy, and could be useful to a person planning an attack on critical infrastructure. Moreover, such information is exempt from disclosure under the freedom of Information Act 5 U.S.C. Section 552, and does not simply give the general location of the critical infrastructure.

Procedures for the public to obtain access to CEII may be found at 18 C.F.R. Section 388.113. Requests for access should be made to FERC's CEII Coordinator.

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## **Appendix D**

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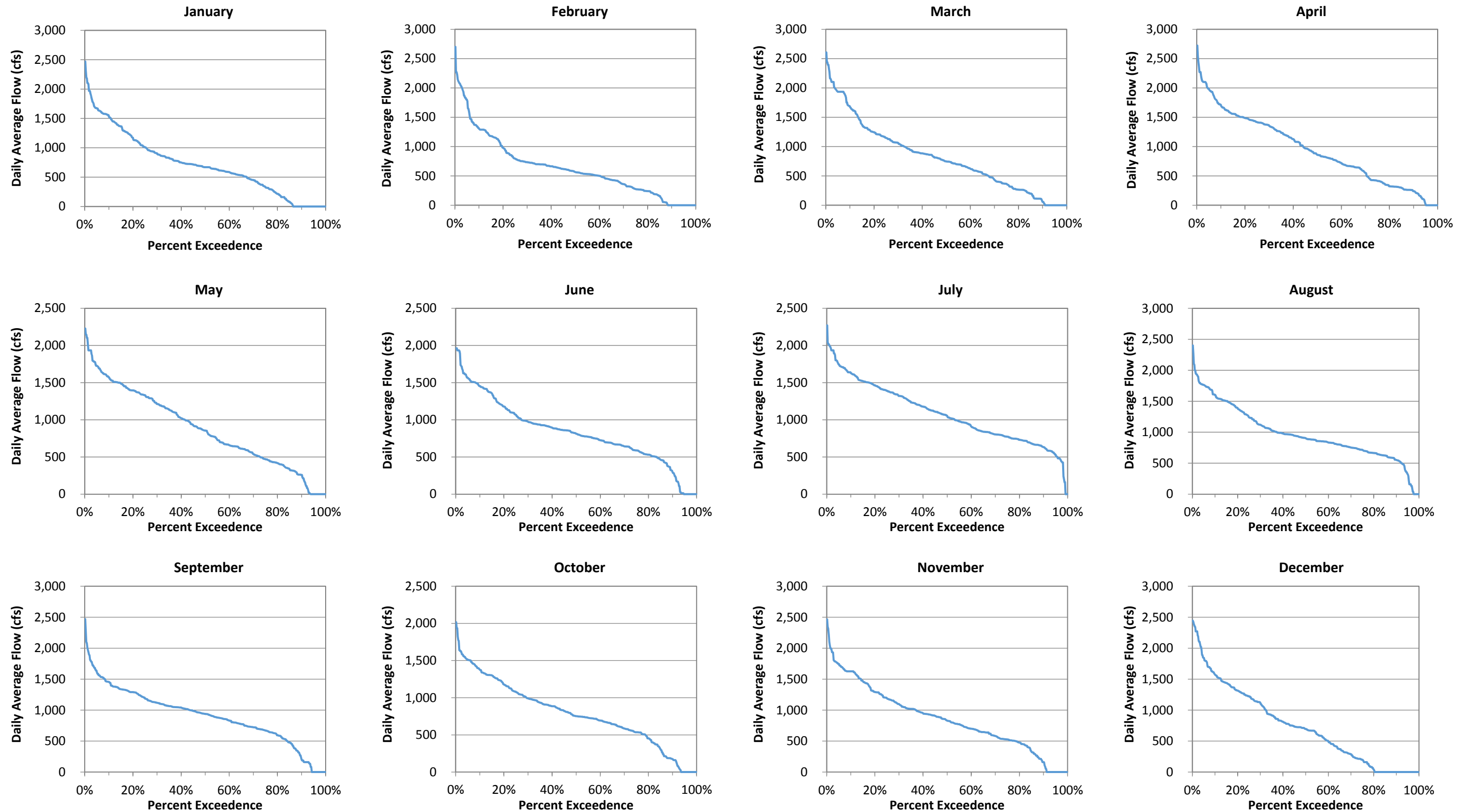
### ***Flow Exceedance Curves, Hydrology and Generation Data***

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## FLOW EXCEEDENCE CURVES

### Exceedance Curves of Daily Inflows by Month from the West Branch SWP to Quail Lake by Month, 2000 through 2014

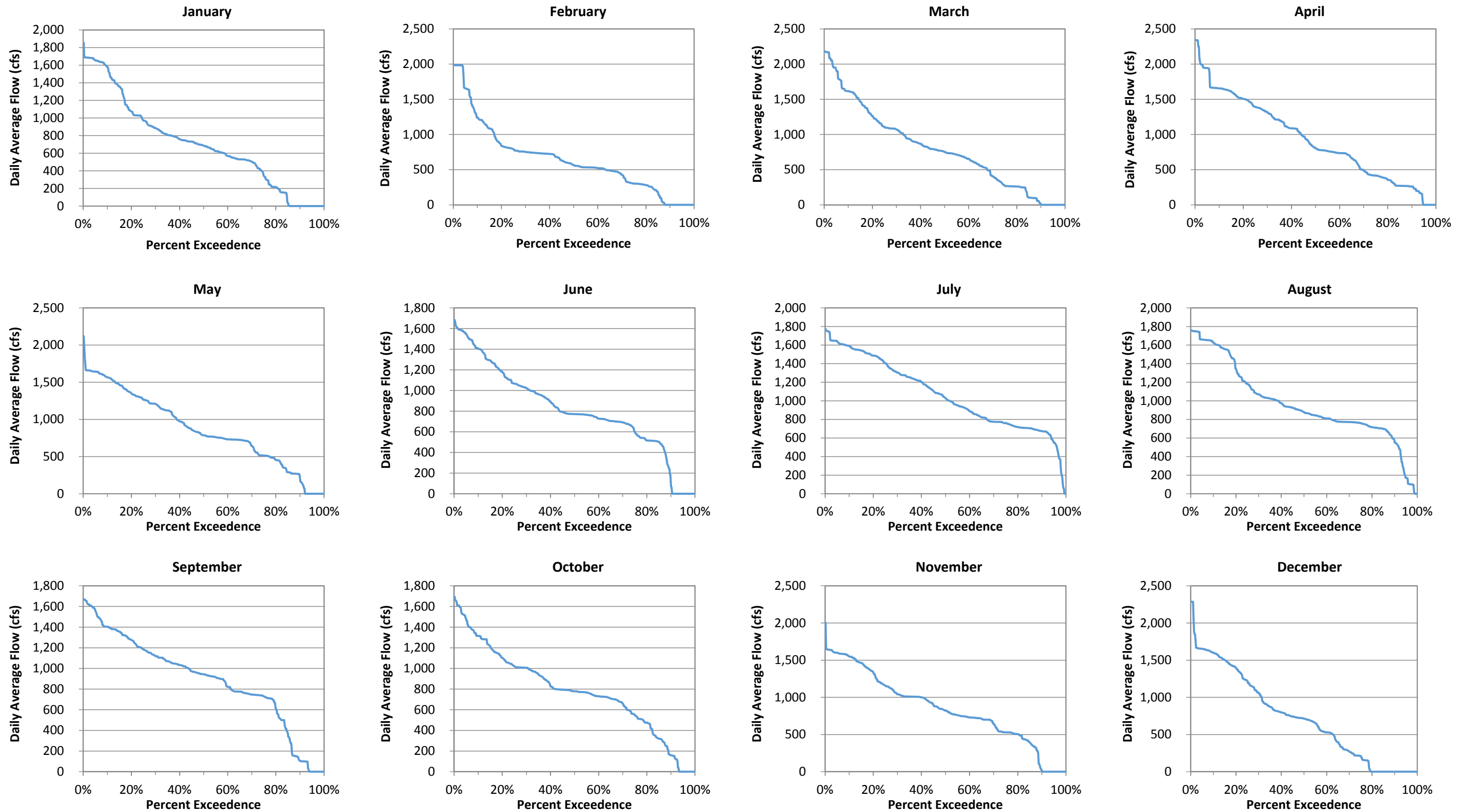
This data corresponds with Figure 3.2-10. Range and Exceedance Probability of Daily Inflows by Month from the West Branch SWP to Quail Lake, 2000 through 2014





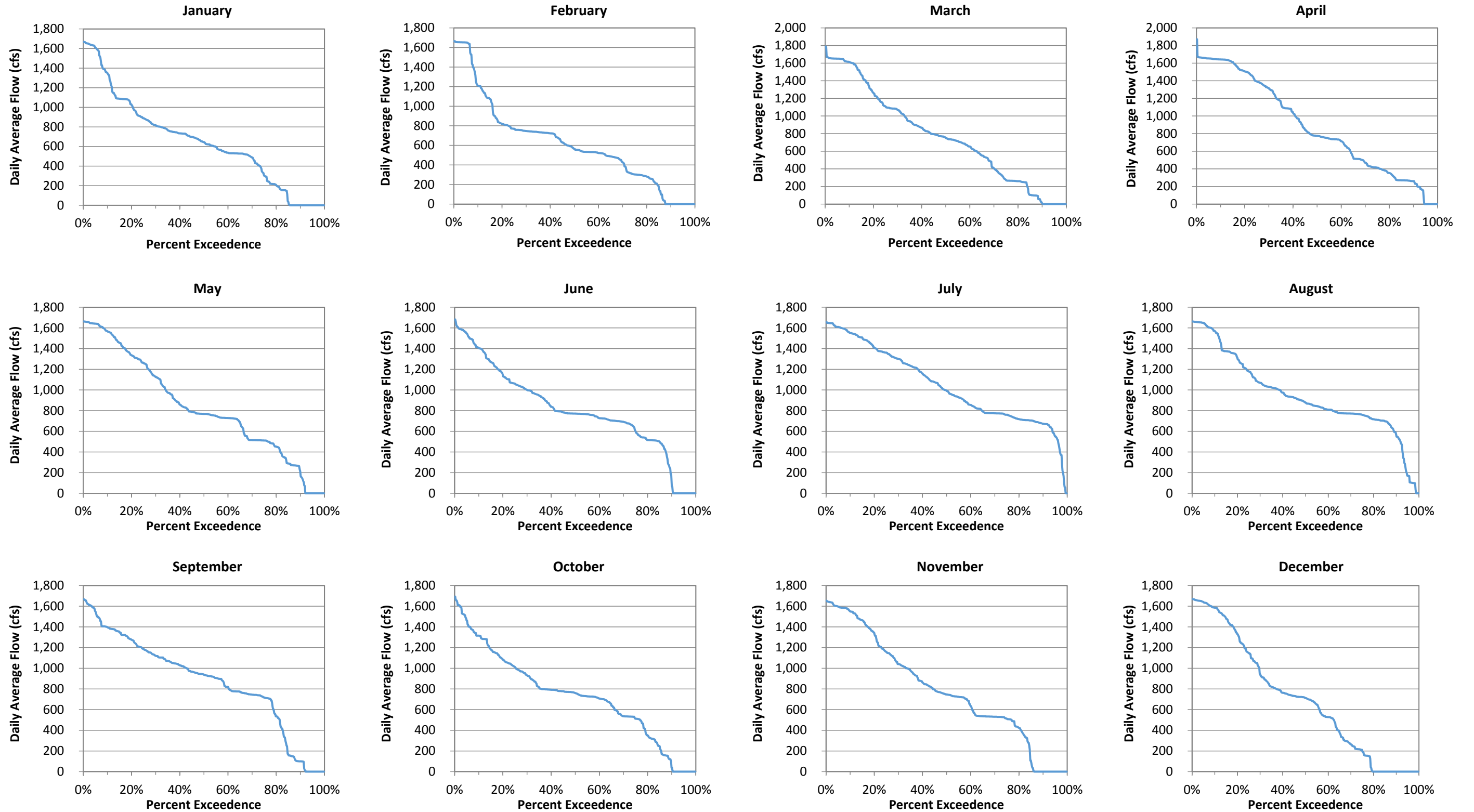
# Exceedance Curves of Daily Inflows to Pyramid Lake by Month from Quail Lake Releases, Including Inflows from Warne Powerplant and the Gorman Bypass Channel, by Month, 2000 through 2014

This data corresponds with Figure 3.2-11. Range and Exceedance Probability of Daily Inflows to Pyramid Lake by Month from Quail Lake Releases, Including Inflows from Warne Powerplant and the Gorman Bypass Channel, 2000 through 2014



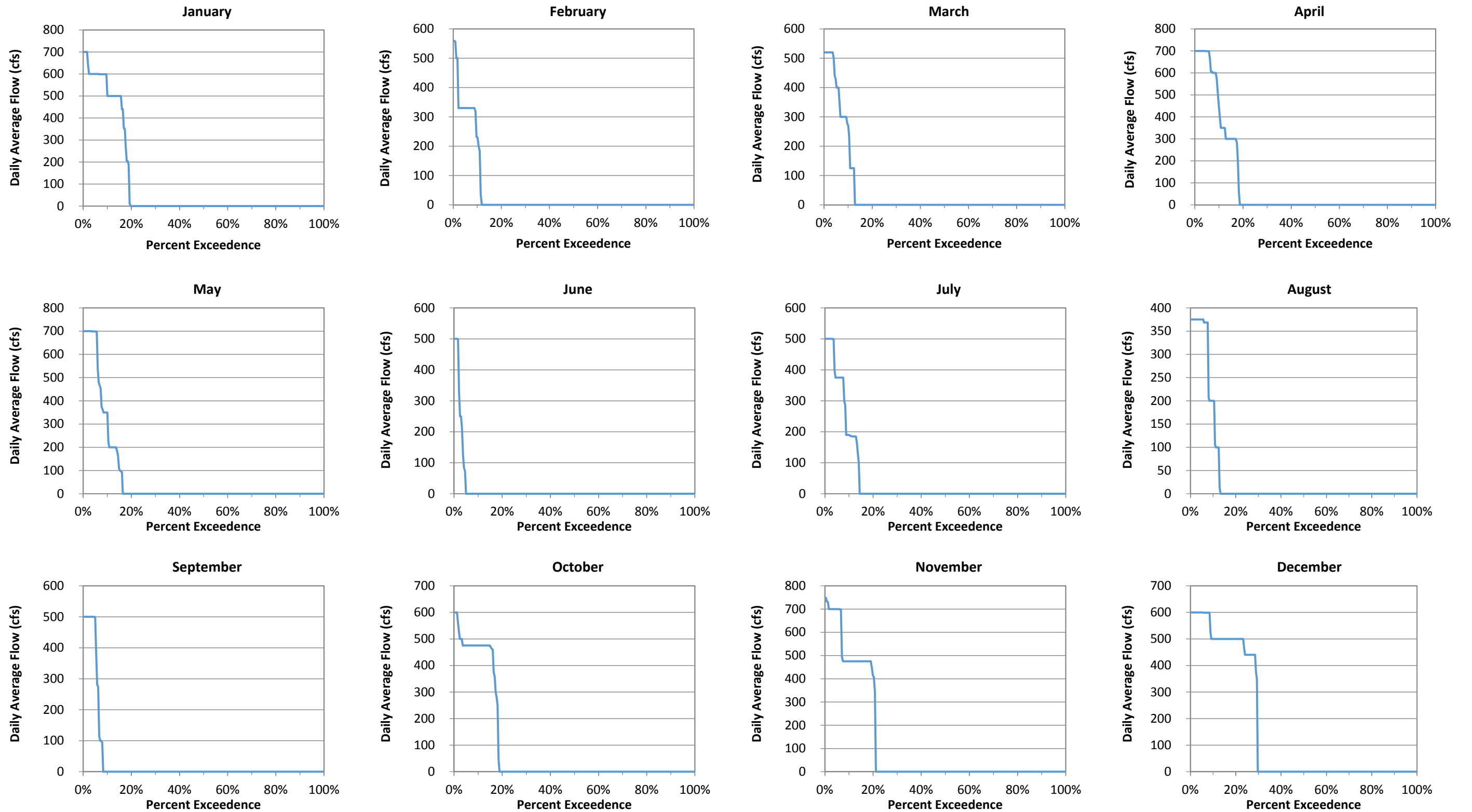
### Exceedance Curves of Daily Inflows to Pyramid Lake by Month from Warne Powerplant by Month, 2000 through 2014

This data corresponds with Figure 3.2-12. Range and Exceedance Probability of Daily Inflows to Pyramid Lake by Month from Warne Powerplant, 2000 through 2014



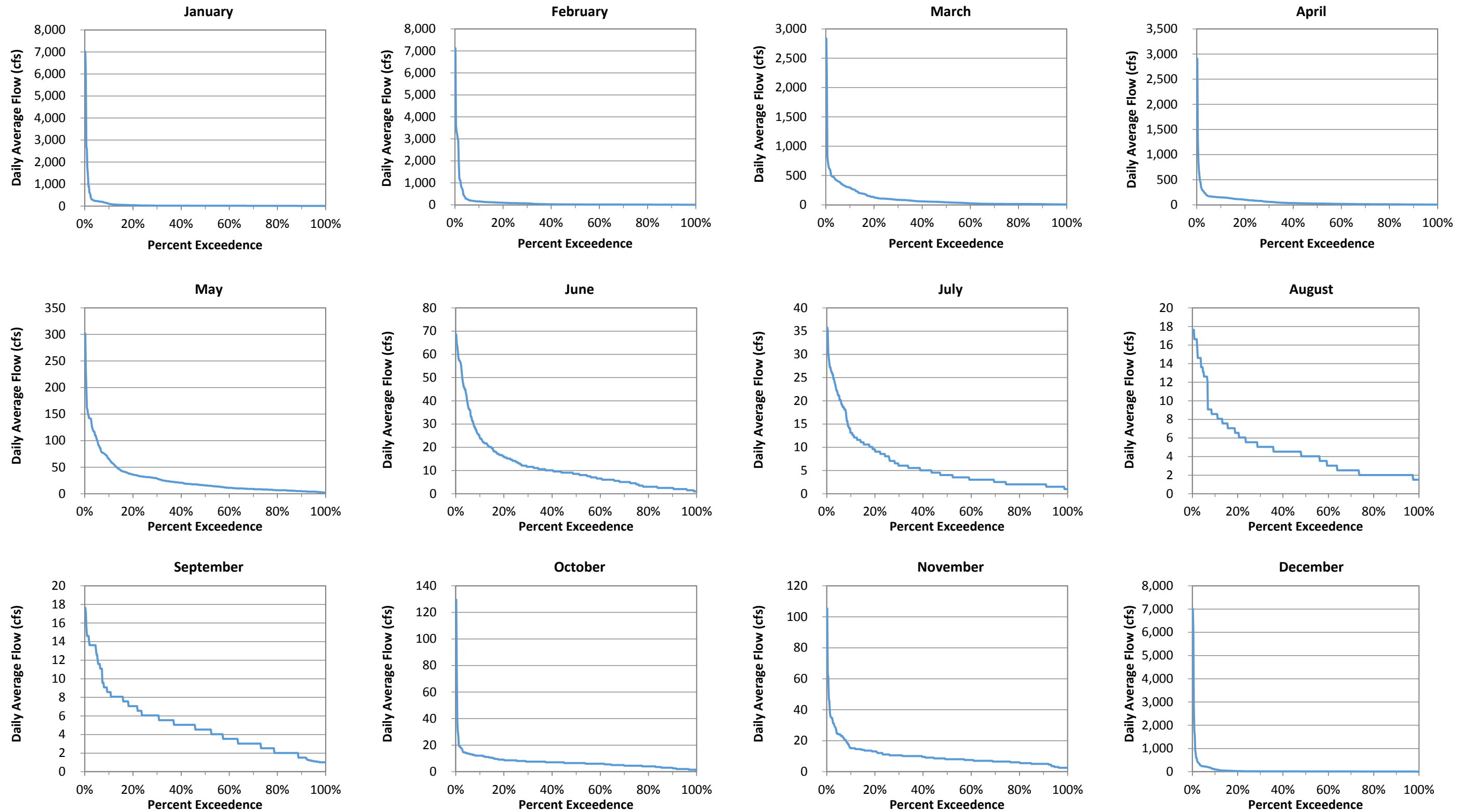
### Exceedance Curves of Daily Inflows by Month to Pyramid Lake from Gorman Bypass Channel by Month, 2007 through 2014

This data corresponds with Figure 3.2-13. Range and Exceedance Probability of Daily Inflows by Month to Pyramid Lake from Gorman Bypass Channel, 2007 through 2014



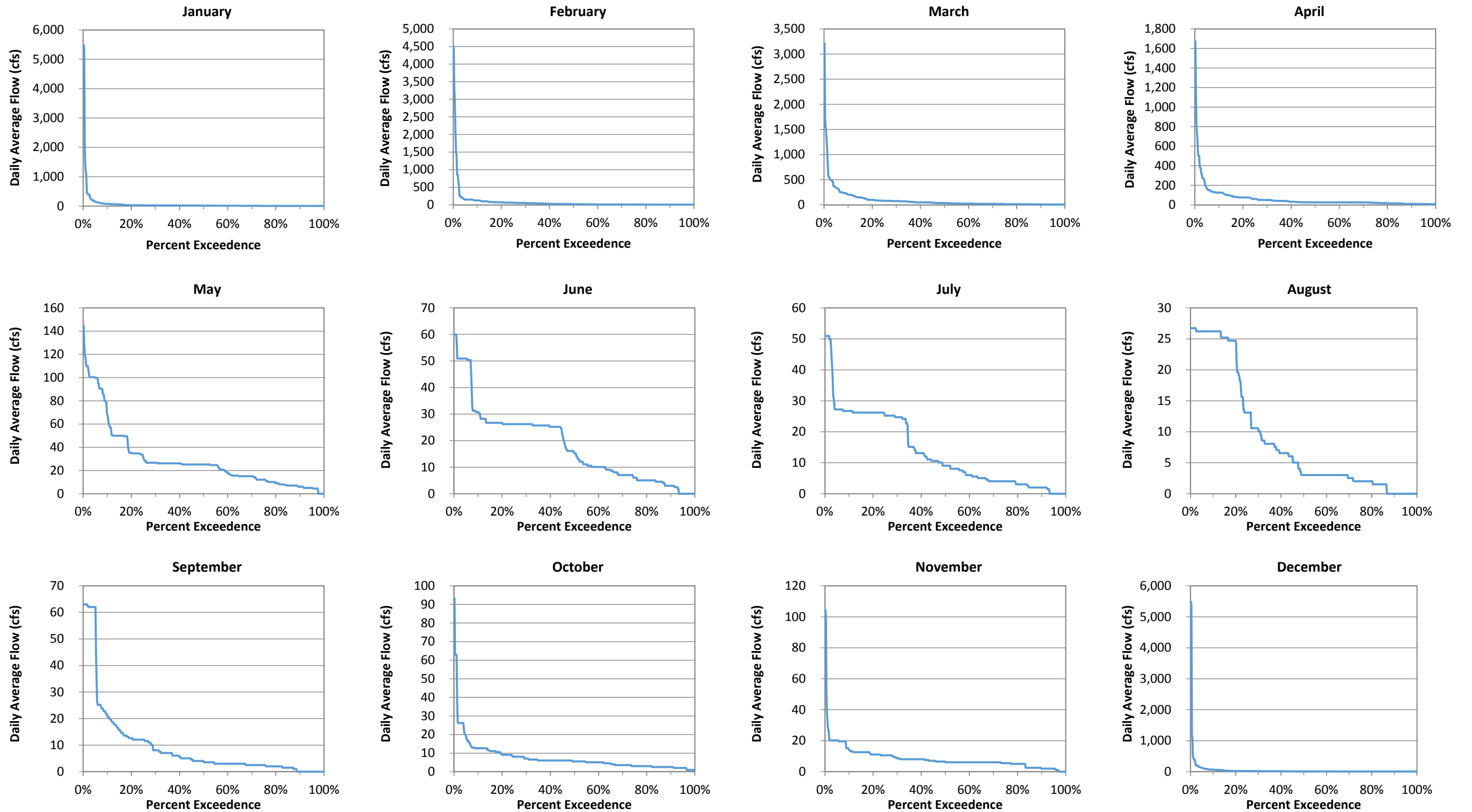
### Exceedance Curves of Daily Natural Inflows by Month into Pyramid Lake by Month, 2000 through 2014

This data corresponds with Figure 3.2-16. Range and Exceedance Probability of Daily Natural Inflows by Month into Pyramid Lake, 2000 through 2014



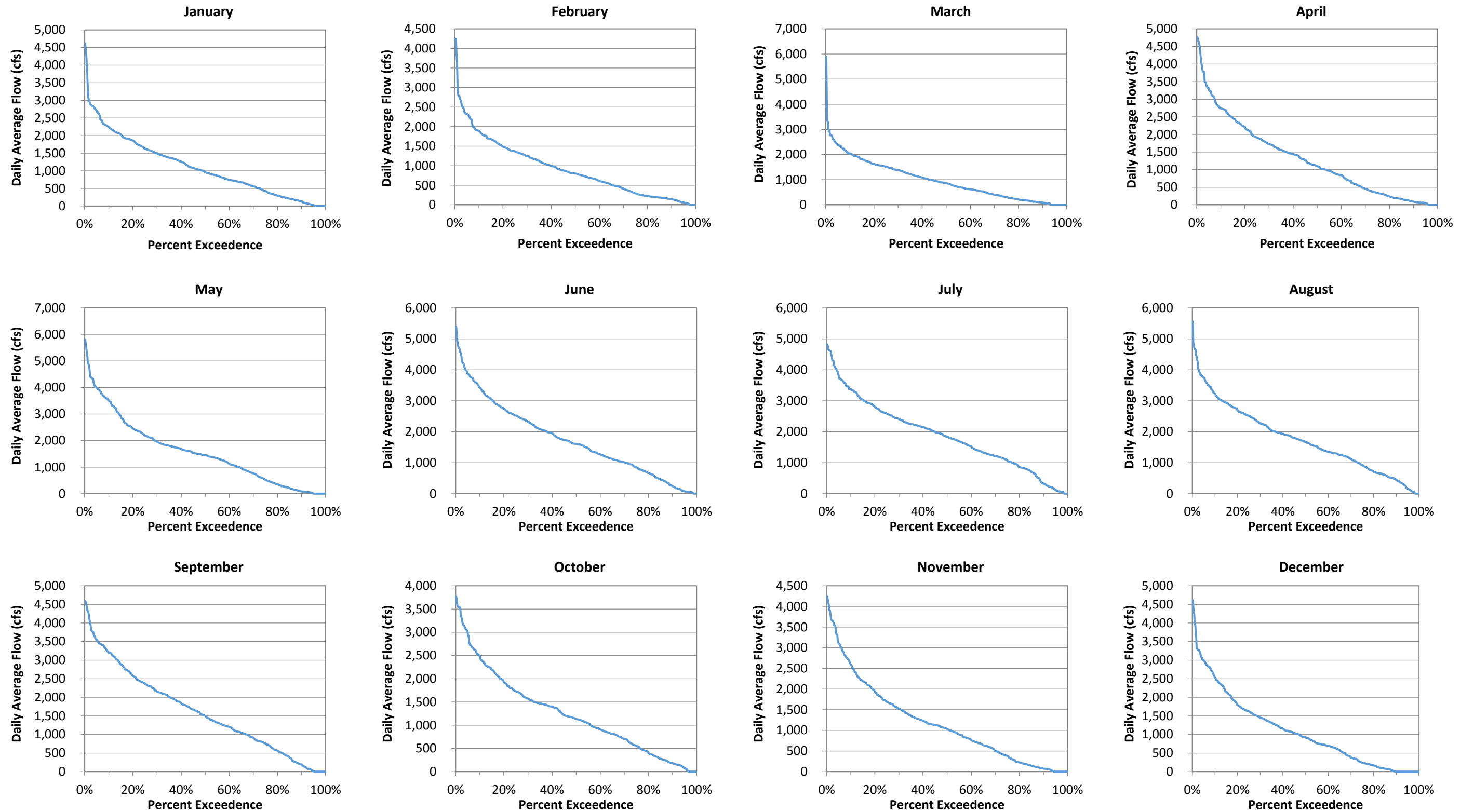
### Exceedance Curves of Daily Natural Flow Releases by Month from Pyramid Lake to Pyramid Reach by Month, 2000 through 2014

This data corresponds with Figure 3.2-17. Range and Exceedance Probability of Daily Natural Flow Releases by Month from Pyramid Lake to Pyramid Reach, 2000 through 2014



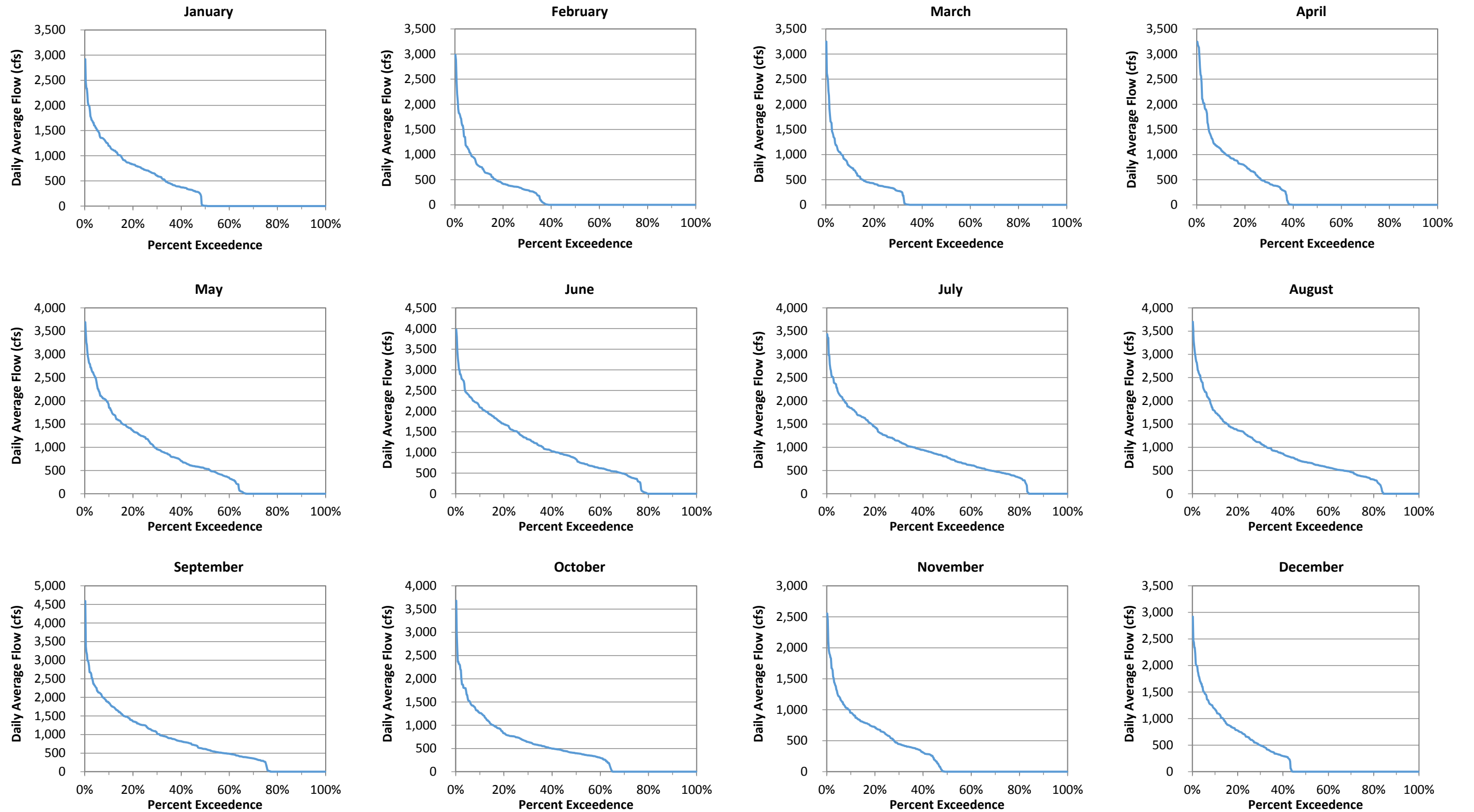
### Exceedance Curves of Daily Releases by Month from Pyramid Lake to Castaic Powerplant via the Angeles Tunnel by Month, 2000 through 2014

This data corresponds with Figure 3.2-20. Range and Exceedance Probability of Daily Releases by Month from Pyramid Lake to Castaic Powerplant via the Angeles Tunnel, 2000 through 2014



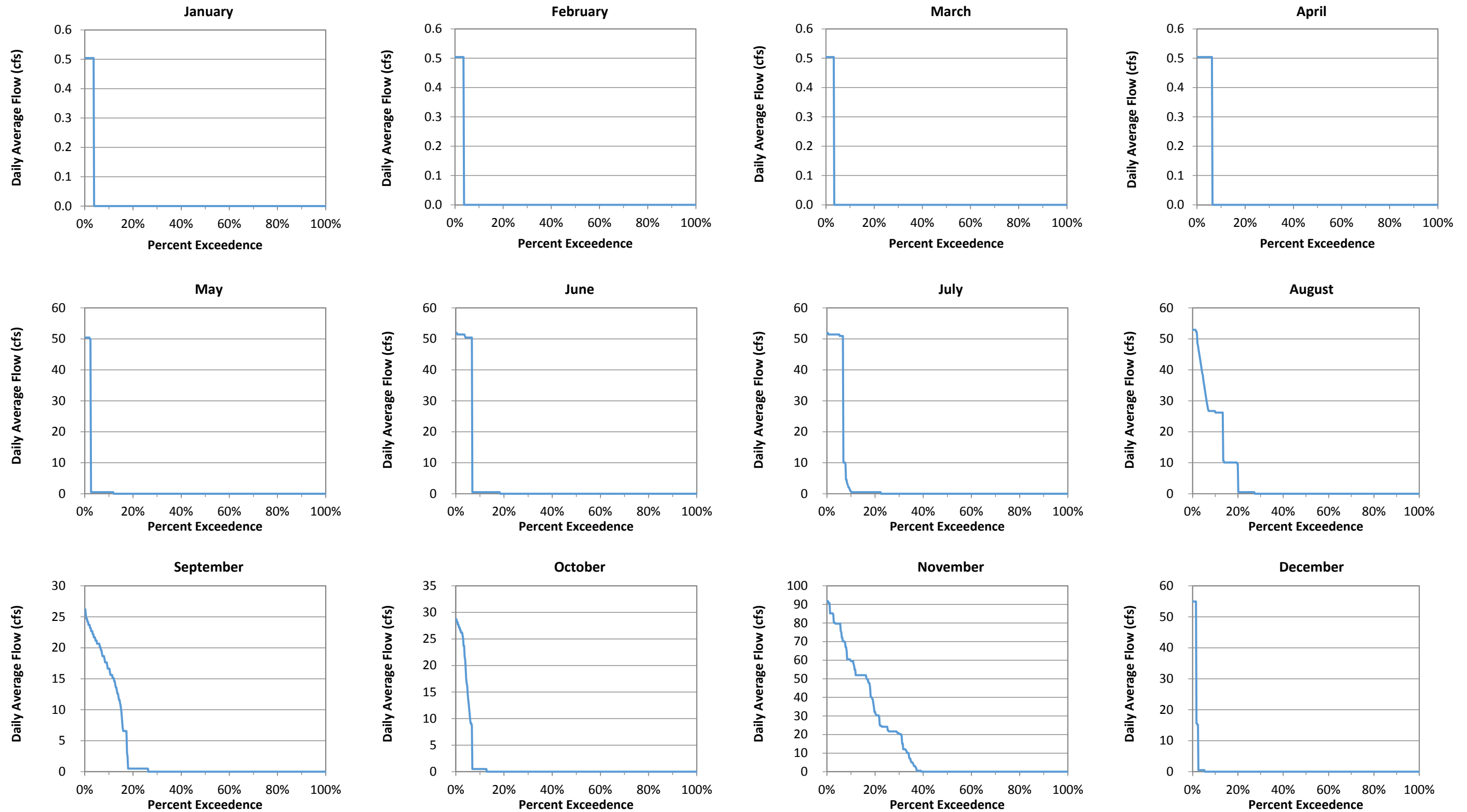
### Exceedance Curves of Daily Inflows by Month to Pyramid Lake from Elderberry Forebay by Month, 2000 through 2014

This data corresponds with Figure 3.2-21. Range and Exceedance Probability of Daily Inflows by Month to Pyramid Lake from Elderberry Forebay, 2000 through 2014



### Exceedance Curves of Daily Releases by Month from Pyramid Lake for Recreation and Delivery to United Water Conservation District by Month, 2000 through 2014

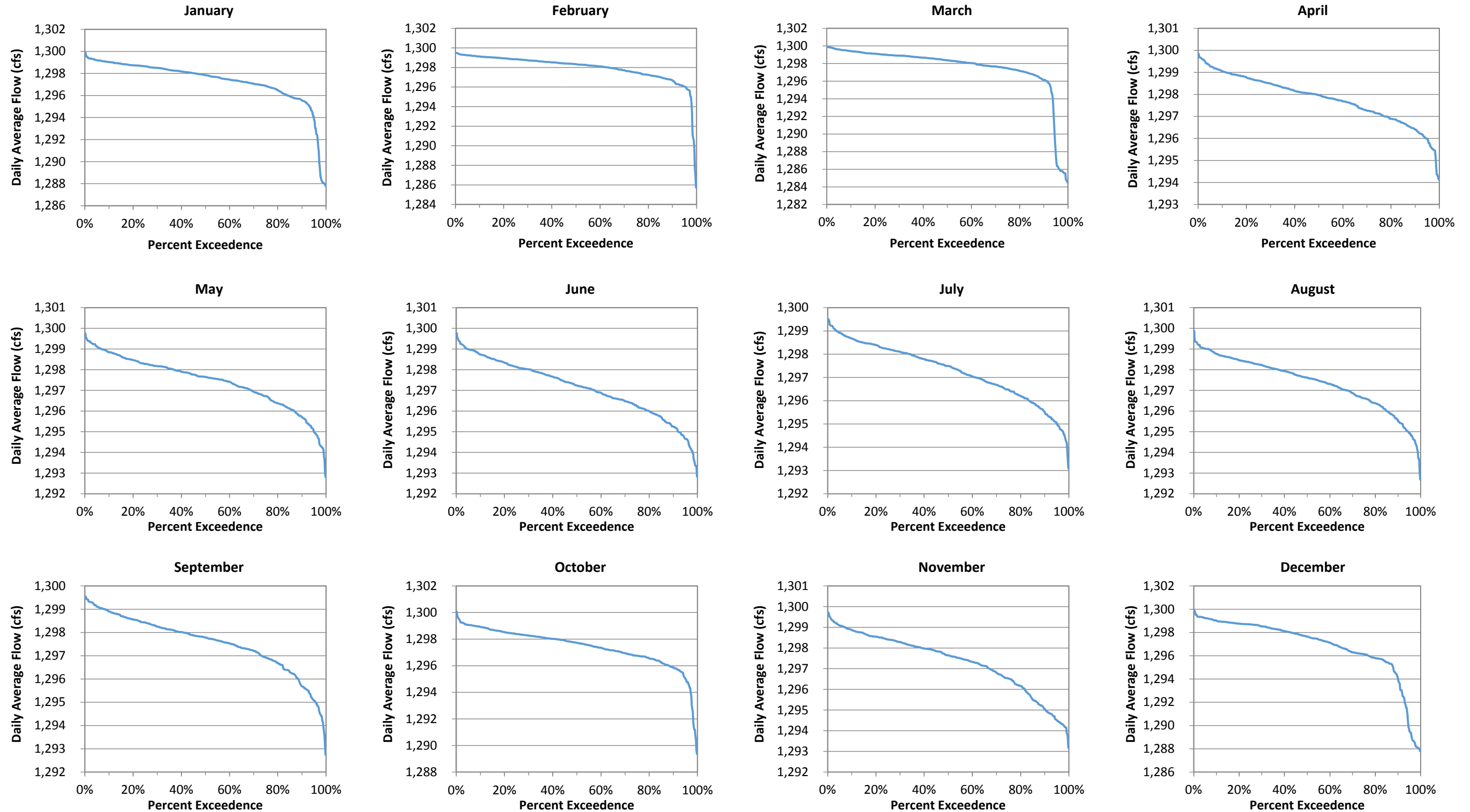
This data corresponds with Figure 3.2-22. Range and Exceedance Probability of Daily Releases by Month from Pyramid Lake for Recreation and Delivery to United Water Conservation District, 2000 through 2014





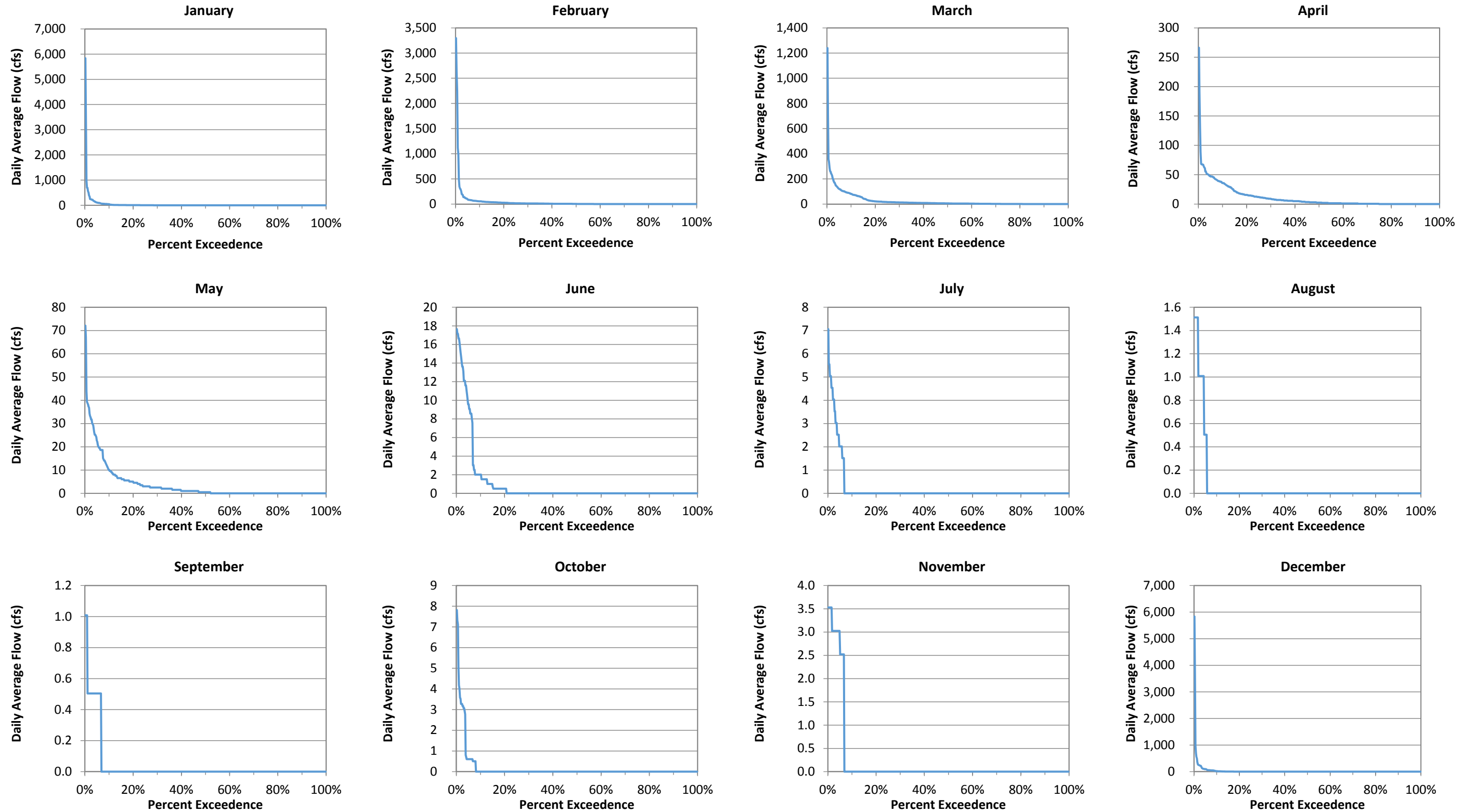
### Exceedance Curves of Daily Pyramid Lake Water Surface Elevation by Month, 2000 through 2014

This data corresponds with Figure 3.2-23. Range and Exceedance Probability of Daily Pyramid Lake Water Surface Elevation by Month, 2000 through 2014



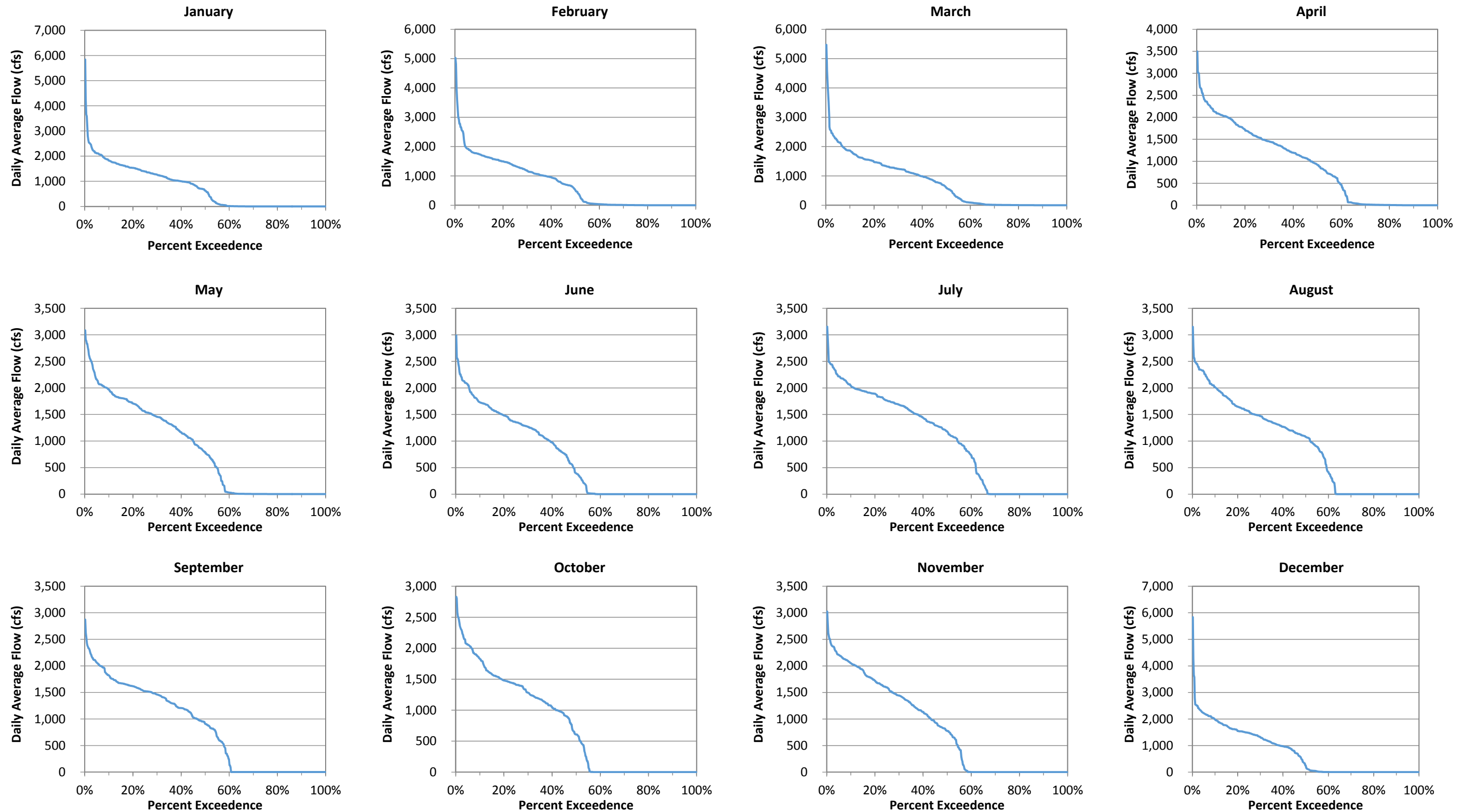
### Exceedance Curves of Daily Natural Inflow by Month to Elderberry Forebay by Month, 2000 through 2014

This data corresponds with Figure 3.2-27. Range and Exceedance Probability of Daily Natural Inflow by Month to Elderberry Forebay, 2000 through 2014



### Exceedance Curves of Daily Releases by Month from Elderberry Forebay to Castaic Lake by Month, 2000 through 2014

This data corresponds with Figure 3.2-28. Range and Exceedance Probability of Daily Releases by Month from Elderberry Forebay to Castaic Lake, 2000 through 2014



## HYDROLOGY AND GENERATION DATA

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**January 2000**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	1,368	1,652	0	4,075	2,190
2	2,499	1,784	0	2,413	3,151
3	2,218	2,279	0	5,573	2,185
4	2,254	2,125	0	4,872	746
5	2,942	3,028	0	3,944	0
6	1,468	1,764	0	4,174	1,160
7	1,538	1,916	0	1,372	1,927
8	1,477	2,041	0	716	933
9	1,497	0	0	569	2,979
10	1,281	1,948	0	4,532	3,083
11	1,440	1,759	0	1,387	2,689
12	1,490	1,730	0	4,090	739
13	1,553	1,785	0	2,693	488
14	1,546	1,749	0	2,579	1,745
15	1,466	1,044	0	288	0
16	1,601	482	0	617	1,651
17	1,331	1,546	0	3,044	2,267
18	1,404	1,594	0	3,437	1,716
19	1,365	1,550	0	5,288	1,814
20	1,410	1,567	0	4,726	1,329
21	1,409	1,572	0	5,188	1,428
22	2,580	2,516	0	767	2,373
23	2,460	1,240	0	2,910	2,759
24	404	1,487	0	5,404	2,118
25	955	922	0	3,738	2,025
26	559	974	0	4,364	2,223
27	1,244	1,285	0	5,668	2,134
28	1,266	1,293	0	3,777	771
29	1,267	1,501	0	570	877
30	1,647	0	0	552	2,447
31	1,192	1,141	0	1,512	3,479
<b>Total</b>	<b>48,131</b>	<b>47,274</b>	<b>0</b>	<b>94,839</b>	<b>55,426</b>

(in acre-feet)

**February 2000**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	1,084	1,161	0	2,670	0
2	1,193	1,185	0	2,727	832
3	1,014	1,222	0	3,742	1,581
4	1,041	1,294	0	1,441	790
5	1,152	1,640	0	84	178
6	633	0	0	115	3,607
7	851	937	0	5,082	1,690
8	861	986	0	4,605	2,285
9	1,057	942	0	3,099	1,220
10	842	946	0	3,791	628
11	848	995	0	307	0
12	867	1,096	0	368	0
13	1,691	909	0	304	3,129
14	1,061	751	0	2,880	913
15	1,054	1,090	0	255	702
16	1,208	1,333	0	5,504	1,592
17	1,198	1,250	0	3,359	0
18	1,111	1,235	0	465	0
19	1,359	1,442	0	47	0
20	1,954	1,443	0	521	1,539
21	1,149	1,442	0	1,742	1,623
22	309	78	0	162	0
23	0	0	0	1,334	467
24	0	0	0	1,600	0
25	463	955	0	482	0
26	1,580	2,389	0	287	0
27	1,535	369	0	573	0
28	879	1,321	0	1,567	0
29	1,093	1,322	0	1,322	0
<b>Total</b>	<b>29,087</b>	<b>29,733</b>	<b>0</b>	<b>50,435</b>	<b>22,776</b>

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**March 2000**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	863	1,238	0	1,169	0
2	806	1,519	0	1,665	0
3	909	1,211	0	549	0
4	1,381	766	0	1,383	200
5	2,341	592	0	1,065	0
6	527	1,035	0	3,050	0
7	1,043	1,046	0	631	12
8	948	1,136	0	994	905
9	724	728	0	545	669
10	697	690	0	2,668	0
11	733	962	0	105	49
12	1,182	206	0	376	1,375
13	475	1,041	0	1,193	0
14	692	1,113	0	1,818	0
15	999	1,153	0	3,015	535
16	889	1,161	0	2,779	483
17	1,038	1,116	0	325	0
18	989	1,249	0	900	535
19	1,613	4	0	2,420	1,811
20	232	704	0	3,455	1,478
21	816	1,008	0	2,170	0
22	1,055	1,057	0	692	0
23	1,779	2,150	0	1,588	511
24	1,642	2,209	0	3,150	698
25	1,615	2,119	0	2,039	0
26	1,796	8	0	1,091	1,362
27	2,392	2,752	0	4,703	820
28	2,318	2,733	0	3,556	801
29	2,395	2,665	0	3,842	2,084
30	2,388	2,653	0	4,862	2,136
31	2,584	2,787	0	5,202	1,369
<b>Total</b>	<b>39,861</b>	<b>40,811</b>	<b>0</b>	<b>63,000</b>	<b>17,833</b>

(in acre-feet)

**April 2000**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	2,318	2,353	0	754	0
2	1,689	3	0	384	0
3	2,901	2,901	0	4,196	0
4	2,707	2,981	0	3,333	0
5	2,621	2,997	0	5,872	1,562
6	2,510	3,017	0	4,417	898
7	2,732	2,989	0	3,259	2,399
8	3,207	3,012	0	2,255	1,892
9	3,118	1,777	0	3,614	22
10	2,737	2,633	0	4,995	2,096
11	2,890	2,993	0	5,408	1,471
12	2,868	2,966	0	6,132	1,829
13	2,539	2,862	0	7,731	3,021
14	2,970	3,087	0	5,784	2,100
15	2,794	3,012	0	1,175	2,075
16	2,872	2,336	0	643	1,634
17	2,940	2,961	0	4,993	1,764
18	2,912	3,004	0	6,892	2,391
19	2,848	2,937	0	6,451	2,608
20	2,946	2,966	0	8,058	2,803
21	2,940	3,052	0	8,432	4,004
22	2,795	2,952	0	4,863	3,710
23	2,884	2,558	0	248	3,769
24	2,958	2,977	0	7,963	841
25	2,765	3,041	0	8,997	2,908
26	2,366	2,631	0	7,493	2,692
27	2,182	2,412	0	5,394	3,188
28	2,255	2,184	0	3,412	1,086
29	2,381	2,167	0	0	2,019
30	2,849	2,559	0	1,373	1,040
<b>Total</b>	<b>81,494</b>	<b>80,320</b>	<b>0</b>	<b>134,521</b>	<b>55,822</b>

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**May 2000**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	2,055	2,240	0	6,394	2,648
2	1,929	2,217	0	6,529	2,559
3	2,049	3,001	0	6,600	2,733
4	2,398	2,265	0	5,633	4,055
5	2,931	3,095	0	5,858	1,335
6	3,408	3,286	0	3,050	2,636
7	3,699	2,697	0	44	2,349
8	745	901	0	3,222	2,624
9	862	891	0	4,224	997
10	1,181	852	0	2,119	582
11	791	888	0	363	1,148
12	981	990	0	2,560	1,867
13	756	875	0	421	3,577
14	716	0	0	2,142	2,462
15	586	915	0	3,743	1,453
16	925	896	0	958	0
17	730	899	0	556	0
18	901	1,410	0	3,916	738
19	939	899	0	4,557	1,793
20	784	1,321	0	3,819	1,786
21	875	138	0	5,053	4,959
22	1,169	1,665	0	3,526	5,233
23	1,626	1,650	0	4,559	0
24	1,518	1,647	0	3,226	603
25	1,558	1,650	0	3,654	869
26	1,559	1,406	0	4,505	1,570
27	1,533	1,645	0	3,443	4,062
28	2,980	1,552	0	5,573	5,541
29	2,405	2,067	0	3,993	5,031
30	901	1,899	0	5,487	1,435
31	1,775	1,900	0	5,145	1,955
<b>Total</b>	<b>47,265</b>	<b>47,757</b>	<b>0</b>	<b>114,872</b>	<b>68,600</b>

(in acre-feet)

**June 2000**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	1,838	1,895	0	5,741	2,706
2	1,843	2,005	0	4,792	2,007
3	1,880	2,046	0	5,230	2,709
4	2,115	1,708	0	3,191	4,580
5	1,858	2,008	0	3,898	3,723
6	2,038	2,083	0	4,894	1,827
7	1,838	1,976	0	3,368	868
8	1,860	1,867	0	2,362	1,279
9	1,868	1,899	0	4,596	3,426
10	2,556	1,806	0	329	1,516
11	1,613	1,658	0	864	3,299
12	1,875	1,733	0	4,303	1,985
13	1,645	1,343	0	5,769	2,626
14	1,336	1,685	0	7,108	1,898
15	1,759	1,837	0	6,463	1,462
16	1,375	1,902	0	5,970	1,680
17	1,792	1,906	0	691	1,722
18	1,859	1,923	0	109	2,142
19	1,779	1,844	0	3,955	1,905
20	1,875	1,996	0	4,471	2,122
21	1,858	2,021	0	5,438	1,663
22	1,868	2,046	0	4,850	1,352
23	1,874	1,818	0	4,792	1,984
24	1,964	1,198	0	807	1,860
25	1,714	1,656	0	1,979	2,615
26	1,929	1,917	0	8,048	2,117
27	2,035	2,193	0	7,866	5,444
28	1,950	2,127	0	9,072	6,489
29	2,080	2,121	0	5,197	7,882
30	1,965	1,829	0	3,271	750
<b>Total</b>	<b>55,839</b>	<b>56,046</b>	<b>0</b>	<b>129,424</b>	<b>77,638</b>

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**July 2000**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	2,131	1,902	0	422	1,876
2	2,132	1,988	0	512	2,289
3	2,152	2,079	0	2,198	2,559
4	2,090	2,201	0	2,811	3,002
5	2,317	2,167	0	6,043	352
6	2,328	1,992	0	6,294	1,075
7	2,399	2,438	0	4,306	657
8	2,344	2,410	0	4	1,098
9	2,344	2,271	0	393	904
10	2,330	2,308	0	6,242	1,340
11	2,358	2,568	0	2,200	1,012
12	1,295	1,352	0	4,438	2,505
13	1,336	1,308	0	5,437	1,949
14	1,324	1,378	0	7,300	1,173
15	1,295	1,435	0	452	4,290
16	1,319	1,367	0	515	3,345
17	1,316	1,366	0	4,701	2,937
18	1,670	1,700	0	7,179	2,192
19	1,674	1,704	0	7,249	3,669
20	1,784	1,697	0	4,729	4,012
21	1,652	1,796	0	7,602	4,119
22	1,895	1,702	0	4,135	4,710
23	1,857	1,694	0	2,079	4,738
24	1,660	1,820	0	5,143	1,677
25	1,659	1,748	0	5,817	3,960
26	1,651	1,648	0	6,871	4,138
27	1,652	1,673	0	6,174	3,662
28	1,659	1,668	0	7,130	3,661
29	1,684	1,748	0	2,892	4,984
30	2,387	1,704	0	1,527	5,906
31	1,250	1,337	0	6,545	3,336
<b>Total</b>	<b>56,944</b>	<b>56,169</b>	<b>0</b>	<b>129,340</b>	<b>87,127</b>

(in acre-feet)

**August 2000**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	0	568	0	9,330	4,293
2	1,227	1,648	0	5,168	6,101
3	1,250	1,647	0	5,463	3,489
4	1,478	1,441	0	7,390	2,969
5	1,910	1,644	0	5,951	4,035
6	3,058	1,621	0	140	5,875
7	2,041	2,017	0	5,565	3,881
8	1,993	2,016	0	6,315	974
9	2,004	2,048	0	7,121	4,093
10	1,982	1,927	0	7,521	4,564
11	1,827	2,083	0	7,574	1,953
12	2,170	2,084	0	1,028	5,064
13	2,169	1,704	0	149	7,340
14	1,864	2,047	0	7,750	2,145
15	1,894	2,040	0	11,021	3,817
16	1,913	2,120	0	8,398	4,895
17	1,765	2,074	0	8,030	5,642
18	1,812	2,127	0	6,643	5,252
19	2,113	2,023	0	2,112	4,495
20	2,549	1,856	0	850	5,117
21	1,930	2,036	0	5,592	1,978
22	1,611	1,818	0	6,016	2,676
23	1,908	2,095	0	7,066	2,322
24	1,836	2,043	0	7,540	2,305
25	1,876	2,003	0	6,963	2,520
26	2,527	2,140	0	4,803	5,602
27	2,558	2,123	0	729	6,969
28	2,309	2,153	0	5,976	2,992
29	2,156	2,247	0	3,838	1,727
30	2,670	2,664	0	3,966	2,763
31	1,828	2,557	0	8,766	931
<b>Total</b>	<b>60,228</b>	<b>60,614</b>	<b>0</b>	<b>174,774</b>	<b>118,779</b>



**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**September 2000**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	2,739	2,514	0	6,535	203
2	2,896	2,391	0	723	4,222
3	3,100	2,669	0	1,449	2,774
4	2,683	2,548	0	3,908	2,250
5	2,620	2,757	0	6,846	1,507
6	2,637	2,605	0	6,701	1,546
7	2,906	2,228	0	6,921	1,790
8	2,473	2,887	0	8,326	2,571
9	2,646	2,526	0	499	3,721
10	1,072	0	0	246	2,457
11	0	0	0	7,090	3,455
12	0	0	0	8,577	4,239
13	0	0	0	5,743	5,301
14	2,461	2,763	0	5,863	5,646
15	2,069	2,727	0	5,973	5,925
16	3,025	2,541	0	6,799	6,681
17	3,038	2,799	0	1,931	9,105
18	1,815	2,329	0	8,487	2,889
19	1,934	2,359	0	4,880	4,612
20	1,788	2,402	0	7,283	2,995
21	2,106	2,426	0	7,211	816
22	2,214	2,285	0	7,540	1,788
23	3,043	2,336	0	1,118	2,971
24	1,908	0	0	821	5,932
25	1,858	1,918	0	6,291	2,474
26	1,649	2,289	0	6,816	1,596
27	2,401	2,788	0	5,713	1,214
28	2,093	2,975	0	6,475	4,220
29	2,633	2,994	0	5,993	3,231
30	2,591	2,958	0	393	3,728
<b>Total</b>	<b>64,398</b>	<b>64,014</b>	<b>0</b>	<b>153,151</b>	<b>101,859</b>

(in acre-feet)

**October 2000**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	2,293	15	0	338	3,728
2	2,591	2,676	0	7,328	508
3	2,585	2,815	0	5,189	137
4	1,162	1,391	0	2,675	1,094
5	2,015	2,708	0	3,552	328
6	2,015	2,030	0	2,781	1,851
7	2,026	1,797	0	490	1,350
8	1,462	201	0	366	2,409
9	1,820	1,924	0	6,477	1,495
10	1,767	1,769	0	5,256	0
11	1,602	1,940	0	5,032	0
12	1,792	2,017	0	5,030	0
13	1,992	2,034	0	4,957	0
14	1,926	1,729	0	494	0
15	973	244	0	882	0
16	2,327	2,781	0	3,120	196
17	2,740	2,428	0	5,799	1,870
18	1,135	1,016	0	2,798	0
19	1,725	2,097	0	3,772	1,395
20	2,408	3,025	0	2,400	2,614
21	2,774	2,660	0	484	2,540
22	3,501	2,901	0	902	7,298
23	3,071	3,008	0	4,182	2,953
24	3,074	2,955	0	7,033	2,254
25	3,003	3,018	0	6,016	2,454
26	2,498	3,036	0	7,036	2,396
27	3,017	2,295	0	7,001	2,146
28	2,534	3,031	0	1,850	3,279
29	3,225	3,253	0	1,522	5,202
30	2,770	3,359	0	6,281	1,733
31	2,232	2,286	0	4,497	1,517
<b>Total</b>	<b>70,055</b>	<b>68,439</b>	<b>0</b>	<b>115,540</b>	<b>52,747</b>

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**November 2000**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	1,747	1,847	0	7,601	1,280
2	3,223	3,177	0	7,266	1,283
3	3,543	3,069	0	7,223	1,555
4	3,586	3,246	0	969	1,467
5	3,072	3,249	0	1,177	3,887
6	3,225	3,280	0	7,035	1,475
7	3,225	3,190	0	7,363	203
8	3,471	3,252	0	6,102	2,280
9	3,233	3,183	0	3,909	2,863
10	3,414	3,162	0	2,499	2,066
11	3,225	3,037	0	2,570	1,827
12	3,119	2,776	0	3,965	3,741
13	2,555	2,838	0	7,751	1,574
14	1,447	3,264	0	5,748	2,029
15	3,224	3,267	0	4,545	1,890
16	3,001	3,241	0	7,246	1,612
17	3,225	3,243	0	5,510	1,665
18	3,225	3,217	0	1,969	4,180
19	3,225	3,257	0	3,235	3,631
20	3,086	3,259	0	8,164	1,479
21	3,225	3,257	0	7,025	2,991
22	3,225	3,253	0	5,377	1,555
23	3,225	3,142	0	872	1,518
24	3,225	3,178	0	4,248	1,348
25	3,322	3,167	0	4,141	0
26	3,498	2,754	0	5,082	1,614
27	3,225	3,169	0	3,443	2,153
28	2,904	3,041	0	8,422	1,882
29	3,067	2,914	0	5,456	2,042
30	2,801	3,068	0	5,418	2,160
<b>Total</b>	<b>92,788</b>	<b>92,997</b>	<b>0</b>	<b>151,331</b>	<b>59,250</b>

(in acre-feet)

**December 2000**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	2,108	2,083	0	5,613	1,550
2	2,748	2,286	0	2,337	580
3	2,266	2,175	0	441	1,485
4	3,225	2,819	0	6,510	1,310
5	1,021	1,472	0	8,414	1,745
6	2,594	2,089	0	6,403	2,894
7	2,242	2,364	0	3,072	3,937
8	2,264	2,445	0	1,542	1,660
9	2,717	2,175	0	869	3,702
10	2,479	2,034	0	3,307	4,841
11	1,198	2,490	0	5,875	2,393
12	1,511	1,871	0	6,232	2,168
13	1,154	661	0	4,674	2,343
14	1,844	1,332	0	4,150	2,328
15	3,041	3,054	0	7,169	2,281
16	3,558	3,143	0	2,455	2,424
17	4,371	3,267	0	1,191	3,578
18	3,370	3,243	0	6,576	1,642
19	3,336	3,208	0	5,149	636
20	2,271	2,415	0	3,477	897
21	2,243	2,495	0	4,775	1,700
22	2,177	2,170	0	5,403	1,887
23	2,135	2,119	0	2,365	3,448
24	3,115	3,239	0	2,291	1,383
25	2,914	2,087	0	3,551	1,085
26	1,474	2,263	0	5,971	454
27	2,329	2,362	0	7,884	1,243
28	2,621	2,472	0	6,477	661
29	2,426	2,442	0	2,545	1,749
30	2,426	2,462	0	1,446	2,506
31	3,558	2,814	0	2,580	4,030
<b>Total</b>	<b>76,736</b>	<b>73,551</b>	<b>0</b>	<b>130,744</b>	<b>64,540</b>

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**January 2001**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	3,309	3,218	0	2,003	957
2	1,543	2,634	0	5,375	0
3	1,757	2,298	0	5,222	1,554
4	1,704	1,806	0	4,547	1,669
5	1,546	1,462	0	3,003	1,472
6	1,543	1,453	0	3,247	3,032
7	1,543	1,562	0	2,075	3,975
8	1,700	1,429	0	8,843	2,076
9	1,492	1,505	0	3,267	3,756
10	1,485	1,721	0	4,606	1,539
11	2,163	1,805	0	4,457	1,403
12	1,648	1,590	0	5,288	2,291
13	1,812	1,787	0	3,804	2,882
14	2,239	1,470	0	2,177	4,638
15	1,564	1,738	0	7,870	2,687
16	1,366	1,745	0	8,498	3,285
17	2,536	1,728	0	5,491	3,539
18	2,239	2,173	0	5,589	4,632
19	1,617	3,258	0	2,686	3,957
20	1,797	1,825	0	2,135	1,306
21	2,559	1,652	0	1,444	3,375
22	2,242	2,278	0	900	0
23	2,453	2,007	0	5,623	99
24	2,236	1,809	0	5,494	1,704
25	1,716	2,119	0	7,498	910
26	0	0	0	3,084	1,809
27	0	0	0	2,782	3,173
28	0	0	0	287	5,790
29	0	0	0	4,614	3,286
30	1,489	800	0	3,792	2,702
31	1,340	1,579	0	9,146	2,906
<b>Total</b>	<b>50,638</b>	<b>50,451</b>	<b>0</b>	<b>134,847</b>	<b>76,404</b>

(in acre-feet)

**February 2001**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	1,282	1,561	0	2,325	3,137
2	1,280	1,448	0	2,796	3,396
3	1,530	1,390	0	374	3,545
4	2,317	2,293	0	2,652	187
5	539	387	0	2,899	2,147
6	537	375	0	5,416	2,675
7	552	638	0	4,999	3,621
8	485	499	0	5,589	2,062
9	477	511	0	5,495	1,890
10	373	653	0	2,015	4,106
11	2,531	2,390	0	754	5,702
12	542	582	0	3,187	8
13	511	581	0	8,413	1,233
14	414	565	0	2,199	3,780
15	517	563	0	8,426	5,919
16	426	614	0	2,732	4,369
17	482	604	0	0	740
18	1,696	1,237	0	108	3,442
19	360	623	0	3,028	952
20	488	548	0	3,712	2,219
21	479	537	0	5,257	880
22	565	452	0	4,939	1,485
23	403	469	0	246	765
24	0	0	0	0	1,526
25	0	77	0	1,173	4,873
26	0	195	0	4,363	2,282
27	0	194	0	7,238	2,201
28	216	195	0	2,613	2,685
<b>Total</b>	<b>19,002</b>	<b>20,181</b>	<b>0</b>	<b>92,948</b>	<b>71,827</b>

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**March 2001**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	256	192	0	1,352	3,792
2	374	191	0	105	2,325
3	169	184	0	0	17
4	208	251	0	634	2,065
5	220	184	0	4,517	639
6	219	193	0	2,268	1,759
7	225	193	0	1,434	3,226
8	222	207	0	4,651	2,854
9	222	200	0	3,199	1,487
10	222	193	0	326	3,285
11	223	194	0	285	2,263
12	222	222	0	1,717	1,851
13	379	209	0	2,442	1,570
14	224	198	0	999	967
15	225	197	0	3,393	2,652
16	222	199	0	2,084	4,488
17	225	191	0	1,494	1,537
18	500	515	0	3,557	1,993
19	839	1,196	0	11,687	2,901
20	970	2,422	0	6,618	4,948
21	798	1,233	0	5,002	6,441
22	1,413	647	0	3,971	5,078
23	1,313	821	0	5,841	2,012
24	1,296	1,150	0	467	4,305
25	1,869	205	0	1,885	1,444
26	430	1,144	0	3,230	1,811
27	1,462	1,049	0	5,634	1,526
28	1,790	1,760	0	5,113	1,505
29	1,814	1,718	0	3,603	3,549
30	1,895	1,866	0	6,558	3,267
31	1,711	1,641	0	2,802	5,188
Total	22,157	20,765	0	96,868	82,745

(in acre-feet)

**April 2001**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	2,580	1,972	0	3,555	1,159
2	1,366	2,346	0	2,871	1,165
3	1,605	1,839	0	5,176	1,618
4	1,524	1,670	0	4,662	1,747
5	1,385	1,703	0	3,835	1,758
6	1,546	1,633	0	4,633	801
7	1,713	1,254	0	305	1,318
8	2,794	1,590	0	1,621	3,254
9	5	0	0	5,142	1,754
10	0	0	0	835	1,325
11	468	1,304	0	583	527
12	1,390	1,258	0	3,104	977
13	686	1,118	0	1,923	1,913
14	474	647	0	3,166	2,417
15	1,617	934	0	2,564	2,548
16	640	829	0	9,367	1,403
17	0	0	0	7,502	6,255
18	0	0	0	4,960	5,416
19	0	0	0	3,526	2,622
20	324	308	0	1,987	1,428
21	608	317	0	135	4,005
22	1,612	1,440	0	2,554	5,131
23	565	688	0	6,091	2,216
24	721	985	0	9,444	5,092
25	644	853	0	9,220	6,437
26	385	601	0	6,406	6,208
27	111	130	0	7,559	4,182
28	178	0	0	105	5,812
29	975	340	0	3,086	6,318
30	821	699	0	6,591	3,819
Total	26,737	26,458	0	122,508	90,625

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**May 2001**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	1,226	1,612	0	5,844	2,473
2	1,586	1,514	0	3,609	2,415
3	1,594	1,991	0	4,202	3,096
4	2,288	2,655	0	5,048	3,657
5	2,370	2,649	0	2,704	3,875
6	3,838	2,685	0	3,400	0
7	2,352	2,712	0	9,571	1,774
8	2,561	2,395	0	10,896	5,864
9	2,795	2,364	0	9,779	7,324
10	2,354	2,792	0	9,711	5,604
11	2,683	2,975	0	7,447	6,893
12	2,440	1,928	0	5,213	6,453
13	3,225	2,725	0	3,861	4,386
14	1,859	2,370	0	6,066	1,958
15	1,959	1,799	0	4,170	2,950
16	1,811	1,906	0	8,666	2,814
17	1,951	2,089	0	7,110	4,034
18	1,997	2,056	0	7,439	4,021
19	1,963	1,822	0	1,250	4,114
20	2,559	1,777	0	5,266	3,353
21	2,172	2,263	0	6,552	4,467
22	2,196	1,967	0	10,550	5,299
23	1,966	2,216	0	11,241	6,353
24	1,966	2,480	0	6,105	6,068
25	2,020	2,645	0	9,020	2,787
26	2,098	2,048	0	3,433	5,384
27	3,836	2,508	0	723	5,742
28	2,879	2,330	0	2,759	1,667
29	2,035	2,342	0	5,085	123
30	1,334	1,611	0	7,620	3,263
31	1,525	1,678	0	11,527	4,852
<b>Total</b>	<b>69,438</b>	<b>68,904</b>	<b>0</b>	<b>195,867</b>	<b>123,063</b>

(in acre-feet)

**June 2001**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	1,294	1,648	0	6,523	5,416
2	1,526	1,342	0	345	2,999
3	2,238	1,931	0	1,947	5,742
4	1,581	1,331	0	2,964	973
5	1,695	1,374	0	3,840	1,915
6	848	823	0	5,935	2,243
7	987	955	0	9,324	1,083
8	1,019	1,424	0	5,608	2,679
9	1,165	1,443	0	1,038	4,717
10	287	0	0	2,353	5,955
11	1,169	1,450	0	2,702	5,739
12	1,175	1,518	0	6,135	1,860
13	1,268	1,436	0	1,733	2,205
14	1,708	1,613	0	7,679	2,951
15	1,597	1,405	0	9,385	3,930
16	1,446	1,775	0	3,140	2,711
17	834	130	0	2,905	5,663
18	1,271	1,366	0	9,798	5,474
19	1,071	1,552	0	6,020	6,265
20	1,528	1,471	0	6,396	4,773
21	1,589	1,475	0	7,588	1,364
22	1,693	1,783	0	7,456	2,587
23	1,229	1,043	0	1,460	5,517
24	1,552	568	0	345	7,534
25	851	1,363	0	3,520	1,738
26	1,504	1,379	0	7,983	652
27	1,843	1,377	0	5,016	2,349
28	1,558	1,157	0	7,190	4,834
29	1,292	1,662	0	7,699	2,984
30	1,429	1,354	0	4,084	4,113
<b>Total</b>	<b>40,247</b>	<b>39,148</b>	<b>0</b>	<b>148,111</b>	<b>108,965</b>

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**July 2001**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	1,000	7	0	115	6,654
2	1,153	1,606	0	9,198	5,268
3	1,183	1,634	0	9,568	6,662
4	1,635	1,360	0	152	6,812
5	1,663	1,437	0	4,574	3,542
6	1,549	1,354	0	4,387	411
7	1,217	1,399	0	4,193	4,723
8	860	196	0	5,226	4,519
9	1,278	1,550	0	4,373	4,998
10	1,077	1,160	0	1,870	3,686
11	1,338	1,543	0	4,999	696
12	1,596	1,639	0	7,957	1,344
13	2,044	1,773	0	5,574	834
14	1,118	1,560	0	231	2,271
15	1,418	1,076	0	316	5,531
16	1,205	1,416	0	2,268	2,426
17	1,580	1,833	0	8,503	42
18	1,593	1,658	0	5,153	3,383
19	1,587	1,769	0	7,070	3,591
20	1,599	1,681	0	6,456	1,713
21	1,441	1,165	0	373	2,581
22	1,703	401	0	1,486	5,916
23	1,333	1,815	0	5,880	4,219
24	1,700	1,806	0	8,143	4,167
25	1,918	1,860	0	5,766	3,887
26	1,759	1,914	0	8,894	3,349
27	1,712	1,915	0	8,029	3,357
28	1,584	1,885	0	495	4,048
29	1,049	123	0	91	4,990
30	1,426	1,662	0	6,521	5,341
31	1,875	1,771	0	9,140	3,713
Total	45,193	43,968	0	147,001	114,674

(in acre-feet)

**August 2001**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	1,384	1,790	0	2,377	1,877
2	1,445	1,909	0	3,594	3,422
3	1,762	1,952	0	7,289	1,473
4	1,998	2,337	0	626	3,357
5	1,946	0	0	6,467	5,167
6	4	72	0	5,806	5,756
7	83	0	0	5,968	3,167
8	83	0	0	1,576	3,289
9	185	513	0	4,736	4,336
10	1,557	2,281	0	7,581	4,750
11	1,518	2,396	0	7,431	3,339
12	1,779	0	0	719	5,278
13	990	1,570	0	5,877	4,175
14	1,919	1,987	0	3,074	4,348
15	1,640	1,931	0	9,531	2,835
16	1,665	1,856	0	7,441	2,565
17	1,834	1,544	0	9,228	3,786
18	1,601	2,054	0	465	706
19	1,968	583	0	356	6,434
20	956	1,855	0	5,108	6,223
21	2,103	1,875	0	5,025	3,419
22	1,732	1,848	0	4,032	4,409
23	1,747	1,779	0	7,867	2,023
24	1,332	1,799	0	7,954	2,886
25	1,471	1,857	0	1,296	2,872
26	1,612	0	0	1,444	4,789
27	1,422	1,803	0	6,468	3,450
28	1,927	1,935	0	6,706	3,568
29	1,867	1,648	0	6,032	2,877
30	1,860	1,987	0	5,576	2,700
31	2,018	1,971	0	9,250	2,868
Total	45,408	45,132	0	156,900	112,144

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**September 2001**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	3,044	2,688	0	6,207	6,260
2	928	33	0	4,859	6,396
3	1,944	1,997	0	1,986	5,828
4	1,478	1,886	0	5,594	3,890
5	1,540	1,893	0	2,600	2,285
6	2,060	2,021	0	5,393	1,161
7	2,270	2,317	0	730	618
8	2,066	2,517	0	4,677	2,131
9	1,353	63	0	3,171	2,493
10	2,093	2,254	0	4,184	1,894
11	2,026	2,388	0	3,236	0
12	1,924	2,287	0	6,565	950
13	2,054	2,307	0	6,992	952
14	2,034	2,248	0	6,825	3,966
15	2,879	2,520	0	0	4,995
16	2,240	1,125	0	5,310	3,629
17	2,353	2,690	0	6,138	4,469
18	2,215	2,387	0	6,618	4,491
19	2,072	1,782	0	6,463	4,208
20	2,334	2,366	0	8,622	3,362
21	2,032	2,217	0	7,957	4,139
22	2,639	2,561	0	1,518	3,445
23	3,571	3,150	0	5,084	4,317
24	2,438	2,738	0	7,532	2,488
25	2,452	2,484	0	6,150	2,934
26	2,077	2,218	0	6,364	4,304
27	1,963	2,346	0	7,024	3,178
28	1,270	1,030	0	6,110	3,063
29	666	0	0	1,141	4,533
30	0	193	0	3,794	4,040
<b>Total</b>	<b>60,015</b>	<b>58,706</b>	<b>0</b>	<b>148,844</b>	<b>100,419</b>

(in acre-feet)

**October 2001**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	1,422	1,831	0	7,487	3,007
2	1,759	2,045	0	6,960	3,958
3	1,759	1,724	0	5,479	2,286
4	1,847	1,864	0	4,983	3,574
5	1,930	1,891	0	3,008	2,863
6	2,487	2,277	0	3,161	4,695
7	1,156	0	0	3,651	5,926
8	1,304	1,966	0	6,378	3,565
9	1,658	1,853	0	5,204	937
10	2,145	2,174	0	6,624	2,130
11	1,985	1,962	0	1,618	2,781
12	1,882	2,006	0	1,473	616
13	2,146	2,109	0	1,236	1,163
14	2,877	2,271	0	1,664	1,259
15	1,690	2,363	0	6,221	443
16	2,455	2,024	0	4,563	1,086
17	2,253	2,605	0	6,153	1,852
18	2,236	2,224	0	4,528	373
19	1,927	2,238	0	4,650	4,552
20	2,150	1,934	0	924	1,729
21	2,887	2,328	0	1,129	3,726
22	1,583	2,147	0	4,993	1,355
23	1,854	2,408	0	5,325	663
24	2,028	2,331	0	5,503	803
25	2,097	2,165	0	5,085	430
26	1,812	2,295	0	7,017	0
27	1,940	2,260	0	36	1,603
28	3,998	2,345	0	126	2,014
29	2,079	2,182	0	5,217	2,213
30	2,168	2,186	0	2,922	758
31	2,079	2,206	0	2,716	1,830
<b>Total</b>	<b>63,593</b>	<b>64,214</b>	<b>0</b>	<b>126,034</b>	<b>64,190</b>

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**November 2001**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	2,031	1,959	0	4,308	3,040
2	2,180	2,180	0	2,308	1,160
3	2,092	2,407	0	1,748	0
4	3,829	2,401	0	771	1,842
5	1,012	2,176	0	5,409	1,893
6	1,296	2,224	0	6,562	1,685
7	2,012	1,580	0	4,333	563
8	2,489	2,393	0	6,012	764
9	2,600	2,355	0	4,413	759
10	2,997	1,526	0	391	2,045
11	3,403	3,038	0	279	4,861
12	2,150	2,623	0	5,911	0
13	2,008	2,273	0	6,113	819
14	1,766	2,008	0	5,835	1,727
15	2,025	2,265	0	6,183	1,708
16	2,212	2,063	0	5,251	1,682
17	2,120	2,701	0	484	3,318
18	3,927	2,041	0	1,135	5,065
19	1,826	1,865	0	6,151	1,096
20	2,042	2,066	0	7,763	1,794
21	2,201	1,879	0	6,844	2,233
22	2,565	2,309	0	562	2,392
23	2,091	2,299	0	1,187	1,292
24	2,042	2,216	0	4,138	1,457
25	2,571	2,024	0	4,751	3,304
26	1,580	1,696	0	3,370	1,451
27	1,403	1,611	0	5,212	762
28	1,351	1,634	0	5,110	729
29	1,530	1,632	0	3,029	2,739
30	1,533	1,484	0	7,003	1,862
<b>Total</b>	<b>64,884</b>	<b>62,928</b>	<b>0</b>	<b>122,566</b>	<b>54,042</b>

(in acre-feet)

**December 2001**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	1,495	1,609	0	1,926	17
2	2,478	1,596	0	0	3,860
3	1,042	1,583	0	2,346	3,434
4	1,523	1,497	0	7,310	3,894
5	1,573	1,637	0	2,655	0
6	1,393	1,616	0	3,071	873
7	1,465	1,651	0	4,498	1,244
8	1,215	1,428	0	315	851
9	2,179	1,571	0	108	1,220
10	172	37	0	378	2,383
11	688	0	0	3,163	840
12	0	0	0	1,193	1,976
13	0	0	0	1,133	1,186
14	0	281	0	1,852	1,253
15	0	627	0	380	0
16	1,609	1,384	0	216	734
17	1,383	1,494	0	4,614	1,398
18	1,267	1,312	0	3,928	0
19	1,617	1,597	0	3,813	1,424
20	1,825	1,525	0	4,849	1,630
21	1,661	1,584	0	6,620	1,175
22	1,487	1,690	0	973	2,855
23	1,946	1,648	0	1,425	2,015
24	1,545	1,869	0	634	3,084
25	3,050	3,072	0	2,662	1,305
26	1,170	1,270	0	5,715	2,416
27	1,193	1,457	0	5,791	1,422
28	1,529	1,548	0	6,320	1,504
29	1,466	1,612	0	2,097	1,963
30	2,458	1,612	0	1,307	3,229
31	989	1,739	0	2,492	3,240
<b>Total</b>	<b>41,418</b>	<b>41,546</b>	<b>0</b>	<b>83,784</b>	<b>52,425</b>



**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**January 2002**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	2,561	1,707	0	1,957	1,709
2	1,107	2,018	0	3,846	2,237
3	1,084	1,350	0	4,819	1,575
4	1,133	1,196	0	5,707	1,670
5	1,752	1,382	0	387	0
6	2,832	1,908	0	445	3,402
7	882	1,122	0	3,939	2,638
8	841	1,098	0	4,292	11
9	894	904	0	4,439	1,824
10	535	1,028	0	5,445	2,337
11	1,087	1,087	0	4,115	863
12	1,212	1,190	0	131	1,670
13	1,465	1,390	0	176	4,089
14	1,012	1,124	0	3,322	1,999
15	849	1,133	0	3,804	1,690
16	585	746	0	3,159	1,323
17	739	1,036	0	2,717	1,416
18	767	689	0	3,545	7
19	1,287	1,000	0	440	0
20	1,528	1,130	0	97	3,076
21	1,134	1,173	0	1,079	1,393
22	1,101	1,206	0	2,100	1,551
23	1,054	1,168	0	3,076	12
24	1,165	1,185	0	2,222	5
25	1,371	1,203	0	1,620	729
26	1,613	1,236	0	311	21
27	1,460	1,237	0	2,814	2,672
28	1,065	1,302	0	4,070	2,685
29	1,174	1,323	0	4,293	1,651
30	1,200	1,218	0	3,119	1,544
31	940	1,267	0	1,371	0
<b>Total</b>	<b>37,429</b>	<b>37,756</b>	<b>0</b>	<b>82,857</b>	<b>45,799</b>

(in acre-feet)

**February 2002**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	1,218	1,249	0	2,158	717
2	2,246	1,194	0	250	719
3	1,946	1,415	0	350	23
4	1,390	1,461	0	2,535	1,246
5	835	858	0	1,590	606
6	1,235	1,453	0	1,693	361
7	1,502	1,446	0	2,085	744
8	1,055	1,465	0	2,728	1,413
9	1,766	1,436	0	433	0
10	1,766	1,486	0	441	244
11	1,222	1,443	0	2,736	1,260
12	1,519	1,443	0	1,579	536
13	1,418	1,442	0	2,658	0
14	1,460	1,454	0	3,093	504
15	1,460	1,448	0	1,192	0
16	1,584	1,431	0	345	0
17	1,701	1,102	0	83	116
18	892	1,266	0	2,236	1,318
19	1,477	1,457	0	3,867	341
20	719	1,260	0	2,755	0
21	1,613	1,455	0	3,522	33
22	1,446	1,474	0	2,673	1,832
23	1,763	1,467	0	458	1,180
24	2,282	1,472	0	1,705	1,944
25	1,104	1,425	0	3,760	2,991
26	1,554	1,454	0	5,317	671
27	1,335	1,438	0	3,319	1,102
28	1,055	1,447	0	2,463	1,501
<b>Total</b>	<b>40,563</b>	<b>38,841</b>	<b>0</b>	<b>58,024</b>	<b>21,402</b>

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**March 2002**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	1,290	1,422	0	3,401	1,614
2	1,933	1,434	0	1,922	0
3	1,613	1,384	0	348	0
4	1,337	1,592	0	3,149	0
5	1,392	1,508	0	3,088	0
6	1,702	1,740	0	2,795	709
7	674	1,502	0	1,981	0
8	2,120	2,302	0	2,462	0
9	2,998	2,365	0	253	712
10	2,892	2,276	0	337	367
11	1,463	1,870	0	2,809	562
12	1,584	1,843	0	2,432	0
13	1,732	2,084	0	3,114	1,961
14	1,810	2,039	0	4,050	0
15	1,851	1,872	0	1,799	0
16	3,838	3,269	0	1,120	0
17	3,232	3,193	0	1,885	8
18	938	1,373	0	2,596	737
19	1,744	2,063	0	3,860	0
20	429	529	0	3,290	0
21	480	691	0	2,951	0
22	2,192	1,968	0	3,288	0
23	3,353	3,280	0	6	533
24	3,396	3,275	0	0	699
25	3,045	3,273	0	4,635	816
26	3,100	3,185	0	3,595	0
27	2,747	3,098	0	3,475	0
28	3,197	3,206	0	2,458	0
29	3,184	3,020	0	3,116	746
30	3,881	3,083	0	3,358	547
31	3,232	3,141	0	2,295	1,574
<b>Total</b>	<b>68,379</b>	<b>68,880</b>	<b>0</b>	<b>75,868</b>	<b>11,585</b>

(in acre-feet)

**April 2002**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	3,091	3,088	0	5,406	1,597
2	3,094	3,224	0	4,646	1,606
3	3,100	3,219	0	5,538	757
4	3,258	3,197	0	5,447	548
5	3,305	3,250	0	4,833	877
6	3,305	3,210	0	348	1,543
7	2,970	1,655	0	2,963	2,141
8	1,809	1,844	0	5,353	1,814
9	1,660	1,804	0	3,863	2,281
10	1,703	1,795	0	5,172	702
11	1,334	1,418	0	4,402	741
12	1,960	2,443	0	3,021	1,316
13	2,134	2,165	0	1,386	0
14	3,921	2,074	0	675	4,019
15	1,915	2,145	0	4,266	1,770
16	1,859	2,159	0	4,224	1,949
17	1,850	2,074	0	5,541	0
18	1,853	2,002	0	3,511	1,745
19	1,888	2,033	0	6,149	1,070
20	2,241	2,041	0	2,133	2,837
21	3,423	2,168	0	1,904	4,157
22	1,880	1,879	0	8,871	1,974
23	1,794	2,220	0	5,731	1,431
24	2,725	3,138	0	5,437	1,695
25	2,734	3,164	0	6,598	1,820
26	2,726	3,155	0	6,905	2,349
27	3,230	3,024	0	365	2,738
28	3,838	2,892	0	2,245	4,834
29	2,756	3,013	0	6,438	2,139
30	2,810	3,050	0	7,471	2,239
<b>Total</b>	<b>76,166</b>	<b>74,543</b>	<b>0</b>	<b>130,842</b>	<b>54,689</b>

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**May 2002**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	2,948	3,158	0	6,093	2,128
2	2,974	3,123	0	7,332	0
3	3,358	3,115	0	4,677	407
4	3,144	2,903	0	168	1,322
5	3,838	3,084	0	480	2,417
6	3,120	3,224	0	7,302	1,839
7	3,253	3,290	0	6,592	1,052
8	1,175	2,226	0	7,114	3,135
9	2,985	3,164	0	8,379	2,867
10	3,145	3,194	0	7,180	2,743
11	3,198	3,291	0	3,510	3,927
12	2,556	2,772	0	561	3,998
13	2,654	2,493	0	7,891	3,368
14	2,878	3,201	0	7,127	3,337
15	2,835	3,082	0	6,069	2,996
16	2,719	3,098	0	10,391	2,028
17	2,710	2,996	0	7,964	2,133
18	3,523	2,867	0	102	4,072
19	4,169	2,919	0	889	2,677
20	1,867	1,727	0	3,206	2,333
21	1,873	2,263	0	3,188	1,124
22	2,058	2,040	0	7,805	0
23	1,833	1,773	0	7,791	1,807
24	1,820	1,942	0	7,201	2,981
25	3,423	3,286	0	2,903	4,133
26	4,006	3,224	0	2,266	5,113
27	3,838	2,946	0	4,656	4,480
28	2,642	3,125	0	8,600	950
29	2,717	2,792	0	6,993	2,687
30	3,352	3,267	0	7,938	4,163
31	3,193	3,295	0	8,589	4,363
<b>Total</b>	<b>89,804</b>	<b>88,880</b>	<b>0</b>	<b>170,957</b>	<b>80,580</b>

(in acre-feet)

**June 2002**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	2,980	2,947	0	3,595	2,786
2	3,820	2,775	0	4,708	4,902
3	2,640	2,847	0	6,585	4,134
4	2,820	2,995	0	6,561	4,658
5	2,858	2,970	0	5,026	2,625
6	2,633	3,108	0	7,476	1,759
7	2,493	3,066	0	7,909	2,086
8	2,554	2,854	0	746	3,912
9	2,879	936	0	1,305	1,425
10	1,321	2,347	0	7,005	2,497
11	1,779	2,115	0	7,221	2,943
12	2,306	2,520	0	7,120	4,468
13	2,185	2,444	0	8,528	4,378
14	1,960	2,377	0	9,044	4,600
15	2,390	2,536	0	7,623	4,639
16	3,225	701	0	3,009	6,875
17	1,893	2,308	0	6,559	4,381
18	1,972	2,507	0	6,827	4,882
19	1,953	2,753	0	9,611	4,427
20	2,276	2,698	0	8,335	3,716
21	2,168	2,272	0	4,976	4,194
22	2,807	3,089	0	2,247	4,804
23	3,308	982	0	3,080	2,752
24	2,885	2,543	0	6,227	3,174
25	2,903	3,150	0	9,329	4,270
26	2,807	3,206	0	7,824	2,832
27	2,855	3,202	0	4,651	2,615
28	2,846	3,294	0	5,709	1,347
29	3,347	3,235	0	10,256	1,341
30	3,752	2,500	0	471	5,279
<b>Total</b>	<b>78,615</b>	<b>77,277</b>	<b>0</b>	<b>179,563</b>	<b>108,701</b>

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**July 2002**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	3,175	3,103	0	6,701	4,679
2	2,891	3,135	0	7,374	3,562
3	3,110	3,104	0	7,267	2,814
4	3,110	2,991	0	112	5,081
5	2,778	2,942	0	8,533	1
6	3,558	3,051	0	5,458	2,758
7	3,930	3,142	0	2,725	3,030
8	3,008	3,182	0	6,640	4,691
9	3,292	3,229	0	8,184	3,831
10	3,251	3,246	0	9,192	1,993
11	3,252	3,272	0	7,823	2,493
12	3,003	2,947	0	9,129	3,729
13	320	859	0	2,320	3,712
14	3,754	3,219	0	539	4,387
15	2,973	2,889	0	7,729	3,140
16	2,755	3,173	0	9,495	4,527
17	2,613	3,036	0	4,752	2,824
18	2,613	2,992	0	9,245	3,508
19	2,622	2,992	0	9,153	4,018
20	3,197	2,911	0	1,560	3,863
21	3,574	2,111	0	2,771	4,193
22	2,620	2,945	0	6,877	3,234
23	2,678	2,998	0	7,843	3,273
24	2,772	2,888	0	6,895	2,137
25	2,976	2,854	0	6,979	2,881
26	2,802	2,660	0	8,312	798
27	2,883	2,608	0	712	2,947
28	2,712	2,587	0	111	3,019
29	1,877	2,077	0	6,697	4,337
30	1,940	2,148	0	5,195	0
31	1,946	2,263	0	5,235	2,044
Total	87,985	87,554	0	181,558	97,504

(in acre-feet)

**August 2002**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	2,029	2,157	0	5,881	3,213
2	2,058	1,892	0	6,169	3,030
3	2,615	2,297	0	1,070	2,783
4	2,664	1,847	0	1,954	4,344
5	1,282	1,931	0	5,086	4,128
6	1,964	2,568	0	6,034	2,678
7	2,348	2,043	0	6,429	2,987
8	2,250	2,065	0	6,356	2,690
9	2,113	2,147	0	8,568	1,288
10	2,195	2,056	0	3,100	3,572
11	2,242	2,015	0	678	5,056
12	2,136	2,159	0	5,902	3,532
13	1,823	2,209	0	5,951	1,392
14	2,201	2,106	0	6,146	2,467
15	1,963	2,044	0	4,383	623
16	1,873	1,985	0	4,389	1,757
17	2,523	2,024	0	2,246	3,585
18	3,391	2,010	0	242	1,852
19	1,179	2,397	0	4,993	3,033
20	1,279	1,340	0	4,265	3,056
21	1,448	1,424	0	2,746	2,791
22	1,077	1,341	0	6,673	1,353
23	1,173	1,297	0	7,194	1,056
24	1,923	2,070	0	261	2,970
25	2,892	1,439	0	350	4,853
26	1,752	1,997	0	5,251	1,935
27	1,738	2,021	0	6,834	1,307
28	1,759	2,027	0	5,594	1,838
29	1,759	1,991	0	5,514	1,839
30	1,759	2,066	0	4,527	1,819
31	1,759	2,022	0	2,974	3,353
Total	61,167	60,987	0	137,760	82,180

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**September 2002**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	2,559	2,303	0	5,708	2,973
2	2,559	1,977	0	4,139	2,202
3	1,532	1,817	0	4,761	923
4	1,547	1,869	0	3,553	1,917
5	1,649	1,903	0	4,455	3,537
6	1,569	2,103	0	4,245	749
7	2,297	1,501	0	272	1,291
8	3,462	1,795	0	328	4,677
9	1,812	1,936	0	4,584	2,964
10	1,759	2,049	0	4,797	1,574
11	1,766	1,796	0	3,719	858
12	1,894	2,026	0	4,809	1,861
13	1,872	1,997	0	5,898	1,522
14	2,242	2,071	0	2,048	3,406
15	2,559	1,966	0	3,584	3,950
16	1,445	1,756	0	3,984	3,344
17	1,533	1,790	0	4,557	1,672
18	1,708	1,786	0	1,834	780
19	1,587	1,782	0	3,855	2,006
20	1,583	1,894	0	4,554	1,807
21	2,985	2,111	0	3,000	1,843
22	2,559	2,097	0	4,450	3,294
23	1,073	2,076	0	5,108	1,622
24	1,546	1,797	0	4,551	1,749
25	1,438	1,931	0	4,739	1,654
26	1,443	1,918	0	3,956	687
27	1,453	1,914	0	3,741	1,760
28	3,838	1,920	0	1,246	1,365
29	3,098	2,629	0	1,625	3,144
30	1,442	1,891	0	5,574	3,247
<b>Total</b>	<b>59,809</b>	<b>58,401</b>	<b>0</b>	<b>113,674</b>	<b>64,378</b>

(in acre-feet)

**October 2002**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	1,655	1,917	0	6,095	2,496
2	1,445	2,072	0	6,645	2,699
3	1,462	1,980	0	4,535	1,953
4	1,437	1,834	0	1,805	702
5	3,521	1,017	0	374	0
6	3,198	2,945	0	490	1,313
7	1,601	1,784	0	4,167	772
8	1,281	1,513	0	3,976	677
9	1,118	1,453	0	4,081	1,502
10	1,171	1,539	0	4,051	1,571
11	1,113	1,618	0	4,752	1,641
12	1,272	1,441	0	368	1,852
13	1,756	1,520	0	407	2,502
14	735	75	0	1,166	1,243
15	341	0	0	1,290	1,228
16	361	0	0	3,767	3,565
17	360	0	0	3,266	1,447
18	324	0	0	5,369	3,578
19	695	1,185	0	905	1,891
20	1,758	1,488	0	3,171	4,590
21	901	1,566	0	3,402	1,747
22	1,422	928	0	3,387	1,003
23	1,313	1,565	0	3,332	1,130
24	1,314	1,570	0	3,098	807
25	1,203	1,561	0	3,053	672
26	1,752	1,467	0	298	698
27	2,432	1,593	0	1,207	4,599
28	1,103	1,441	0	3,559	1,636
29	1,120	1,409	0	2,821	529
30	1,122	1,423	0	3,121	380
31	1,071	1,478	0	2,940	0
<b>Total</b>	<b>41,357</b>	<b>41,382</b>	<b>0</b>	<b>90,898</b>	<b>50,423</b>

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**November 2002**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	1,272	1,902	0	2,885	0
2	2,078	1,625	0	450	0
3	2,559	1,300	0	607	506
4	2,925	2,991	0	3,430	572
5	2,550	3,096	0	4,172	1,071
6	2,608	2,920	0	4,167	565
7	2,456	2,921	0	4,555	615
8	2,717	2,870	0	5,477	1,196
9	3,253	3,181	0	858	1,981
10	4,171	2,329	0	2,826	3,661
11	1,952	2,301	0	4,963	0
12	1,997	2,663	0	4,963	0
13	2,023	2,364	0	4,263	465
14	2,026	2,394	0	5,615	1,444
15	2,132	2,407	0	4,836	1,188
16	3,290	2,356	0	453	1,171
17	3,462	2,339	0	2,058	3,791
18	2,504	2,605	0	5,973	2,420
19	2,477	2,801	0	3,345	1,995
20	1,769	2,192	0	4,868	0
21	2,383	2,603	0	5,798	883
22	2,619	3,070	0	8,000	706
23	3,533	2,889	0	973	512
24	4,046	3,117	0	727	2,503
25	2,502	2,689	0	7,129	1,506
26	2,305	2,781	0	7,293	0
27	2,171	2,716	0	6,619	1,289
28	3,963	2,736	0	1,304	1,357
29	2,398	2,742	0	2,133	1,064
30	2,598	2,674	0	0	1,439
<b>Total</b>	<b>78,739</b>	<b>77,574</b>	<b>0</b>	<b>110,740</b>	<b>33,900</b>

(in acre-feet)

**December 2002**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	4,004	2,725	0	1,444	2,521
2	2,519	3,109	0	6,111	0
3	2,454	3,042	0	4,267	796
4	2,608	2,916	0	4,785	1,491
5	3,006	2,813	0	3,284	613
6	3,014	2,843	0	5,695	0
7	2,889	3,240	0	1,002	0
8	4,213	3,137	0	568	1,860
9	2,610	2,859	0	4,971	2,130
10	2,875	2,780	0	5,124	492
11	2,515	2,814	0	5,764	1,499
12	2,473	2,457	0	4,926	0
13	2,872	3,058	0	5,568	1,291
14	3,364	3,238	0	1,472	1,559
15	4,504	3,150	0	376	1,751
16	2,854	3,153	0	3,000	2,177
17	856	835	0	5,638	1,149
18	0	0	0	5,968	2,161
19	0	248	0	5,594	1,085
20	649	1,572	0	137	0
21	1,607	2,109	0	83	0
22	2,850	1,581	0	684	2,010
23	2,121	2,557	0	4,736	822
24	2,321	3,103	0	4,873	0
25	4,504	3,246	0	2,831	673
26	2,265	2,930	0	4,876	668
27	2,450	3,201	0	2,130	0
28	3,920	3,193	0	2,171	1,307
29	4,645	2,739	0	1,788	2,828
30	2,532	3,023	0	6,489	1,934
31	2,358	2,958	0	4,551	1,481
<b>Total</b>	<b>81,852</b>	<b>80,629</b>	<b>0</b>	<b>110,906</b>	<b>34,298</b>

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**January 2003**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	4,352	3,296	0	3,692	1,425
2	901	1,097	0	6,110	597
3	751	1,353	0	5,911	2,479
4	1,164	1,084	0	1,381	4,899
5	1,613	1,092	0	3,211	4,420
6	404	2	0	2,461	2,376
7	0	0	0	2,878	1,898
8	267	0	0	4,251	2,493
9	0	0	0	2,519	1,559
10	0	0	0	3,039	2,591
11	0	0	0	1,397	2,123
12	0	0	0	2,681	2,528
13	0	0	0	1,363	2,653
14	0	0	0	2,896	2,980
15	0	0	0	2,560	2,547
16	83	0	0	2,007	1,629
17	0	0	0	2,204	1,638
18	0	0	0	339	388
19	0	0	0	510	1,802
20	0	0	0	1,793	2,000
21	0	0	0	1,400	2,016
22	0	0	0	2,109	1,429
23	0	0	0	2,037	1,212
24	0	0	0	3,232	2,948
25	0	0	0	1,633	3,181
26	0	0	0	347	1,728
27	0	0	0	2,501	3,350
28	211	653	0	3,135	2,484
29	584	786	0	3,195	2,363
30	426	0	0	3,230	2,179
31	0	0	0	4,248	2,229
<b>Total</b>	<b>10,756</b>	<b>9,363</b>	<b>0</b>	<b>80,270</b>	<b>70,144</b>

(in acre-feet)

**February 2003**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	83	0	0	1,711	3,230
2	0	0	0	624	2,701
3	0	0	0	1,610	1,913
4	97	0	0	1,456	1,553
5	99	0	0	336	589
6	0	0	0	309	0
7	0	0	0	916	1,227
8	0	0	0	219	0
9	0	0	0	262	0
10	97	0	0	886	0
11	0	0	0	457	0
12	0	63	0	480	0
13	0	0	0	903	0
14	0	0	0	3,099	717
15	0	0	0	366	0
16	0	0	0	273	0
17	0	0	0	60	1,902
18	0	0	0	2,716	1,503
19	0	0	0	1,743	1,253
20	0	0	0	1,140	0
21	0	0	0	1,646	581
22	0	0	0	481	1,872
23	0	0	0	2,243	2,355
24	0	567	0	1,092	523
25	341	264	0	1,353	0
26	0	0	0	1,928	371
27	2,448	3,026	0	2,898	0
28	2,614	3,065	0	2,835	931
<b>Total</b>	<b>5,779</b>	<b>6,985</b>	<b>0</b>	<b>34,042</b>	<b>23,221</b>

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**March 2003**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	2,451	3,175	0	1,069	0
2	3,177	2,351	0	117	0
3	1,942	2,021	0	4,967	0
4	2,408	3,019	0	3,424	0
5	2,665	3,020	0	4,056	0
6	1,963	2,147	0	3,720	0
7	2,451	2,731	0	3,682	0
8	2,005	2,603	0	327	0
9	3,838	1,964	0	504	0
10	2,353	2,491	0	3,597	0
11	2,139	2,421	0	3,808	0
12	1,983	1,936	0	4,046	889
13	2,859	3,194	0	3,604	686
14	2,693	3,299	0	5,928	0
15	2,965	2,958	0	1,414	0
16	3,803	1,998	0	194	986
17	2,493	2,810	0	4,039	941
18	2,284	2,810	0	2,796	0
19	2,633	3,010	0	1,849	0
20	2,728	2,896	0	3,771	0
21	2,259	2,734	0	3,841	0
22	420	809	0	3,851	0
23	3,922	3,230	0	1,369	9
24	1,334	2,031	0	3,080	1,970
25	1,544	2,025	0	4,417	2,166
26	2,404	2,372	0	4,934	2,359
27	3,477	3,266	0	4,699	1,152
28	3,477	3,070	0	5,261	545
29	3,371	2,920	0	869	575
30	3,907	2,724	0	992	893
31	3,780	3,131	0	8,284	0
<b>Total</b>	<b>81,728</b>	<b>81,166</b>	<b>0</b>	<b>98,509</b>	<b>13,171</b>

(in acre-feet)

**April 2003**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	3,585	3,202	0	1,994	609
2	3,342	3,303	0	2,664	382
3	2,984	3,307	0	2,884	0
4	2,984	3,257	0	1,075	0
5	2,984	3,316	0	1,845	0
6	3,463	3,177	0	1,222	12
7	2,235	2,465	0	5,024	1,221
8	2,395	2,621	0	5,542	1,580
9	2,450	2,776	0	3,896	0
10	2,295	2,692	0	3,618	0
11	2,445	2,633	0	3,377	0
12	3,092	2,679	0	244	958
13	2,509	1,567	0	480	12
14	2,714	2,718	0	4,842	1,286
15	2,730	3,302	0	5,387	1,534
16	2,642	2,709	0	5,357	808
17	2,492	2,983	0	5,656	1,512
18	3,030	2,829	0	6,401	1,379
19	2,552	2,747	0	1,185	0
20	3,604	2,189	0	92	950
21	3,160	3,017	0	5,641	2,461
22	3,031	3,140	0	5,411	2,053
23	2,935	3,198	0	6,913	1,991
24	2,642	3,298	0	6,039	721
25	2,928	2,932	0	2,924	2,317
26	3,517	2,911	0	1,796	0
27	3,949	3,295	0	124	51
28	2,835	2,744	0	6,125	2,197
29	2,945	2,658	0	6,706	1,373
30	2,677	3,246	0	6,282	1,269
<b>Total</b>	<b>87,146</b>	<b>86,911</b>	<b>0</b>	<b>110,746</b>	<b>26,676</b>



**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**May 2003**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	2,410	2,999	0	6,415	1,731
2	2,343	3,298	0	6,488	1,726
3	3,530	3,290	0	1,025	3,021
4	4,171	3,294	0	2,814	3,159
5	2,698	3,171	0	6,850	1,402
6	2,838	3,295	0	8,019	3,493
7	2,908	3,030	0	8,621	2,835
8	2,993	3,024	0	7,665	1,583
9	3,029	3,206	0	6,945	2,604
10	3,741	3,173	0	3,798	5,066
11	4,254	3,197	0	1,947	5,184
12	2,752	3,291	0	8,139	2,860
13	2,839	3,199	0	8,111	3,670
14	2,736	3,049	0	4,851	3,566
15	2,657	2,887	0	8,720	2,109
16	2,657	3,283	0	8,708	2,007
17	2,937	3,260	0	1,934	2,483
18	4,268	2,892	0	415	2,624
19	1,754	1,669	0	4,762	2,930
20	1,855	1,704	0	7,225	3,137
21	1,700	1,997	0	6,995	2,937
22	1,756	1,700	0	6,869	3,182
23	2,237	1,882	0	7,915	3,820
24	1,756	1,686	0	1,627	5,557
25	2,559	1,926	0	667	4,962
26	1,814	1,511	0	5,098	1,117
27	1,547	1,631	0	7,475	4,182
28	1,569	1,808	0	9,400	3,927
29	1,386	2,096	0	6,902	4,180
30	2,026	1,934	0	7,685	2,947
31	1,994	1,926	0	310	4,285
<b>Total</b>	<b>79,714</b>	<b>80,308</b>	<b>0</b>	<b>174,395</b>	<b>98,286</b>

(in acre-feet)

**June 2003**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	3,225	2,129	0	986	4,051
2	2,452	2,498	0	6,729	2,795
3	1,978	2,479	0	7,413	3,845
4	2,175	2,344	0	8,340	3,537
5	2,214	2,387	0	8,968	4,359
6	1,968	2,189	0	6,884	3,106
7	2,722	2,809	0	2,032	5,504
8	3,838	2,777	0	3,441	5,957
9	646	994	0	4,078	990
10	906	1,003	0	6,046	3,004
11	640	1,093	0	6,294	4,299
12	728	1,108	0	7,431	4,447
13	986	913	0	8,703	4,464
14	1,287	956	0	1,459	4,646
15	2,559	1,036	0	1,538	4,389
16	1,607	2,107	0	6,939	3,375
17	1,632	2,046	0	5,717	1,832
18	1,823	2,110	0	2,705	0
19	1,966	2,118	0	4,064	1,418
20	2,242	2,348	0	6,816	3,072
21	3,425	2,065	0	3,472	4,846
22	3,198	2,091	0	347	4,537
23	1,689	2,440	0	4,003	1,123
24	1,825	2,068	0	5,450	1,808
25	1,648	2,032	0	4,952	1,775
26	1,771	2,123	0	4,690	716
27	2,062	2,221	0	4,691	2,022
28	2,248	2,104	0	3,457	3,497
29	3,225	1,957	0	2,706	3,372
30	1,737	1,740	0	6,367	3,622
<b>Total</b>	<b>60,422</b>	<b>58,285</b>	<b>0</b>	<b>146,718</b>	<b>96,408</b>

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**July 2003**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
1	1,606	1,998	0	5,474	869
2	1,594	1,414	0	6,857	1,628
3	1,659	2,027	0	5,749	2,814
4	1,946	1,981	0	4,929	3,167
5	1,666	2,120	0	3,516	3,630
6	3,325	1,953	0	180	4,255
7	1,716	2,054	0	5,783	3,357
8	1,608	2,136	0	6,601	3,887
9	1,720	2,298	0	8,006	3,929
10	1,811	2,144	0	6,874	1,058
11	1,845	2,250	0	5,413	1,415
12	1,974	1,851	0	1,731	1,599
13	3,838	1,866	0	442	1,982
14	2,505	2,949	0	4,837	1,814
15	2,490	2,954	0	3,852	1,706
16	2,665	2,909	0	4,824	0
17	2,620	2,945	0	3,351	1,795
18	2,620	2,963	0	6,634	2,565
19	2,615	2,923	0	2,414	2,407
20	3,838	2,575	0	0	1,840
21	3,027	2,752	0	4,382	718
22	3,022	2,723	0	3,849	862
23	3,031	2,542	0	5,319	1,812
24	2,545	1,267	0	4,703	1,276
25	1,615	1,622	0	5,643	1,897
26	1,566	1,622	0	2,803	4,145
27	1,236	1,624	0	2,608	2,270
28	1,451	1,624	0	3,911	2,596
29	1,451	1,625	0	5,812	2,415
30	1,664	1,893	0	4,307	0
31	1,544	1,981	0	1,602	0
Total	67,813	67,585	0	132,406	63,708

(in acre-feet)

**August 2003**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation 1/	Pumpback 1/
1	2,684	3,289	0	1,737	0
2	3,500	3,288	0	933	0
3	3,962	3,293	0	763	3,696
4	2,773	3,059	0	6,583	1,316
5	2,728	3,173	0	6,066	758
6	3,097	3,295	0	7,470	2,665
7	2,638	3,287	0	7,567	2,707
8	3,191	3,280	0	6,265	2,026
9	4,504	3,161	0	3,499	752
10	2,892	3,279	0	3,899	291
11	3,000	3,119	0	4,470	5,463
12	2,908	3,080	0	5,849	2,150
13	3,032	3,279	0	5,665	1,613
14	3,002	3,275	0	5,475	2,765
15	3,155	3,271	0	5,206	3,174
16	3,842	3,118	0	3,973	1,040
17	3,776	3,281	0	3,390	3,441
18	3,506	3,178	0	5,086	2,229
19	3,016	3,172	0	5,213	706
20	3,344	3,232	0	6,498	2,719
21	3,100	3,284	0	5,866	1,462
22	3,473	3,282	0	6,840	1,324
23	4,143	3,274	0	1,833	1,203
24	3,585	3,257	0	2,586	3,687
25	3,052	3,290	0	5,175	1,759
26	2,918	2,944	0	5,213	955
27	2,932	3,292	0	6,176	1,476
28	2,838	3,291	0	5,524	601
29	2,759	3,283	0	5,761	387
30	2,788	3,212	0	1,788	2,243
31	3,866	3,283	0	4,498	2,550
Total	100,004	100,101	0	146,867	57,158

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**September 2003**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
				1/	1/
1	3,038	3,282	0	4,742	2,665
2	3,020	2,401	0	3,363	0
3	2,707	2,355	0	2,628	0
4	1,730	1,415	0	3,492	521
5	2,203	1,407	0	4,229	1,142
6	2,631	1,394	0	684	1,169
7	1,555	1,523	0	18	4,982
8	2,140	1,919	0	5,240	748
9	1,737	2,154	0	5,980	2,847
10	2,208	2,039	0	6,326	2,642
11	1,982	2,039	0	6,228	2,757
12	1,993	1,396	0	6,364	2,562
13	1,560	2,065	0	720	3,090
14	2,296	1,986	0	2,231	4,587
15	2,551	2,605	0	6,331	1,629
16	2,138	2,594	0	6,833	3,174
17	2,686	2,550	0	6,615	2,015
18	2,043	2,035	0	6,761	3,770
19	2,258	2,464	0	7,797	2,507
20	3,339	2,399	0	1,397	3,283
21	2,243	2,069	0	4,177	5,291
22	1,595	2,094	0	4,621	2,321
23	1,725	1,836	0	3,574	1,568
24	1,595	1,641	0	3,326	714
25	1,870	1,726	0	4,657	2,485
26	1,827	1,977	0	4,816	1,743
27	1,953	1,907	0	274	0
28	1,975	785	0	423	2,489
29	2,737	3,136	0	5,456	1,630
30	3,091	3,306	0	4,231	316
Total	66,426	62,499	0	123,534	64,647

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**October 2003**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
				1/	1/
1	2,892	3,301	0	4,960	0
2	2,976	3,186	0	6,058	2,387
3	2,988	3,143	0	5,800	2,898
4	2,776	2,659	0	2,340	3,161
5	2,892	1,595	0	4,440	2,434
6	640	333	0	2,897	2,077
7	260	0	0	4,803	2,771
8	0	0	0	3,566	1,469
9	0	0	0	2,728	1,426
10	0	0	0	2,234	2,580
11	347	1,499	0	2,289	4,341
12	2,240	1,319	0	3,467	4,697
13	762	1,310	0	4,946	2,540
14	1,663	1,464	0	4,464	1,462
15	1,508	1,441	0	4,657	1,961
16	1,508	1,181	0	4,238	873
17	1,610	1,632	0	5,391	1,522
18	1,339	1,264	0	4,312	1,167
19	1,706	1,445	0	747	3,015
20	897	1,495	0	3,945	1,920
21	1,772	1,436	0	2,574	2,481
22	1,349	1,479	0	3,655	2,614
23	1,407	1,156	0	2,219	3,032
24	165	324	0	1,575	2,831
25	1,525	1,532	0	339	512
26	2,113	1,633	0	1,128	1,157
27	1,382	1,435	0	3,183	1,268
28	1,449	1,441	0	4,437	2,511
29	1,365	1,402	0	4,462	1,919
30	1,151	1,499	0	4,131	1,554
31	1,579	1,505	0	6,066	2,159
Total	44,261	43,109	0	112,051	66,739

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**November 2003**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
				1/	1/
1	1,510	1,530	0	147	2,768
2	2,291	1,525	0	3,270	2,833
3	1,226	1,443	0	4,518	2,454
4	1,173	1,519	0	3,675	844
5	1,366	1,495	0	2,546	66
6	1,327	1,426	0	1,152	0
7	1,843	1,471	0	2,825	0
8	1,436	1,578	0	1,779	2,597
9	2,292	1,478	0	3,141	2,414
10	802	651	0	2,587	2,360
11	1,061	1,496	0	3,431	1,604
12	1,149	1,430	0	2,520	1,988
13	1,333	1,483	0	3,295	1,528
14	1,486	1,474	0	4,022	1,252
15	1,867	1,528	0	4,508	1,799
16	2,019	1,528	0	1,089	3,248
17	1,188	1,500	0	3,696	1,602
18	1,168	1,200	0	4,469	1,624
19	1,067	1,237	0	6,226	1,261
20	1,406	1,370	0	3,591	542
21	1,277	1,294	0	4,343	1,357
22	2,383	3,036	0	174	800
23	3,962	2,318	0	258	0
24	2,829	3,075	0	4,957	323
25	2,825	3,114	0	5,570	0
26	2,879	2,865	0	5,146	0
27	3,516	3,071	0	3,940	0
28	2,879	2,943	0	1,645	731
29	3,196	3,118	0	283	1,203
30	2,932	3,203	0	755	1,883
<b>Total</b>	<b>57,688</b>	<b>56,399</b>	<b>0</b>	<b>89,558</b>	<b>39,081</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**December 2003**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
				1/	1/
1	2,879	3,253	0	4,817	1,404
2	3,090	3,159	0	4,740	1,282
3	2,719	2,937	0	5,061	528
4	2,932	3,171	0	6,099	802
5	2,559	3,114	0	5,399	2,602
6	3,038	3,072	0	1,378	2,663
7	2,932	2,577	0	885	1,558
8	2,025	1,810	0	3,964	992
9	1,972	1,972	0	3,504	0
10	2,077	1,861	0	4,014	0
11	2,927	2,899	0	4,385	2,398
12	2,680	2,082	0	5,001	0
13	2,559	2,102	0	297	0
14	2,559	1,945	0	108	0
15	2,714	2,981	0	6,128	1,775
16	2,519	2,669	0	5,829	0
17	2,863	2,296	0	3,189	0
18	2,723	2,482	0	3,972	800
19	2,700	2,773	0	4,872	883
20	3,462	3,303	0	948	0
21	3,579	3,260	0	1,181	3,328
22	2,958	2,842	0	4,817	2,295
23	2,533	2,820	0	5,035	1,324
24	2,672	2,749	0	6,246	2,682
25	2,882	2,738	0	4,181	1,366
26	2,855	2,643	0	5,928	980
27	3,787	3,194	0	3,530	0
28	2,734	3,263	0	476	1,069
29	2,554	2,721	0	4,831	0
30	2,749	2,677	0	5,211	0
31	2,747	2,768	0	4,805	1,779
<b>Total</b>	<b>85,979</b>	<b>84,133</b>	<b>0</b>	<b>120,831</b>	<b>32,510</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**January 2004**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
				1/	1/
1	2,719	2,768	0	3,649	3,926
2	2,660	2,703	0	5,611	1,458
3	2,771	2,991	0	3,691	722
4	3,908	3,017	0	1,547	1,797
5	2,536	2,757	0	4,004	558
6	2,414	2,752	0	3,543	0
7	3,111	2,740	0	5,721	1,232
8	2,123	2,398	0	2,832	1,398
9	3,123	2,909	0	5,649	1,373
10	3,093	3,190	0	555	0
11	3,817	2,835	0	1,788	1,714
12	1,649	1,887	0	3,641	1,642
13	1,652	2,160	0	3,474	1,504
14	1,600	1,816	0	3,308	22
15	1,856	1,815	0	3,990	1,871
16	1,909	1,758	0	3,845	730
17	1,862	2,142	0	369	0
18	3,198	1,851	0	395	875
19	1,690	1,972	0	2,402	895
20	1,852	1,658	0	4,329	1,582
21	766	459	0	3,779	1,404
22	582	768	0	3,712	1,151
23	2,324	2,758	0	4,497	0
24	2,719	2,538	0	625	1,347
25	2,990	2,651	0	491	1,718
26	1,973	2,836	0	4,832	901
27	2,399	2,689	0	4,166	0
28	2,508	2,792	0	4,129	1,215
29	2,717	2,630	0	4,104	0
30	3,342	2,703	0	4,570	775
31	3,133	2,686	0	405	0
<b>Total</b>	<b>74,996</b>	<b>73,629</b>	<b>0</b>	<b>99,653</b>	<b>31,810</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**February 2004**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				2/	2/
1	3,838	3,034	0	381	0
2	2,130	2,494	0	3,504	0
3	2,334	2,404	0	3,501	0
4	2,297	2,419	0	3,347	0
5	2,272	2,315	0	3,556	0
6	2,333	2,151	0	3,046	0
7	1,917	2,199	0	1,338	0
8	2,559	1,857	0	503	1,204
9	2,719	2,724	0	4,628	1,414
10	2,827	2,763	0	4,342	0
11	2,665	2,614	0	3,763	0
12	2,719	2,770	0	4,018	0
13	2,825	2,675	0	500	0
14	2,451	2,826	0	410	0
15	2,719	3,277	0	459	0
16	2,559	2,348	0	3,272	0
17	2,475	2,344	0	3,521	0
18	2,545	2,256	0	3,818	1,251
19	2,483	2,373	72	3,955	364
20	2,342	2,395	0	3,755	0
21	2,726	2,394	0	3,151	0
22	2,184	2,397	0	463	1,201
23	814	585	0	1,775	2,329
24	707	570	0	1,820	710
25	426	444	0	1,966	1,281
26	480	506	0	2,365	574
27	970	1,205	0	1,609	529
28	428	425	0	526	0
29	486	420	0	821	0
<b>Total</b>	<b>60,230</b>	<b>59,184</b>	<b>72</b>	<b>70,113</b>	<b>10,857</b>

1/ Warne Bypass on Feb 19th run through the Gorman Creek Improvement channel

2/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**March 2004**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation 1/	Pumpback 1/
1	1,476	1,687	0	2,349	0
2	1,732	1,867	0	2,162	0
3	1,737	1,668	0	2,363	0
4	1,769	1,810	0	1,763	0
5	1,808	1,667	0	2,182	0
6	1,785	1,754	0	157	0
7	1,724	1,429	0	242	0
8	1,724	1,849	0	2,937	0
9	1,719	1,556	0	2,331	0
10	1,645	1,722	0	2,324	684
11	1,756	1,867	0	1,512	925
12	1,868	1,772	0	2,641	0
13	1,775	1,834	0	3,135	1,335
14	1,724	1,681	0	383	943
15	2,192	2,115	0	3,046	754
16	2,117	2,205	0	2,656	0
17	1,592	2,040	0	2,747	545
18	2,112	2,432	0	4,061	1,440
19	2,065	1,393	0	3,798	0
20	2,054	2,084	0	3,580	996
21	2,360	2,196	0	1,229	1,790
22	2,488	2,508	0	6,024	1,689
23	2,272	2,567	0	4,124	711
24	2,491	2,590	0	5,461	2,084
25	2,501	2,488	0	5,463	2,776
26	2,545	2,351	0	5,121	1,240
27	2,333	2,430	0	1,947	2,102
28	2,559	2,566	0	1,248	2,673
29	2,472	2,515	0	4,514	2,359
30	2,478	2,534	0	3,979	931
31	2,466	2,596	0	4,187	2,432
Total	63,339	63,773	0	89,666	28,409

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**April 2004**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation 1/	Pumpback 1/
1	3,017	1,927	0	4,116	1,609
2	2,629	2,529	0	5,609	793
3	3,038	2,873	0	5,335	0
4	2,295	2,354	0	146	4
5	2,716	2,574	0	3,722	1,830
6	3,038	2,730	0	3,746	567
7	2,401	2,761	0	4,172	679
8	3,144	2,780	0	6,574	2,249
9	3,091	2,983	0	4,128	1,938
10	2,030	2,376	0	1,914	1,914
11	1,279	1,485	0	1,710	754
12	2,504	2,555	0	4,407	1,623
13	2,510	2,282	0	4,569	1,285
14	2,503	2,766	0	6,179	1,587
15	2,345	2,328	0	2,385	0
16	2,665	2,724	0	3,780	0
17	2,985	2,586	0	87	0
18	3,836	3,113	0	462	2,042
19	2,986	3,236	0	3,383	824
20	2,779	3,107	0	5,435	0
21	2,290	2,619	0	4,842	1,614
22	1,810	1,567	0	2,484	540
23	1,488	1,668	0	2,672	560
24	2,026	1,703	0	1,351	1,181
25	1,758	1,635	0	1,900	1,944
26	1,595	1,620	0	3,854	1,052
27	1,650	1,585	0	3,434	423
28	1,759	1,724	0	3,086	0
29	1,759	1,929	0	3,087	1,434
30	1,652	1,850	0	3,239	935
Total	71,578	69,969	0	101,808	29,381

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**May 2004**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	1,812	1,924	0	2,682	2,841
2	1,759	1,469	0	3,170	4,062
3	1,013	1,155	0	3,578	2,899
4	640	460	0	2,731	1,676
5	851	786	0	3,058	1,668
6	853	694	0	2,959	2,613
7	857	522	0	2,348	593
8	0	153	0	116	1,265
9	0	0	0	32	1,868
10	107	0	0	4,194	660
11	2,668	2,382	0	4,692	813
12	2,772	2,829	0	4,306	1,568
13	2,401	2,552	0	4,156	3,125
14	2,252	2,387	0	3,602	1,546
15	2,717	2,301	0	3,182	1,569
16	3,564	2,629	0	2,658	2,148
17	1,949	2,256	0	3,962	1,522
18	2,636	3,113	0	5,288	1,536
19	3,028	2,786	0	5,979	1,897
20	2,796	3,146	0	4,673	1,125
21	3,060	3,090	0	7,756	1,637
22	3,037	3,254	0	846	955
23	3,031	3,065	0	707	2,720
24	2,993	3,043	0	5,336	1,058
25	2,995	2,883	0	4,293	1,877
26	2,995	2,549	94	6,577	1,112
27	2,995	2,820	0	7,111	2,453
28	2,995	3,098	0	7,798	3,664
29	3,116	2,730	0	7,315	1,058
30	2,989	2,903	0	3,455	5,400
31	3,264	3,107	0	4,479	4,731
<b>Total</b>	<b>68,145</b>	<b>66,086</b>	<b>94</b>	<b>123,039</b>	<b>63,659</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**June 2004**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	2,994	2,680	0	6,239	3,723
2	2,992	2,946	0	6,280	1,734
3	2,995	3,090	0	5,742	954
4	215	142	0	4,221	3,809
5	0	0	0	1,715	4,407
6	2,729	2,876	0	4,750	3,278
7	2,994	2,961	0	7,443	3,656
8	3,097	3,110	0	7,116	3,427
9	3,082	2,760	0	4,522	3,637
10	1,883	1,987	0	8,145	3,542
11	2,955	3,135	0	10,694	3,091
12	3,406	3,151	0	2,642	2,449
13	3,113	3,116	0	2,330	3,934
14	2,695	2,709	0	5,327	3,953
15	2,969	3,135	0	5,183	1,418
16	3,060	2,713	0	5,639	1,502
17	3,002	3,002	0	5,521	717
18	2,957	2,732	0	3,422	0
19	2,987	3,167	0	2,378	754
20	2,986	3,149	0	4,206	4,345
21	2,959	3,049	0	6,175	3,368
22	3,028	3,168	0	6,291	2,432
23	3,021	2,870	0	6,668	1,458
24	2,851	2,967	0	7,140	3,344
25	2,810	2,960	0	8,299	2,306
26	2,886	3,018	0	3,179	3,783
27	3,838	3,134	0	698	3,380
28	2,860	2,969	0	6,765	1,337
29	2,755	3,072	0	2,061	1,872
30	2,721	2,378	0	5,681	2,121
<b>Total</b>	<b>82,840</b>	<b>82,146</b>	<b>0</b>	<b>156,472</b>	<b>79,731</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**July 2004**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	2,904	3,041	0	8,517	3,330
2	2,821	3,057	0	8,772	1,929
3	3,388	3,112	0	1,901	3,317
4	3,463	3,173	0	2,455	1,286
5	2,716	3,078	0	4,374	3,270
6	2,902	3,033	0	7,316	1,875
7	2,943	3,051	0	6,484	3,141
8	3,022	3,056	0	6,693	2,081
9	2,905	3,075	0	6,013	851
10	3,198	2,940	0	3,923	1,666
11	3,838	2,835	0	2,061	3,409
12	2,804	2,787	0	5,013	1,632
13	2,737	3,220	0	6,028	2,349
14	2,853	3,061	0	5,353	982
15	2,843	3,076	0	4,748	914
16	2,664	3,027	0	5,454	1,459
17	3,144	2,993	0	1,317	2,270
18	4,005	3,090	0	2,011	2,024
19	3,058	3,062	0	6,689	0
20	2,997	2,856	0	5,765	1,525
21	2,990	2,799	0	2,477	2,477
22	3,150	3,067	0	7,068	975
23	2,737	2,935	0	2,803	752
24	3,016	2,918	0	3,892	2,124
25	3,333	2,726	0	1,247	2,242
26	2,775	3,149	0	4,272	1,982
27	2,855	3,003	0	5,890	1,448
28	2,946	3,074	0	5,807	2,394
29	2,984	3,067	0	6,379	1,935
30	2,717	3,201	0	5,917	1,473
31	2,823	2,150	0	3,587	2,399
Total	93,531	92,712	0	150,226	59,511

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**August 2004**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	3,059	3,102	0	2,717	2,602
2	3,046	3,193	0	5,504	2,433
3	3,031	3,112	0	6,242	1,823
4	3,067	3,220	0	5,042	730
5	3,198	2,847	0	5,646	1,003
6	3,006	3,295	0	6,940	1,755
7	2,574	1,243	0	2,788	2,748
8	3,525	3,145	0	2,359	4,123
9	2,715	3,297	0	5,511	2,032
10	2,956	3,272	0	5,313	1,599
11	2,950	3,076	0	3,901	402
12	2,825	3,123	93	3,956	1,837
13	2,868	3,074	0	4,973	634
14	3,055	3,063	0	2,369	1,583
15	4,171	2,888	0	3,594	3,387
16	2,876	3,253	0	5,837	2,069
17	2,983	3,257	0	6,057	2,261
18	2,453	3,007	0	6,939	2,663
19	3,047	2,508	0	7,111	2,759
20	2,829	3,279	0	8,838	1,757
21	3,193	3,176	0	3,543	3,230
22	3,518	3,274	0	3,046	4,768
23	3,518	3,120	0	7,016	3,079
24	2,929	3,180	0	6,820	3,990
25	2,863	3,186	0	9,197	2,832
26	2,871	3,154	0	6,863	2,089
27	2,775	2,970	0	9,691	2,963
28	3,444	3,021	0	271	3,071
29	3,810	2,904	0	1,701	4,431
30	2,943	3,191	0	5,700	1,426
31	3,054	3,181	0	5,778	2,078
Total	95,152	94,611	93	161,263	74,157

1/ Values supplied by LADWP, not verified by DWR.



**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**September 2004**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	2,736	2,927	0	9,105	2,876
2	3,336	3,283	0	7,493	3,669
3	3,145	3,187	0	9,060	2,523
4	4,115	3,124	0	4,226	4,132
5	3,735	2,957	0	2,540	3,845
6	2,913	3,152	0	5,093	3,945
7	3,145	3,035	0	7,048	2,368
8	2,606	3,150	0	6,752	1,436
9	2,861	3,172	0	6,876	2,066
10	2,721	3,068	0	7,438	1,870
11	3,252	3,251	0	2,699	817
12	3,372	3,213	0	2,443	4,187
13	2,890	2,975	0	5,652	2,502
14	2,897	3,194	0	5,704	1,101
15	3,178	3,176	0	6,359	3,086
16	2,750	3,211	0	6,019	1,433
17	2,722	3,082	0	8,085	1,788
18	3,767	3,228	0	2,430	2,139
19	3,896	2,750	0	1,373	4,859
20	2,619	2,696	0	4,800	2,486
21	2,559	2,669	0	7,245	2,271
22	2,642	2,885	0	7,457	2,174
23	2,600	2,664	0	8,710	3,662
24	2,985	2,614	0	8,957	3,030
25	3,411	2,587	0	1,850	2,639
26	2,720	2,471	0	1,605	5,305
27	2,245	2,945	0	6,100	3,506
28	1,865	1,910	0	6,417	2,937
29	1,897	2,118	0	6,760	2,920
30	1,989	2,126	0	6,319	3,181
Total	87,569	86,820	0	172,615	84,753

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**October 2004**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	2,231	2,354	0	4,338	3,292
2	2,311	1,847	0	561	2,812
3	2,731	2,081	0	3,954	2,300
4	2,158	2,416	0	4,613	1,828
5	1,812	2,007	0	3,223	691
6	1,921	2,127	0	5,281	2,502
7	1,800	1,889	0	5,965	2,822
8	1,795	1,911	0	7,102	1,985
9	1,948	2,057	0	1,513	2,336
10	3,251	2,149	0	1,226	3,581
11	1,491	2,093	0	4,749	1,689
12	1,938	2,274	0	7,043	1,646
13	1,951	2,113	0	4,758	1,089
14	1,802	2,378	0	3,378	1,469
15	1,755	1,228	0	4,360	1,999
16	2,064	2,273	0	1,893	2,618
17	3,225	2,049	0	3,435	4,368
18	1,435	1,594	0	4,288	2,631
19	1,455	1,744	0	4,475	1,440
20	1,444	1,455	0	6,181	995
21	1,721	1,593	44	6,288	2,822
22	1,376	1,953	0	1,831	2,191
23	1,434	1,571	0	204	1,871
24	3,031	1,185	0	2,277	3,463
25	1,374	1,701	0	4,106	1,531
26	1,353	1,772	0	3,065	825
27	1,203	1,865	0	2,831	490
28	2,339	1,515	0	3,564	2,002
29	1,603	1,692	0	4,039	764
30	1,771	1,588	0	250	668
31	2,186	2,316	0	2,784	2,752
Total	59,909	58,790	44	113,575	63,472

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**November 2004**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	586	6	0	2,659	1,374
2	0	0	0	1,749	1,666
3	0	0	0	2,134	2,101
4	0	0	0	2,228	1,592
5	0	0	0	1,507	898
6	0	0	0	139	1,123
7	0	0	0	1,773	2,226
8	582	1,017	0	2,895	1,971
9	747	1,172	0	2,698	1,558
10	854	1,130	0	2,614	1,578
11	851	884	0	2,428	1,542
12	1,015	1,021	0	2,261	882
13	1,015	1,036	0	1,442	0
14	2,238	1,007	0	195	0
15	0	0	0	0	0
16	0	0	0	0	0
17	0	580	0	0	0
18	0	66	0	0	0
19	0	212	0	0	0
20	0	166	0	0	0
21	1,069	107	0	0	0
22	2,390	2,475	0	4,355	16
23	2,574	2,938	0	5,580	2,032
24	2,762	2,813	0	8,275	2,126
25	3,005	2,997	0	780	0
26	2,844	2,933	0	4,097	0
27	2,987	2,942	0	4,378	0
28	3,543	2,897	0	3,281	687
29	2,357	2,812	0	4,419	0
30	2,746	2,751	0	3,448	0
<b>Total</b>	<b>34,165</b>	<b>33,962</b>	<b>0</b>	<b>65,335</b>	<b>23,372</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**December 2004**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	2,657	3,225	0	2,322	0
2	3,135	3,046	0	2,395	578
3	3,103	3,158	0	2,871	0
4	3,016	3,002	0	1,939	0
5	2,918	2,882	0	498	0
6	2,090	1,867	0	3,523	474
7	2,393	2,263	0	4,048	1,000
8	2,716	3,175	0	4,198	1,065
9	2,291	2,991	0	1,858	657
10	2,442	2,973	0	6,353	973
11	2,962	2,998	0	3,236	1,285
12	2,803	2,746	0	2,863	1,776
13	4,090	2,597	0	4,204	2,999
14	2,645	3,077	0	3,729	0
15	2,827	2,607	0	4,068	0
16	2,714	3,035	0	4,456	676
17	2,709	2,848	0	5,033	550
18	2,730	2,983	0	1,279	773
19	3,567	1,613	0	1,132	1,718
20	2,612	2,674	0	5,883	1,662
21	2,899	2,659	0	6,478	545
22	3,003	2,934	0	4,986	546
23	2,621	3,119	0	2,983	0
24	2,586	2,924	0	4,116	726
25	3,739	2,636	0	0	0
26	2,636	2,790	0	296	0
27	2,702	3,000	0	3,835	1,188
28	2,400	3,048	0	3,453	0
29	2,555	2,026	0	6,571	890
30	2,477	2,787	0	6,068	0
31	1,574	1,805	0	4,686	0
<b>Total</b>	<b>85,612</b>	<b>85,488</b>	<b>0</b>	<b>109,360</b>	<b>20,081</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**January 2005**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation 1/	Pumpback 1/
1	1,148	1,362	0	2,152	0
2	2,209	1,568	0	256	0
3	1,363	1,576	0	1,754	790
4	1,280	1,622	0	1,972	0
5	1,445	1,628	0	1,332	11
6	1,470	1,625	0	2,084	0
7	599	70	0	1,525	0
8	475	0	0	901	1,164
9	497	0	0	2,159	0
10	195	0	0	512	1,405
11	0	0	0	541	0
12	0	0	0	3,364	0
13	0	0	0	4,127	0
14	0	85	0	3,384	822
15	0	0	0	397	0
16	0	0	0	358	0
17	0	0	0	322	0
18	0	12	0	473	0
19	0	0	0	403	0
20	0	0	0	4	0
21	0	0	0	44	0
22	0	0	0	0	0
23	0	0	0	0	0
24	0	0	0	54	0
25	0	0	0	4	0
26	0	0	0	0	0
27	0	0	0	0	0
28	0	22	0	0	0
29	0	0	0	0	0
30	0	0	0	0	0
31	134	375	0	63	0
<b>Total</b>	<b>10,815</b>	<b>9,945</b>	<b>0</b>	<b>28,185</b>	<b>4,192</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**February 2005**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation 1/	Pumpback 1/
1	1,103	1,530	0	0	0
2	1,330	1,526	0	332	0
3	1,592	1,526	0	1,320	0
4	1,520	1,434	0	3,361	0
5	1,518	1,532	0	292	0
6	2,239	1,529	0	241	0
7	865	1,430	0	1,688	0
8	1,222	1,433	0	1,442	0
9	1,113	1,435	0	2,307	0
10	1,220	1,418	0	2,245	0
11	1,652	1,486	47	2,252	0
12	1,652	1,484	0	5	0
13	2,345	1,481	0	2,053	0
14	1,319	1,474	0	3,537	0
15	1,381	1,482	0	3,363	0
16	1,372	1,476	0	2,534	0
17	1,296	1,526	0	2,385	0
18	1,439	1,127	0	2,872	0
19	0	0	0	5,795	0
20	562	0	0	7,681	0
21	0	0	0	3,360	0
22	0	0	65	404	0
23	0	0	109	391	0
24	0	266	0	160	0
25	0	0	0	425	0
26	0	0	0	412	0
27	0	0	0	967	0
28	0	0	0	537	0
<b>Total</b>	<b>26,740</b>	<b>26,595</b>	<b>221</b>	<b>52,361</b>	<b>0</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**March 2005**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation 1/	Pumpback 1/
1	0	0	0	491	0
2	0	0	0	660	0
3	0	0	0	464	0
4	0	0	0	356	0
5	0	0	0	718	0
6	0	0	0	621	0
7	0	0	0	359	0
8	0	0	0	505	0
9	0	0	0	795	0
10	0	0	0	142	0
11	0	0	0	0	0
12	0	0	0	0	0
13	0	0	0	0	0
14	0	0	0	0	0
15	0	0	0	0	0
16	0	0	0	0	0
17	0	0	24	0	0
18	0	0	50	0	0
19	0	0	45	0	0
20	0	0	111	0	0
21	0	0	112	0	0
22	0	0	112	0	0
23	0	0	111	0	0
24	0	0	0	0	0
25	111	0	0	0	0
26	111	0	0	0	0
27	120	0	0	0	0
28	56	0	0	0	0
29	69	0	0	0	0
30	0	0	0	0	0
31	0	0	0	0	0
<b>Total</b>	<b>467</b>	<b>0</b>	<b>565</b>	<b>5,111</b>	<b>0</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**April 2005**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass & Leakage	Generation 1/	Pumpback 1/
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	2,354	0
5	56	635	43	2,866	0
6	1,290	1,588	21	3,005	0
7	3,069	1,699	678	2,819	0
8	2,572	3,300	411	6,706	0
9	3,554	3,296	0	2,216	0
10	3,331	3,296	0	0	0
11	2,723	3,293	0	5,153	0
12	2,799	3,292	0	4,202	0
13	2,794	3,289	0	4,624	0
14	3,124	3,290	0	2,783	0
15	3,193	3,288	0	1,458	0
16	4,171	3,282	0	1,386	0
17	3,973	2,818	0	2,352	0
18	2,479	2,676	0	9,186	0
19	2,801	2,897	0	2,321	0
20	2,798	3,307	0	2,022	0
21	3,001	3,303	0	4,733	0
22	2,987	3,243	0	1,904	0
23	4,171	3,299	0	3,662	0
24	4,171	3,232	0	3,817	0
25	2,346	2,372	0	3,196	0
26	1,991	2,326	0	429	0
27	1,334	1,007	0	1,735	0
28	853	997	0	2,292	171
29	1,163	994	0	321	0
30	976	992	0	366	0
<b>Total</b>	<b>67,720</b>	<b>67,011</b>	<b>1,153</b>	<b>77,908</b>	<b>171</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**May 2005**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	1,279	991	0	352	0
2	1,082	1,559	0	2,708	0
3	1,983	1,517	0	293	0
4	1,342	1,458	0	287	0
5	853	1,479	0	619	1,152
6	871	1,446	0	760	1,183
7	819	1,475	0	2,727	715
8	870	1,484	0	2,207	804
9	669	1,102	0	3,629	822
10	828	1,145	0	1,717	1,332
11	612	639	0	2,173	1,302
12	611	574	0	3,909	1,749
13	512	314	0	3,202	2,446
14	373	215	0	2,784	1,972
15	0	266	0	2,873	3,119
16	1,385	942	0	3,395	2,325
17	1,285	1,266	0	3,829	2,221
18	1,235	1,464	0	3,140	2,554
19	1,260	1,378	0	6,249	2,092
20	1,226	987	0	3,993	2,523
21	1,279	1,441	0	2,889	2,798
22	1,726	1,374	0	4,775	5,194
23	1,433	1,828	0	4,723	3,974
24	1,710	1,781	0	6,430	3,175
25	1,744	1,754	0	2,405	577
26	1,762	1,747	0	5,607	2,501
27	1,718	1,749	0	4,643	3,440
28	320	1	0	160	3,390
29	0	0	0	2,611	2,424
30	1,729	1,896	0	2,858	2,518
31	1,706	1,746	0	2,102	1,053
Total	34,222	37,018	0	90,049	59,355

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**June 2005**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	1,736	1,777	0	6,125	591
2	1,707	1,765	0	4,777	2,593
3	1,920	1,818	0	7,644	3,810
4	1,707	0	0	2,233	3,483
5	1,813	0	0	1,023	5,003
6	1,706	1,680	0	4,817	2,305
7	1,542	1,910	0	4,996	2,136
8	1,541	1,592	0	4,055	2,897
9	1,484	1,729	0	5,160	2,099
10	1,484	1,738	0	4,856	1,833
11	1,279	0	0	3,210	3,010
12	480	0	0	1,902	4,752
13	724	1,167	0	5,960	3,323
14	1,177	1,363	0	4,535	3,008
15	1,069	1,432	0	5,528	1,707
16	957	1,480	0	5,073	2,416
17	958	1,384	0	3,914	1,847
18	1,104	1,514	0	834	2,161
19	1,919	0	0	896	3,582
20	1,055	1,436	0	4,535	791
21	1,442	1,924	0	3,732	1,418
22	1,064	1,434	0	3,090	1,151
23	1,712	2,189	0	4,030	0
24	1,715	2,212	0	2,431	1,027
25	1,786	2,189	0	62	1,222
26	2,139	0	0	98	3,941
27	1,583	1,865	0	4,751	2,455
28	1,063	1,007	0	432	1,867
29	1,522	1,965	0	4,832	0
30	1,502	1,973	0	5,688	1,917
Total	42,890	40,543	0	111,219	68,345

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**July 2005**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	1,502	1,978	0	5,010	1,746
2	1,426	1,953	0	1,920	2,259
3	2,436	739	0	2,019	3,590
4	2,199	734	0	2,572	1,815
5	1,676	2,386	0	4,312	1,687
6	1,904	2,382	0	4,035	0
7	1,905	2,366	0	4,899	1,379
8	2,261	2,536	0	6,097	575
9	2,865	2,435	0	470	0
10	2,439	755	0	2,594	4,913
11	2,671	3,200	0	5,891	2,512
12	2,572	2,775	0	7,093	3,599
13	2,784	2,778	0	7,392	1,522
14	2,784	3,161	0	5,700	920
15	2,784	3,135	0	6,499	1,386
16	3,396	3,187	0	2,305	2,009
17	3,225	3,163	0	1,000	2,615
18	2,791	2,872	0	5,092	3,194
19	2,445	2,587	0	6,622	1,753
20	2,165	1,845	0	4,820	1,689
21	2,394	1,800	0	6,527	1,449
22	1,979	1,830	0	3,206	987
23	1,967	2,276	0	396	2,313
24	3,280	1,823	0	185	3,654
25	2,111	2,422	0	4,523	1,647
26	2,148	1,494	0	4,679	1,851
27	1,446	1,845	0	4,471	2,876
28	1,761	1,861	0	4,412	2,003
29	1,512	1,863	0	4,467	1,772
30	2,297	1,752	0	1,343	2,666
31	1,778	1,728	0	3,458	1,261
Total	70,903	67,661	0	124,009	61,642

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**August 2005**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	1,238	1,376	0	4,874	2,400
2	1,161	1,423	0	3,917	613
3	1,058	1,379	0	5,221	1,812
4	1,553	1,372	48	4,009	1,623
5	1,499	1,403	0	4,047	0
6	1,494	1,442	0	998	1,065
7	1,900	1,380	0	532	695
8	1,237	1,259	0	3,705	2,753
9	1,104	1,362	0	2,683	1,531
10	1,328	1,417	0	4,494	2,675
11	1,241	1,403	0	3,750	1,593
12	1,470	1,410	0	4,189	1,481
13	1,946	1,423	0	584	2,191
14	1,946	1,321	0	506	2,431
15	743	1,789	0	5,135	2,694
16	1,246	1,207	0	4,428	1,731
17	1,323	1,498	0	4,764	1,203
18	1,323	1,529	0	3,243	1,004
19	1,921	1,518	0	4,175	1,295
20	2,505	2,328	0	1,483	4,046
21	2,711	2,348	0	1,714	2,761
22	1,337	1,516	0	4,459	2,002
23	1,419	1,392	0	3,900	618
24	1,379	1,678	0	5,156	1,595
25	1,379	1,580	0	5,805	0
26	1,680	1,536	0	5,534	1,632
27	2,440	2,331	0	952	2,207
28	2,440	2,300	0	1,608	3,028
29	1,518	1,524	0	4,102	1,368
30	1,592	1,513	0	3,799	1,674
31	1,507	1,513	0	5,019	1,071
Total	48,638	48,470	48	108,785	52,792

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**September 2005**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	1,432	1,509	0	4,347	2,678
2	1,454	1,931	0	5,463	1,632
3	2,045	2,407	0	1,012	3,759
4	2,662	2,322	0	2,487	5,223
5	2,130	1,484	0	5,004	3,481
6	1,381	1,475	0	5,774	3,727
7	1,451	1,472	0	5,536	2,930
8	1,561	1,477	0	5,956	1,877
9	1,447	1,463	0	3,562	1,037
10	1,365	853	0	2,667	3,290
11	2,892	2,332	0	463	3,866
12	2,576	3,304	0	3,037	1,408
13	2,563	3,295	0	5,150	0
14	2,525	3,194	0	4,910	1,579
15	2,506	2,198	0	5,056	583
16	1,079	17	0	40	1,703
17	1,032	0	0	0	0
18	1,332	0	0	880	0
19	1,323	1,808	0	4,272	1,891
20	1,304	1,857	0	4,784	0
21	1,741	1,854	0	5,457	742
22	1,726	1,850	0	2,216	999
23	1,701	1,779	0	83	528
24	1,833	1,799	0	0	0
25	2,170	1,846	0	0	0
26	1,977	2,239	0	3,828	0
27	2,080	2,383	0	4,166	0
28	2,252	2,124	0	5,240	808
29	2,076	2,289	0	4,217	542
30	2,083	2,285	0	851	734
<b>Total</b>	<b>55,699</b>	<b>54,846</b>	<b>0</b>	<b>96,458</b>	<b>45,017</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**October 2005**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	2,517	2,291	0	1,973	940
2	3,127	2,297	0	632	1,794
3	2,863	2,897	0	5,144	1,513
4	2,759	3,002	0	2,362	511
5	2,988	3,017	0	3,518	684
6	2,988	2,822	0	5,310	1,279
7	3,003	3,286	0	5,219	1,274
8	2,981	3,160	0	2,055	853
9	3,842	3,283	0	1,798	2,058
10	2,627	2,602	0	2,400	737
11	1,493	1,560	0	2,298	0
12	1,491	724	0	3,384	0
13	1,431	1,576	0	2,337	745
14	1,585	1,579	0	2,152	964
15	1,581	1,566	0	1,827	0
16	2,401	1,573	0	590	14
17	1,661	1,569	0	3,131	1,040
18	1,146	1,570	0	2,929	0
19	1,833	1,569	0	3,506	1,120
20	1,042	1,572	0	2,791	0
21	1,476	1,576	0	2,447	0
22	1,651	1,579	0	1,322	0
23	2,543	1,578	0	1,634	1,154
24	1,347	1,571	0	2,062	890
25	1,371	1,574	0	1,443	0
26	1,337	1,304	0	2,388	889
27	1,469	1,574	0	2,862	713
28	1,440	1,576	0	3,747	660
29	1,459	1,923	0	1,016	1,279
30	2,213	1,644	0	1,753	1,052
31	1,771	2,237	0	2,336	2,040
<b>Total</b>	<b>63,436</b>	<b>61,651</b>	<b>0</b>	<b>78,366</b>	<b>24,203</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**November 2005**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	1,939	2,216	0	4,293	1,266
2	1,932	2,276	0	4,410	1,655
3	2,078	2,277	0	3,323	999
4	2,287	2,242	0	2,450	728
5	2,453	2,248	0	3,467	0
6	3,365	2,231	0	2,548	0
7	1,444	1,514	0	3,033	1,799
8	1,415	1,634	0	2,271	0
9	1,549	1,653	0	1,597	0
10	1,505	1,493	0	2,290	803
11	1,890	1,672	0	3,031	564
12	2,322	2,275	0	878	268
13	3,369	2,283	0	1,786	445
14	1,103	1,686	0	3,574	1,572
15	1,295	1,707	0	2,098	751
16	1,398	1,558	0	2,485	552
17	426	0	0	2,116	0
18	176	76	0	2,398	0
19	97	0	0	1,261	1,146
20	982	0	0	2,404	0
21	1,227	1,576	0	1,983	857
22	1,386	1,662	0	2,065	0
23	1,386	1,658	0	1,754	0
24	2,389	1,676	0	1,467	847
25	958	1,646	0	3,991	1,443
26	1,385	1,619	0	2,241	0
27	2,023	1,580	0	1,371	1,230
28	1,390	1,678	0	2,241	569
29	1,606	1,677	0	1,970	0
30	1,585	1,678	0	1,251	386
<b>Total</b>	<b>48,360</b>	<b>47,491</b>	<b>0</b>	<b>72,047</b>	<b>17,880</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**December 2005**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	1,600	1,677	0	2,099	0
2	1,537	1,683	0	2,638	595
3	1,758	1,681	0	2,059	594
4	2,725	1,624	0	743	693
5	1,530	1,688	0	1,829	603
6	617	1,205	0	1,571	0
7	1,528	1,601	0	1,881	0
8	1,759	1,612	0	1,820	0
9	1,759	1,614	0	2,185	0
10	1,599	1,624	0	408	0
11	1,738	1,628	0	1,039	388
12	1,733	2,434	0	2,191	876
13	1,641	1,743	0	2,462	733
14	1,701	1,826	0	1,495	0
15	1,703	2,006	0	1,548	0
16	2,559	2,397	0	3,068	339
17	2,559	2,375	0	736	46
18	2,614	2,409	0	518	0
19	633	0	0	843	0
20	0	0	0	446	641
21	0	0	0	1,150	656
22	0	0	0	2,710	1,608
23	161	0	0	2,493	769
24	819	0	0	2,227	2,077
25	554	385	0	290	2,340
26	528	635	0	2,215	2,291
27	249	108	0	3,254	2,386
28	0	0	0	933	989
29	0	0	0	2,529	2,693
30	0	0	0	1,408	1,836
31	0	0	0	1,310	2,458
<b>Total</b>	<b>35,604</b>	<b>33,955</b>	<b>0</b>	<b>52,098</b>	<b>25,611</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**January 2006**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation 1/	Pumpback 1/
1	0	0	0	1,605	1,765
2	0	227	0	4,378	2,613
3	0	384	0	2,125	1,298
4	110	0	0	2,310	0
5	220	404	0	3,162	0
6	573	390	0	2,970	544
7	2,926	3,238	0	1,396	632
8	4,131	3,244	0	1,358	1,165
9	2,814	3,232	0	3,090	0
10	2,874	3,245	0	5,227	0
11	2,762	3,255	0	3,436	0
12	2,762	3,193	0	4,557	1,276
13	2,844	1,315	0	3,747	718
14	3,605	3,235	0	2,841	1,053
15	3,327	3,245	0	1,168	0
16	2,738	3,137	0	4,388	1,484
17	2,705	3,140	0	3,139	0
18	2,705	3,153	0	2,762	0
19	2,809	3,164	0	5,084	861
20	3,250	3,174	0	4,224	0
21	3,472	3,113	0	2,723	13
22	3,902	2,429	0	1,473	0
23	2,437	1,929	0	6,628	1,598
24	2,068	2,227	0	3,179	907
25	1,760	2,251	0	3,822	1,267
26	1,995	2,145	0	3,854	2,212
27	2,220	2,162	0	3,596	1,974
28	2,444	2,047	0	2,043	802
29	3,014	2,044	0	1,406	738
30	2,058	2,096	0	2,914	1,142
31	1,954	2,149	0	3,405	1,292
<b>Total</b>	<b>70,479</b>	<b>68,967</b>	<b>0</b>	<b>98,010</b>	<b>25,354</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**February 2006**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation 1/	Pumpback 1/
1	1,901	2,250	0	3,234	473
2	1,742	2,160	0	2,945	6
3	2,107	2,151	0	2,867	1,101
4	2,235	1,788	0	1,978	0
5	2,699	1,778	0	1,360	1,779
6	2,010	2,154	0	2,463	2,052
7	2,011	2,150	0	2,396	0
8	1,297	1,724	0	674	502
9	1,294	1,487	0	2,654	652
10	1,029	1,491	0	2,116	0
11	1,553	1,486	0	462	0
12	2,661	1,189	0	1,824	0
13	1,336	1,500	0	2,491	743
14	1,337	1,505	0	2,343	0
15	1,333	1,499	0	1,813	0
16	1,120	1,501	0	2,567	0
17	1,457	1,497	0	2,462	0
18	1,293	1,607	0	1,079	0
19	2,541	1,503	0	563	0
20	1,405	1,501	0	2,307	0
21	1,318	1,504	0	1,513	0
22	1,318	1,504	0	584	0
23	1,318	1,505	0	1,235	0
24	1,309	1,505	0	1,047	15
25	1,318	1,505	0	687	11
26	3,041	1,509	0	628	0
27	1,202	2,021	512	3,597	811
28	2,355	2,072	1,584	980	0
<b>Total</b>	<b>47,540</b>	<b>47,046</b>	<b>2,096</b>	<b>50,869</b>	<b>8,145</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**March 2006**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
				1/	1/
1	3,084	1,660	1,521	1,760	1,118
2	3,075	3,168	0	3,052	0
3	1,800	2,109	0	2,745	673
4	1,677	1,652	0	1,415	61
5	2,121	1,460	0	1,504	749
6	2,312	2,797	0	3,454	0
7	2,618	2,787	0	2,265	0
8	2,399	2,837	0	3,213	0
9	2,521	2,890	0	3,212	0
10	2,315	2,403	0	3,426	0
11	3,316	3,184	0	1,849	0
12	4,171	3,140	0	2,099	0
13	2,663	3,217	0	2,735	0
14	2,922	2,909	0	3,830	0
15	2,616	3,210	0	875	0
16	3,265	3,171	0	3,947	859
17	3,357	3,214	0	4,317	0
18	3,378	3,205	0	1,168	0
19	4,171	3,206	0	3,224	0
20	2,620	3,204	0	3,178	0
21	2,619	3,207	0	3,149	0
22	1,993	1,793	0	2,725	0
23	1,760	1,787	0	2,231	0
24	1,757	1,781	0	1,732	0
25	1,758	1,781	0	1,312	0
26	4,171	1,780	0	1,139	0
27	1,401	1,804	0	2,514	0
28	1,487	1,774	0	1,979	0
29	1,327	1,195	0	645	0
30	1,324	1,193	0	1,992	0
31	1,220	1,052	0	1,739	0
<b>Total</b>	<b>77,218</b>	<b>74,570</b>	<b>1,521</b>	<b>74,425</b>	<b>3,460</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**April 2006**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Leakage	Generation	Pumpback
				1/	1/
1	1,279	716	0	1,685	0
2	2,115	755	0	2,162	0
3	623	1,233	0	650	0
4	687	963	0	555	0
5	615	396	0	416	0
6	640	929	0	1,818	780
7	1,700	826	0	1,958	758
8	994	847	0	2,210	766
9	1,464	808	0	2,680	1,597
10	683	906	0	2,941	2,319
11	603	837	0	3,986	2,292
12	603	837	0	2,824	1,497
13	735	865	0	3,987	3,768
14	679	1,154	0	4,503	1,850
15	600	867	0	355	3,602
16	1,138	956	0	258	1,338
17	1,094	1,533	0	5,263	0
18	1,125	1,490	0	3,002	0
19	1,172	1,505	0	2,354	1,826
20	1,757	1,474	0	2,941	708
21	1,821	1,610	0	3,095	1,630
22	1,364	1,464	0	2,044	1,978
23	3,863	1,455	0	2,505	1,312
24	1,605	1,474	0	3,429	1,844
25	1,275	1,533	0	3,066	800
26	1,285	1,497	0	2,007	874
27	1,271	1,488	0	2,840	1,329
28	1,495	1,491	0	3,921	744
29	1,101	1,375	0	700	1,100
30	2,284	1,518	0	1,715	2,273
<b>Total</b>	<b>37,670</b>	<b>34,802</b>	<b>0</b>	<b>71,870</b>	<b>36,985</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**May 2006**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation 1/	Pumpback 1/
1	1,311	1,427	0	3,277	0
2	1,205	1,492	0	5,245	1,855
3	995	1,434	0	2,974	1,596
4	1,193	1,495	0	3,628	1,774
5	1,303	1,499	0	3,560	959
6	1,292	1,245	0	1,059	3,375
7	3,315	1,429	0	1,797	2,284
8	908	1,661	0	5,732	1,681
9	1,205	1,400	0	2,965	1,518
10	1,300	1,555	0	2,438	1,106
11	1,208	1,560	0	3,696	893
12	1,204	1,512	0	4,341	0
13	1,213	1,505	0	1,162	535
14	3,356	1,467	0	688	1,275
15	1,214	1,533	0	2,490	775
16	1,279	1,696	0	2,621	855
17	1,269	1,557	0	2,957	2,473
18	1,278	1,814	0	5,061	1,904
19	2,124	1,567	0	4,624	630
20	1,271	1,635	0	1,983	0
21	2,438	1,532	0	376	2,191
22	1,456	1,588	0	3,349	1,558
23	1,363	1,563	0	4,371	2,596
24	1,810	1,495	0	4,819	2,808
25	1,796	1,653	0	2,914	2,258
26	1,393	1,492	0	4,861	3,179
27	1,287	1,483	0	4,172	1,895
28	1,803	1,502	0	447	4,610
29	2,181	1,501	0	3,047	2,460
30	1,071	1,497	0	5,277	2,076
31	1,324	1,493	0	5,097	2,968
Total	47,365	47,282	0	101,028	54,087

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**June 2006**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation 1/	Pumpback 1/
1	1,808	1,504	0	4,608	2,613
2	1,271	1,377	0	7,047	3,320
3	1,325	1,526	0	5,310	2,894
4	3,838	1,990	0	4,509	3,978
5	967	1,847	0	4,412	3,819
6	1,105	1,499	0	4,128	2,844
7	354	1,581	0	3,911	3,290
8	1,178	1,505	0	5,180	3,157
9	917	1,509	0	5,937	2,693
10	443	794	0	3,001	2,548
11	754	0	0	2,527	4,141
12	333	0	0	3,202	3,994
13	333	0	0	4,128	3,775
14	0	0	0	4,924	4,132
15	341	0	0	5,101	4,034
16	832	0	0	5,512	3,444
17	908	3	0	4,613	3,266
18	1,944	1,398	0	1,494	4,022
19	1,550	2,086	0	4,394	2,258
20	2,027	2,409	0	5,116	3,052
21	2,079	2,426	0	5,533	3,741
22	2,718	2,512	0	7,386	3,327
23	2,241	2,331	0	7,254	3,298
24	2,278	2,430	0	1,208	1,472
25	2,587	2,372	0	3,323	3,636
26	2,383	2,804	0	5,311	2,123
27	2,730	2,795	0	5,399	1,538
28	3,109	2,788	0	5,428	792
29	2,823	2,802	0	4,377	1,261
30	2,710	2,803	0	6,145	1,085
Total	47,886	47,091	0	140,418	89,547

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**July 2006**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	2,559	2,799	0	4,697	2,509
2	3,220	2,785	0	2,929	1,944
3	2,517	1,967	0	4,270	1,664
4	3,005	1,904	0	653	1,220
5	2,370	1,906	0	5,797	1,726
6	1,998	2,232	0	5,620	2,972
7	2,031	1,895	0	2,322	2,390
8	1,662	1,939	0	3,452	2,268
9	2,249	1,493	0	2,465	1,075
10	1,897	2,558	0	4,573	3,730
11	1,917	2,347	0	3,347	1,912
12	1,685	2,296	0	3,055	447
13	2,131	2,322	0	2,499	1,551
14	2,487	2,335	0	4,891	1,139
15	2,477	2,330	0	3,567	1,026
16	2,680	2,262	0	1,661	935
17	2,195	2,577	0	5,134	1,501
18	2,195	2,673	0	4,550	2,017
19	2,250	2,585	0	5,227	2,479
20	2,195	2,462	0	5,193	2,020
21	2,194	2,459	0	4,323	1,875
22	2,212	2,468	0	3,832	743
23	3,459	2,431	0	3,745	1,602
24	2,426	2,452	0	4,824	821
25	2,338	2,481	0	4,169	2,220
26	1,586	1,964	0	4,172	2,404
27	2,332	2,066	0	4,242	2,155
28	2,753	2,124	0	3,714	1,602
29	2,516	2,037	0	4,278	2,986
30	2,162	2,161	0	1,355	2,584
31	1,927	2,060	0	3,995	1,506
<b>Total</b>	<b>71,625</b>	<b>70,370</b>	<b>0</b>	<b>118,551</b>	<b>57,023</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**August 2006**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	2,557	1,737	0	3,434	1,359
2	1,764	1,858	0	3,044	772
3	2,185	1,524	0	2,659	860
4	1,922	1,714	0	3,052	725
5	1,920	1,679	0	2,482	1,347
6	1,681	1,236	0	699	1,110
7	1,652	1,982	0	2,700	1,126
8	1,540	1,662	0	2,713	1,022
9	1,521	1,683	0	2,671	1,058
10	1,962	1,669	0	2,585	687
11	1,792	1,653	0	4,388	575
12	1,702	1,685	0	1,001	621
13	1,592	665	0	1,305	2,460
14	1,196	1,669	0	3,395	1,715
15	1,483	1,381	0	3,204	909
16	990	1,483	0	3,421	669
17	1,106	1,502	0	3,219	941
18	1,076	1,482	0	2,466	0
19	1,087	1,492	0	1,383	1,079
20	2,559	1,383	0	1,320	2,355
21	1,097	1,487	0	3,248	930
22	1,392	1,431	0	2,772	919
23	1,403	1,537	0	2,604	744
24	1,160	1,321	0	2,856	61
25	1,241	1,527	0	3,480	1,381
26	1,244	1,542	0	1,258	2,295
27	2,669	1,563	0	2,244	1,534
28	969	1,463	0	3,411	1,506
29	1,185	1,530	0	3,094	1,124
30	1,229	1,515	0	2,791	786
31	1,230	1,665	0	3,525	1,947
<b>Total</b>	<b>48,106</b>	<b>47,720</b>	<b>0</b>	<b>82,424</b>	<b>34,617</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**September 2006**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	1,233	1,424	0	4,868	2,165
2	1,238	1,494	0	3,655	2,566
3	2,559	1,562	0	1,932	2,730
4	2,121	1,433	0	2,427	2,207
5	1,393	1,504	0	3,555	607
6	1,284	1,509	0	1,826	1,260
7	1,116	1,538	0	4,126	435
8	1,345	1,453	0	905	0
9	1,530	1,512	0	1,435	770
10	2,084	1,397	0	549	2,315
11	1,434	1,028	0	3,304	849
12	1,259	1,109	0	3,063	994
13	1,456	1,198	0	2,875	1,236
14	1,360	1,193	0	4,284	557
15	929	1,004	0	2,086	0
16	1,113	1,102	0	548	1,243
17	2,019	1,013	0	907	2,628
18	1,246	1,624	0	5,355	981
19	1,390	1,583	0	3,376	665
20	980	1,409	0	1,685	2,520
21	1,376	1,322	0	2,392	622
22	691	1,520	0	437	1,456
23	627	213	0	405	1,072
24	1,458	0	0	592	1,255
25	997	1,473	0	2,901	701
26	951	1,467	0	5,041	1,696
27	1,056	1,628	0	2,506	0
28	1,149	1,238	0	1,987	0
29	800	1,367	0	2,498	907
30	755	0	0	471	1,419
<b>Total</b>	<b>38,949</b>	<b>37,317</b>	<b>0</b>	<b>71,991</b>	<b>35,856</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**October 2006**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	1,016	0	0	1,131	0
2	1,374	1,387	0	492	0
3	1,013	1,184	0	1,785	0
4	1,004	1,729	0	1,955	0
5	1,007	1,427	0	1,615	605
6	1,007	1,424	0	2,787	1,550
7	851	0	0	398	3,053
8	1,267	0	0	383	1,372
9	1,056	1,389	0	751	586
10	1,280	1,397	0	2,653	0
11	994	1,390	0	2,906	683
12	1,056	1,456	0	2,916	0
13	1,063	1,434	0	3,494	614
14	1,160	0	0	628	0
15	1,267	0	0	1,100	1,302
16	1,436	1,381	0	2,237	808
17	1,239	1,464	0	2,378	1,507
18	1,063	1,398	0	2,370	790
19	1,063	1,403	0	2,715	1,453
20	1,063	1,401	0	2,211	881
21	1,006	0	0	1,004	988
22	785	0	0	508	0
23	957	1,472	0	1,685	877
24	773	980	0	1,570	0
25	582	1,014	0	1,202	1,243
26	318	1,000	0	352	846
27	686	1,023	0	1,621	602
28	792	0	0	542	1,116
29	851	0	0	353	3,711
30	589	573	0	2,763	1,233
31	475	574	0	1,670	1,008
<b>Total</b>	<b>30,093</b>	<b>27,900</b>	<b>0</b>	<b>50,175</b>	<b>26,828</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**November 2006**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	524	650	0	2,795	920
2	845	753	0	3,121	935
3	319	701	0	2,337	0
4	528	0	0	445	0
5	457	0	0	581	0
6	681	669	0	3,376	6
7	579	693	0	1,882	2,255
8	793	1,020	0	816	873
9	1,181	790	0	455	1,441
10	424	734	0	2,083	2,628
11	211	0	0	368	3
12	557	0	0	371	1,548
13	318	558	0	1,352	1,727
14	0	0	0	1,957	559
15	0	9	0	2,209	673
16	0	0	0	1,330	1,337
17	0	0	0	399	0
18	0	0	0	42	0
19	0	0	0	6	166
20	0	0	0	0	0
21	0	0	0	0	0
22	0	0	0	90	0
23	0	0	0	218	0
24	0	0	0	92	0
25	0	0	0	0	0
26	0	0	0	0	0
27	0	0	0	0	0
28	0	0	0	0	0
29	0	0	0	0	0
30	0	0	0	0	0
<b>Total</b>	<b>7,417</b>	<b>6,577</b>	<b>0</b>	<b>26,325</b>	<b>15,071</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**December 2006**

West Branch					
Date	Oso Pumping Plant	Warne Powerplant		Castaic Powerplant	
		Generation	Bypass	Generation	Pumpback
				1/	1/
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
5	0	0	0	0	0
6	0	0	0	0	0
7	0	0	0	0	0
8	0	0	0	0	0
9	0	0	0	0	0
10	0	0	0	0	0
11	0	0	0	0	0
12	0	0	0	0	0
13	0	0	0	0	0
14	0	0	0	0	0
15	0	0	0	0	0
16	0	0	0	0	0
17	0	0	0	0	0
18	0	0	0	0	0
19	0	0	0	0	0
20	0	0	0	0	0
21	0	0	0	0	0
22	0	0	0	0	0
23	0	0	0	0	0
24	0	0	0	0	0
25	0	0	0	0	0
26	0	0	0	0	0
27	0	0	0	0	0
28	0	0	0	0	0
29	166	0	0	0	0
30	0	0	0	0	0
31	0	0	0	0	0
<b>Total</b>	<b>166</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**January 2007**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	0	0	0	0	0	0
2	0	0	0	0	0	0
3	0	0	0	0	64	0
4	0	0	0	0	1,441	0
5	0	0	0	0	1,099	0
6	0	0	0	0	689	0
7	0	0	0	0	1,443	0
8	189	0	0	0	1,444	0
9	925	799	0	0	1,922	0
10	969	1,691	0	0	1,882	0
11	1,305	2,462	0	0	5,945	0
12	1,994	2,672	0	0	5,774	0
13	3,223	3,309	0	0	4,860	0
14	3,537	3,305	0	0	4,308	0
15	4,171	3,305	0	372	4,621	0
16	4,172	2,275	0	0	1,605	0
17	905	612	0	0	189	0
18	0	0	0	0	0	0
19	0	0	0	0	0	0
20	0	0	0	0	0	0
21	0	0	0	0	0	0
22	52	0	0	0	0	0
23	102	1,557	0	0	324	0
24	3,085	3,280	0	0	0	0
25	3,092	3,236	0	0	14	0
26	3,155	3,261	0	0	1,865	0
27	3,369	3,275	0	0	1,833	0
28	3,322	3,282	0	0	2,035	0
29	3,515	3,280	0	0	1,718	0
30	3,752	3,277	0	0	2,059	0
31	3,667	3,274	0	0	2,013	0
<b>Total</b>	<b>48,501</b>	<b>48,152</b>	<b>0</b>	<b>372</b>	<b>49,147</b>	<b>0</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**February 2007**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	3,636	3,273	0	0	1,993	0
2	3,638	3,272	0	0	1,970	0
3	2,412	2,842	0	0	2,018	0
4	3,706	3,248	0	0	2,237	0
5	2,913	3,244	0	0	3,366	0
6	2,915	3,250	0	0	3,509	0
7	2,579	3,263	0	0	3,634	0
8	2,785	3,282	0	0	2,740	0
9	3,282	3,301	0	0	2,800	0
10	3,261	3,301	0	0	1,949	0
11	5,357	3,285	0	397	4,665	0
12	4,127	3,278	0	632	2,093	0
13	3,995	3,276	0	655	3,954	0
14	3,709	3,277	0	655	2,936	0
15	4,110	3,279	0	655	3,793	0
16	3,885	3,275	0	655	4,343	0
17	3,167	3,280	0	655	2,379	0
18	4,504	3,282	0	655	2,609	0
19	4,058	3,278	0	655	4,293	0
20	4,031	3,275	0	655	4,827	0
21	3,524	3,279	0	655	2,470	0
22	3,579	3,278	0	655	4,618	0
23	3,577	3,281	0	655	4,475	0
24	4,171	3,281	0	655	2,304	0
25	4,504	3,282	0	655	4,597	0
26	4,254	3,280	0	655	4,448	0
27	3,948	3,279	0	655	4,549	0
28	4,416	3,279	0	655	4,581	0
<b>Total</b>	<b>104,043</b>	<b>91,300</b>	<b>0</b>	<b>11,509</b>	<b>94,150</b>	<b>0</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**March 2007**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	4,296	3,278	0	536	4,300	0
2	3,858	3,281	0	694	4,476	0
3	3,708	3,279	0	793	3,138	0
4	3,649	3,284	0	793	3,473	0
5	4,753	3,283	0	793	4,418	0
6	5,171	3,278	0	853	4,129	0
7	4,748	3,264	0	873	3,571	0
8	3,980	3,292	0	1,031	4,110	0
9	3,249	3,286	0	1,031	4,027	0
10	4,171	3,277	0	1,031	2,601	0
11	3,997	3,144	0	992	3,264	0
12	4,171	3,275	0	1,031	4,724	0
13	4,510	3,275	0	1,031	4,278	0
14	4,279	3,275	0	1,031	3,820	0
15	4,239	3,268	0	1,031	4,634	0
16	4,838	3,266	0	1,031	4,848	0
17	4,615	3,266	0	1,031	2,363	0
18	4,838	3,266	0	248	3,934	0
19	3,838	3,246	0	248	4,813	0
20	3,949	3,275	0	248	4,707	0
21	3,301	3,282	0	248	3,544	0
22	3,838	3,309	0	248	4,483	0
23	3,838	3,309	0	459	3,771	0
24	3,838	3,310	0	595	765	0
25	3,838	3,274	0	595	2,074	0
26	3,736	3,213	0	550	5,487	0
27	3,197	3,174	0	595	5,485	0
28	3,838	3,277	0	595	2,994	0
29	3,839	3,276	0	595	2,024	0
30	3,838	3,276	0	595	1,260	0
31	3,838	3,276	0	595	4,284	0
<b>Total</b>	<b>125,796</b>	<b>101,334</b>	<b>0</b>	<b>22,020</b>	<b>115,799</b>	<b>0</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**April 2007**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	3,204	3,276	0	595	3,599	0
2	3,204	3,274	0	595	3,739	0
3	3,423	3,269	0	595	4,396	0
4	3,087	3,264	0	0	4,549	0
5	3,887	3,263	0	0	4,305	0
6	4,002	3,264	0	595	5,054	0
7	4,171	3,263	0	594	3,883	0
8	4,171	3,262	0	595	1,675	0
9	3,949	3,261	0	595	4,271	0
10	3,699	3,259	0	595	4,705	0
11	3,837	3,259	0	595	5,442	0
12	4,374	3,259	0	595	4,939	0
13	4,112	3,255	0	595	4,900	0
14	3,784	3,258	0	793	1,715	0
15	4,504	3,256	0	892	3,364	0
16	4,504	3,257	0	1,203	4,613	0
17	4,837	3,259	0	1,203	4,137	0
18	5,401	3,257	0	1,388	3,704	0
19	5,051	3,245	0	1,388	4,536	0
20	4,697	3,252	0	1,386	4,460	0
21	4,504	3,254	0	1,386	1,381	0
22	4,282	3,255	0	1,386	4,463	0
23	3,395	3,256	0	0	3,768	0
24	2,819	2,616	0	116	3,446	0
25	4,208	3,278	0	562	3,387	0
26	3,730	3,275	0	693	3,754	157
27	3,642	3,267	0	694	4,626	17
28	3,870	3,252	0	694	2,566	83
29	4,141	3,253	0	694	2,792	0
30	4,193	3,253	0	694	4,972	0
<b>Total</b>	<b>120,682</b>	<b>97,171</b>	<b>0</b>	<b>21,716</b>	<b>117,141</b>	<b>257</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**May 2007**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	4,419	3,248	0	955	5,002	0
2	2,768	3,255	0	694	5,601	0
3	3,301	3,259	0	363	3,378	98
4	3,549	3,259	0	198	5,024	625
5	3,838	3,264	0	0	510	0
6	3,838	3,262	0	0	3,348	879
7	3,425	3,264	0	0	5,906	439
8	3,425	3,266	0	0	4,907	933
9	3,551	3,271	0	0	4,844	0
10	2,967	3,253	0	0	4,453	0
11	2,877	3,256	0	0	4,728	0
12	2,904	3,258	0	0	2,847	0
13	3,204	3,255	0	0	1,595	43
14	3,205	3,252	0	0	4,963	1,117
15	3,399	3,192	0	0	3,138	1,207
16	3,453	3,251	0	0	3,637	1,487
17	3,063	2,509	0	0	4,063	1,162
18	2,768	2,490	0	0	4,211	956
19	2,768	2,507	0	0	2,476	0
20	2,321	2,493	0	0	2,077	1,164
21	2,975	2,745	0	0	4,175	739
22	2,941	2,746	0	0	3,563	693
23	3,246	2,192	0	0	3,421	0
24	2,775	2,787	0	0	3,649	0
25	2,770	2,883	0	0	3,713	0
26	2,767	2,817	0	0	1,548	0
27	2,590	2,939	0	0	692	1,199
28	2,564	2,944	0	0	1,491	1,072
29	2,724	2,718	0	0	4,090	949
30	2,343	2,573	0	0	4,267	0
31	1,991	2,041	0	0	3,450	0
<b>Total</b>	<b>94,729</b>	<b>91,449</b>	<b>0</b>	<b>2,210</b>	<b>110,767</b>	<b>14,762</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**June 2007**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,395	2,321	0	0	2,149	0
2	1,912	2,035	0	0	1,372	733
3	840	527	0	0	1,413	1,142
4	1,366	1,415	0	0	3,638	1,471
5	1,545	1,386	0	0	2,326	930
6	1,549	1,385	0	0	3,155	1,227
7	1,691	1,394	0	0	3,605	558
8	1,057	1,388	0	0	5,200	938
9	1,324	1,390	0	0	491	1,069
10	2,121	1,396	0	0	548	1,989
11	1,374	1,398	0	0	3,168	730
12	1,566	1,395	0	0	2,149	739
13	1,270	1,395	0	0	3,319	1,959
14	1,121	1,395	0	0	4,243	1,076
15	1,328	1,386	0	0	3,431	901
16	1,471	1,399	0	0	1,163	1,041
17	561	1,315	0	0	421	3,255
18	1,426	1,398	0	0	3,442	1,491
19	1,799	1,407	0	0	2,869	1,076
20	1,324	1,478	0	0	2,785	1,068
21	1,189	1,451	0	0	3,249	997
22	1,240	1,527	0	0	3,146	1,192
23	1,357	1,538	0	0	766	1,123
24	1,264	1,381	0	0	344	1,982
25	1,448	1,286	0	0	2,643	1,174
26	1,704	1,342	0	0	2,678	591
27	1,631	1,150	0	0	3,209	0
28	1,571	1,653	0	0	2,086	576
29	1,919	1,259	0	0	3,904	1,610
30	1,900	1,275	0	0	110	2,016
<b>Total</b>	<b>44,263</b>	<b>42,465</b>	<b>0</b>	<b>0</b>	<b>73,022</b>	<b>34,654</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**July 2007**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,643	1,837	0	0	1,797	1,047
2	2,563	2,601	0	260	5,058	1,588
3	3,043	2,622	0	366	6,082	496
4	2,879	2,595	0	377	3,883	2,093
5	2,602	2,569	0	377	6,610	3,035
6	2,431	2,575	0	377	5,730	845
7	2,448	2,578	0	377	3,174	1,200
8	3,494	2,597	0	0	602	2,346
9	2,474	2,672	0	0	4,379	1,591
10	2,593	2,650	0	0	3,733	1,664
11	2,553	2,672	0	0	5,278	694
12	3,193	2,701	0	0	5,010	837
13	2,662	2,696	0	0	6,232	1,823
14	2,662	1,737	0	0	1,010	0
15	2,987	1,837	0	594	234	1,120
16	2,385	2,699	0	565	4,336	1,388
17	2,918	2,701	0	370	4,459	1,790
18	2,415	2,710	0	371	5,185	775
19	2,710	2,727	0	367	4,810	784
20	2,735	2,704	0	367	4,349	884
21	2,757	2,710	0	367	1,954	702
22	3,838	2,717	0	367	1,946	1,342
23	3,049	2,701	0	744	4,689	850
24	3,368	2,709	0	744	5,051	1,866
25	3,315	2,772	0	744	5,933	992
26	3,210	2,721	0	744	5,107	1,100
27	3,402	2,721	0	744	7,302	1,076
28	3,424	2,737	0	744	3,646	1,246
29	3,757	2,731	0	744	2,048	1,975
30	3,365	2,729	0	744	5,522	1,907
31	3,365	2,728	0	744	4,592	575
<b>Total</b>	<b>91,240</b>	<b>80,456</b>	<b>0</b>	<b>12,198</b>	<b>129,741</b>	<b>39,631</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**August 2007**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	3,437	2,735	0	744	4,425	0
2	3,559	2,739	0	731	4,623	686
3	3,438	2,737	0	731	4,835	0
4	3,428	2,723	0	731	3,288	1,015
5	3,837	2,725	0	731	386	979
6	3,427	2,727	0	731	5,939	1,328
7	3,559	2,724	0	744	3,943	2,035
8	3,535	2,728	0	744	4,973	2,116
9	3,506	2,728	0	744	5,685	1,854
10	3,492	2,728	0	744	5,803	1,544
11	3,485	2,723	0	744	3,406	1,182
12	3,405	2,728	0	744	1,882	1,212
13	4,761	2,720	0	744	5,202	1,236
14	3,198	2,713	0	744	5,296	726
15	3,338	2,719	0	744	4,656	977
16	3,312	2,719	0	744	4,427	570
17	3,340	2,323	0	744	5,308	967
18	3,353	2,745	0	744	4,010	476
19	3,628	2,741	0	744	2,018	1,173
20	3,765	2,697	0	411	4,886	580
21	2,993	2,534	0	397	3,932	1,565
22	3,181	2,689	0	396	4,469	725
23	3,005	2,688	0	397	4,536	0
24	2,993	2,694	0	397	5,442	622
25	3,074	2,703	0	397	797	837
26	3,423	2,690	0	397	3,791	2,409
27	2,982	2,684	0	209	4,707	2,815
28	2,982	2,693	0	198	4,859	736
29	2,215	2,615	0	198	4,870	948
30	2,644	2,680	0	198	5,026	444
31	2,619	2,680	0	198	5,038	1,816
<b>Total</b>	<b>102,914</b>	<b>83,472</b>	<b>0</b>	<b>17,864</b>	<b>132,458</b>	<b>33,573</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**September 2007**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,768	2,622	0	198	1,943	991
2	3,410	2,622	0	198	1,831	1,935
3	3,979	2,772	0	544	2,865	967
4	2,497	2,696	0	225	3,936	1,910
5	2,230	2,703	0	0	4,287	729
6	2,545	2,622	0	0	6,157	644
7	2,410	2,622	0	0	4,022	618
8	2,463	2,622	0	0	1,448	1,181
9	2,894	2,622	0	0	1,435	1,092
10	2,734	2,622	0	0	3,747	1,055
11	3,526	2,736	0	0	4,330	1,892
12	4,898	2,706	0	0	4,567	1,905
13	2,554	2,709	0	0	5,164	1,789
14	3,598	2,732	0	0	5,029	826
15	2,414	2,731	0	0	3,871	1,157
16	2,733	2,742	0	0	1,565	1,200
17	2,642	2,735	0	0	4,079	895
18	2,627	2,738	0	0	3,265	1,027
19	2,656	2,737	0	0	4,878	1,508
20	2,066	2,742	0	0	4,921	625
21	2,121	2,764	0	0	4,654	681
22	2,572	2,782	0	0	2,411	720
23	3,278	2,780	0	0	0	1,268
24	2,661	2,779	0	0	4,338	963
25	2,732	2,787	0	0	3,538	913
26	3,064	2,784	0	0	4,424	907
27	2,349	2,788	0	0	4,471	1,032
28	2,220	2,787	0	0	4,425	782
29	2,971	2,786	0	0	1,827	0
30	3,537	2,787	0	0	1,229	0
<b>Total</b>	<b>85,149</b>	<b>81,657</b>	<b>0</b>	<b>1,165</b>	<b>104,657</b>	<b>31,212</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**October 2007**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,584	1,829	0	0	3,402	954
2	2,618	1,537	0	0	4,480	789
3	1,945	1,531	0	0	3,721	665
4	1,334	1,531	0	0	4,210	1,094
5	1,370	1,533	0	0	1,618	697
6	1,691	1,529	0	0	259	0
7	1,499	1,529	0	0	617	0
8	1,716	1,530	0	0	3,995	1,927
9	1,147	1,166	0	0	2,968	790
10	1,425	1,577	0	0	2,963	776
11	1,473	1,579	0	0	2,775	941
12	1,470	1,582	0	0	3,098	1,521
13	1,084	1,583	0	0	119	1,211
14	2,598	1,585	0	0	734	0
15	1,144	1,583	0	0	2,718	1,356
16	1,276	1,584	0	0	3,443	1,316
17	1,471	1,583	0	0	1,396	1,409
18	1,479	1,585	0	0	4,529	700
19	1,392	1,570	0	0	3,428	768
20	1,401	1,551	0	0	108	0
21	2,715	1,547	0	0	714	19
22	1,641	1,543	0	0	559	1,987
23	1,240	1,543	0	0	3,600	1,632
24	1,757	1,548	0	0	3,770	964
25	1,574	1,546	0	0	4,435	1,040
26	1,422	1,549	0	0	2,525	0
27	1,460	1,548	0	0	642	0
28	2,655	1,547	0	0	111	0
29	1,782	1,543	0	0	3,882	0
30	1,177	1,543	0	0	2,168	0
31	1,215	1,544	0	0	3,822	0
<b>Total</b>	<b>50,755</b>	<b>48,078</b>	<b>0</b>	<b>0</b>	<b>76,809</b>	<b>22,556</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**November 2007**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,015	214	0	0	295	126
2	525	0	0	888	3,093	796
3	1,370	0	0	1,388	993	0
4	1,589	0	0	1,388	1,199	0
5	1,268	0	0	685	1,258	770
6	108	0	0	0	776	833
7	0	0	0	0	176	10
8	0	0	0	0	48	0
9	0	0	0	0	0	0
10	0	0	0	0	0	80
11	0	0	0	0	1	2,302
12	0	0	0	0	38	1,388
13	0	0	0	0	1,558	1,342
14	0	0	0	0	1,618	1,420
15	0	0	0	0	2,270	17
16	0	0	0	807	986	0
17	478	0	0	1,386	250	512
18	2,080	0	0	1,386	373	818
19	1,398	0	0	1,452	2,306	643
20	1,035	0	0	1,485	2,228	0
21	1,040	0	0	1,448	1,271	1,058
22	1,953	0	0	1,388	622	0
23	1,055	0	0	1,388	1,394	0
24	1,977	0	0	1,388	1,811	0
25	2,091	0	0	1,388	1,901	0
26	1,440	0	0	1,388	2,190	0
27	1,227	0	0	1,388	1,154	0
28	1,414	0	0	1,388	2,651	564
29	1,178	0	0	1,388	2,139	803
30	1,299	423	0	1,388	2,906	0
<b>Total</b>	<b>25,540</b>	<b>637</b>	<b>0</b>	<b>24,805</b>	<b>37,505</b>	<b>13,482</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**December 2007**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	3,225	2,144	0	925	1,040	0
2	3,225	2,146	0	1,041	901	0
3	352	535	0	0	437	1,025
4	1,115	529	0	0	894	939
5	787	597	0	0	967	761
6	877	584	0	0	2,008	1,509
7	69	599	0	0	1,427	610
8	70	601	0	0	32	1,114
9	151	603	0	0	58	0
10	275	595	0	0	677	0
11	137	586	0	0	1,011	0
12	585	603	0	0	895	0
13	585	602	0	0	1,248	0
14	736	612	0	0	76	0
15	863	611	0	0	354	0
16	2,037	608	0	0	819	286
17	2,039	2,153	0	0	3,024	0
18	2,046	2,153	0	0	2,871	0
19	2,028	2,163	0	0	2,608	0
20	2,020	1,819	0	0	2,655	625
21	2,049	2,154	0	0	3,904	0
22	2,046	2,149	0	0	1,411	0
23	4,168	2,154	0	0	1,119	0
24	1,993	2,140	0	0	2,782	0
25	2,042	2,139	0	0	2,886	784
26	2,241	2,137	0	0	1,441	0
27	2,215	2,143	0	0	2,873	467
28	1,955	2,141	0	0	3,123	0
29	1,954	2,140	0	744	1,379	819
30	4,367	2,158	0	1,190	1,373	824
31	3,093	2,149	0	1,190	3,023	0
<b>Total</b>	<b>51,345</b>	<b>44,447</b>	<b>0</b>	<b>5,090</b>	<b>49,316</b>	<b>9,763</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**January 2008**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	3,390	2,149	0	1,188	2,523	0
2	3,325	2,147	0	1,190	3,870	0
3	3,242	2,149	0	1,190	4,540	0
4	3,234	2,151	0	1,190	4,160	0
5	3,235	2,151	0	1,190	1,698	0
6	4,597	2,157	0	1,190	2,164	0
7	3,147	2,145	0	1,190	4,677	0
8	3,107	2,144	0	1,190	3,687	0
9	3,133	2,147	0	1,188	2,431	0
10	2,495	2,155	0	1,188	3,746	0
11	2,517	2,161	0	1,188	4,198	0
12	3,309	2,168	0	1,188	1,011	0
13	4,897	2,162	0	1,188	1,498	0
14	3,906	2,147	0	1,188	3,521	733
15	3,161	1,725	0	1,188	3,796	777
16	3,128	2,147	0	1,190	3,784	0
17	3,127	2,154	0	1,190	3,468	0
18	3,127	2,158	0	1,190	3,463	0
19	4,330	2,155	0	1,190	1,998	0
20	3,196	2,153	0	694	1,003	557
21	2,007	2,135	0	0	2,985	718
22	1,651	1,593	0	0	2,585	655
23	1,105	1,597	0	0	2,917	0
24	919	980	0	0	1,815	0
25	1,245	986	0	0	2,286	568
26	919	1,033	0	0	1,499	602
27	1,679	1,075	0	0	1,001	1,366
28	1,247	1,206	0	0	1,307	699
29	639	1,030	0	0	1,140	638
30	668	815	0	0	1,346	0
31	500	845	0	0	976	0
<b>Total</b>	<b>80,182</b>	<b>55,920</b>	<b>0</b>	<b>23,288</b>	<b>81,093</b>	<b>7,313</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**February 2008**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	675	844	0	0	1,771	616
2	719	834	0	0	0	0
3	1,927	856	0	0	84	722
4	484	643	0	0	1,312	532
5	534	622	0	0	989	0
6	616	632	0	0	944	0
7	608	624	0	0	945	0
8	0	0	0	0	449	0
9	106	0	0	0	1,957	0
10	0	0	0	0	761	0
11	0	0	0	0	305	0
12	0	0	0	0	307	0
13	0	0	0	0	68	573
14	0	1,188	0	0	280	793
15	0	1,122	0	0	379	407
16	380	1,210	0	0	387	0
17	2,616	1,790	0	0	415	540
18	881	0	0	0	1,091	589
19	317	0	0	0	2,578	0
20	107	0	0	0	3,609	0
21	0	0	0	0	3,377	0
22	108	0	0	0	4,941	0
23	111	0	0	0	1,909	0
24	0	0	0	0	1,025	0
25	28	0	0	0	2,126	0
26	165	0	0	0	2,598	0
27	0	0	0	0	1,908	662
28	0	0	0	0	2,187	847
29	0	0	0	0	2,956	539
<b>Total</b>	<b>10,382</b>	<b>10,365</b>	<b>0</b>	<b>0</b>	<b>41,658</b>	<b>6,820</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**March 2008**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	0	0	0	0	375	555
2	0	0	0	0	0	0
3	225	0	0	0	273	507
4	0	0	0	0	348	883
5	0	0	0	0	207	689
6	0	0	0	0	227	758
7	0	0	0	0	460	840
8	0	0	0	0	510	0
9	0	0	0	0	851	0
10	0	0	0	0	310	863
11	0	0	0	0	1,860	721
12	0	0	0	0	979	770
13	0	0	0	0	387	746
14	0	0	0	0	428	663
15	0	0	0	0	201	814
16	1,609	0	0	0	334	1,440
17	319	0	0	0	1,956	760
18	318	0	0	0	2,619	750
19	0	0	0	0	1,364	1,013
20	0	79	0	0	1,085	809
21	2,616	1,526	0	909	2,671	895
22	2,772	2,149	0	1,388	3,418	1,255
23	3,838	2,161	0	1,388	1,204	1,126
24	2,125	2,156	0	0	1,779	1,151
25	2,121	2,156	0	0	902	1,024
26	2,132	2,147	0	0	1,134	641
27	2,121	2,150	0	0	469	865
28	2,240	2,144	0	0	247	1,467
29	2,239	2,149	0	0	365	0
30	2,276	2,151	0	0	476	0
31	2,047	2,153	0	0	1,214	0
<b>Total</b>	<b>28,998</b>	<b>23,121</b>	<b>0</b>	<b>3,685</b>	<b>28,653</b>	<b>22,005</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**April 2008**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,021	2,155	0	0	318	0
2	2,123	2,148	0	0	129	0
3	2,243	0	0	0	187	0
4	2,345	2,159	0	0	119	0
5	2,951	2,151	0	0	961	0
6	2,154	0	0	0	1,060	0
7	1,960	2,089	0	0	3,326	0
8	2,224	2,153	0	0	2,909	0
9	2,146	2,154	0	0	2,826	0
10	2,144	2,156	0	0	3,072	0
11	1,918	2,157	0	0	3,241	0
12	2,143	2,156	0	0	2,244	0
13	3,225	2,149	0	0	1,769	0
14	1,343	670	0	398	2,591	0
15	796	0	0	1,000	620	0
16	869	527	0	1,322	727	0
17	1,920	1,058	0	1,388	1,703	0
18	1,927	1,016	0	1,388	1,682	0
19	2,143	1,019	0	1,388	953	0
20	3,225	1,017	0	1,388	807	0
21	2,885	1,015	0	1,388	2,749	0
22	2,449	1,016	0	1,388	2,574	0
23	1,843	1,018	0	1,126	2,568	0
24	2,141	1,019	0	1,190	2,242	579
25	2,368	1,020	0	1,190	2,385	0
26	2,778	1,018	0	1,190	2,273	0
27	2,849	1,016	0	1,190	1,658	0
28	2,145	1,013	0	1,388	3,032	0
29	2,370	1,017	0	1,388	4,801	952
30	1,702	1,014	0	1,386	2,624	580
<b>Total</b>	<b>65,350</b>	<b>39,100</b>	<b>0</b>	<b>21,096</b>	<b>58,150</b>	<b>2,111</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**May 2008**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,778	1,022	0	1,386	3,888	0
2	2,370	1,023	0	1,386	3,013	0
3	2,593	1,018	0	1,386	802	0
4	3,530	1,016	0	1,386	627	0
5	2,370	1,013	0	1,388	3,045	748
6	1,651	1,017	0	1,388	3,185	591
7	2,452	1,022	0	1,388	3,407	537
8	2,751	1,020	0	1,388	2,691	641
9	2,591	1,021	0	1,388	3,291	781
10	2,591	1,019	0	1,388	914	1,072
11	2,975	1,017	0	1,388	939	480
12	1,140	1,011	0	397	3,302	0
13	1,002	1,016	0	397	2,655	727
14	1,290	989	0	397	3,015	1,173
15	686	1,018	0	397	2,869	0
16	684	1,022	0	396	2,768	1,053
17	848	1,024	0	397	1,600	0
18	3,223	1,022	0	397	1,799	0
19	1,015	1,015	0	397	1,564	0
20	966	996	0	0	1,803	0
21	820	809	0	0	1,553	968
22	806	1,062	0	0	2,020	758
23	841	1,281	0	0	2,883	847
24	840	1,286	0	0	544	0
25	1,922	1,254	0	0	1,651	2,342
26	1,866	1,050	0	0	2,311	2,615
27	1,145	1,002	0	0	2,980	1,738
28	926	1,100	0	0	4,640	1,809
29	577	1,099	0	0	4,447	3,408
30	450	1,098	0	0	6,762	2,956
31	426	1,110	0	0	3,040	2,353
<b>Total</b>	<b>50,125</b>	<b>32,472</b>	<b>0</b>	<b>18,435</b>	<b>80,008</b>	<b>27,597</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**June 2008**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	3,140	754	0	0	3,083	3,858
2	1,275	1,514	0	0	3,499	1,211
3	1,612	2,024	0	0	3,911	1,877
4	1,840	2,200	0	0	4,032	2,038
5	1,840	3,337	0	0	4,999	2,033
6	1,840	1,977	0	0	5,563	2,434
7	1,840	1,975	0	0	1,227	2,816
8	3,892	1,975	0	0	924	3,497
9	2,278	2,221	0	0	4,898	2,050
10	1,812	1,978	0	0	4,999	843
11	1,522	2,416	0	0	5,112	2,122
12	2,025	2,665	0	0	5,146	1,131
13	2,375	2,769	0	0	6,196	1,237
14	2,351	2,780	0	0	1,676	2,157
15	3,892	2,781	0	0	1,941	3,035
16	2,991	2,589	0	0	5,009	2,142
17	2,810	2,573	0	0	5,798	1,068
18	2,813	2,574	0	0	4,399	918
19	2,686	2,572	0	0	4,175	714
20	2,411	2,586	0	0	4,242	1,035
21	2,422	2,520	0	0	3,436	758
22	3,075	2,593	0	0	3,570	0
23	1,936	2,064	0	0	2,729	2,335
24	1,716	2,075	0	0	4,147	4,009
25	1,729	1,864	0	0	5,621	2,416
26	1,896	1,885	0	0	5,407	1,042
27	1,881	1,921	0	0	5,180	831
28	1,720	1,890	0	0	519	972
29	3,445	1,896	0	0	989	3,011
30	1,750	1,875	0	0	4,458	1,764
<b>Total</b>	<b>68,815</b>	<b>66,843</b>	<b>0</b>	<b>0</b>	<b>116,885</b>	<b>55,354</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**July 2008**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,917	1,871	0	0	4,072	3,243
2	1,692	1,885	0	0	6,689	3,264
3	1,971	1,885	0	0	5,621	2,113
4	3,570	3,088	0	0	5,784	2,419
5	2,282	2,873	0	0	2,731	1,979
6	3,892	3,005	0	0	241	3,238
7	2,986	2,413	0	0	5,734	2,765
8	1,916	2,449	0	0	5,519	1,663
9	2,727	2,620	0	0	4,443	1,459
10	2,715	2,638	0	0	3,624	975
11	2,365	1,032	0	0	4,157	1,444
12	846	1,090	0	0	2,398	1,023
13	2,122	2,209	0	0	930	592
14	1,914	2,443	0	0	3,837	1,772
15	2,020	2,495	0	0	4,779	627
16	2,012	2,506	0	0	4,818	0
17	2,236	2,494	0	0	4,536	884
18	2,338	2,411	0	0	1,619	570
19	2,251	2,379	0	0	562	952
20	4,001	3,289	0	0	606	1,291
21	2,043	2,479	0	0	3,624	1,594
22	1,938	2,488	0	0	4,284	993
23	2,536	2,490	0	0	4,267	648
24	2,715	2,480	0	0	4,200	876
25	2,330	2,491	0	0	4,441	1,037
26	2,660	2,496	0	0	2,500	1,006
27	4,503	2,149	0	0	0	1,007
28	2,121	2,420	0	0	3,913	770
29	2,231	2,418	0	0	3,864	785
30	1,962	2,411	0	0	3,536	731
31	2,425	2,407	0	0	4,154	782
<b>Total</b>	<b>75,237</b>	<b>73,804</b>	<b>0</b>	<b>0</b>	<b>111,483</b>	<b>42,502</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**August 2008**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,448	2,362	0	0	3,117	526
2	2,228	2,411	0	0	1,366	864
3	3,976	2,480	0	0	809	0
4	2,393	2,053	0	0	4,014	562
5	1,649	1,847	0	0	2,502	1,396
6	1,798	1,837	0	0	3,594	820
7	2,014	1,835	0	0	3,842	778
8	1,691	1,826	0	0	3,767	1,653
9	1,306	1,820	0	0	1,298	1,712
10	2,980	1,803	0	0	1,529	2,390
11	1,691	1,827	0	0	3,486	1,028
12	1,429	1,829	0	0	3,319	963
13	1,587	1,868	0	0	3,836	663
14	1,804	1,744	0	0	3,741	741
15	1,590	1,853	0	0	2,466	790
16	1,642	1,853	0	0	827	1,266
17	3,180	1,710	0	0	1,527	1,770
18	1,386	1,849	0	0	3,383	728
19	1,483	1,676	0	0	3,372	998
20	1,583	1,780	0	0	3,928	1,019
21	1,530	1,478	0	0	4,600	1,616
22	1,692	2,506	0	0	3,638	963
23	1,743	1,592	0	0	1,717	1,423
24	3,356	1,574	0	0	860	1,151
25	1,856	2,030	0	0	3,865	1,959
26	1,747	1,865	0	0	3,557	2,200
27	1,749	2,030	0	0	4,471	1,132
28	1,747	2,008	0	0	3,600	1,186
29	1,697	1,866	0	0	7,669	1,356
30	1,697	2,044	0	0	2,875	2,453
31	3,463	2,048	0	0	1,022	2,445
<b>Total</b>	<b>62,135</b>	<b>59,304</b>	<b>0</b>	<b>0</b>	<b>93,597</b>	<b>38,551</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**September 2008**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,641	1,849	0	0	4,112	2,763
2	1,854	1,800	0	0	5,406	1,667
3	1,588	1,739	0	0	3,843	1,934
4	1,431	2,446	0	0	3,019	1,431
5	1,313	2,085	0	0	4,844	980
6	1,374	2,074	0	0	1,590	1,218
7	4,503	1,747	0	0	2,034	2,439
8	1,365	1,996	0	0	3,930	1,578
9	1,484	2,022	0	0	4,507	1,604
10	1,484	2,081	0	0	4,739	1,653
11	1,274	2,082	0	0	4,549	1,583
12	1,159	671	0	0	4,099	1,079
13	1,381	1,698	0	0	2,344	2,672
14	4,169	2,024	0	0	1,147	2,533
15	1,746	0	0	0	2,593	1,012
16	318	0	0	0	1,984	2,166
17	0	0	0	0	1,606	1,043
18	0	0	0	0	2,063	1,019
19	0	0	0	0	1,770	1,065
20	0	0	0	0	30	1,012
21	0	0	0	0	989	2,475
22	0	0	0	0	2,859	1,722
23	0	0	0	0	2,584	1,790
24	0	0	0	0	1,597	923
25	0	0	0	0	1,384	800
26	0	0	0	0	1,569	1,215
27	0	0	0	0	2,363	2,940
28	0	0	0	0	1,209	2,754
29	763	1,366	0	0	3,737	2,166
30	841	1,523	0	0	3,311	926
<b>Total</b>	<b>29,688</b>	<b>29,203</b>	<b>0</b>	<b>0</b>	<b>81,811</b>	<b>50,162</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**October 2008**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,055	1,099	0	0	3,644	647
2	1,481	1,522	0	0	1,905	1,563
3	1,206	1,528	0	0	2,623	1,516
4	1,216	1,529	0	0	0	528
5	2,982	1,529	0	0	442	1,336
6	1,312	1,522	0	0	3,041	915
7	1,422	1,522	0	0	2,952	739
8	1,100	1,530	0	0	3,306	684
9	1,275	1,525	0	0	3,966	1,510
10	1,303	1,532	0	0	0	0
11	1,105	1,509	0	0	0	0
12	2,911	1,531	0	0	508	0
13	1,145	631	0	0	2,112	568
14	1,057	650	0	0	1,487	1,325
15	370	566	0	0	2,585	1,546
16	373	620	0	0	2,350	810
17	299	627	0	0	2,878	950
18	373	632	0	0	171	1,541
19	1,321	634	0	0	910	2,191
20	320	632	0	0	1,699	1,091
21	524	641	0	0	2,254	985
22	371	642	0	0	2,715	793
23	373	655	0	0	2,504	1,020
24	371	660	0	0	1,701	1,471
25	371	610	0	0	1,079	1,514
26	1,333	0	0	0	1,727	1,142
27	793	0	0	0	1,369	0
28	423	0	0	0	1,872	1,262
29	0	418	0	0	2,112	1,002
30	107	977	0	0	1,706	689
31	425	1,110	0	0	2,150	870
<b>Total</b>	<b>28,717</b>	<b>28,583</b>	<b>0</b>	<b>0</b>	<b>57,768</b>	<b>30,208</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**November 2008**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	371	1,002	0	0	811	0
2	2,342	1,078	0	0	1,126	699
3	1,135	1,744	0	0	2,708	774
4	1,463	2,059	0	0	2,928	1,522
5	1,562	2,111	0	0	3,255	779
6	1,716	2,052	0	0	3,169	572
7	1,838	1,983	0	0	2,090	633
8	1,982	2,128	0	0	874	858
9	4,394	2,110	0	0	861	1,143
10	1,710	2,104	0	0	1,995	800
11	1,358	1,475	0	0	1,609	633
12	1,268	1,482	0	0	3,088	0
13	1,266	1,457	0	0	3,350	871
14	1,268	997	0	0	3,554	786
15	1,279	1,548	0	0	3,641	0
16	3,409	1,355	0	0	3,029	28
17	1,269	1,480	0	0	402	1,390
18	951	1,403	0	0	779	757
19	1,080	1,393	0	0	2,711	888
20	1,139	1,808	0	0	2,121	1,344
21	1,820	2,416	0	0	3,625	1,277
22	1,856	2,783	0	0	2,348	0
23	4,588	3,174	0	0	480	1,420
24	2,312	3,026	0	0	6,591	160
25	2,489	3,177	0	0	4,780	363
26	2,699	2,497	0	0	4,619	0
27	4,890	2,687	0	0	4,183	0
28	2,334	1,508	0	0	2,829	0
29	1,659	1,472	0	0	347	0
30	1,811	1,395	0	0	861	0
Total	59,258	56,904	0	0	74,764	17,697

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**December 2008**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	739	937	0	0	2,262	0
2	631	863	0	0	2,227	0
3	616	541	0	0	2,735	586
4	466	732	0	0	2,424	0
5	450	712	0	0	3,275	561
6	622	555	0	0	360	604
7	748	744	0	0	749	993
8	440	566	0	0	3,828	957
9	568	979	0	0	3,547	0
10	666	853	0	0	2,879	0
11	581	994	0	0	3,025	0
12	1,413	2,248	0	0	2,219	0
13	1,837	2,295	0	0	494	0
14	2,795	2,327	0	0	1,185	0
15	741	1,398	0	0	1,371	0
16	1,522	1,471	0	0	1,997	0
17	1,582	1,248	0	0	2,116	0
18	896	1,707	0	0	1,797	0
19	2,056	1,349	0	0	2,275	876
20	1,992	1,520	0	0	2,184	509
21	4,018	3,276	0	0	863	0
22	3,649	3,264	0	0	183	1,183
23	2,836	3,154	0	0	1,674	576
24	3,193	3,303	0	0	1,836	1,017
25	4,504	3,296	0	0	1,677	1,048
26	3,362	3,290	0	0	3,489	740
27	3,209	3,289	0	0	622	0
28	4,504	3,286	0	0	1,180	0
29	3,199	3,282	0	0	1,044	922
30	2,421	3,280	0	0	2,616	635
31	2,422	3,229	0	0	3,042	0
Total	58,678	59,988	0	0	61,175	11,207

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**January 2009**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,332	589	0	0	1,475	0
2	1,009	582	0	0	2,457	960
3	736	583	0	0	3,339	2,682
4	634	594	0	0	2,620	1,475
5	628	1,076	0	0	2,614	1,623
6	732	1,066	0	0	1,575	826
7	1,171	1,351	0	0	2,071	765
8	792	1,052	0	0	2,335	1,189
9	883	1,051	0	0	2,969	0
10	1,209	1,076	0	0	821	563
11	1,438	578	0	0	1,004	1,093
12	1,047	1,006	0	0	2,704	1,579
13	1,438	1,604	0	0	2,746	2,008
14	1,326	1,642	0	0	2,949	1,629
15	1,328	1,408	0	0	3,372	0
16	1,452	1,402	0	0	2,180	921
17	1,328	1,386	0	0	1,655	1,140
18	2,707	1,410	0	0	1,346	1,290
19	1,330	1,366	0	0	2,784	1,351
20	1,392	1,391	0	0	2,982	2,177
21	1,326	1,294	0	21	3,124	1,078
22	1,326	1,383	0	0	3,140	1,994
23	1,326	1,577	0	0	2,858	1,058
24	1,326	1,635	0	0	419	0
25	2,344	1,387	0	0	444	1,303
26	1,328	1,762	0	0	3,729	0
27	1,438	1,532	0	0	1,500	0
28	1,438	1,481	0	0	842	0
29	1,438	1,599	0	0	4,095	0
30	1,439	1,608	0	0	1,696	0
31	1,441	1,621	0	0	842	0
<b>Total</b>	<b>41,082</b>	<b>39,092</b>	<b>0</b>	<b>21</b>	<b>68,687</b>	<b>28,704</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**February 2009**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,559	1,577	0	0	897	0
2	1,242	1,616	0	0	2,457	596
3	1,388	1,568	0	0	2,634	850
4	1,437	1,596	0	0	3,023	979
5	1,493	1,609	0	0	3,332	1,012
6	1,492	1,654	0	0	1,946	809
7	1,492	1,589	0	0	1,739	2,020
8	2,559	1,597	0	0	1,938	1,847
9	1,385	1,058	0	0	2,508	918
10	1,385	1,348	0	0	2,930	677
11	1,388	2,247	0	0	1,857	581
12	1,388	1,620	0	0	3,693	821
13	1,450	1,623	0	0	2,350	0
14	1,437	1,642	0	0	859	1,359
15	2,559	1,635	0	0	837	0
16	1,490	1,352	0	0	2,791	679
17	1,383	1,606	0	0	3,299	715
18	1,389	1,659	0	0	1,236	693
19	1,489	1,660	0	0	3,295	602
20	1,437	1,606	0	0	2,743	725
21	1,437	1,583	0	0	507	0
22	2,559	1,622	0	0	1,346	1,479
23	1,384	1,597	0	0	3,119	710
24	1,470	1,632	0	0	3,490	892
25	1,233	1,701	0	0	2,752	0
26	1,384	1,045	0	0	3,180	820
27	1,388	1,450	0	0	3,018	822
28	1,383	1,346	0	0	1,133	1,058
<b>Total</b>	<b>44,080</b>	<b>43,838</b>	<b>0</b>	<b>0</b>	<b>64,909</b>	<b>21,664</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**March 2009**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,889	1,737	0	0	1,569	0
2	1,326	1,341	0	0	2,552	1,142
3	1,388	1,458	0	0	2,481	0
4	1,384	1,458	0	0	1,245	1,736
5	1,386	1,292	0	0	2,386	660
6	1,382	1,425	0	0	1,798	1,766
7	1,378	1,363	0	0	2,070	0
8	2,074	1,369	0	0	635	0
9	1,380	1,596	0	0	3,079	0
10	1,134	1,490	0	0	762	0
11	1,150	1,216	0	0	2,516	0
12	1,129	1,456	0	0	1,335	0
13	1,160	1,367	0	0	1,782	0
14	1,127	1,395	0	0	1,214	0
15	2,148	1,448	0	0	1,358	2,616
16	1,136	1,419	0	0	2,911	886
17	1,118	1,473	0	0	3,019	732
18	1,541	1,450	0	0	2,894	855
19	1,229	1,577	0	0	1,953	629
20	1,170	1,451	0	0	3,111	818
21	1,170	1,429	0	0	186	0
22	2,559	1,389	0	0	482	0
23	1,495	1,567	0	0	1,482	0
24	1,437	795	0	0	748	700
25	2,074	1,575	0	0	2,740	0
26	1,706	1,575	0	0	3,373	0
27	1,706	1,577	0	0	2,987	0
28	1,706	1,574	0	0	311	367
29	2,559	1,570	0	0	647	1,937
30	1,707	1,567	0	0	2,131	0
31	1,599	1,565	0	0	2,156	0
<b>Total</b>	<b>48,347</b>	<b>44,964</b>	<b>0</b>	<b>0</b>	<b>57,913</b>	<b>14,844</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**April 2009**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,279	1,265	0	0	3,100	0
2	1,279	909	0	0	1,874	0
3	851	1,526	0	0	1,217	0
4	855	787	0	0	872	0
5	2,878	704	0	0	342	0
6	908	819	0	0	1,016	0
7	897	826	0	0	884	0
8	844	753	0	0	1,040	0
9	844	996	0	0	84	0
10	842	851	0	0	363	0
11	842	645	0	0	582	0
12	849	830	0	0	510	0
13	849	855	0	0	541	0
14	744	793	0	0	677	0
15	690	792	0	0	856	0
16	632	825	0	0	123	0
17	627	847	0	0	248	0
18	630	772	0	0	373	0
19	1,757	765	0	0	1,073	0
20	635	827	0	0	2,864	0
21	737	703	0	0	1,677	0
22	635	624	0	0	595	0
23	643	746	0	0	278	0
24	846	817	0	0	1,097	0
25	851	750	0	0	188	0
26	1,651	764	0	0	4	0
27	1,221	1,471	0	0	3,519	0
28	473	1,507	0	0	682	0
29	1,326	1,506	0	0	698	0
30	1,167	1,511	0	0	358	0
<b>Total</b>	<b>29,282</b>	<b>27,786</b>	<b>0</b>	<b>0</b>	<b>27,735</b>	<b>0</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**May 2009**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,172	1,360	0	0	2,484	0
2	1,969	1,516	0	0	952	0
3	2,559	1,528	0	0	855	0
4	2,822	1,524	0	900	3,724	0
5	2,713	1,554	0	1,388	3,664	0
6	2,662	1,569	0	1,386	4,315	0
7	2,552	1,571	0	1,386	3,247	0
8	2,446	1,571	0	926	2,371	0
9	1,751	1,571	0	0	467	0
10	2,877	784	0	0	691	0
11	1,118	1,565	0	0	1,452	704
12	797	720	0	186	3,495	1,331
13	1,270	1,525	0	217	3,708	1,472
14	2,610	1,524	0	0	3,786	1,253
15	1,116	1,524	0	0	2,867	1,503
16	1,275	1,526	0	0	2,520	1,578
17	2,184	1,528	0	0	1,183	3,047
18	2,233	1,526	0	744	4,755	1,721
19	1,917	1,531	0	721	3,481	1,074
20	2,031	1,530	0	0	3,624	697
21	1,111	1,527	0	0	3,214	931
22	2,112	1,526	0	0	4,226	1,285
23	2,012	1,525	0	0	122	1,753
24	1,321	1,523	0	0	864	2,807
25	1,697	1,523	0	0	1,226	0
26	1,590	1,525	0	0	4,204	0
27	1,691	1,525	0	441	3,913	1,122
28	1,697	1,530	0	694	3,440	2
29	2,229	1,529	0	694	3,198	1,137
30	2,283	1,533	0	694	1,463	0
31	3,197	1,528	0	694	87	1,717
<b>Total</b>	<b>61,014</b>	<b>45,841</b>	<b>0</b>	<b>11,071</b>	<b>79,598</b>	<b>25,134</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**June 2009**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,956	1,523	0	413	2,958	0
2	2,179	1,525	0	651	3,891	0
3	1,799	1,547	0	495	3,408	0
4	2,340	1,573	0	990	4,110	0
5	2,179	1,574	0	992	960	0
6	2,336	1,575	0	992	167	0
7	3,838	1,575	0	992	508	0
8	1,383	1,568	0	496	2,681	0
9	1,753	1,571	0	248	2,183	0
10	1,382	1,574	0	0	1,160	0
11	1,490	1,572	0	0	1,873	0
12	1,375	1,572	0	0	1,972	0
13	1,436	1,578	0	0	956	0
14	1,541	1,577	0	0	673	0
15	1,540	1,578	0	0	2,072	0
16	1,653	851	0	165	2,430	0
17	1,644	1,532	0	145	1,978	0
18	1,537	1,533	0	0	1,846	0
19	1,434	1,534	0	0	1,312	0
20	1,915	1,532	0	0	123	0
21	2,404	1,526	0	0	218	0
22	1,006	1,524	0	0	2,172	0
23	1,324	1,528	0	0	4,187	0
24	1,383	1,528	0	0	3,470	1,813
25	1,327	1,531	0	0	2,036	1,926
26	1,272	1,534	0	0	3,994	2
27	1,557	1,534	0	0	3,506	1,084
28	2,461	1,531	0	0	1,548	2,748
29	1,298	1,529	0	0	3,576	4,154
30	1,319	1,529	0	0	3,748	2,500
<b>Total</b>	<b>52,061</b>	<b>45,758</b>	<b>0</b>	<b>6,579</b>	<b>65,716</b>	<b>14,227</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**July 2009**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,481	1,531	0	0	4,045	1,645
2	1,318	1,534	0	0	4,569	1,129
3	1,315	1,533	0	0	2,266	1,130
4	1,157	1,535	0	0	2,408	1,782
5	2,980	1,538	0	0	2,029	1,875
6	1,451	1,531	0	0	2,836	1,663
7	1,323	1,534	0	0	1,887	0
8	1,468	1,534	0	0	3,436	0
9	1,151	1,536	0	0	2,234	963
10	1,530	1,538	0	0	2,522	0
11	1,481	1,540	0	0	699	0
12	2,229	1,537	0	0	149	0
13	1,590	1,534	0	0	1,949	0
14	1,320	1,535	0	0	3,253	575
15	1,480	1,533	0	0	3,282	1,212
16	1,318	1,539	0	198	4,575	1,299
17	2,119	1,539	0	793	4,456	1,232
18	2,017	1,542	0	992	2,746	1,597
19	3,136	1,542	0	990	1,457	2,409
20	2,385	1,538	0	992	3,580	1,590
21	2,277	1,539	0	992	3,519	1,108
22	2,119	1,540	0	992	4,488	1,530
23	2,380	1,539	0	992	4,877	2,153
24	2,384	1,541	0	992	5,909	1,793
25	3,569	1,539	0	992	6,063	2,136
26	3,003	1,532	0	992	2,346	2,882
27	1,297	1,533	0	331	2,544	2,638
28	1,160	1,534	0	0	3,182	2,251
29	1,429	1,534	0	0	3,235	1,302
30	1,365	1,535	0	0	2,780	2,483
31	1,423	1,534	0	0	4,250	2,040
<b>Total</b>	<b>56,655</b>	<b>47,623</b>	<b>0</b>	<b>10,248</b>	<b>97,571</b>	<b>42,417</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**August 2009**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,881	1,537	0	0	3,621	2,083
2	1,802	1,534	0	0	3,064	2,682
3	1,367	1,534	0	0	2,745	1,428
4	1,697	1,534	0	0	4,278	1,817
5	1,538	1,534	0	0	3,112	1,406
6	1,445	1,530	0	0	2,656	1,966
7	1,478	1,533	0	0	3,715	2,213
8	1,996	1,533	0	0	2,901	1,572
9	1,374	1,528	0	0	3,317	1,110
10	1,315	1,529	0	0	3,045	1,501
11	1,171	1,536	0	0	2,682	2,200
12	1,642	1,536	0	0	3,514	1,471
13	1,858	1,533	0	0	3,881	1,955
14	1,699	1,533	0	0	2,104	0
15	1,913	1,533	0	0	182	0
16	1,334	1,520	0	0	278	0
17	1,641	1,517	0	0	2,022	0
18	1,488	1,525	0	0	1,663	0
19	1,180	1,565	0	0	1,837	0
20	1,426	1,563	0	0	1,880	0
21	1,754	1,540	0	0	1,996	0
22	2,121	1,533	0	0	307	0
23	1,854	1,534	0	0	630	0
24	1,644	1,531	0	0	2,331	0
25	1,537	1,532	0	0	2,124	0
26	1,509	1,531	0	0	1,942	0
27	1,687	1,530	0	0	2,137	0
28	1,103	1,536	0	0	2,618	0
29	1,374	1,538	0	0	1,398	0
30	1,850	1,538	0	0	2,381	2,607
31	1,589	1,533	0	0	2,143	975
<b>Total</b>	<b>49,267</b>	<b>47,563</b>	<b>0</b>	<b>0</b>	<b>72,504</b>	<b>26,986</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**September 2009**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,212	1,535	0	0	1,553	580
2	1,164	1,539	0	0	2,017	771
3	1,796	1,539	0	0	2,441	0
4	898	1,541	0	0	2,458	0
5	1,248	1,541	0	0	484	0
6	2,554	1,541	0	0	68	0
7	1,481	1,540	0	0	387	0
8	1,325	1,538	0	0	2,084	0
9	1,366	1,540	0	0	2,138	0
10	1,176	1,544	0	0	2,749	0
11	1,380	1,545	0	0	2,398	0
12	2,230	1,543	0	0	526	0
13	1,908	1,539	0	0	155	980
14	1,536	1,537	0	0	1,887	1,051
15	1,276	1,539	0	0	2,154	0
16	1,694	866	0	186	3,488	0
17	1,643	0	0	992	3,974	2,002
18	956	0	0	992	4,250	2,288
19	736	0	0	992	275	3,481
20	1,051	0	0	764	0	1,147
21	690	0	0	558	3,051	30
22	322	0	0	992	3,994	1,934
23	370	0	0	992	3,764	2,270
24	1,908	0	0	992	6,729	1,827
25	951	335	0	992	4,575	2,377
26	2,016	1,061	0	990	3,870	3,430
27	2,175	1,060	0	992	2,293	3,574
28	1,639	1,054	0	992	2,612	2,689
29	1,764	1,059	0	992	2,689	85
30	1,858	489	0	992	1,627	1,198
<b>Total</b>	<b>42,323</b>	<b>29,025</b>	<b>0</b>	<b>13,410</b>	<b>70,690</b>	<b>31,714</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**October 2009**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,801	1,055	0	943	2,859	0
2	1,877	1,057	0	943	4,325	0
3	1,951	1,059	0	558	1,192	0
4	2,061	1,054	0	943	708	0
5	1,312	1,054	0	943	1,382	0
6	1,691	1,063	0	943	2,843	0
7	2,119	1,059	0	943	2,185	1,032
8	1,857	1,057	0	943	3,141	1,040
9	2,012	1,057	0	943	4,355	838
10	1,801	1,057	0	943	320	0
11	2,632	1,059	0	943	848	1,583
12	1,847	1,056	0	943	3,357	817
13	1,792	1,053	0	943	2,576	628
14	1,484	1,054	0	943	3,133	865
15	1,477	1,061	0	943	3,407	830
16	1,264	1,060	0	943	4,688	719
17	1,802	1,065	0	943	1,419	0
18	2,502	1,056	0	943	325	772
19	1,492	0	0	930	2,207	883
20	1,279	0	0	943	1,652	805
21	160	0	0	943	1,270	570
22	1,006	0	0	943	2,061	613
23	796	0	0	943	294	0
24	1,279	0	0	943	546	1,131
25	1,650	0	0	943	435	0
26	1,619	400	0	943	2,333	262
27	1,222	1,060	0	943	2,384	0
28	1,539	1,060	0	943	2,372	709
29	1,483	1,060	0	943	1,555	0
30	1,912	1,063	0	943	1,776	0
31	1,907	1,060	0	943	366	981
<b>Total</b>	<b>50,626</b>	<b>24,739</b>	<b>0</b>	<b>28,835</b>	<b>62,314</b>	<b>15,078</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**November 2009**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,551	1,109	0	982	1,673	0
2	1,632	1,055	0	943	2,764	0
3	1,592	1,059	0	943	2,468	0
4	1,756	1,063	0	943	2,311	0
5	1,841	1,063	0	943	2,457	598
6	1,855	1,064	0	943	2,976	0
7	2,535	1,062	0	943	491	559
8	2,877	1,054	0	943	754	0
9	1,628	1,054	0	943	3,115	0
10	1,637	1,057	0	943	3,000	0
11	1,768	1,062	0	943	2,938	1,024
12	1,770	1,059	0	943	3,409	588
13	1,831	1,061	0	943	2,630	749
14	2,316	1,066	0	943	225	0
15	2,848	1,053	0	943	248	0
16	1,821	1,053	0	943	3,303	0
17	1,899	1,057	0	943	3,244	0
18	1,487	1,059	0	943	2,105	0
19	1,861	1,065	0	943	2,228	842
20	1,928	1,064	0	943	2,504	0
21	2,379	1,064	0	943	311	0
22	2,607	1,053	0	943	238	0
23	1,366	1,059	0	943	3,130	0
24	1,851	1,057	0	943	2,302	932
25	1,944	1,058	0	943	2,208	0
26	2,033	1,061	0	943	2,472	0
27	2,034	1,060	0	943	2,899	0
28	2,030	1,058	0	943	244	0
29	2,021	1,061	0	943	941	0
30	1,865	1,057	0	943	3,234	822
Total	59,563	31,827	0	28,329	62,822	6,114

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**December 2009**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,876	1,059	0	992	2,731	627
2	1,741	1,060	0	992	3,546	581
3	2,110	1,055	0	992	3,485	0
4	2,109	1,051	0	992	3,652	0
5	2,109	1,057	0	992	1,146	0
6	2,108	1,056	0	992	297	835
7	1,833	1,058	0	992	4,159	678
8	1,324	1,061	0	992	1,165	794
9	1,750	1,068	0	992	1,070	637
10	1,969	1,068	0	992	2,261	0
11	1,681	793	0	992	2,646	0
12	1,779	999	0	992	186	1
13	1,960	1,069	0	992	419	2,973
14	1,866	1,069	0	992	3,509	604
15	1,789	1,069	0	992	2,813	0
16	1,032	1,064	0	992	3,244	0
17	1,796	1,074	0	992	3,354	0
18	1,928	1,074	0	992	1,536	653
19	2,516	1,076	0	992	9	0
20	2,505	1,070	0	992	344	0
21	2,217	912	0	992	1,293	550
22	2,176	1,062	0	873	4,592	0
23	2,252	1,016	0	873	1,837	715
24	2,155	1,061	0	873	5,019	0
25	2,185	1,066	0	873	0	0
26	2,126	1,060	0	873	2,497	0
27	2,028	1,062	0	873	1,141	606
28	2,009	1,058	0	873	3,540	620
29	2,102	1,055	0	873	2,864	0
30	2,016	1,060	0	873	3,283	1,074
31	2,042	1,059	0	873	2,878	0
Total	61,089	32,421	0	29,562	70,516	11,948

1/ Values supplied by LADWP, not verified by DWR.



**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**January 2010**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,713	1,065	0	992	1,288	0
2	2,074	1,056	0	992	1,190	996
3	1,539	1,047	0	992	2,051	709
4	2,395	1,050	0	992	2,618	596
5	1,818	1,049	0	873	2,691	645
6	2,066	1,048	0	873	2,882	762
7	2,166	1,053	0	992	3,799	512
8	1,868	1,048	0	992	3,086	0
9	1,873	811	0	992	487	781
10	1,937	1,048	0	992	724	665
11	1,883	1,045	0	992	2,885	569
12	1,324	351	0	992	2,355	0
13	1,697	330	0	992	2,746	0
14	2,065	1,051	0	992	2,632	0
15	1,749	1,051	0	992	2,647	0
16	1,901	1,047	0	992	112	0
17	2,006	1,047	0	992	616	535
18	1,009	1,053	0	0	573	648
19	1,039	1,054	0	0	304	0
20	1,055	1,052	0	0	2,435	0
21	1,056	1,053	0	0	752	1,054
22	1,708	1,053	0	0	646	0
23	1,160	1,048	0	0	1,420	0
24	1,078	1,048	0	0	1,159	0
25	1,102	1,052	0	0	1,272	450
26	1,034	1,049	0	0	1,798	0
27	1,065	1,051	0	0	1,123	0
28	1,120	818	0	0	1,702	0
29	1,070	1,051	0	0	1,279	0
30	1,182	1,052	0	0	275	0
31	838	1,053	0	0	974	0
<b>Total</b>	<b>47,590</b>	<b>30,684</b>	<b>0</b>	<b>16,626</b>	<b>50,521</b>	<b>8,922</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**February 2010**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,053	1,054	0	0	1,385	0
2	992	1,046	0	0	812	0
3	992	1,046	0	0	1,152	625
4	938	1,052	0	0	2,924	0
5	712	1,052	0	0	975	926
6	998	1,054	0	0	132	0
7	1,021	1,054	0	0	141	0
8	1,039	1,057	0	0	1,743	98
9	1,068	1,059	0	0	1,894	0
10	1,077	1,058	0	0	1,583	0
11	1,076	1,059	0	0	1,678	0
12	1,253	1,053	0	0	1,489	0
13	1,128	1,054	0	0	363	0
14	1,002	1,054	0	0	1,358	0
15	1,047	1,058	0	0	1,499	747
16	1,050	1,058	0	0	1,067	711
17	1,028	1,055	0	0	2,551	0
18	1,038	1,060	0	0	2,487	913
19	1,015	1,062	0	0	1,707	758
20	378	1,060	0	0	981	0
21	1,338	1,059	0	0	682	0
22	547	762	0	0	2,005	751
23	531	554	0	0	777	568
24	540	552	0	0	787	0
25	517	557	0	0	705	959
26	521	523	0	0	335	0
27	622	517	0	0	396	0
28	527	514	0	0	391	0
<b>Total</b>	<b>25,048</b>	<b>26,143</b>	<b>0</b>	<b>0</b>	<b>33,999</b>	<b>7,056</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**March 2010**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	519	514	0	0	905	553
2	441	521	0	0	539	0
3	527	520	0	0	1,167	706
4	533	523	0	0	1,230	902
5	523	523	0	0	1,155	0
6	524	525	0	0	239	0
7	532	528	0	0	497	0
8	1,114	1,061	0	0	1,493	603
9	1,059	1,062	0	0	1,058	680
10	941	1,092	0	0	1,317	0
11	524	527	0	0	597	0
12	524	525	0	0	335	0
13	524	525	0	0	663	0
14	552	501	0	0	380	0
15	556	524	0	0	843	0
16	556	525	0	0	945	0
17	537	525	0	0	770	867
18	628	532	0	0	1,025	660
19	557	528	0	0	1,062	852
20	556	527	0	0	388	0
21	1,187	527	0	0	123	0
22	1,253	516	0	0	1,236	0
23	1,053	508	0	0	1,266	0
24	795	500	0	0	871	867
25	775	516	0	0	796	666
26	785	517	0	0	392	578
27	775	516	0	0	141	0
28	792	522	0	0	218	0
29	399	523	0	0	1,403	0
30	495	519	0	0	788	0
31	522	516	0	0	218	0
<b>Total</b>	<b>21,058</b>	<b>17,788</b>	<b>0</b>	<b>0</b>	<b>24,060</b>	<b>7,934</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**April 2010**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	519	518	0	0	478	0
2	263	517	0	0	335	0
3	520	519	0	0	159	0
4	514	520	0	0	123	0
5	522	519	0	0	614	0
6	521	527	0	0	629	0
7	521	531	0	0	513	0
8	424	539	0	0	265	0
9	577	533	0	0	141	0
10	521	542	0	0	103	0
11	528	536	0	0	784	0
12	524	535	0	0	737	0
13	451	533	0	0	1,096	0
14	509	532	0	0	784	0
15	635	529	0	0	718	0
16	524	536	0	0	635	2,353
17	0	536	0	0	668	0
18	520	539	0	0	908	0
19	400	536	0	0	895	4
20	696	535	0	0	282	11
21	398	536	0	0	379	743
22	627	535	0	0	410	623
23	515	535	0	0	363	0
24	627	534	0	0	141	0
25	809	535	0	0	188	0
26	821	528	0	0	719	0
27	531	534	0	0	2,042	0
28	0	533	0	0	185	730
29	14,017	546	0	0	367	631
30	528	533	0	0	1,179	0
<b>Total</b>	<b>28,562</b>	<b>15,961</b>	<b>0</b>	<b>0</b>	<b>16,840</b>	<b>5,095</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**May 2010**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	628	530	0	0	159	0
2	831	532	0	0	1,094	0
3	265	535	0	0	1,672	833
4	794	539	0	0	2,856	0
5	703	541	0	0	1,252	0
6	707	535	0	0	95	1,258
7	636	529	0	0	343	0
8	522	536	0	0	468	0
9	914	537	0	0	188	0
10	778	537	0	0	244	23
11	520	539	0	0	183	960
12	520	530	0	0	863	0
13	514	533	0	0	2,706	0
14	522	530	0	0	1,248	768
15	522	538	0	0	278	0
16	522	543	0	0	982	1,386
17	1,031	1,022	0	0	472	634
18	1,172	889	0	0	2,886	0
19	634	1,023	0	0	1,493	0
20	626	1,024	0	0	2,109	1,190
21	1,014	1,021	0	0	195	1,337
22	856	1,024	0	0	512	0
23	1,545	1,020	0	0	349	0
24	1,178	1,018	0	0	2,003	0
25	1,208	1,015	0	0	302	0
26	943	1,014	0	0	2,756	0
27	879	1,014	0	0	1,996	842
28	1,049	1,012	0	0	1,145	0
29	944	1,013	0	0	218	0
30	1,037	1,019	0	0	546	1,147
31	1,044	1,018	0	0	105	0
<b>Total</b>	<b>25,058</b>	<b>23,710</b>	<b>0</b>	<b>0</b>	<b>31,718</b>	<b>10,378</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**June 2010**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,044	1,011	0	0	2,019	0
2	936	1,012	0	0	2,307	38
3	1,024	1,017	0	0	3,192	1,443
4	1,010	1,024	0	0	4,762	1,916
5	1,010	916	0	0	2,588	2,299
6	1,095	1,021	0	0	2,640	3,027
7	1,091	1,024	0	0	3,429	1,977
8	997	1,023	0	0	4,061	2,431
9	1,000	1,022	0	0	3,497	3,078
10	1,011	1,021	0	0	3,043	1,933
11	563	1,017	0	0	1,241	1,266
12	1,120	1,017	0	0	155	2
13	1,640	1,015	0	0	2,276	1,643
14	1,167	1,018	0	0	3,687	1,422
15	1,037	1,019	0	0	3,850	2,077
16	1,053	1,016	0	0	3,393	2,510
17	1,052	1,021	0	0	3,175	2,352
18	1,053	1,023	0	0	3,943	1,339
19	1,001	1,014	0	0	3,706	2,686
20	745	1,021	0	0	1,369	1,390
21	1,063	1,118	0	0	1,659	2,296
22	823	1,118	0	0	4,305	1,461
23	1,348	1,106	0	0	2,961	2,523
24	1,144	1,070	0	0	5,884	2,311
25	898	1,072	0	0	3,621	3,594
26	1,053	1,071	0	0	888	1,541
27	1,230	1,066	0	0	2,504	1,540
28	896	1,072	0	0	3,327	1,213
29	29,104	1,076	0	0	3,904	2,037
30	1,340	1,076	0	0	4,111	2,255
<b>Total</b>	<b>59,548</b>	<b>31,117</b>	<b>0</b>	<b>0</b>	<b>91,497</b>	<b>55,600</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**July 2010**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	995	1,269	0	0	4,473	2,389
2	1,348	1,023	0	0	7,387	3,075
3	1,507	1,129	0	0	297	3,296
4	1,619	1,336	0	0	157	3,148
5	1,211	1,342	0	0	439	0
6	1,270	1,345	0	0	3,612	60
7	1,305	1,453	0	0	1,834	2,281
8	1,254	1,444	0	0	3,220	0
9	1,142	1,519	0	0	3,458	1,240
10	1,764	1,328	0	0	141	0
11	1,434	1,329	0	0	159	0
12	1,159	1,330	0	0	3,499	822
13	954	1,335	0	0	3,941	2,160
14	1,051	1,332	0	0	2,293	1,837
15	2,311	2,465	0	0	5,230	0
16	2,698	2,224	0	0	2,474	0
17	2,797	2,638	0	0	1,287	957
18	2,444	1,861	0	0	1,114	0
19	1,769	1,675	0	0	3,093	1,292
20	1,635	1,627	0	0	3,300	1,203
21	2,270	1,630	0	0	4,553	2,021
22	1,157	1,363	0	0	5,290	2,855
23	1,490	1,391	0	0	4,107	1,465
24	1,303	1,391	0	0	1,631	2,386
25	2,232	1,380	0	0	1,960	2,514
26	1,660	1,381	0	0	3,713	1,357
27	1,788	1,369	0	0	3,882	1,721
28	1,421	1,326	0	0	3,219	2,052
29	1,398	1,367	0	0	3,354	2,002
30	1,468	1,446	0	0	4,807	1,357
31	1,912	1,483	0	0	327	1,924
<b>Total</b>	<b>49,766</b>	<b>46,531</b>	<b>0</b>	<b>0</b>	<b>88,251</b>	<b>45,414</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**August 2010**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,455	1,460	0	0	1,292	1,405
2	1,685	1,891	0	0	3,322	420
3	1,686	1,785	0	0	3,744	1,781
4	1,631	1,778	0	0	4,118	1,548
5	1,506	1,761	0	0	4,022	1,109
6	1,685	1,845	0	0	3,851	1,733
7	1,685	1,797	0	0	1,955	1,169
8	1,260	1,037	0	0	1,596	3,213
9	1,540	1,763	0	0	3,676	1,009
10	1,963	1,771	0	0	3,676	1,326
11	1,539	1,751	0	0	5,155	1,544
12	2,121	1,041	0	0	4,966	2,404
13	2,628	1,940	0	0	4,963	2,208
14	2,334	2,649	0	0	1,524	1,660
15	2,447	2,675	0	0	1,325	2,819
16	2,123	2,565	0	0	4,682	46
17	2,221	2,491	0	0	4,326	2,119
18	2,101	2,487	0	29	4,705	1,199
19	1,487	2,498	0	0	3,540	766
20	2,174	2,391	0	0	3,982	1,096
21	2,399	2,604	0	0	4,871	1,317
22	2,349	2,482	0	0	154	2,538
23	1,743	1,674	0	0	2,775	743
24	1,644	1,694	0	0	3,733	1,382
25	1,921	1,615	0	0	4,119	1,551
26	1,700	1,616	0	0	4,371	1,129
27	1,671	1,083	0	0	5,678	1,341
28	2,090	1,661	0	0	54	1,950
29	52,788	1,676	0	0	15	1,841
30	2,060	1,584	0	0	300	790
31	1,900	1,575	0	0	5,469	115
<b>Total</b>	<b>109,536</b>	<b>58,640</b>	<b>0</b>	<b>29</b>	<b>101,959</b>	<b>45,271</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**September 2010**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,078	1,551	0	0	5,367	2,667
2	2,113	1,868	0	0	5,289	1,996
3	1,693	1,876	0	0	5,431	2,203
4	1,578	1,874	0	0	4,219	1,731
5	1,885	1,878	0	0	1,480	3,988
6	1,772	1,879	0	0	2,416	2,847
7	1,905	1,873	0	0	2,643	788
8	2,036	1,872	0	0	3,183	777
9	1,564	1,876	0	0	5,860	0
10	2,181	2,016	0	0	5,406	1,225
11	2,384	2,532	0	0	391	0
12	2,204	2,540	0	0	393	1,738
13	1,863	1,583	0	0	3,928	0
14	2,184	2,125	0	0	3,172	1,563
15	1,507	1,569	0	0	3,410	936
16	1,791	1,629	0	0	1,632	713
17	1,847	1,627	0	0	3,198	0
18	1,732	1,626	0	0	1,673	1,548
19	2,277	1,629	0	0	1,616	1,390
20	1,428	1,830	0	0	3,065	2,009
21	1,666	1,866	0	0	2,488	683
22	1,833	1,836	0	0	3,604	973
23	1,689	1,831	0	0	2,561	930
24	2,110	1,825	0	0	3,962	0
25	2,109	1,821	0	0	1,033	0
26	2,223	1,833	0	0	2,167	1,776
27	2,238	1,844	0	0	7,058	2,184
28	2,066	1,875	0	0	3,460	4,693
29	1,587	1,901	0	0	3,042	964
30	1,872	1,844	0	0	3,468	0
Total	57,415	55,729	0	0	96,615	40,322

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**October 2010**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,041	1,957	0	0	1,612	0
2	3,617	2,545	0	0	872	635
3	2,498	2,543	0	0	1,683	0
4	2,457	2,544	0	0	2,352	0
5	2,463	2,541	0	0	2,866	784
6	2,445	2,545	0	0	2,765	0
7	2,331	2,545	0	0	2,782	0
8	2,385	2,546	0	0	3,057	0
9	2,600	2,542	0	0	3,641	0
10	2,069	1,816	0	0	1,618	0
11	1,192	1,008	0	0	2,243	0
12	1,194	1,161	0	0	1,390	0
13	1,105	1,002	0	0	1,690	575
14	0	1,013	0	0	1,932	0
15	420	1,011	0	0	2,106	0
16	1,843	1,009	0	0	550	0
17	1,798	1,016	0	0	1,065	0
18	2,440	2,734	0	0	2,756	0
19	2,645	2,731	0	0	2,864	728
20	2,571	2,723	0	0	2,201	728
21	2,580	2,720	0	0	3,927	581
22	2,565	2,674	0	91	4,695	1,011
23	2,589	2,779	0	0	151	1,245
24	2,590	2,779	0	0	1,076	1,183
25	2,589	2,780	0	0	3,218	0
26	2,935	2,751	0	0	3,186	819
27	2,592	2,606	0	0	3,802	947
28	2,807	2,561	0	0	3,439	0
29	61,361	2,551	0	0	2,893	0
30	2,586	2,546	0	0	944	0
31	2,314	2,552	0	0	667	0
Total	127,622	68,831	0	91	70,043	9,236

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**November 2010**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,323	2,557	0	0	3,833	0
2	2,142	2,703	0	0	2,149	0
3	1,157	554	0	0	1,932	0
4	840	0	0	0	1,843	0
5	947	0	0	0	561	0
6	939	500	0	0	210	0
7	1,792	2,362	0	0	213	0
8	1,047	1,088	0	0	278	0
9	1,290	1,050	0	0	779	0
10	997	1,051	0	0	2,409	0
11	1,164	1,050	0	0	307	0
12	1,092	1,051	0	0	1,954	0
13	1,062	1,051	0	0	123	0
14	1,052	1,050	0	0	117	1,147
15	1,155	1,051	0	0	1,586	932
16	1,515	1,045	0	0	367	0
17	1,003	1,046	0	0	1,796	0
18	906	1,049	0	0	1,822	883
19	993	1,045	0	0	1,417	529
20	637	1,071	0	0	248	0
21	1,045	1,071	0	0	159	0
22	1,048	1,057	0	0	1,579	611
23	1,048	1,048	0	0	3,004	0
24	1,042	1,048	0	0	2,682	0
25	779	1,050	0	0	123	0
26	889	1,053	0	0	662	0
27	896	1,053	0	0	141	0
28	887	1,054	0	0	307	0
29	1,651	1,427	0	0	333	0
30	1,868	1,420	0	0	1,351	0
<b>Total</b>	<b>35,206</b>	<b>33,655</b>	<b>0</b>	<b>0</b>	<b>34,285</b>	<b>4,102</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**December 2010**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,280	1,454	0	0	2,000	0
2	1,594	1,593	0	0	3,358	0
3	1,418	1,424	0	0	4,287	972
4	1,413	1,304	0	0	190	0
5	1,413	1,443	0	0	105	0
6	1,411	1,431	0	0	159	0
7	1,482	1,426	0	0	1,871	0
8	1,110	1,444	0	0	1,280	0
9	1,378	1,143	0	0	1,358	0
10	1,046	1,465	0	0	1,488	0
11	1,449	1,513	0	0	404	0
12	1,454	1,434	0	0	218	0
13	2,262	1,414	0	0	2,326	936
14	2,860	2,081	0	368	3,293	1,093
15	3,577	2,711	0	1,357	4,662	728
16	2,759	2,092	0	877	2,848	0
17	822	1,046	0	0	1,674	0
18	824	1,049	0	0	2,330	0
19	818	612	0	0	188	1,400
20	1,333	1,051	0	0	3,983	1,732
21	1,640	1,051	0	0	2,907	0
22	1,162	1,048	0	0	2,503	0
23	1,003	1,046	0	0	1,485	574
24	945	1,047	0	0	1,271	645
25	1,107	1,043	0	0	1,611	1,240
26	1,057	1,048	0	0	156	1,960
27	594	515	0	0	1,496	984
28	397	590	0	0	1,032	747
29	40,608	530	0	0	1,455	752
30	439	485	0	0	2,135	0
31	394	495	0	0	2,676	0
<b>Total</b>	<b>82,049</b>	<b>38,028</b>	<b>0</b>	<b>2,602</b>	<b>56,749</b>	<b>13,763</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**January 2011**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	828	493	0	0	389	0
2	0	484	0	0	414	1,525
3	0	0	0	0	854	638
4	0	0	0	0	430	622
5	0	482	0	0	1,322	672
6	136	384	0	702	2,809	0
7	2,858	1,455	0	1,273	3,404	0
8	3,023	1,499	0	1,388	188	0
9	2,561	1,497	0	1,388	133	0
10	2,517	1,496	0	405	1,636	0
11	1,186	477	0	533	3,194	561
12	2,896	1,450	0	1,388	2,658	0
13	2,995	1,453	0	1,388	2,854	0
14	1,852	1,026	0	405	2,725	10
15	839	1,027	0	0	363	0
16	1,166	1,028	0	0	996	1,529
17	163	372	0	0	157	1,044
18	627	306	0	0	673	649
19	680	304	0	0	2,546	32
20	316	305	0	0	641	594
21	630	304	0	0	1,534	716
22	317	305	0	0	216	1,452
23	316	308	0	0	182	672
24	318	315	0	0	1,012	0
25	316	310	0	0	716	816
26	163	308	0	0	2,134	831
27	317	293	0	0	729	735
28	263	294	0	0	282	1,187
29	316	301	0	0	123	0
30	263	321	0	0	1,382	0
31	1,078	1,020	0	0	1,235	1,003
<b>Total</b>	<b>28,940</b>	<b>19,617</b>	<b>0</b>	<b>8,870</b>	<b>37,931</b>	<b>15,288</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**February 2011**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	990	1,024	0	0	2,105	995
2	1,083	1,017	0	0	1,771	0
3	886	1,142	0	0	2,888	0
4	710	1,030	0	0	1,189	0
5	954	1,064	0	0	248	0
6	688	1,066	0	0	446	0
7	1,233	1,012	0	0	1,173	757
8	743	1,034	0	0	1,515	482
9	765	1,034	0	0	1,585	0
10	728	1,031	0	0	1,524	85
11	906	974	0	0	1,756	737
12	1,062	975	0	0	2,301	0
13	1,273	1,034	0	0	300	1,493
14	1,300	1,054	0	0	1,120	1,266
15	1,161	1,053	0	0	2,612	1,010
16	1,135	1,174	0	0	933	62
17	1,013	1,477	0	0	2,121	793
18	1,704	1,481	0	364	4,694	436
19	2,191	1,478	0	1,104	396	0
20	2,926	1,479	0	1,110	1,585	0
21	4,208	1,473	0	461	2,160	0
22	2,781	1,465	0	992	3,958	0
23	2,307	1,465	0	992	2,296	0
24	1,459	1,466	0	455	3,252	0
25	1,253	1,468	0	0	2,591	0
26	1,261	1,467	0	0	410	1,015
27	579	1,463	0	0	367	529
28	531	513	0	0	496	1,090
<b>Total</b>	<b>37,830</b>	<b>33,413</b>	<b>0</b>	<b>5,478</b>	<b>47,792</b>	<b>10,750</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**March 2011**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	730	485	0	0	1,292	0
2	528	491	0	0	896	0
3	522	495	0	0	117	802
4	628	495	0	0	114	17
5	732	498	0	0	123	0
6	951	491	0	0	218	0
7	421	550	0	0	2,541	36
8	730	561	0	0	2,218	1,289
9	1,051	1,521	0	0	1,532	0
10	1,246	1,553	0	0	1,629	0
11	1,789	1,553	0	0	720	747
12	1,415	1,552	0	0	470	0
13	3,197	1,483	0	0	303	0
14	1,154	977	0	0	1,864	0
15	847	975	0	0	2,282	0
16	536	978	0	0	1,201	870
17	1,033	1,083	0	0	1,243	0
18	1,378	1,528	0	0	181	0
19	1,480	1,529	0	0	510	0
20	1,607	839	0	0	3,873	0
21	728	770	0	0	1,214	0
22	506	741	0	0	704	716
23	1,584	1,525	0	0	2,092	0
24	1,170	1,521	0	0	1,698	0
25	1,369	1,530	0	0	3,239	993
26	1,374	1,523	0	0	542	1,116
27	1,520	1,510	0	0	1,529	0
28	1,787	1,534	0	0	3,087	0
29	1,477	1,529	0	0	2,198	0
30	1,258	1,401	0	0	1,616	1,043
31	1,414	1,403	0	0	2,290	0
<b>Total</b>	<b>36,162</b>	<b>34,624</b>	<b>0</b>	<b>0</b>	<b>43,536</b>	<b>7,629</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**April 2011**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,237	1,409	0	0	3,394	754
2	1,637	1,402	0	0	1,224	0
3	1,470	700	0	0	123	0
4	530	383	0	0	1,924	0
5	211	384	0	0	1,151	891
6	211	391	0	0	1,162	959
7	217	391	0	0	1,992	0
8	317	326	0	0	1,345	975
9	317	327	0	0	231	891
10	415	392	0	0	638	1,733
11	415	455	0	0	2,004	895
12	264	455	0	0	1,990	905
13	624	584	0	0	928	996
14	198	452	0	0	1,523	0
15	579	516	0	0	1,505	753
16	627	515	0	0	248	0
17	632	452	0	0	101	1,119
18	1,464	1,535	0	0	2,291	0
19	1,413	1,538	0	0	1,742	0
20	1,693	1,542	0	0	557	0
21	1,899	1,538	0	0	658	867
22	1,573	1,529	0	0	2,777	0
23	1,311	1,539	0	0	343	0
24	1,315	1,536	0	0	123	0
25	1,572	1,541	0	0	605	0
26	1,473	1,546	0	0	944	0
27	1,412	1,543	0	0	1,937	0
28	1,579	1,547	0	0	2,168	0
29	1,524	1,544	0	0	1,558	0
30	1,267	1,551	0	0	123	0
<b>Total</b>	<b>29,396</b>	<b>29,563</b>	<b>0</b>	<b>0</b>	<b>37,309</b>	<b>11,738</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**May 2011**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,692	1,544	0	0	2,914	0
2	1,048	581	0	0	1,477	0
3	633	577	0	0	510	0
4	599	573	0	0	1,196	0
5	634	574	0	0	301	0
6	622	568	0	0	258	1,231
7	688	569	0	0	159	0
8	1,066	563	0	0	141	0
9	698	681	0	0	1,328	0
10	698	693	0	0	544	2
11	848	710	0	0	1,312	0
12	794	678	0	0	2,750	81
13	530	696	0	0	3,737	1,219
14	952	764	0	0	113	1,968
15	798	703	0	0	173	1,885
16	0	0	1	0	1,541	741
17	0	0	2	0	335	0
18	0	0	0	0	137	829
19	0	0	0	0	605	0
20	219	0	0	0	1,814	0
21	626	958	0	0	159	0
22	1,033	961	0	0	746	1,180
23	778	965	0	0	1,870	998
24	1,121	1,032	0	0	1,733	1,022
25	1,015	1,025	0	0	2,010	1,315
26	930	1,025	0	0	443	1,189
27	930	1,020	0	0	3,006	0
28	983	964	0	0	1,743	25
29	938	957	0	0	194	1,503
30	983	957	0	0	666	1,085
31	977	960	0	0	3,241	0
<b>Total</b>	<b>22,833</b>	<b>21,298</b>	<b>3</b>	<b>0</b>	<b>37,156</b>	<b>16,273</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**June 2011**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,825	1,527	0	0	2,344	983
2	1,519	1,531	0	0	157	0
3	1,732	1,526	0	0	1,893	0
4	1,327	1,532	0	0	105	0
5	2,182	1,522	0	0	1,443	0
6	1,303	1,532	0	0	2,159	0
7	1,468	1,531	0	0	2,493	205
8	1,493	1,531	0	0	1,546	1,187
9	1,635	1,520	0	0	1,876	0
10	1,723	1,516	0	0	543	0
11	1,383	1,524	0	0	105	0
12	2,547	1,529	0	0	2,384	0
13	908	1,516	0	0	3,085	0
14	1,424	1,522	0	0	3,213	1,131
15	1,138	1,528	0	0	2,833	0
16	1,406	1,517	0	0	3,402	0
17	1,533	1,534	0	0	2,975	145
18	1,503	1,559	0	0	243	897
19	1,833	1,558	0	0	152	70
20	1,526	1,544	0	0	3,147	1,183
21	1,378	1,538	0	0	2,038	1,227
22	1,484	1,522	0	0	1,587	1,149
23	1,157	1,534	0	0	2,909	0
24	1,206	1,507	0	0	3,106	1,486
25	2,170	1,492	0	0	1,880	1,100
26	2,448	1,496	0	0	146	2,133
27	1,429	1,506	0	0	3,215	0
28	1,534	1,420	0	0	65	968
29	1,165	1,001	0	0	16	0
30	925	999	0	0	4,084	0
<b>Total</b>	<b>46,304</b>	<b>44,614</b>	<b>0</b>	<b>0</b>	<b>55,144</b>	<b>13,864</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**July 2011**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,087	1,059	0	0	3,496	1,235
2	1,114	1,233	0	0	681	1,375
3	844	799	0	0	435	1,323
4	395	0	0	0	1,073	0
5	477	0	0	0	2,638	1,113
6	317	113	0	0	2,402	952
7	0	328	0	0	2,459	1,211
8	0	1,431	0	0	2,169	999
9	1,143	1,454	0	0	1,679	1,339
10	1,480	1,469	0	0	1,501	3,476
11	1,381	1,435	0	0	4,164	1,186
12	1,557	1,395	0	0	4,040	2,526
13	1,388	1,403	0	0	1,724	2,629
14	947	1,416	0	0	5,158	1,339
15	1,802	1,408	0	0	6,037	2,352
16	1,965	1,425	0	0	2,222	3,068
17	2,149	1,426	0	0	1,906	3,489
18	1,576	1,422	0	0	3,501	1,897
19	1,622	1,403	0	0	3,872	1,920
20	1,527	1,404	0	0	2,764	1,742
21	1,883	1,404	0	0	3,986	1,858
22	900	1,405	0	0	4,975	2,003
23	1,440	1,406	0	0	4,514	1,438
24	955	1,400	0	0	1,922	3,276
25	1,318	1,407	0	0	3,039	2,107
26	1,472	1,408	0	0	2,909	1,840
27	1,509	1,408	0	0	2,772	1,304
28	1,592	1,404	0	0	3,721	2,200
29	1,009	1,398	0	0	2,687	0
30	1,565	1,399	0	0	1,673	849
31	1,431	1,405	0	0	2,216	976
<b>Total</b>	<b>37,845</b>	<b>37,467</b>	<b>0</b>	<b>0</b>	<b>88,335</b>	<b>53,022</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**August 2011**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,324	1,414	0	0	3,557	1,798
2	1,341	1,414	0	0	2,741	2,640
3	1,032	1,413	0	0	3,236	1,097
4	654	1,409	0	0	3,755	1,261
5	1,615	1,410	0	0	3,779	1,574
6	1,704	1,410	0	0	3,851	3,547
7	2,469	1,407	0	0	1,697	2,828
8	1,478	1,396	0	0	2,218	814
9	1,081	1,397	0	0	2,459	0
10	1,309	1,396	0	0	2,660	1,029
11	1,175	1,395	0	0	1,334	690
12	1,318	1,394	0	0	1,853	0
13	1,915	1,395	0	0	1,214	1,225
14	1,775	1,396	0	0	1,233	2,277
15	1,327	1,396	0	0	3,157	2,212
16	895	739	0	0	2,971	1,225
17	1,320	1,412	0	0	4,627	2,501
18	1,422	1,369	0	0	3,864	2,699
19	1,246	1,439	0	0	2,420	1,940
20	1,275	1,525	0	0	3,465	1,233
21	2,116	1,526	0	0	113	610
22	1,278	1,424	0	0	2,574	605
23	940	1,551	0	0	3,227	749
24	1,423	1,563	0	0	2,327	2,656
25	1,249	1,544	0	0	4,263	996
26	1,576	1,521	0	0	1,195	912
27	1,901	1,489	0	0	881	1
28	1,964	1,489	0	0	2,490	2,508
29	1,257	1,506	0	0	2,651	1,172
30	1,042	1,504	0	0	2,013	1,152
31	1,466	1,508	0	0	1,500	0
<b>Total</b>	<b>43,887</b>	<b>44,151</b>	<b>0</b>	<b>0</b>	<b>79,325</b>	<b>43,951</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**September 2011**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,180	1,512	0	0	4,123	871
2	1,748	1,511	0	0	3,700	783
3	2,011	1,462	0	0	1,846	729
4	1,858	1,410	0	0	98	1,564
5	1,954	1,412	0	0	1,641	735
6	1,373	1,412	0	0	2,932	586
7	1,657	1,411	0	0	3,322	1,515
8	1,484	1,407	0	0	3,261	1,279
9	1,176	1,426	0	0	4,636	866
10	999	1,491	0	0	329	0
11	2,549	1,423	0	0	123	0
12	1,429	1,558	0	0	2,573	706
13	1,163	1,485	0	0	2,760	584
14	1,062	1,469	0	0	2,045	1,081
15	1,307	1,504	0	0	2,694	1,018
16	1,593	1,500	0	0	2,272	988
17	1,944	1,465	0	0	122	1,411
18	1,761	1,483	0	0	1,342	1,443
19	1,714	1,443	0	0	3,466	1,145
20	1,532	1,473	0	0	1,798	954
21	1,277	1,465	0	0	2,834	0
22	1,242	1,476	0	0	2,512	39
23	1,054	1,491	0	0	3,277	0
24	1,698	1,484	0	0	152	1,264
25	1,961	1,447	0	0	511	1,023
26	1,167	1,473	0	0	2,634	863
27	1,273	1,480	0	0	2,163	0
28	1,268	1,480	0	0	862	0
29	2,340	1,479	0	0	2,826	0
30	1,324	1,465	0	0	2,132	0
<b>Total</b>	<b>46,098</b>	<b>43,997</b>	<b>0</b>	<b>0</b>	<b>64,986</b>	<b>21,447</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**October 2011**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,913	1,444	0	0	459	0
2	1,488	1,449	0	0	273	983
3	739	307	0	0	1,077	741
4	0	0	0	0	450	1,120
5	0	0	0	0	733	817
6	0	0	0	0	390	0
7	391	434	0	0	2,711	0
8	1,325	1,436	0	0	536	1,130
9	1,480	1,394	0	0	210	1,524
10	1,481	1,391	0	0	1,134	0
11	1,969	1,414	0	0	2,901	0
12	944	1,439	0	0	2,983	779
13	0	1,258	0	0	2,827	778
14	663	1,234	0	0	2,924	827
15	2,133	1,421	0	0	288	0
16	3,046	1,266	0	0	739	1,393
17	527	318	0	744	2,343	971
18	0	0	0	1,190	1,759	0
19	0	0	0	1,050	1,392	632
20	0	0	0	711	2,231	887
21	65	0	0	595	2,210	0
22	2,653	0	0	1,116	298	0
23	2,822	0	0	1,190	305	0
24	1,423	620	0	1,190	980	0
25	2,074	1,451	0	992	2,740	925
26	2,590	1,454	0	992	2,518	974
27	2,652	1,443	0	992	2,968	77
28	2,531	1,441	0	496	2,445	0
29	1,217	1,440	0	0	297	1,145
30	1,062	1,442	0	0	1,848	719
31	1,603	1,443	0	0	1,849	987
<b>Total</b>	<b>38,791</b>	<b>26,939</b>	<b>0</b>	<b>11,258</b>	<b>46,818</b>	<b>17,409</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**November 2011**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,530	1,443	0	0	2,133	0
2	796	1,007	0	0	1,603	970
3	316	1,004	0	0	2,223	0
4	314	1,005	0	0	1,648	822
5	2,023	1,452	0	0	105	0
6	2,343	1,512	0	0	572	0
7	1,645	1,357	0	0	2,047	0
8	1,907	1,415	0	0	2,496	0
9	1,325	1,439	0	0	1,096	792
10	1,379	1,443	0	0	2,307	0
11	867	1,448	0	0	1,495	0
12	1,226	1,447	0	0	120	0
13	1,704	1,448	0	0	416	0
14	896	837	0	0	2,760	0
15	422	845	0	0	1,260	699
16	478	967	0	0	4,766	380
17	424	969	0	0	1,426	0
18	945	967	0	0	89	1,058
19	1,640	725	0	0	131	786
20	1,055	667	0	0	1,885	0
21	1,268	1,005	0	0	1,456	0
22	633	966	0	0	366	0
23	627	970	0	0	668	0
24	396	871	0	0	200	0
25	629	865	0	0	172	1,021
26	898	866	0	0	1,233	0
27	784	795	0	0	1,147	0
28	1,003	852	0	0	136	0
29	892	838	0	0	444	0
30	942	993	0	0	152	713
<b>Total</b>	<b>31,307</b>	<b>32,418</b>	<b>0</b>	<b>0</b>	<b>36,552</b>	<b>7,241</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**December 2011**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	475	970	0	0	1,031	0
2	792	972	0	0	1,452	0
3	1,324	726	0	0	1,033	0
4	633	676	0	0	469	0
5	1,323	973	0	0	1,173	0
6	857	853	0	0	1,550	726
7	891	1,086	0	0	1,395	0
8	530	974	0	0	619	0
9	1,372	1,096	0	0	1,533	0
10	1,171	550	0	0	847	0
11	1,164	426	0	0	1,369	0
12	744	1,091	0	0	1,054	0
13	960	1,088	0	0	992	0
14	762	1,034	0	0	181	0
15	159	1,034	0	0	1,241	0
16	1,532	1,093	0	0	110	0
17	2,006	364	0	0	159	843
18	900	546	0	0	713	0
19	418	1,150	0	0	1,177	910
20	1,306	1,208	0	0	927	0
21	1,252	1,204	0	0	1,612	0
22	1,197	1,208	0	0	1,386	0
23	634	790	0	0	130	0
24	628	794	0	0	803	0
25	212	549	0	0	795	0
26	0	488	0	0	841	783
27	0	491	0	0	1,487	945
28	626	978	0	0	985	0
29	1,117	1,026	0	0	904	0
30	1,273	1,034	0	0	175	0
31	1,704	982	0	0	830	0
<b>Total</b>	<b>27,962</b>	<b>27,454</b>	<b>0</b>	<b>0</b>	<b>28,973</b>	<b>4,207</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**January 2012**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,181	966	0	0	1,020	0
2	1,896	967	0	0	859	0
3	371	849	0	0	1,225	0
4	735	846	0	0	1,195	0
5	885	851	0	0	1,059	0
6	1,204	1,451	0	0	1,749	0
7	1,204	1,452	0	0	1,450	0
8	1,525	1,452	0	0	909	0
9	1,426	1,450	0	0	1,772	0
10	1,368	1,454	0	0	1,857	0
11	1,417	1,456	0	0	2,253	0
12	1,360	1,479	0	0	1,842	0
13	1,792	1,456	0	0	1,485	0
14	1,704	1,456	0	0	155	0
15	2,237	1,451	0	0	834	0
16	1,745	1,586	0	0	88	0
17	1,169	1,484	0	0	2,057	0
18	1,409	1,592	0	0	1,621	0
19	1,427	1,554	0	0	2,777	0
20	1,434	1,493	0	0	1,694	0
21	1,807	1,481	0	0	559	0
22	1,804	1,319	0	0	327	0
23	1,328	1,628	0	0	1,972	0
24	1,119	1,427	0	0	1,851	0
25	2,873	3,253	0	0	1,928	0
26	1,623	1,705	0	0	1,773	0
27	789	1,523	0	0	2,697	0
28	1,728	1,373	0	0	504	0
29	1,057	670	0	0	591	0
30	1,901	1,834	0	0	2,281	0
31	1,372	1,684	0	0	2,498	0
<b>Total</b>	<b>45,890</b>	<b>44,642</b>	<b>0</b>	<b>0</b>	<b>44,882</b>	<b>0</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**February 2012**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,421	1,746	0	0	1,612	0
2	1,851	1,805	0	0	2,972	0
3	1,749	1,741	0	0	3,780	0
4	2,284	2,045	0	0	522	0
5	2,377	2,180	0	0	418	0
6	634	588	0	0	292	20
7	630	586	0	0	352	0
8	1,171	604	0	0	130	0
9	639	600	0	0	571	0
10	585	575	0	0	589	0
11	903	573	0	0	120	0
12	639	597	0	0	99	0
13	639	599	0	0	826	0
14	639	594	0	0	412	0
15	478	598	0	0	826	0
16	1,011	657	0	0	1,601	0
17	850	639	0	0	124	0
18	531	595	0	0	617	0
19	477	416	0	0	332	0
20	266	594	0	0	350	0
21	371	596	0	0	176	0
22	477	600	0	0	206	0
23	639	599	0	0	1,206	0
24	318	609	0	0	935	0
25	245	301	0	0	343	0
26	371	417	0	0	968	0
27	370	963	0	0	1,474	0
28	959	823	0	0	1,272	0
29	939	897	0	0	1,599	0
<b>Total</b>	<b>24,463</b>	<b>24,137</b>	<b>0</b>	<b>0</b>	<b>24,724</b>	<b>20</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**March 2012**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,469	388	0	0	1,097	0
2	738	1,450	0	0	317	0
3	1,423	1,642	0	0	164	0
4	1,474	1,481	0	0	248	0
5	944	675	0	0	608	0
6	629	613	0	0	719	0
7	396	825	0	0	508	0
8	524	421	0	0	748	0
9	397	631	0	0	132	0
10	397	515	0	0	164	0
11	628	0	0	0	390	0
12	935	1,297	0	0	1,406	0
13	1,907	1,882	0	0	1,841	0
14	2,014	1,853	0	0	2,913	0
15	2,019	2,110	0	0	2,436	25
16	2,338	2,285	0	0	2,766	0
17	2,403	2,227	0	0	1,683	10
18	2,229	1,091	0	0	1,042	0
19	1,977	2,014	0	0	2,709	0
20	2,180	2,151	0	0	1,743	0
21	2,331	2,300	0	0	2,450	0
22	1,751	2,172	0	0	1,713	0
23	1,970	2,173	0	0	1,061	0
24	1,916	2,176	0	0	1,182	0
25	1,748	1,577	0	0	2,235	0
26	741	957	0	0	1,759	0
27	1,473	1,229	0	0	821	0
28	1,591	1,458	0	0	2,203	0
29	1,318	1,298	0	0	1,962	0
30	1,271	1,299	0	0	809	0
31	945	1,181	0	0	188	0
<b>Total</b>	<b>44,076</b>	<b>43,371</b>	<b>0</b>	<b>0</b>	<b>40,017</b>	<b>35</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**April 2012**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,531	1,136	0	0	822	0
2	1,314	1,392	0	0	1,800	0
3	1,367	1,412	0	0	1,615	0
4	1,351	1,344	0	0	1,363	0
5	1,327	1,263	0	0	2,270	0
6	1,193	1,312	0	0	2,627	0
7	1,325	1,500	0	0	1,199	0
8	1,571	737	0	0	126	0
9	1,652	1,730	0	0	1,975	0
10	1,328	1,336	0	0	2,035	0
11	1,446	1,216	0	0	2,075	0
12	1,327	1,304	0	0	2,882	0
13	1,310	1,505	0	0	713	0
14	1,444	1,433	0	0	210	0
15	1,578	1,189	0	0	150	0
16	1,731	1,489	0	0	947	0
17	1,536	1,477	0	0	2,513	0
18	1,321	1,496	0	0	1,181	0
19	1,641	1,953	0	0	3,801	0
20	1,634	1,925	0	0	2,152	0
21	2,784	2,593	0	0	276	0
22	3,410	2,481	0	0	127	0
23	3,142	3,281	0	0	3,845	0
24	2,649	3,281	0	0	3,201	0
25	2,999	3,279	0	0	3,522	0
26	3,457	3,279	0	0	1,668	0
27	3,088	3,281	0	0	4,195	0
28	3,291	3,280	0	0	3,226	0
29	3,409	3,282	0	0	3,172	0
30	2,818	2,574	0	0	3,458	0
<b>Total</b>	<b>59,974</b>	<b>58,760</b>	<b>0</b>	<b>0</b>	<b>59,146</b>	<b>0</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**May 2012**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,274	2,526	0	0	2,081	0
2	2,660	2,589	0	0	2,955	0
3	2,402	2,597	0	0	2,770	0
4	2,497	2,599	0	0	1,377	0
5	3,083	2,624	0	0	1,679	0
6	2,986	2,598	0	0	2,240	0
7	3,145	2,473	0	0	3,253	0
8	2,293	2,293	0	0	2,158	0
9	2,341	2,242	0	0	2,574	0
10	2,252	2,190	0	0	3,623	400
11	2,208	2,208	0	0	2,546	228
12	2,491	2,201	0	0	510	3
13	2,005	1,957	0	0	1,935	0
14	2,188	2,472	0	0	4,343	146
15	2,770	2,710	0	0	2,668	0
16	2,226	2,323	0	0	3,453	0
17	2,326	2,432	0	0	2,413	0
18	2,487	2,589	0	0	2,543	0
19	2,759	2,604	0	0	1,980	0
20	2,972	2,660	0	0	1,411	0
21	2,647	2,595	0	0	3,508	0
22	2,541	2,632	0	0	3,203	0
23	2,386	2,510	0	0	3,529	0
24	2,592	2,569	0	0	1,002	98
25	2,645	2,566	0	0	3,377	418
26	2,811	2,569	0	0	1,224	0
27	3,169	2,571	0	0	2,081	0
28	2,346	2,114	0	0	2,183	0
29	2,170	2,180	0	0	591	0
30	2,270	2,226	0	0	1,218	0
31	2,174	2,240	0	0	2,493	0
<b>Total</b>	<b>78,116</b>	<b>75,659</b>	<b>0</b>	<b>0</b>	<b>72,921</b>	<b>1,293</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**June 2012**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,175	2,239	0	0	4,662	95
2	2,436	2,241	0	0	139	0
3	2,337	2,235	0	0	964	0
4	1,812	2,188	0	0	2,463	0
5	1,701	1,964	0	0	2,630	0
6	2,020	2,055	0	0	2,074	0
7	1,859	2,112	0	0	2,481	0
8	1,961	2,079	0	0	3,399	0
9	2,333	2,112	0	0	199	0
10	2,009	2,053	0	0	278	0
11	1,700	1,341	0	0	1,697	0
12	1,070	1,325	0	0	1,878	0
13	1,434	1,551	0	0	1,740	462
14	1,390	1,317	0	0	2,554	0
15	1,318	1,325	0	0	1,421	0
16	1,590	1,301	0	0	554	0
17	1,732	1,295	0	0	1,040	0
18	1,327	1,370	0	0	1,545	0
19	477	1,144	0	0	3,774	0
20	1,172	1,411	0	0	889	0
21	1,169	1,375	0	0	1,661	0
22	1,477	1,385	0	0	1,767	0
23	1,672	1,439	0	0	105	0
24	1,628	1,360	0	0	121	0
25	1,323	1,344	0	0	2,239	0
26	1,168	1,392	0	0	2,280	76
27	1,366	1,469	0	0	2,010	830
28	1,752	1,631	0	0	3,174	763
29	1,754	1,551	0	0	1,984	814
30	2,128	1,540	0	0	281	0
<b>Total</b>	<b>49,290</b>	<b>49,144</b>	<b>0</b>	<b>0</b>	<b>52,003</b>	<b>3,040</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**July 2012**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,973	1,578	0	0	887	653
2	1,355	1,543	0	0	2,608	0
3	1,580	1,555	0	0	3,062	0
4	1,485	1,485	0	0	1,665	929
5	1,479	1,472	0	0	1,392	2
6	1,375	1,419	0	0	1,025	0
7	1,576	1,413	0	0	998	0
8	1,590	1,421	0	0	643	1,223
9	1,356	1,398	0	0	2,540	680
10	1,540	1,369	0	0	2,638	0
11	1,164	1,345	0	0	1,173	0
12	1,480	1,305	0	0	2,487	0
13	1,308	1,328	0	0	2,717	0
14	1,157	1,313	0	0	140	0
15	1,743	1,329	0	0	130	0
16	1,382	1,336	0	0	653	0
17	955	1,350	0	0	1,678	0
18	958	1,410	0	0	2,176	0
19	1,700	1,575	0	0	4,096	0
20	1,693	1,616	0	0	457	721
21	1,859	1,693	0	0	1,458	0
22	1,907	1,531	0	0	131	0
23	2,178	2,134	0	0	2,021	726
24	2,010	1,586	0	0	1,708	0
25	1,859	2,117	0	0	1,576	0
26	2,173	2,190	0	0	3,647	849
27	2,046	2,145	0	0	2,104	0
28	2,111	2,148	0	0	1,240	0
29	2,437	2,176	0	0	1,500	0
30	2,230	2,241	0	0	2,413	0
31	2,206	2,333	0	0	3,099	0
<b>Total</b>	<b>51,865</b>	<b>50,854</b>	<b>0</b>	<b>0</b>	<b>54,062</b>	<b>5,783</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**August 2012**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,265	2,370	0	0	2,530	0
2	2,337	2,413	0	0	2,584	0
3	2,393	2,416	0	0	2,436	0
4	2,440	2,408	0	0	1,202	0
5	2,539	2,345	0	0	1,166	0
6	2,391	2,347	0	0	2,884	0
7	2,017	1,863	0	0	3,328	908
8	1,327	1,131	0	0	3,332	1,019
9	1,164	1,088	0	0	3,724	460
10	1,164	1,088	0	0	3,111	968
11	1,268	1,077	0	0	1,305	1,711
12	1,525	998	0	0	1,978	1,547
13	1,318	1,059	0	0	3,733	3,302
14	1,165	1,179	0	0	2,426	3,099
15	1,055	1,271	0	0	2,420	1,125
16	1,313	1,255	0	0	2,492	0
17	1,260	1,180	0	0	2,569	0
18	1,483	805	0	0	1,238	1,639
19	1,149	1,307	0	0	1,323	919
20	1,742	1,687	0	0	2,702	1,438
21	1,649	1,674	0	0	2,199	573
22	1,596	1,650	0	0	2,876	0
23	1,700	1,707	0	0	2,598	0
24	1,693	1,707	0	0	1,036	0
25	1,587	1,745	0	0	106	0
26	1,958	1,716	0	0	1,767	0
27	2,225	2,225	0	0	2,633	0
28	1,969	2,225	0	0	2,468	0
29	2,118	2,216	0	0	3,055	774
30	2,233	2,227	0	0	2,433	978
31	2,233	2,198	0	0	2,561	0
<b>Total</b>	<b>54,276</b>	<b>52,577</b>	<b>0</b>	<b>0</b>	<b>72,215</b>	<b>20,460</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**September 2012**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,516	2,251	0	0	147	0
2	2,290	2,162	0	0	1,451	0
3	2,383	2,394	0	0	2,142	0
4	1,915	2,245	0	0	2,701	0
5	850	588	0	0	784	0
6	2,649	2,457	0	0	3,726	0
7	2,173	2,277	0	0	3,072	0
8	2,651	2,344	0	0	1,035	0
9	1,876	1,929	0	0	1,637	25
10	1,348	2,126	0	0	2,362	1,222
11	1,979	2,165	0	0	2,162	0
12	2,114	2,086	0	0	3,543	0
13	2,020	1,991	0	0	3,426	0
14	1,698	2,067	0	0	2,550	0
15	2,081	2,076	0	0	2,012	0
16	2,276	2,076	0	0	286	65
17	1,975	1,894	0	0	1,991	1,256
18	1,252	922	0	0	2,216	0
19	0	0	0	0	850	0
20	0	0	0	0	590	0
21	760	498	0	0	989	810
22	1,461	1,441	0	0	220	0
23	1,797	744	0	0	545	1,600
24	1,587	1,836	0	0	4,074	819
25	2,079	3,217	0	0	3,311	0
26	2,153	2,193	0	0	2,143	0
27	2,335	2,053	0	0	2,752	0
28	1,803	2,169	0	0	2,113	0
29	2,432	2,189	0	0	174	0
30	2,177	2,191	0	0	142	0
Total	54,630	54,581	0	0	55,146	5,797

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**October 2012**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	611	0	73	0	1,588	699
2	425	0	0	0	917	910
3	478	0	0	0	741	1,055
4	415	0	0	0	1,784	0
5	318	0	0	0	1,444	0
6	355	0	0	0	147	0
7	737	0	0	911	788	0
8	2,633	2,139	0	918	2,183	652
9	1,059	1,981	0	0	2,112	1,173
10	0	494	0	0	1,125	0
11	211	0	0	0	1,885	0
12	1,627	817	0	0	1,877	0
13	2,715	3,194	0	0	1,148	0
14	3,092	3,160	0	0	871	0
15	1,060	487	0	0	1,909	0
16	0	494	0	0	1,743	1,192
17	0	523	0	0	1,562	1,110
18	0	496	0	0	2,073	0
19	0	690	0	0	218	0
20	1,502	689	0	0	47	0
21	2,127	1,075	0	0	677	0
22	2,288	2,661	0	0	2,879	0
23	2,286	2,610	0	0	2,980	956
24	2,290	2,610	0	0	3,303	0
25	2,347	2,610	0	0	3,551	0
26	2,507	2,610	0	0	2,923	0
27	2,933	2,610	0	0	672	0
28	3,089	2,610	0	0	217	0
29	3,143	3,193	0	0	4,082	0
30	3,250	3,193	0	0	5,390	0
31	3,142	3,193	0	0	3,925	0
Total	46,640	44,139	73	1,829	56,761	7,747

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**November 2012**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,930	2,906	0	0	3,624	0
2	2,845	2,906	0	0	2,260	0
3	3,465	2,905	0	0	121	0
4	3,838	3,000	0	0	318	0
5	3,337	3,137	0	0	3,798	349
6	3,175	3,142	0	0	4,303	0
7	3,362	3,139	0	0	3,791	0
8	3,241	3,135	0	0	3,988	724
9	2,982	3,135	0	0	3,838	0
10	1,703	1,749	0	0	4,153	0
11	1,279	1,715	0	0	123	0
12	1,279	1,478	0	0	188	0
13	1,289	1,545	0	0	1,761	0
14	1,452	1,537	0	0	301	0
15	1,378	643	0	0	1,676	0
16	1,541	1,460	0	0	434	0
17	1,586	1,738	0	0	451	0
18	2,024	1,395	0	0	1,639	0
19	2,559	2,482	0	0	4,089	0
20	3,121	3,145	0	0	3,136	0
21	3,293	3,148	0	0	3,278	0
22	3,141	3,145	0	0	2,276	0
23	3,195	3,146	0	0	3,524	0
24	3,245	3,149	0	0	1,253	0
25	3,503	3,146	0	0	653	0
26	2,264	3,065	0	0	1,533	0
27	3,567	3,155	0	0	5,721	0
28	3,835	3,141	0	0	4,663	0
29	2,854	3,088	0	0	5,342	0
30	4,644	3,150	0	825	2,630	0
<b>Total</b>	<b>81,927</b>	<b>77,625</b>	<b>0</b>	<b>825</b>	<b>74,865</b>	<b>1,073</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**December 2012**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	4,697	3,144	0	1,387	1,719	0
2	4,813	3,147	0	1,388	4,707	0
3	4,664	3,149	0	1,388	5,334	0
4	4,742	3,142	0	1,388	3,788	0
5	4,849	3,146	0	1,388	3,627	0
6	1,101	2,150	0	72	3,248	0
7	2,443	2,816	0	0	3,116	0
8	3,036	3,174	0	0	1,871	0
9	3,410	3,173	0	0	3,882	0
10	1,652	1,767	0	0	1,011	0
11	1,163	1,380	0	0	1,300	0
12	1,226	1,476	0	0	1,326	0
13	1,704	1,598	0	0	1,434	124
14	1,581	1,450	0	0	3,479	0
15	2,878	1,838	0	0	722	0
16	2,820	2,366	0	0	125	0
17	1,625	2,301	0	0	5,685	0
18	2,074	3,177	0	0	2,033	0
19	3,661	3,190	0	0	2,135	0
20	1,325	792	0	0	2,639	0
21	841	788	0	0	1,249	0
22	896	657	0	0	223	0
23	900	667	0	0	131	0
24	636	596	0	0	182	0
25	596	553	0	0	111	0
26	529	583	0	0	244	0
27	420	440	0	0	1,494	0
28	424	523	0	0	435	0
29	423	522	0	0	446	0
30	478	420	0	0	163	0
31	423	420	0	0	123	0
<b>Total</b>	<b>62,030</b>	<b>54,545</b>	<b>0</b>	<b>7,011</b>	<b>57,982</b>	<b>124</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**January 2013**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	581	418	0	0	443	0
2	479	430	0	0	670	0
3	428	430	0	0	455	0
4	375	433	0	0	828	0
5	698	431	0	0	143	0
6	1,172	430	0	0	151	0
7	683	428	0	0	686	0
8	570	431	0	0	514	0
9	352	436	0	0	486	0
10	165	436	0	0	696	0
11	451	421	0	0	131	0
12	423	433	0	0	255	0
13	531	661	0	0	323	0
14	443	1,192	0	0	1,417	0
15	689	949	0	0	1,140	0
16	1,011	1,383	0	0	1,221	0
17	1,539	1,128	0	0	1,141	0
18	949	1,125	0	0	1,093	0
19	1,007	1,066	0	0	313	0
20	951	1,064	0	0	204	0
21	1,323	1,413	0	0	1,327	0
22	1,382	1,685	0	0	1,277	0
23	1,412	1,370	0	0	2,829	0
24	1,214	1,278	0	0	2,192	0
25	1,645	1,277	0	0	1,770	0
26	1,426	1,328	0	0	82	0
27	1,864	1,291	0	0	32	0
28	1,650	1,513	0	0	2,696	0
29	1,337	1,474	0	0	2,476	0
30	1,700	1,512	0	0	2,183	0
31	734	1,038	0	0	927	0
<b>Total</b>	<b>29,184</b>	<b>28,904</b>	<b>0</b>	<b>0</b>	<b>30,101</b>	<b>0</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**February 2013**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,560	2,283	0	0	2,035	0
2	2,290	2,138	0	0	991	0
3	2,559	2,124	0	0	684	0
4	1,378	1,356	0	0	2,699	0
5	1,164	1,434	0	0	1,633	71
6	1,397	1,432	0	0	1,684	0
7	1,379	1,471	0	0	1,231	0
8	1,481	1,459	0	0	1,542	0
9	1,771	1,458	0	0	2,098	0
10	1,421	1,472	0	0	1,553	0
11	1,059	1,076	0	0	1,406	0
12	340	1,100	0	0	729	0
13	1,115	1,182	0	0	758	0
14	1,267	1,171	0	0	1,281	0
15	1,162	1,174	0	0	1,104	0
16	1,382	1,171	0	0	105	0
17	2,344	1,102	0	0	155	0
18	1,844	1,038	0	0	1,176	0
19	1,063	1,023	0	0	1,608	0
20	-	1,028	0	0	1,441	0
21	832	1,032	0	0	1,357	0
22	1,202	1,101	0	0	1,392	0
23	1,266	1,099	0	0	347	0
24	1,572	1,119	0	0	177	0
25	1,477	1,452	0	0	1,356	0
26	2,017	2,121	0	0	2,037	0
27	1,171	1,354	0	0	2,036	0
28	733	1,056	0	0	1,809	0
<b>Total</b>	<b>39,246</b>	<b>38,026</b>	<b>0</b>	<b>0</b>	<b>36,424</b>	<b>71</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**March 2013**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,526	1,415	0	0	1,480	0
2	1,741	1,472	0	0	188	7
3	1,756	1,401	0	0	407	0
4	1,537	1,458	0	0	2,925	0
5	1,424	1,456	0	0	1,650	0
6	1,260	1,334	0	0	1,209	0
7	1,436	1,334	0	0	1,832	0
8	1,167	1,361	0	0	565	0
9	1,576	1,360	0	0	118	0
10	1,411	1,306	0	0	1,267	0
11	1,795	1,634	0	0	2,489	0
12	1,799	1,615	0	0	2,180	0
13	1,483	1,612	0	0	1,684	0
14	1,708	1,644	0	0	1,920	0
15	1,615	1,633	0	0	2,154	0
16	1,656	1,631	0	0	1,264	0
17	1,869	1,642	0	0	1,130	0
18	1,524	1,729	0	0	1,873	0
19	1,477	1,765	0	0	2,666	0
20	2,237	2,320	0	0	3,011	0
21	2,018	2,205	0	0	2,059	0
22	2,173	2,226	0	0	2,728	0
23	2,279	2,301	0	0	199	0
24	2,641	2,155	0	0	1,076	0
25	2,472	2,151	0	0	2,947	0
26	1,283	1,716	0	0	2,923	0
27	2,128	2,177	0	0	3,072	0
28	2,130	2,170	0	0	3,112	0
29	2,236	2,172	0	0	2,752	0
30	2,397	2,157	0	0	225	0
31	2,397	2,167	0	0	831	0
<b>Total</b>	<b>56,151</b>	<b>54,719</b>	<b>0</b>	<b>0</b>	<b>53,936</b>	<b>7</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**April 2013**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,499	2,769	0	0	2,791	0
2	2,443	2,493	0	0	3,438	0
3	1,378	2,140	0	0	3,028	0
4	1,693	2,028	0	0	2,135	0
5	2,865	2,752	0	0	2,963	0
6	2,878	2,702	0	0	555	0
7	3,086	2,744	0	0	1,779	0
8	2,609	2,736	0	0	3,593	0
9	2,552	1,966	0	0	3,719	0
10	2,665	2,663	0	0	2,936	0
11	2,278	2,659	0	0	3,655	0
12	1,281	1,574	0	0	2,985	0
13	3,570	3,248	0	0	177	0
14	3,303	3,230	0	0	412	0
15	1,635	1,923	0	0	1,391	0
16	1,626	1,459	0	0	2,506	0
17	1,534	1,457	0	0	2,804	0
18	1,307	1,465	0	0	439	0
19	1,926	1,458	0	0	2,178	0
20	1,316	1,460	0	0	379	0
21	1,921	1,459	0	0	276	0
22	2,027	1,458	0	0	2,885	0
23	1,434	1,458	0	0	2,216	0
24	1,223	1,459	0	0	2,247	0
25	1,638	1,459	0	0	799	0
26	952	1,455	0	0	3,184	0
27	2,023	1,457	0	0	157	0
28	2,395	1,451	0	0	213	0
29	1,595	1,454	0	0	2,019	0
30	1,595	1,454	0	0	144	0
<b>Total</b>	<b>61,247</b>	<b>59,490</b>	<b>0</b>	<b>0</b>	<b>58,003</b>	<b>0</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**May 2013**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,535	1,450	0	0	2,230	6
2	2,192	1,448	0	0	2,398	1,157
3	1,326	1,449	0	0	2,954	0
4	1,220	1,450	0	0	945	1,361
5	1,434	1,453	0	0	142	0
6	1,376	1,454	0	0	3,572	0
7	1,327	1,450	0	0	2,937	1,182
8	1,438	1,452	0	0	1,089	1,208
9	1,547	880	0	325	2,839	0
10	1,332	425	0	1,069	527	0
11	2,293	1,439	0	190	2,455	0
12	2,065	1,430	0	0	2,622	1,543
13	1,438	1,432	0	0	2,603	1,526
14	1,330	1,434	0	0	1,637	1,394
15	1,132	1,438	0	0	1,825	80
16	1,214	1,445	0	0	1,763	818
17	1,118	1,446	0	0	802	0
18	1,385	1,444	0	0	1,718	0
19	1,494	1,441	0	0	1,126	0
20	1,334	1,449	0	0	2,144	0
21	1,280	1,445	0	0	2,716	907
22	1,276	1,445	0	0	3,005	918
23	1,375	1,447	0	0	3,564	114
24	1,377	1,451	0	0	2,146	1,136
25	1,485	1,446	0	0	145	15
26	2,289	1,446	0	0	105	1,217
27	1,539	1,440	0	0	117	0
28	1,278	1,443	0	0	3,256	0
29	1,324	1,437	0	0	2,975	0
30	1,540	1,446	0	0	3,768	412
31	1,699	1,441	0	0	1,975	1,061
<b>Total</b>	<b>45,992</b>	<b>43,196</b>	<b>0</b>	<b>1,584</b>	<b>62,100</b>	<b>16,055</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**June 2013**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,751	1,438	0	0	2,150	1,969
2	1,855	1,437	0	0	815	2,033
3	1,006	1,436	0	0	3,940	0
4	529	847	0	0	2,249	1,011
5	1,543	1,440	0	0	2,512	1,312
6	1,493	1,441	0	0	1,498	1,069
7	1,273	1,080	0	0	2,571	0
8	1,332	1,430	0	0	356	0
9	1,755	1,387	0	0	299	0
10	1,487	962	0	0	2,069	0
11	1,378	1,439	0	0	2,687	1,337
12	1,273	1,442	0	0	879	0
13	1,217	1,382	0	0	1,797	0
14	1,380	1,418	0	0	1,577	0
15	1,700	1,504	0	0	429	0
16	1,753	1,510	0	0	1,889	0
17	1,702	1,475	0	0	2,119	51
18	1,380	1,215	0	0	1,325	1,279
19	1,264	1,531	0	0	1,257	0
20	949	1,073	0	0	2,561	0
21	1,705	893	0	0	2,510	0
22	742	1,067	0	0	127	0
23	635	660	0	0	115	0
24	582	494	0	0	123	101
25	212	362	0	0	1,290	1,082
26	626	479	0	0	2,914	0
27	2,766	3,190	0	0	3,193	11
28	2,927	3,154	0	0	3,555	553
29	3,193	3,145	0	0	3,190	1,230
30	3,195	2,900	0	0	803	1,368
<b>Total</b>	<b>44,603</b>	<b>43,231</b>	<b>0</b>	<b>0</b>	<b>52,799</b>	<b>14,406</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**July 2013**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	3,037	2,614	0	0	3,900	926
2	2,926	2,621	0	0	4,494	0
3	2,096	2,609	0	0	4,844	2,200
4	2,800	3,157	0	0	4,410	1,550
5	2,963	3,170	0	0	5,459	1,358
6	3,413	3,188	0	0	6,217	1,708
7	3,838	3,181	0	0	3,256	1,785
8	3,518	3,003	0	0	4,149	1,207
9	3,038	2,990	0	0	4,449	1,227
10	2,932	2,831	0	0	4,344	1,156
11	2,984	3,160	0	0	5,121	796
12	2,880	3,166	0	0	3,984	1,227
13	3,168	3,193	0	0	1,598	1,021
14	3,411	3,193	0	0	3,406	0
15	2,962	3,193	0	0	2,621	81
16	2,571	3,193	0	0	3,162	1,879
17	3,389	3,193	0	0	3,649	0
18	3,251	3,263	0	0	3,491	0
19	3,254	3,265	0	0	2,898	0
20	3,948	3,267	0	0	1,592	0
21	3,976	3,268	0	0	3,969	0
22	3,252	3,271	0	0	5,056	0
23	3,197	3,268	0	0	3,281	0
24	3,252	3,266	0	0	3,066	0
25	2,966	3,264	0	0	3,407	0
26	3,712	3,262	0	0	2,939	0
27	3,388	3,264	0	0	4,166	0
28	4,057	3,271	0	0	2,863	0
29	2,211	2,225	0	0	2,617	0
30	2,051	2,119	0	0	2,398	0
31	2,026	2,128	0	0	2,491	0
<b>Total</b>	<b>96,467</b>	<b>94,056</b>	<b>0</b>	<b>0</b>	<b>113,297</b>	<b>18,121</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**August 2013**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,970	2,127	0	0	671	0
2	2,027	2,130	0	0	3,455	0
3	2,344	2,118	0	0	1,067	0
4	2,704	2,119	0	0	1,460	0
5	1,595	1,721	0	0	2,587	0
6	1,692	1,724	0	0	2,228	358
7	1,701	1,723	0	0	2,791	0
8	1,658	1,723	0	0	2,138	0
9	1,647	1,720	0	0	0	0
10	1,963	1,799	0	0	220	0
11	2,090	1,721	0	0	1,363	0
12	1,543	1,611	0	0	2,915	1,324
13	1,811	1,683	0	0	2,804	1,187
14	1,909	1,640	0	0	2,581	1,329
15	1,805	1,617	0	0	2,922	0
16	1,649	1,611	0	0	2,586	0
17	1,698	1,606	0	0	1,009	0
18	1,169	1,607	0	0	1,467	1,944
19	1,545	1,533	0	0	2,375	1,101
20	1,271	1,604	0	0	2,105	0
21	1,330	1,636	0	0	3,065	1,349
22	1,813	1,606	0	0	3,786	0
23	1,805	1,606	0	0	4,034	1,144
24	1,491	1,616	0	0	120	2,205
25	2,769	1,606	0	0	820	0
26	1,750	1,606	0	0	3,458	0
27	1,915	1,606	0	0	3,175	1,231
28	1,542	1,605	0	0	4,541	1,246
29	1,438	1,803	0	0	4,833	1,356
30	1,918	1,474	0	0	518	1,192
31	1,386	1,474	0	0	0	0
<b>Total</b>	<b>54,948</b>	<b>52,775</b>	<b>0</b>	<b>0</b>	<b>67,094</b>	<b>16,966</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**September 2013**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,700	825	0	0	946	1,212
2	904	829	0	0	1,108	1,383
3	1,338	1,474	0	0	4,152	660
4	1,593	1,474	0	0	3,765	1,410
5	2,287	2,692	0	0	3,560	1,949
6	2,393	3,193	0	0	3,336	576
7	949	552	0	0	2,386	1,644
8	1,422	665	0	0	942	1,748
9	1,915	2,562	0	0	2,345	1,635
10	2,183	2,263	0	0	2,616	0
11	2,120	2,140	0	0	2,961	0
12	2,110	2,190	0	0	3,649	0
13	2,166	2,190	0	0	3,010	0
14	2,766	2,119	0	0	796	0
15	2,766	2,119	0	0	1,743	1,525
16	1,718	1,832	0	0	2,749	640
17	1,749	1,644	0	0	1,959	755
18	1,669	1,779	0	0	3,214	0
19	1,740	1,779	0	0	4,144	0
20	1,470	1,824	0	0	0	0
21	1,863	1,825	0	0	0	0
22	2,017	1,779	0	0	1,674	0
23	2,076	2,035	0	0	3,236	779
24	1,887	2,218	0	0	2,751	0
25	2,130	2,225	0	0	1,521	0
26	2,080	2,219	0	0	2,853	0
27	2,003	2,190	0	0	2,121	0
28	2,854	2,190	0	0	1,182	0
29	3,250	2,190	0	0	2,115	0
30	2,076	2,190	0	0	2,985	42
Total	59,194	57,206	0	0	69,819	15,958

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**October 2013**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,159	2,190	0	0	2,469	0
2	1,963	2,075	0	0	3,048	0
3	1,956	2,075	0	0	2,910	1,080
4	2,067	2,099	0	0	1,414	0
5	2,282	2,094	0	0	1,379	0
6	2,449	2,087	0	0	0	0
7	1,432	1,837	0	0	2,180	0
8	1,109	746	0	0	1,592	0
9	0	554	0	0	2,294	0
10	0	836	0	0	0	0
11	0	959	0	0	2,421	0
12	2,172	1,236	0	0	310	0
13	3,838	2,071	0	0	0	2
14	899	700	0	0	0	0
15	0	701	0	0	953	0
16	0	828	0	0	1,605	0
17	0	825	0	0	987	0
18	84	313	0	0	662	439
19	1,739	1,107	0	0	1,715	0
20	2,661	1,110	0	0	0	0
21	1,918	1,771	0	0	1,986	967
22	1,866	1,755	0	0	2,869	953
23	1,756	1,753	0	0	3,042	0
24	1,064	921	0	0	983	0
25	1,652	1,894	0	0	3,353	0
26	1,919	1,951	0	0	579	0
27	2,824	2,456	0	0	2,354	0
28	1,970	1,923	0	0	2,956	0
29	1,700	1,924	0	0	2,309	0
30	2,070	1,900	0	0	1,234	0
31	737	1,111	0	0	2,062	0
Total	46,286	45,802	0	0	49,666	3,441

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**November 2013**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,921	2,025	0	0	3,918	0
2	2,287	2,147	0	0	0	0
3	2,256	1,735	0	0	364	0
4	1,844	1,907	0	0	2,958	0
5	1,673	1,917	0	0	2,224	0
6	1,862	1,972	0	0	2,632	0
7	1,813	1,986	0	0	2,268	0
8	1,811	1,969	0	0	2,523	0
9	2,229	2,060	0	0	0	0
10	2,232	2,066	0	0	441	0
11	1,914	2,038	0	0	2,238	0
12	1,904	1,876	0	0	1,281	0
13	1,865	2,010	0	0	2,056	0
14	2,056	2,034	0	0	2,012	0
15	1,780	1,937	0	0	1,405	0
16	2,074	2,009	0	0	1,222	0
17	2,184	1,025	0	0	1,361	0
18	1,696	1,744	0	0	2,195	323
19	1,700	1,743	0	0	1,404	270
20	1,698	1,844	0	0	999	0
21	1,569	1,785	0	0	2,553	240
22	1,756	1,855	0	0	1,646	0
23	1,529	1,978	0	0	434	0
24	1,759	1,981	0	0	817	0
25	2,178	1,927	0	0	3,693	0
26	2,552	1,959	0	0	3,696	0
27	2,019	1,985	0	0	963	0
28	2,386	2,020	0	0	0	0
29	1,804	1,841	0	0	2,717	0
30	1,802	1,841	0	0	0	0
<b>Total</b>	<b>58,153</b>	<b>57,216</b>	<b>0</b>	<b>0</b>	<b>50,020</b>	<b>833</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**December 2013**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	2,080	2,025	0	0	3,304	1,026
2	1,059	1,411	0	0	3,062	597
3	325	1,235	0	0	3,029	0
4	1,866	1,805	0	0	2,674	0
5	1,779	1,839	0	0	3,007	0
6	2,006	1,892	0	0	1,793	0
7	3,064	2,554	0	0	1,396	0
8	3,778	1,957	0	0	547	0
9	3,085	3,214	0	0	4,478	0
10	2,965	3,207	0	0	3,243	62
11	2,967	3,252	0	0	3,199	0
12	3,080	3,306	0	0	2,873	0
13	3,130	3,266	0	0	2,824	0
14	3,560	3,260	0	0	0	0
15	4,049	2,922	0	0	2,840	0
16	3,083	3,193	0	0	3,364	0
17	3,195	3,221	0	0	3,873	0
18	3,183	3,185	0	0	3,984	0
19	3,021	3,084	0	0	5,130	0
20	3,023	3,261	0	0	2,411	0
21	3,030	3,084	0	0	2,653	0
22	3,466	3,263	0	0	880	0
23	1,159	881	0	0	669	0
24	797	865	0	0	634	0
25	1,010	856	0	0	0	0
26	689	859	0	0	3,222	0
27	948	878	0	0	1,984	0
28	1,007	917	0	0	0	0
29	1,651	873	0	0	3	0
30	696	859	0	0	1,000	0
31	856	898	0	0	0	0
<b>Total</b>	<b>69,607</b>	<b>67,322</b>	<b>0</b>	<b>0</b>	<b>68,076</b>	<b>1,685</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**January 2014**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,064	900	0	0	1,215	0
2	629	857	0	0	1,334	0
3	1,117	1,484	0	0	2,034	0
4	1,278	1,476	0	0	0	0
5	2,131	1,444	0	0	1,750	0
6	899	1,249	0	0	2,625	824
7	0	1,122	0	0	1,858	0
8	899	996	0	0	1,574	777
9	2,024	1,410	0	0	1,093	0
10	1,276	1,479	0	0	4,483	0
11	2,023	1,791	0	0	91	0
12	2,875	1,927	0	0	0	1,153
13	1,434	1,595	0	0	2,504	654
14	1,113	1,374	0	0	1,725	0
15	1,382	1,279	0	0	1,890	0
16	1,272	1,344	0	0	1,018	0
17	1,270	1,345	0	0	780	0
18	1,275	1,113	0	0	1,111	0
19	1,864	1,095	0	0	592	0
20	1,058	1,233	0	0	1,139	0
21	1,217	1,233	0	0	1,768	0
22	1,215	1,234	0	0	1,467	0
23	1,001	1,014	0	0	0	0
24	1,255	1,213	0	0	2,974	0
25	1,434	1,213	0	0	486	0
26	1,265	1,232	0	0	679	768
27	1,216	1,193	0	0	1,741	953
28	1,206	1,210	0	0	1,593	0
29	1,597	1,234	0	0	1,403	0
30	1,222	1,458	0	0	1,713	0
31	1,377	1,489	0	0	1,216	0
<b>Total</b>	<b>40,888</b>	<b>40,236</b>	<b>0</b>	<b>0</b>	<b>43,856</b>	<b>5,129</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**February 2014**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,063	1,146	0	0	1,290	0
2	1,162	592	0	0	1,090	0
3	1,107	900	0	0	1,492	0
4	792	945	0	0	1,139	134
5	854	975	0	0	1,412	0
6	846	938	0	0	3,241	0
7	951	1,075	0	0	944	0
8	952	1,079	0	0	0	0
9	1,003	1,093	0	0	0	0
10	1,057	1,212	0	0	0	0
11	840	966	0	71	0	0
12	1,111	974	0	0	711	0
13	899	933	0	0	1,641	0
14	894	934	0	0	1,027	0
15	1,428	697	0	0	349	0
16	1,450	765	0	0	0	0
17	528	960	0	0	1,131	0
18	773	966	0	0	1,526	0
19	831	969	0	0	1,480	0
20	1,213	1,028	0	0	566	0
21	1,007	951	0	0	737	0
22	1,053	953	0	0	1,412	0
23	1,378	893	0	0	644	0
24	797	981	0	0	1,311	0
25	831	916	0	0	1,184	0
26	904	976	0	0	934	0
27	1,178	1,096	0	0	1,807	0
28	1,227	957	0	0	0	0
<b>Total</b>	<b>28,129</b>	<b>26,870</b>	<b>0</b>	<b>71</b>	<b>27,068</b>	<b>134</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**March 2014**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,850	1,912	0	0	1,958	0
2	1,909	1,321	0	0	2,901	0
3	1,914	2,965	0	0	3,030	0
4	1,296	676	0	0	2,045	0
5	2,015	1,946	0	0	1,701	0
6	1,487	2,132	0	0	1,480	0
7	1,220	1,247	0	0	1,762	0
8	1,794	821	0	0	423	0
9	1,046	645	0	0	652	0
10	1,558	1,329	0	0	2,248	0
11	1,116	1,749	0	0	2,734	0
12	1,137	1,723	0	0	1,595	0
13	1,170	1,540	0	0	1,990	0
14	1,206	1,442	0	0	2,798	0
15	1,329	1,268	0	0	0	0
16	1,504	1,443	0	0	0	0
17	1,224	1,098	0	0	762	0
18	1,013	574	0	0	249	0
19	690	354	0	0	11	0
20	738	498	0	0	881	0
21	637	564	0	0	0	0
22	743	491	0	0	0	0
23	636	487	0	0	567	0
24	584	769	0	0	16	0
25	1,065	1,192	0	0	232	0
26	1,011	1,089	0	0	238	0
27	792	1,294	0	0	1,383	0
28	585	664	0	0	1,661	0
29	789	958	0	0	977	0
30	798	790	0	0	88	0
31	795	739	0	0	1,351	0
<b>Total</b>	<b>35,651</b>	<b>35,720</b>	<b>0</b>	<b>0</b>	<b>35,733</b>	<b>0</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**April 2014**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	767	0	0	275	0	313
2	793	0	0	450	0	363
3	836	0	0	968	0	366
4	825	0	0	790	0	295
5	820	0	0	465	0	877
6	1,082	0	0	1,464	0	219
7	799	0	0	2,356	0	222
8	1,516	0	0	1,344	0	514
9	1,289	0	0	1,038	0	193
10	932	0	0	894	0	218
11	695	0	0	1,083	0	0
12	518	0	0	23	0	272
13	817	0	0	0	0	254
14	621	0	0	1,857	0	219
15	543	0	0	1,669	0	354
16	480	0	0	1,479	0	221
17	598	0	0	201	0	298
18	774	0	0	0	0	297
19	338	0	0	478	0	311
20	0	0	0	2	0	403
21	0	0	0	0	0	702
22	0	0	0	0	0	661
23	0	0	0	1	0	536
24	0	0	0	0	0	629
25	0	0	0	0	0	589
26	0	0	0	0	0	616
27	0	0	0	39	0	1,135
28	0	0	0	0	0	705
29	0	0	0	164	0	264
30	0	0	0	0	0	835
<b>Total</b>	<b>15,043</b>	<b>0</b>	<b>0</b>	<b>17,040</b>	<b>0</b>	<b>12,881</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**May 2014**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	0	0	0	0	0	0
2	425	0	0	0	0	0
3	162	235	0	0	0	0
4	532	288	0	0	0	0
5	334	307	0	0	0	0
6	159	0	0	0	0	61
7	215	0	0	0	118	0
8	0	0	0	0	6	0
9	0	0	0	0	0	0
10	0	329	0	0	0	0
11	0	0	0	0	0	0
12	42	0	0	0	0	0
13	12	0	0	0	3	0
14	26	0	0	0	1,551	0
15	0	0	0	0	0	1,564
16	0	0	0	0	1,016	0
17	0	0	0	0	815	1,159
18	0	0	0	0	11	0
19	0	0	0	0	0	0
20	41	0	0	0	34	0
21	0	0	0	0	0	0
22	0	0	0	0	234	0
23	0	0	0	0	0	0
24	0	0	0	0	0	0
25	0	0	0	0	0	0
26	0	0	0	0	0	0
27	0	0	0	0	6	0
28	0	0	0	0	0	0
29	0	0	0	0	0	0
30	0	0	0	0	794	1,164
31	0	0	0	0	0	0
<b>Total</b>	<b>1,948</b>	<b>1,159</b>	<b>0</b>	<b>0</b>	<b>4,588</b>	<b>3,948</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**June 2014**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	55	0	0	0	1,086	1,075
2	0	0	0	0	329	1,011
3	27	0	0	0	2,690	130
4	26	0	0	0	1,709	1,847
5	27	0	0	0	2,422	1,762
6	0	0	0	0	1,219	2,586
7	0	0	0	0	0	780
8	0	0	0	0	0	0
9	25	0	0	0	2,256	1,235
10	0	2	0	0	1,958	1,220
11	0	0	0	0	0	1,274
12	0	0	0	0	1,327	46
13	0	0	0	0	1,008	1,209
14	0	0	0	0	2,093	1,785
15	0	0	0	0	161	1,880
16	0	0	0	0	1,533	1,280
17	0	0	0	0	0	1,453
18	0	369	0	0	2,023	65
19	0	0	0	0	1,215	1,266
20	0	0	0	0	575	1,008
21	0	0	0	0	2,177	0
22	0	0	0	0	0	1,990
23	52	0	0	0	1,350	1,310
24	0	0	0	0	659	1,323
25	0	0	0	0	2,114	1,115
26	26	0	0	0	2,202	1,308
27	0	0	0	0	1,459	1,211
28	0	0	0	0	726	3,067
29	735	0	0	0	305	0
30	0	553	0	0	2,183	970
<b>Total</b>	<b>973</b>	<b>924</b>	<b>0</b>	<b>0</b>	<b>36,779</b>	<b>35,206</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**July 2014**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	0	430	0	0	2,559	970
2	0	553	0	0	1,646	866
3	1,533	1,102	0	0	0	0
4	2,176	2,024	0	0	0	1,083
5	2,234	1,989	0	0	1,102	1,988
6	2,607	2,681	0	0	3,036	892
7	927	1,090	0	0	3,109	0
8	1,254	1,157	0	0	2,506	902
9	1,110	961	0	0	2,300	933
10	1,262	1,241	0	0	1,360	1,079
11	1,595	1,264	0	0	2,331	0
12	1,589	1,282	0	0	2,416	0
13	2,018	2,011	0	0	0	1,207
14	1,657	1,464	0	0	2,319	0
15	1,535	1,488	0	0	2,055	0
16	1,538	1,542	0	0	1,647	0
17	1,445	916	0	0	1,537	1,106
18	1,382	1,397	0	0	1,683	0
19	1,424	1,497	0	0	643	0
20	1,537	1,474	0	0	3,084	1,703
21	1,745	1,544	0	0	3,329	1,167
22	1,485	1,508	0	0	3,827	930
23	2,027	1,508	0	0	2,382	1,126
24	1,488	1,508	0	0	3,716	887
25	1,537	1,508	0	0	3,334	1,081
26	873	1,510	0	0	760	1,284
27	1,625	1,514	0	0	0	1,237
28	1,475	1,508	0	0	2,669	786
29	2,007	1,456	0	0	2,333	934
30	1,932	1,628	0	0	3,403	940
31	1,479	1,528	0	0	2,667	683
<b>Total</b>	<b>46,496</b>	<b>44,283</b>	<b>0</b>	<b>0</b>	<b>63,753</b>	<b>23,784</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**August 2014**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,611	1,546	0	0	2,538	0
2	1,868	1,526	0	0	1,247	994
3	2,030	1,601	0	0	1,107	1,189
4	956	928	0	0	2,293	0
5	1,093	675	0	0	1,628	1,235
6	794	954	0	0	2,054	1,089
7	697	1,012	0	0	1,881	1,169
8	997	1,169	0	0	2,246	0
9	1,314	1,177	0	0	1,087	1,260
10	1,168	949	0	0	1,292	1,229
11	583	413	0	0	1,287	1,005
12	264	341	0	0	1,033	848
13	317	338	0	0	957	1,014
14	317	331	0	0	1,149	0
15	434	333	0	0	2,471	1,013
16	314	338	0	0	0	1,370
17	734	450	0	0	0	0
18	317	389	0	0	997	827
19	264	192	0	0	0	0
20	0	208	0	0	1,041	0
21	0	199	0	0	1,133	1,081
22	0	197	0	0	1,491	1,042
23	0	201	0	0	966	1,370
24	703	7	0	0	653	1,049
25	0	204	0	0	2	0
26	0	199	0	0	1,027	0
27	0	203	0	0	1,332	0
28	0	208	0	0	1,361	985
29	0	211	0	0	1,214	228
30	1,425	197	0	0	1,757	1,317
31	633	199	0	0	0	1,306
<b>Total</b>	<b>18,833</b>	<b>16,895</b>	<b>0</b>	<b>0</b>	<b>37,244</b>	<b>22,620</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**September 2014**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	166	198	0	0	19	0
2	163	198	0	0	0	0
3	0	210	0	0	1,031	865
4	0	197	0	0	1,069	0
5	265	201	0	0	493	0
6	530	200	0	0	3	961
7	685	198	0	0	0	1,110
8	0	196	0	0	0	0
9	0	227	0	0	0	0
10	0	199	0	0	0	0
11	0	197	0	0	0	0
12	0	203	0	0	1,146	0
13	267	192	0	0	1,250	0
14	629	198	0	0	2,073	1,077
15	370	343	0	0	1,511	2,573
16	319	297	0	0	1,307	1,553
17	317	310	0	0	1,151	1,109
18	317	311	0	0	117	0
19	398	287	0	0	0	0
20	317	255	0	0	212	0
21	370	307	0	0	0	0
22	318	307	0	0	1,066	0
23	536	297	0	0	1,276	1,045
24	592	201	0	0	854	1,003
25	468	656	0	0	976	0
26	289	296	0	0	0	763
27	317	285	0	0	0	0
28	317	0	1	0	1,130	0
29	317	297	0	0	0	975
30	0	308	0	0	1,727	0
<b>Total</b>	<b>8,267</b>	<b>7,571</b>	<b>1</b>	<b>0</b>	<b>18,411</b>	<b>13,034</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**October 2014**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	0	307	0	0	1,494	1,150
2	0	304	0	0	1,647	1,061
3	0	306	0	0	1,498	912
4	53	315	0	0	1,353	1,466
5	1,442	336	0	0	0	1,163
6	769	316	0	0	898	0
7	0	310	0	0	862	0
8	0	264	0	0	649	0
9	0	326	0	0	770	0
10	0	238	0	0	0	0
11	318	239	0	0	0	0
12	683	239	0	0	0	0
13	885	1,343	0	0	2,246	0
14	1,385	1,374	0	0	1,935	0
15	740	1,373	0	0	1,527	0
16	1,229	1,354	0	0	1,417	0
17	1,463	1,083	0	0	275	0
18	1,969	1,349	0	0	499	0
19	1,865	1,337	0	0	0	0
20	1,326	1,335	0	0	2,042	0
21	1,168	924	0	0	1,105	380
22	899	1,338	0	0	2,259	0
23	1,079	1,369	0	0	2,909	0
24	1,377	1,454	0	0	1,887	0
25	1,500	1,448	0	0	0	0
26	1,477	1,443	0	0	0	0
27	1,541	1,450	0	0	2,095	0
28	1,626	1,451	0	0	1,857	0
29	872	1,116	0	0	1,489	0
30	139	1,069	0	0	1,943	0
31	1,550	1,451	0	0	45	0
<b>Total</b>	<b>27,355</b>	<b>28,561</b>	<b>0</b>	<b>0</b>	<b>34,701</b>	<b>6,132</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**November 2014**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,859	1,539	0	0	0	0
2	1,748	1,741	0	0	142	0
3	1,060	1,503	0	0	2,578	0
4	1,176	1,366	0	0	1,909	0
5	1,700	1,469	0	0	1,884	0
6	2,554	1,609	0	0	2,541	0
7	1,545	1,431	0	0	1,377	0
8	1,348	1,257	0	0	176	0
9	1,003	860	0	0	0	0
10	1,003	864	0	0	962	956
11	981	771	0	0	1,658	0
12	995	831	0	0	682	0
13	670	1,076	0	0	1,589	0
14	1,543	1,432	0	0	1,469	0
15	1,279	1,070	0	0	61	0
16	1,064	1,130	0	0	617	0
17	1,063	1,071	0	0	1,903	0
18	1,118	1,071	0	0	1,333	0
19	1,390	1,427	0	0	1,361	0
20	1,431	1,427	0	0	2,401	0
21	974	1,430	0	0	560	0
22	1,027	1,432	0	0	2,810	0
23	1,013	1,437	0	0	1,182	1,726
24	1,099	1,264	0	0	1,969	0
25	1,279	1,007	0	0	1,488	0
26	1,492	1,445	0	0	1,900	0
27	1,279	1,174	0	0	904	0
28	1,636	1,444	0	0	1,232	0
29	1,542	1,438	0	0	1,202	0
30	1,555	1,436	0	0	1,043	0
Total	39,426	38,452	0	0	38,933	2,682

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**December 2014**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,274	1,436	0	0	1,787	0
2	1,766	1,435	0	0	1,510	0
3	1,851	1,438	0	0	1,877	0
4	1,812	1,434	0	0	1,289	0
5	1,864	1,431	0	186	569	0
6	1,861	1,428	0	298	695	0
7	1,975	1,433	0	298	1,948	0
8	1,839	1,434	0	703	1,392	0
9	1,799	1,433	0	992	3,433	0
10	2,521	1,437	0	1,240	2,634	0
11	2,581	2,119	0	1,388	3,884	0
12	2,800	3,310	0	421	3,004	0
13	2,342	2,420	0	1,240	2,936	0
14	3,245	1,644	0	0	337	0
15	1,916	1,992	0	0	3,575	0
16	1,442	1,766	0	0	1,858	0
17	1,651	1,826	0	0	1,461	0
18	1,490	1,194	0	0	1,058	0
19	1,385	1,312	0	0	1,526	0
20	1,650	1,226	0	0	472	0
21	1,491	1,335	0	0	749	0
22	1,348	1,492	0	0	1,831	0
23	1,438	1,487	0	0	2,397	0
24	1,435	1,434	0	0	387	0
25	1,491	1,464	0	0	770	0
26	1,704	1,433	0	0	2,519	0
27	1,811	1,510	0	0	1,379	0
28	1,757	1,515	0	0	1,195	0
29	1,543	1,501	0	0	2,030	0
30	2,018	1,559	0	0	1,797	0
31	1,843	1,453	0	0	723	0
Total	56,943	49,331	0	6,766	53,022	0

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**January 2015**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,591	1,525	0	0	2,299	0
2	1,277	1,500	0	0	1,569	0
3	977	1,379	0	0	0	0
4	1,182	1,486	0	0	1,083	0
5	334	645	0	0	930	0
6	894	648	0	0	365	227
7	812	597	0	0	628	0
8	796	580	0	0	674	0
9	647	585	0	0	626	0
10	864	578	0	0	580	0
11	645	439	0	0	748	0
12	717	579	0	0	912	0
13	1,905	1,462	0	0	1,088	0
14	686	873	0	0	847	0
15	689	720	0	0	827	0
16	743	594	0	0	554	0
17	637	624	0	0	941	0
18	742	1,065	0	0	0	0
19	676	942	0	0	1,847	0
20	690	934	0	0	1,267	0
21	584	951	0	0	1,585	0
22	577	954	0	0	1,134	0
23	1,118	786	0	0	491	0
24	925	725	0	0	0	0
25	1,157	947	0	0	351	0
26	956	824	0	0	1,235	0
27	1,012	843	0	0	646	0
28	1,206	1,021	0	0	1,048	0
29	1,273	1,097	0	0	1,021	0
30	1,221	1,101	0	0	1,413	0
31	1,011	799	0	0	788	0
<b>Total</b>	<b>28,544</b>	<b>27,803</b>	<b>0</b>	<b>0</b>	<b>27,497</b>	<b>227</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**February 2015**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,011	916	0	0	0	0
2	950	915	0	0	1,190	0
3	1,113	922	0	0	640	0
4	903	965	0	0	813	0
5	980	923	0	0	953	0
6	1,039	924	0	0	960	0
7	788	923	0	0	1,039	0
8	600	1,053	0	0	0	0
9	575	928	0	0	1,419	0
10	737	927	0	0	2,028	0
11	343	707	0	0	643	0
12	357	499	0	0	1,250	0
13	395	500	0	0	29	0
14	275	389	0	0	107	38
15	369	384	0	0	138	84
16	531	0	0	0	0	0
17	401	0	0	0	0	0
18	318	0	0	0	0	0
19	318	0	0	0	0	0
20	0	0	0	0	0	0
21	0	0	0	0	0	0
22	0	0	0	0	0	0
23	317	0	0	0	0	0
24	370	0	0	0	0	0
25	528	0	0	0	0	0
26	0	0	0	0	0	0
27	0	0	0	0	0	0
28	0	0	0	0	0	0
<b>Total</b>	<b>13,218</b>	<b>11,875</b>	<b>0</b>	<b>0</b>	<b>11,209</b>	<b>122</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**March 2015**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	55	0	1	0	0	0
2	423	931	0	0	862	0
3	790	952	0	0	1,320	0
4	840	962	0	0	1,231	0
5	771	1,046	0	0	1,252	0
6	435	918	0	0	650	0
7	1,054	918	0	0	0	0
8	849	924	0	0	0	0
9	848	926	0	0	932	0
10	685	460	0	0	740	0
11	633	460	0	0	801	0
12	366	462	0	0	1,166	0
13	636	409	0	0	749	0
14	503	458	0	0	0	0
15	841	457	0	0	0	0
16	881	955	0	0	986	0
17	946	970	0	0	640	0
18	1,199	1,055	0	0	486	0
19	1,745	1,627	0	0	1,920	0
20	1,639	1,596	0	0	3,768	0
21	1,648	1,730	0	0	0	0
22	1,958	1,648	0	0	330	0
23	1,684	1,582	0	0	1,917	0
24	1,568	1,578	0	0	2,485	0
25	1,433	1,529	0	0	2,672	0
26	1,533	1,521	0	0	2,677	30
27	1,533	1,515	0	0	1,801	0
28	1,430	1,518	0	0	478	0
29	1,628	1,503	0	0	0	0
30	1,699	1,700	0	0	3,442	0
31	633	1,372	0	0	1,656	0
<b>Total</b>	<b>32,886</b>	<b>33,682</b>	<b>1</b>	<b>0</b>	<b>34,961</b>	<b>30</b>

1/ Values supplied by LADWP, not verified by DWR.

(in acre-feet)

**April 2015**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,864	1,720	0	0	1,525	0
2	1,859	1,732	0	0	1,943	0
3	1,541	1,711	0	0	3,386	0
4	2,019	1,738	0	0	0	0
5	1,850	1,721	0	0	0	0
6	1,701	1,709	0	0	1,054	0
7	1,701	1,200	0	0	812	96
8	1,697	1,514	0	0	3,470	0
9	1,470	1,499	0	0	1,662	0
10	1,381	1,528	0	0	961	0
11	1,640	1,670	0	0	560	0
12	1,326	1,324	0	0	949	0
13	1,380	1,529	0	0	2,222	0
14	1,485	1,496	0	0	2,076	0
15	1,477	1,522	0	0	2,708	0
16	1,859	1,459	0	0	1,614	0
17	1,540	1,531	0	0	1,440	0
18	1,587	1,477	0	0	0	0
19	1,534	1,385	0	0	92	0
20	1,262	1,405	0	0	2,274	0
21	1,475	1,305	0	0	1,754	0
22	1,212	1,539	0	0	2,025	0
23	1,164	1,413	0	0	1,204	0
24	1,159	1,443	0	0	1,835	0
25	2,598	2,206	0	0	471	0
26	2,600	2,058	0	0	760	0
27	1,110	1,384	0	0	2,299	0
28	1,398	1,382	0	0	2,905	0
29	1,378	1,444	0	0	2,188	0
30	1,321	1,407	0	0	1,559	0
<b>Total</b>	<b>47,588</b>	<b>46,451</b>	<b>0</b>	<b>0</b>	<b>45,748</b>	<b>96</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 24. Southern Field Division Plant Data**

(in acre-feet)

**May 2015**

West Branch						
Date	Oso Pumping Plant	Warne Powerplant			Castaic Powerplant	
		Generation	Leakage	Gorman Creek Improvement Channel	Generation 1/	Pumpback 1/
1	1,748	1,391	0	0	1,724	0
2	2,470	886	0	0	524	0
3	3,250	2,184	0	0	570	0
4	2,457	2,357	0	0	3,464	0
5	2,565	2,117	0	0	1,910	0
6	2,237	2,005	0	0	3,371	0
7	2,337	2,577	0	0	2,742	0
8	2,393	2,581	0	0	2,894	0
9	2,281	2,594	0	0	368	0
10	2,601	2,598	0	0	803	0
11	2,451	2,399	0	0	3,638	0
12	2,630	2,385	0	0	2,067	0
13	1,701	1,223	0	0	1,753	0
14	1,331	1,291	0	0	1,430	0
15	1,702	776	0	0	697	0
16	1,431	1,298	0	0	865	0
17	1,596	1,285	0	0	684	0
18	1,439	1,048	0	0	2,991	0
19	684	1,249	0	0	1,960	0
20	1,109	1,342	0	0	1,791	0
21	1,318	1,713	0	0	1,335	0
22	1,165	1,109	0	0	780	0
23	2,012	1,722	0	0	387	0
24	1,796	1,946	0	0	302	0
25	1,267	2,226	0	0	1,523	0
26	1,483	1,859	0	0	2,122	0
27	1,348	1,587	0	0	2,331	0
28	1,434	1,667	0	0	1,347	0
29	1,683	1,419	0	0	1,186	0
30	1,627	510	0	0	709	0
31	1,866	554	0	0	893	0
<b>Total</b>	<b>57,412</b>	<b>51,898</b>	<b>0</b>	<b>0</b>	<b>49,161</b>	<b>0</b>

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

Daily Operation

January 2000

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Dec 31	2569.85	159,592								
1	2569.63	159,320	-272	2,190	1,652	27	4,075	0	20	-46
2	2571.63	161,808	2,488	3,151	1,784	27	2,413	0	20	-41
3	2570.57	160,486	-1,322	2,185	2,279	26	5,573	0	20	-219
4	2569.05	158,603	-1,883	746	2,125	28	4,872	0	20	110
5	2568.41	157,814	-789	0	3,028	28	3,944	0	20	119
6	2566.84	155,890	-1,924	1,160	1,764	28	4,174	0	20	-682
7	2568.70	158,171	2,281	1,927	1,916	27	1,372	0	20	-197
8	2570.52	160,424	2,253	933	2,041	28	716	0	20	-13
9	2572.59	163,011	2,587	2,979	0	29	569	0	20	168
10	2573.02	163,551	540	3,083	1,948	29	4,532	0	20	32
11	2575.41	166,579	3,028	2,689	1,759	29	1,387	0	20	-42
12	2574.05	164,852	-1,727	739	1,730	29	4,090	0	20	-115
13	2573.60	164,283	-569	488	1,785	29	2,693	0	20	-158
14	2574.40	165,295	1,012	1,745	1,749	29	2,579	0	20	88
15	2574.93	165,968	673	0	1,044	30	288	0	20	-93
16	2576.04	167,383	1,415	1,651	482	30	617	0	20	-111
17	2576.64	168,151	768	2,267	1,546	34	3,044	0	20	-15
18	2576.54	168,023	-128	1,716	1,594	37	3,437	0	20	-18
19	2575.01	166,070	-1,953	1,814	1,550	37	5,288	0	20	-46
20	2573.58	164,258	-1,812	1,329	1,567	34	4,726	0	20	4
21	2571.80	162,020	-2,238	1,428	1,572	34	5,188	0	20	-64
22	2575.06	166,133	4,113	2,373	2,516	32	767	0	20	-21
23	2575.65	166,885	752	2,759	1,240	32	2,910	0	20	-349
24	2574.18	165,016	-1,869	2,118	1,487	31	5,404	0	20	-81
25	2573.62	164,308	-708	2,025	922	40	3,738	0	20	63
26	2572.63	163,061	-1,247	2,223	974	49	4,364	0	18	-111
27	2570.82	160,797	-2,264	2,134	1,285	40	5,668	0	17	-38
28	2569.23	158,825	-1,972	771	1,293	35	3,777	0	17	-277
29	2570.75	160,710	1,885	877	1,501	33	570	0	17	61
30	2572.30	162,647	1,937	2,447	0	33	552	0	17	26
31	2574.68	165,650	3,003	3,479	1,141	33	1,512	0	17	-121
<b>Total</b>			<b>6,058</b>	<b>55,426</b>	<b>47,274</b>	<b>987</b>	<b>94,839</b>	<b>0</b>	<b>603</b>	<b>-2,187</b>

**Table 25. Pyramid Lake**

Daily Operation

**February 2000**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Jan 31	2574.68	165,650								
1	2573.59	164,270	-1,380	0	1,161	32	2,670	0	20	117
2	2573.00	163,526	-744	832	1,185	31	2,727	0	20	-45
3	2572.18	162,496	-1,030	1,581	1,222	29	3,742	0	20	-100
4	2572.68	163,124	628	790	1,294	30	1,441	0	20	-25
5	2574.01	164,801	1,677	178	1,640	31	84	0	20	-68
6	2576.71	168,241	3,440	3,607	0	31	115	0	20	-63
7	2574.78	165,777	-2,464	1,690	937	33	5,082	0	20	-22
8	2573.71	164,422	-1,355	2,285	986	32	4,605	0	20	-33
9	2572.88	163,375	-1,047	1,220	942	31	3,099	0	20	-121
10	2571.11	161,158	-2,217	628	946	38	3,791	0	20	-18
11	2571.72	161,920	762	0	995	51	307	0	20	43
12	2572.33	162,684	764	0	1,096	98	368	0	20	-42
13	2574.97	166,019	3,335	3,129	909	69	304	0	20	-448
14	2574.02	164,814	-1,205	913	751	57	2,880	0	20	-26
15	2575.25	166,375	1,561	702	1,090	56	255	0	20	-12
16	2573.13	163,690	-2,685	1,592	1,333	54	5,504	0	20	-140
17	2571.41	161,533	-2,157	0	1,250	55	3,359	0	20	-83
18	2572.03	162,308	775	0	1,235	53	465	0	20	-28
19	2573.16	163,728	1,420	0	1,442	52	47	0	20	-7
20	2575.57	166,783	3,055	1,539	1,443	246	521	0	109	457
21	2577.17	168,832	2,049	1,623	1,442	508	1,742	0	198	416
22	2577.03	168,652	-180	0	78	187	162	0	198	-85
23	2576.54	168,023	-629	467	0	242	1,334	0	198	194
24	2575.23	166,350	-1,673	0	0	200	1,600	0	198	-75
25	2575.58	166,796	446	0	955	157	482	0	198	14
26	2577.50	169,257	2,461	0	2,389	205	287	0	198	352
27	2577.48	169,231	-26	0	369	244	573	0	198	132
28	2577.15	168,806	-425	0	1,321	233	1,567	0	198	-214
29	2577.21	168,883	77	0	1,322	181	1,322	0	198	94
Total			3,233	22,776	29,733	3,266	50,435	0	2,271	164

### Table 25. Pyramid Lake

Daily Operation

March 2000

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Feb 29	2577.21	168,883								
1	2577.33	169,038	155	0	1,238	204	1,169	0	198	80
2	2577.09	168,729	-309	0	1,519	181	1,665	0	198	-146
3	2577.54	169,308	579	0	1,211	168	549	0	169	-82
4	2577.28	168,973	-335	200	766	189	1,383	0	149	42
5	2576.91	168,498	-475	0	592	226	1,065	0	397	169
6	2575.34	166,490	-2,008	0	1,035	220	3,050	0	168	-45
7	2575.59	166,808	318	12	1,046	195	631	0	99	-205
8	2576.72	168,254	1,446	905	1,136	214	994	0	99	284
9	2577.41	169,141	887	669	728	210	545	0	99	-76
10	2576.03	167,370	-1,771	0	690	199	2,668	0	99	107
11	2576.77	168,318	948	49	962	212	105	0	99	-71
12	2577.79	169,630	1,312	1,375	206	214	376	0	99	-8
13	2577.59	169,372	-258	0	1,041	210	1,193	0	99	-217
14	2577.24	168,922	-450	0	1,113	213	1,818	0	99	141
15	2576.26	167,664	-1,258	535	1,153	213	3,015	0	99	-45
16	2575.33	166,477	-1,187	483	1,161	202	2,779	0	99	-155
17	2575.92	167,230	753	0	1,116	185	325	0	149	-74
18	2576.54	168,023	793	535	1,249	165	900	0	149	-107
19	2576.01	167,345	-678	1,811	4	154	2,420	0	149	-78
20	2575.18	166,286	-1,059	1,478	704	169	3,455	0	99	144
21	2574.22	165,067	-1,219	0	1,008	140	2,170	0	99	-98
22	2574.34	165,219	152	0	1,057	119	692	0	99	-233
23	2575.24	166,362	1,143	511	2,150	106	1,588	0	99	63
24	2574.87	165,892	-470	698	2,209	100	3,150	0	99	-228
25	2574.90	165,930	38	0	2,119	95	2,039	0	99	-38
26	2575.13	166,222	292	1,362	8	90	1,091	0	99	22
27	2574.21	165,054	-1,168	820	2,752	86	4,703	0	99	-24
28	2574.04	164,839	-215	801	2,733	84	3,556	0	69	-208
29	2574.81	165,815	976	2,084	2,665	79	3,842	0	65	55
30	2574.69	165,663	-152	2,136	2,653	75	4,862	0	51	-103
31	2573.79	164,523	-1,140	1,369	2,787	72	5,202	0	51	-115
<b>Total</b>			<b>-4,360</b>	<b>17,833</b>	<b>40,811</b>	<b>4,989</b>	<b>63,000</b>	<b>0</b>	<b>3,744</b>	<b>-1,249</b>

### Table 25. Pyramid Lake

Daily Operation

April 2000

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Mar 31	2573.79	164,523								
1	2574.94	165,981	1,458	0	2,353	69	754	0	50	-160
2	2574.00	165,726	-255	0	3	65	384	0	50	111
3	2573.60	164,283	-1,443	0	2,901	63	4,196	0	50	-161
4	2573.16	163,728	-555	0	2,981	61	3,333	0	50	-214
5	2572.02	162,296	-1,432	1,562	2,997	58	5,872	0	50	-127
6	2571.60	161,770	-526	898	3,017	58	4,417	0	50	-32
7	2573.32	163,929	2,159	2,399	2,989	56	3,259	0	50	24
8	2575.23	166,350	2,421	1,892	3,012	53	2,255	0	50	-231
9	2573.65	164,346	-2,004	22	1,777	51	3,614	0	50	-190
10	2573.38	164,005	-341	2,096	2,633	49	4,995	0	50	-74
11	2572.46	162,847	-1,158	1,471	2,993	45	5,408	0	50	-209
12	2571.26	161,345	-1,502	1,829	2,966	42	6,132	0	50	-157
13	2569.47	159,122	-2,223	3,021	2,862	40	7,731	0	50	-365
14	2568.92	158,442	-680	2,100	3,087	40	5,784	0	50	-73
15	2572.00	162,271	3,829	2,075	3,012	42	1,175	0	50	-75
16	2574.62	165,574	3,303	1,634	2,336	39	643	0	50	-13
17	2574.85	165,866	292	1,764	2,961	268	4,993	0	50	342
18	2573.81	164,548	-1,318	2,391	3,004	314	6,892	0	258	123
19	2573.04	163,577	-971	2,608	2,937	240	6,451	0	298	-7
20	2570.99	161,009	-2,568	2,803	2,966	183	8,058	0	258	-204
21	2569.56	159,233	-1,776	4,004	3,052	157	8,432	0	149	-408
22	2571.01	161,034	1,801	3,710	2,952	133	4,863	0	149	18
23	2575.75	167,012	5,978	3,769	2,558	116	248	0	149	-68
24	2572.35	162,709	-4,303	841	2,977	102	7,963	0	102	-158
25	2569.48	159,134	-3,575	2,908	3,041	91	8,997	0	98	-520
26	2567.18	156,306	-2,828	2,692	2,631	84	7,493	0	98	-644
27	2567.33	156,489	183	3,188	2,412	80	5,394	0	58	-45
28	2567.03	156,122	-367	1,086	2,184	77	3,412	0	58	-244
29	2570.52	160,424	4,302	2,019	2,167	75	0	0	58	99
30	2572.16	162,471	2,047	1,040	2,559	71	1,373	0	58	-192
<b>Total</b>			-2,052	55,822	80,320	2,822	134,521	0	2,641	-3,854

### Table 25. Pyramid Lake

Daily Operation

May 2000

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Apr 30	2572.16	162,471								
1	2570.77	160,735	-1,736	2,648	2,240	73	6,394	0	50	-253
2	2569.13	158,702	-2,033	2,559	2,217	70	6,529	0	50	-300
3	2568.03	157,347	-1,355	2,733	3,001	66	6,600	0	50	-505
4	2568.49	157,913	566	4,055	2,265	61	5,633	0	50	-132
5	2567.48	156,673	-1,240	1,335	3,095	62	5,858	0	50	176
6	2569.76	159,481	2,808	2,636	3,286	58	3,050	0	50	-72
7	2573.72	164,434	4,953	2,349	2,697	56	44	0	50	-55
8	2573.89	164,649	215	2,624	901	54	3,222	0	50	-92
9	2571.98	162,246	-2,403	997	891	52	4,224	0	50	-69
10	2571.32	161,420	-826	582	852	52	2,119	0	50	-143
11	2572.62	163,048	1,628	1,148	888	49	363	0	50	-44
12	2572.86	163,350	302	1,867	990	47	2,560	0	50	8
13	2576.04	167,383	4,033	3,577	875	45	421	0	50	7
14	2576.19	167,575	192	2,462	0	42	2,142	0	50	-120
15	2575.10	166,184	-1,391	1,453	915	42	3,743	0	50	-8
16	2575.03	166,095	-89	0	896	43	958	0	50	-20
17	2575.20	166,311	216	0	899	42	556	0	50	-119
18	2573.72	164,434	-1,877	738	1,410	42	3,916	0	50	-101
19	2572.24	162,571	-1,863	1,793	899	39	4,557	0	50	13
20	2571.29	161,383	-1,188	1,786	1,321	37	3,819	0	50	-463
21	2571.27	161,358	-25	4,959	138	35	5,053	0	50	-54
22	2574.00	164,788	3,430	5,233	1,665	34	3,526	0	50	74
23	2571.60	161,770	-3,018	0	1,650	32	4,559	0	50	-91
24	2570.67	160,610	-1,160	603	1,647	33	3,226	0	50	-167
25	2569.71	159,419	-1,191	869	1,650	34	3,654	0	50	-40
26	2568.36	157,753	-1,666	1,570	1,406	31	4,505	0	50	-118
27	2570.15	159,964	2,211	4,062	1,645	28	3,443	0	50	-31
28	2571.10	161,146	1,182	5,541	1,552	27	5,573	0	50	-315
29	2573.47	164,119	2,973	5,031	2,067	27	3,993	0	51	-108
30	2571.50	161,645	-2,474	1,435	1,899	27	5,487	0	51	-297
31	2570.38	160,250	-1,395	1,955	1,900	26	5,145	0	51	-80
<b>Total</b>			-2,221	68,600	47,757	1,366	114,872	0	1,553	-3,519

### Table 25. Pyramid Lake

Daily Operation

June 2000

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
May 31	2570.38	160,250								
1	2569.10	158,665	-1,585	2,706	1,895	24	5,741	0	50	-419
2	2568.29	157,667	-998	2,007	2,005	24	4,792	0	50	-192
3	2567.84	157,114	-553	2,709	2,046	23	5,230	0	50	-51
4	2570.37	160,237	3,123	4,580	1,708	23	3,191	0	50	53
5	2571.68	161,870	1,633	3,723	2,008	22	3,898	0	50	-172
6	2570.67	160,610	-1,260	1,827	2,083	22	4,894	0	50	-248
7	2570.11	159,914	-696	868	1,976	22	3,368	0	50	-144
8	2570.66	160,598	684	1,279	1,867	24	2,362	0	50	-74
9	2570.88	160,872	274	3,426	1,899	26	4,596	0	50	-431
10	2573.27	163,866	2,994	1,516	1,806	25	329	0	50	26
11	2576.39	167,831	3,965	3,299	1,658	24	864	0	50	-102
12	2575.69	166,936	-895	1,985	1,733	22	4,303	0	50	-282
13	2574.57	165,511	-1,425	2,626	1,343	21	5,769	0	50	404
14	2571.46	161,595	-3,916	1,898	1,685	20	7,108	0	50	-361
15	2568.59	158,036	-3,559	1,462	1,837	18	6,463	0	50	-363
16	2566.47	155,439	-2,597	1,680	1,902	19	5,970	0	50	-178
17	2568.92	158,442	3,003	1,722	1,906	19	691	0	51	98
18	2571.98	162,246	3,804	2,142	1,923	19	109	0	51	-120
19	2571.79	162,008	-238	1,905	1,844	19	3,955	0	51	0
20	2571.41	161,533	-475	2,122	1,996	19	4,471	0	51	-90
21	2569.75	159,468	-2,065	1,663	2,021	18	5,438	0	51	-278
22	2568.53	157,962	-1,506	1,352	2,046	17	4,850	0	51	-20
23	2567.63	156,857	-1,105	1,984	1,818	18	4,792	0	51	-82
24	2569.45	159,097	2,240	1,860	1,198	18	807	0	51	22
25	2571.35	161,458	2,361	2,615	1,656	18	1,979	0	51	102
26	2567.28	156,428	-5,030	2,117	1,917	18	8,048	0	51	-983
27	2565.90	154,746	-1,682	5,444	2,193	17	7,866	0	51	-1,419
28	2565.33	154,054	-692	6,489	2,127	16	9,072	0	51	-201
29	2569.11	158,677	4,623	7,882	2,121	16	5,197	0	51	-148
30	2568.46	157,876	-801	750	1,829	16	3,271	0	51	-74
<b>Total</b>			<b>-2,374</b>	<b>77,638</b>	<b>56,046</b>	<b>607</b>	<b>129,424</b>	<b>0</b>	<b>1,514</b>	<b>-5,727</b>

**Table 25. Pyramid Lake**

Daily Operation

**July 2000**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Jun 30	2568.46	157,876								
1	2571.02	161,046	3,170	1,876	1,902	14	422	0	52	-148
2	2573.95	164,725	3,679	2,289	1,988	14	512	0	52	-48
3	2575.79	167,064	2,338	2,559	2,079	14	2,198	0	52	-64
4	2577.50	169,257	2,193	3,002	2,201	14	2,811	0	52	-161
5	2574.74	165,726	-3,530	352	2,167	13	6,043	0	53	34
6	2571.93	162,183	-3,544	1,075	1,992	12	6,294	1	54	-274
7	2570.78	160,747	-1,436	657	2,438	12	4,306	0	54	-183
8	2573.55	164,220	3,472	1,098	2,410	13	4	0	54	9
9	2575.70	166,949	2,729	904	2,271	13	393	0	54	-12
10	2573.54	164,207	-2,742	1,340	2,308	13	6,242	0	54	-107
11	2574.52	165,447	1,240	1,012	2,568	12	2,200	0	54	-98
12	2573.95	164,725	-722	2,505	1,352	12	4,438	0	54	-99
13	2572.14	162,446	-2,279	1,949	1,308	12	5,437	0	54	-57
14	2567.72	156,967	-5,479	1,173	1,378	12	7,300	0	54	-688
15	2572.04	162,321	5,354	4,290	1,435	12	452	0	54	123
16	2575.32	166,464	4,143	3,345	1,367	12	515	0	54	-12
17	2574.94	165,981	-484	2,937	1,366	12	4,701	0	54	-44
18	2572.11	162,408	-3,572	2,192	1,700	12	7,179	0	53	-244
19	2569.81	159,543	-2,866	3,669	1,704	12	7,249	0	53	-949
20	2570.32	160,175	633	4,012	1,697	11	4,729	0	53	-305
21	2568.64	158,097	-2,078	4,119	1,796	11	7,602	0	53	-349
22	2570.43	160,312	2,214	4,710	1,702	11	4,135	0	53	-21
23	2573.88	164,637	4,325	4,738	1,694	10	2,079	0	53	15
24	2572.35	162,709	-1,927	1,677	1,820	10	5,143	0	53	-238
25	2571.90	162,145	-564	3,960	1,748	10	5,817	0	53	-412
26	2570.58	160,498	-1,647	4,138	1,648	10	6,871	0	53	-519
27	2569.23	158,825	-1,673	3,662	1,673	10	6,174	0	53	-791
28	2567.22	156,355	-2,470	3,661	1,668	10	7,130	0	53	-626
29	2570.34	160,200	3,845	4,984	1,748	10	2,892	0	53	48
30	2575.14	166,235	6,035	5,906	1,704	10	1,527	0	53	-5
31	2573.49	164,144	-2,091	3,336	1,337	10	6,545	0	53	-176
<b>Total</b>			<b>6,268</b>	<b>87,127</b>	<b>56,169</b>	<b>363</b>	<b>129,340</b>	<b>1</b>	<b>1,651</b>	<b>-6,399</b>



**Table 25. Pyramid Lake**

Daily Operation

**August 2000**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Jul 31	2573.49	164,144								
1	2569.89	159,642	-4,502	4,293	568	9	9,330	0	52	10
2	2571.39	161,508	1,866	6,101	1,648	9	5,168	0	52	-672
3	2570.55	160,461	-1,047	3,489	1,647	9	5,463	0	52	-677
4	2567.77	157,028	-3,433	2,969	1,441	9	7,390	0	52	-410
5	2567.33	156,489	-539	4,035	1,644	9	5,951	1	52	-223
6	2573.21	163,791	7,302	5,875	1,621	8	140	0	52	-10
7	2573.21	163,790	-1	3,881	2,017	9	5,565	0	52	-291
8	2570.21	160,039	-3,751	974	2,016	9	6,315	0	52	-383
9	2568.75	158,233	-1,806	4,093	2,048	9	7,121	0	52	-783
10	2567.82	157,090	-1,143	4,564	1,927	8	7,521	0	52	-69
11	2564.67	153,256	-3,834	1,953	2,083	8	7,574	0	52	-252
12	2569.58	159,258	6,002	5,064	2,084	8	1,028	1	52	-73
13	2576.54	168,023	8,765	7,340	1,704	8	149	0	52	-86
14	2576.54	168,022	-1	2,145	2,047	8	7,750	0	52	3,601
15	2569.45	159,097	-8,925	3,817	2,040	8	11,021	0	52	-3,717
16	2568.21	157,568	-1,529	4,895	2,120	8	8,398	0	52	-102
17	2567.88	157,163	-405	5,642	2,074	9	8,030	0	52	-48
18	2568.21	157,568	405	5,252	2,127	9	6,643	1	52	-287
19	2571.74	161,945	4,377	4,495	2,023	9	2,112	0	52	14
20	2576.46	167,921	5,976	5,117	1,856	9	850	0	52	-104
21	2575.08	166,159	-1,762	1,978	2,036	10	5,592	0	52	-142
22	2573.81	164,548	-1,611	2,676	1,818	10	6,016	0	53	-46
23	2571.45	161,583	-2,965	2,322	2,095	10	7,066	0	53	-273
24	2568.54	157,974	-3,609	2,305	2,043	10	7,540	1	53	-373
25	2566.09	154,977	-2,997	2,520	2,003	10	6,963	0	53	-514
26	2568.43	157,839	2,862	5,602	2,140	10	4,803	0	53	-34
27	2575.00	166,057	8,218	6,969	2,123	10	729	0	53	-102
28	2574.21	165,054	-1,003	2,992	2,153	10	5,976	0	53	-129
29	2574.26	165,118	64	1,727	2,247	10	3,838	0	53	-29
30	2575.34	166,490	1,372	2,763	2,664	11	3,966	0	53	-47
31	2570.87	160,859	-5,631	931	2,557	11	8,766	0	53	-311
<b>Total</b>			<b>-3,285</b>	<b>118,779</b>	<b>60,614</b>	<b>284</b>	<b>174,774</b>	<b>4</b>	<b>1,622</b>	<b>-6,562</b>

### Table 25. Pyramid Lake

Daily Operation

September 2000

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Aug 31	2570.87	160,859								
1	2567.53	156,734	-4,125	203	2,514	12	6,535	0	50	-269
2	2572.25	162,584	5,850	4,222	2,391	12	723	0	50	-2
3	2575.36	166,515	3,931	2,774	2,669	12	1,449	0	50	-25
4	2575.92	167,230	715	2,250	2,548	12	3,908	0	50	-137
5	2573.63	164,321	-2,909	1,507	2,757	12	6,846	0	50	-289
6	2571.39	161,508	-2,813	1,546	2,605	12	6,701	0	69	-206
7	2569.02	158,566	-2,942	1,790	2,228	11	6,921	1	89	40
8	2566.15	155,050	-3,516	2,571	2,887	11	8,326	0	123	-536
9	2570.68	160,623	5,573	3,721	2,526	11	499	0	123	-63
10	2572.57	162,986	2,363	2,457	0	11	246	0	123	264
11	2569.22	158,813	-4,173	3,455	0	11	7,090	0	123	-426
12	2564.88	153,510	-5,303	4,239	0	11	8,577	0	123	-853
13	2564.12	152,593	-917	5,301	0	11	5,743	0	123	-363
14	2565.75	154,563	1,970	5,646	2,763	11	5,863	0	125	-462
15	2567.42	156,599	2,036	5,925	2,727	11	5,973	0	123	-531
16	2568.85	158,356	1,757	6,681	2,541	11	6,799	0	125	-552
17	2576.54	168,023	9,667	9,105	2,799	10	1,931	0	123	-193
18	2573.56	164,232	-3,791	2,889	2,329	10	8,487	1	125	-406
19	2574.95	165,993	1,761	4,612	2,359	11	4,880	0	123	-218
20	2573.24	163,829	-2,164	2,995	2,402	11	7,283	0	125	-164
21	2569.92	159,679	-4,150	816	2,426	12	7,211	0	123	-70
22	2566.99	156,074	-3,605	1,788	2,285	12	7,540	0	125	-25
23	2570.14	159,952	3,878	2,971	2,336	10	1,118	0	123	-198
24	2573.98	164,763	4,811	5,932	0	12	821	0	125	-187
25	2572.40	162,772	-1,991	2,474	1,918	11	6,291	0	123	20
26	2569.90	159,654	-3,118	1,596	2,289	12	6,816	0	125	-74
27	2568.32	157,704	-1,950	1,214	2,788	12	5,713	0	123	-128
28	2568.77	158,258	554	4,220	2,975	11	6,475	0	124	-53
29	2568.70	158,171	-87	3,231	2,994	11	5,993	0	123	-207
30	2573.66	164,359	6,188	3,728	2,958	11	393	0	124	8
<b>Total</b>			<b>3,500</b>	<b>101,859</b>	<b>64,014</b>	<b>338</b>	<b>153,151</b>	<b>2</b>	<b>3,253</b>	<b>-6,305</b>

**Table 25. Pyramid Lake**

Daily Operation

**October 2000**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Sep 30	2573.66	164,359								
1	2576.20	167,588	3,229	3,728	15	12	338	0	125	-63
2	2572.62	163,048	-4,540	508	2,676	12	7,328	0	125	-283
3	2570.59	160,511	-2,537	137	2,815	12	5,189	0	125	-187
4	2570.30	160,150	-361	1,094	1,391	12	2,675	0	125	-58
5	2569.72	159,431	-719	328	2,708	12	3,552	0	79	-136
6	2570.55	160,461	1,030	1,851	2,030	13	2,781	0	53	-30
7	2572.58	162,998	2,537	1,350	1,797	13	490	0	52	-81
8	2574.34	165,219	2,221	2,409	201	13	366	0	52	16
9	2571.81	162,033	-3,186	1,495	1,924	13	6,477	1	52	-88
10	2568.80	158,294	-3,739	0	1,769	14	5,256	0	52	-214
11	2566.14	155,037	-3,257	0	1,940	17	5,032	0	52	-130
12	2563.70	152,087	-2,950	0	2,017	17	5,030	0	52	98
13	2561.05	148,923	-3,164	0	2,034	16	4,957	0	52	-205
14	2562.05	150,112	1,189	0	1,729	15	494	0	52	-9
15	2561.36	149,291	-821	0	244	15	882	0	52	-146
16	2561.01	148,875	-416	196	2,781	15	3,120	0	52	-236
17	2559.57	147,173	-1,702	1,870	2,428	14	5,799	0	52	-163
18	2557.85	145,156	-2,017	0	1,016	14	2,798	0	46	-203
19	2557.41	144,642	-514	1,395	2,097	14	3,772	0	28	-220
20	2560.19	147,905	3,263	2,614	3,025	14	2,400	0	22	32
21	2564.12	152,593	4,688	2,540	2,660	14	484	1	22	-19
22	2571.82	162,045	9,452	7,298	2,901	15	902	0	22	162
23	2573.26	163,854	1,809	2,953	3,008	10	4,182	0	22	42
24	2571.56	161,720	-2,134	2,254	2,955	15	7,033	0	22	-303
25	2570.92	160,921	-799	2,454	3,018	16	6,016	0	22	-249
26	2569.58	159,258	-1,663	2,396	3,036	17	7,036	0	22	-54
27	2567.29	156,440	-2,818	2,146	2,295	21	7,001	0	22	-257
28	2570.71	160,660	4,220	3,279	3,031	18	1,850	0	22	-236
29	2576.57	168,061	7,401	5,202	3,253	19	1,522	0	22	471
30	2575.01	166,070	-1,991	1,733	3,359	19	6,281	0	22	-799
31	2574.55	165,485	-585	1,517	2,286	19	4,497	0	22	112
<b>Total</b>			1,126	52,747	68,439	460	115,540	2	1,542	-3,436

### Table 25. Pyramid Lake

Daily Operation

November 2000

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Oct 31	2574.55	165,485								
1	2570.68	160,623	-4,862	1,280	1,847	17	7,601	0	10	-395
2	2568.26	157,630	-2,993	1,283	3,177	18	7,266	0	10	-195
3	2565.96	154,819	-2,811	1,555	3,069	18	7,223	0	10	-220
4	2569.00	158,541	3,722	1,467	3,246	18	969	0	10	-30
5	2573.71	164,422	5,881	3,887	3,249	18	1,177	0	10	-86
6	2571.90	162,145	-2,277	1,475	3,280	18	7,035	0	10	-5
7	2568.30	157,679	-4,466	203	3,190	18	7,363	0	10	-504
8	2567.73	156,979	-700	2,280	3,252	19	6,102	0	10	-139
9	2569.47	159,122	2,143	2,863	3,183	19	3,909	1	10	-2
10	2571.58	161,745	2,623	2,066	3,162	20	2,499	0	10	-116
11	2573.39	164,018	2,273	1,827	3,037	20	2,570	0	10	-31
12	2575.31	166,451	2,433	3,741	2,776	20	3,965	0	10	-129
13	2572.39	162,760	-3,691	1,574	2,838	20	7,751	0	11	-361
14	2572.00	162,270	-490	2,029	3,264	20	5,748	0	11	-44
15	2572.29	162,634	364	1,890	3,267	21	4,545	0	11	-258
16	2570.19	160,014	-2,620	1,612	3,241	21	7,246	0	11	-237
17	2569.47	159,122	-892	1,665	3,243	21	5,510	0	11	-300
18	2573.85	164,599	5,477	4,180	3,217	20	1,969	0	11	40
19	2576.59	168,087	3,488	3,631	3,257	21	3,235	0	11	-175
20	2573.77	164,498	-3,589	1,479	3,259	21	8,164	0	11	-173
21	2573.11	163,665	-833	2,991	3,257	21	7,025	0	11	-66
22	2572.56	162,973	-692	1,555	3,253	21	5,377	0	11	-133
23	2575.55	166,757	3,784	1,518	3,142	21	872	0	11	-14
24	2575.69	166,936	179	1,348	3,178	21	4,248	0	11	-109
25	2574.85	165,866	-1,070	0	3,167	21	4,141	0	11	-106
26	2574.21	165,054	-812	1,614	2,754	21	5,082	0	11	-108
27	2575.62	166,847	1,793	2,153	3,169	21	3,443	0	11	-96
28	2572.60	163,023	-3,824	1,882	3,041	20	8,422	0	11	-334
29	2572.02	162,296	-727	2,042	2,914	20	5,456	0	11	-236
30	2571.76	161,970	-326	2,160	3,068	20	5,418	0	11	-145
<b>Total</b>			<b>-3,515</b>	<b>59,250</b>	<b>92,997</b>	<b>595</b>	<b>151,331</b>	<b>1</b>	<b>318</b>	<b>-4,707</b>

**Table 25. Pyramid Lake**

Daily Operation

**December 2000**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Nov 30	2571.76	161,970								
1	2570.12	159,927	-2,043	1,550	2,083	20	5,613	0	10	-73
2	2570.66	160,598	671	580	2,286	20	2,337	0	10	132
3	2573.14	163,703	3,105	1,485	2,175	21	441	0	10	-125
4	2571.14	161,196	-2,507	1,310	2,819	20	6,510	0	10	-136
5	2566.43	155,390	-5,806	1,745	1,472	20	8,414	0	10	-619
6	2564.76	153,365	-2,025	2,894	2,089	21	6,403	0	10	-616
7	2567.43	156,612	3,247	3,937	2,364	21	3,072	0	10	7
8	2569.19	158,776	2,164	1,660	2,445	21	1,542	0	10	-410
9	2573.28	163,879	5,103	3,702	2,175	21	869	0	10	84
10	2575.96	167,281	3,402	4,841	2,034	21	3,307	0	10	-177
11	2575.12	166,210	-1,071	2,393	2,490	21	5,875	0	10	-90
12	2573.22	163,803	-2,407	2,168	1,871	21	6,232	0	10	-225
13	2571.90	162,145	-1,658	2,343	661	21	4,674	0	10	1
14	2571.38	161,495	-650	2,328	1,332	21	4,150	0	11	-170
15	2569.76	159,481	-2,014	2,281	3,054	21	7,169	0	11	-190
16	2572.18	162,496	3,015	2,424	3,143	21	2,455	0	11	-107
17	2576.57	168,061	5,565	3,578	3,267	21	1,191	0	11	-99
18	2575.19	166,299	-1,762	1,642	3,243	21	6,576	0	11	-81
19	2574.11	164,928	-1,371	636	3,208	21	5,149	0	11	-76
20	2574.00	164,788	-140	897	2,415	21	3,477	1	11	16
21	2573.52	164,182	-606	1,700	2,495	21	4,775	0	11	-36
22	2572.40	162,772	-1,410	1,887	2,170	22	5,403	0	11	-75
23	2574.91	165,942	3,170	3,448	2,119	21	2,365	0	11	-42
24	2576.73	168,267	2,325	1,383	3,239	21	2,291	0	11	-16
25	2576.30	167,716	-551	1,085	2,087	21	3,551	0	11	-182
26	2573.80	164,535	-3,181	454	2,263	21	5,971	0	11	63
27	2570.41	160,287	-4,248	1,243	2,362	21	7,884	0	11	21
28	2567.77	157,028	-3,259	661	2,472	22	6,477	0	11	74
29	2569.12	158,689	1,661	1,749	2,442	23	2,545	0	11	3
30	2571.93	162,183	3,494	2,506	2,462	23	1,446	0	11	-40
31	2575.24	166,362	4,179	4,030	2,814	23	2,580	0	11	-97
<b>Total</b>			<b>4,392</b>	<b>64,540</b>	<b>73,551</b>	<b>655</b>	<b>130,744</b>	<b>1</b>	<b>328</b>	<b>-3,281</b>

**Table 25. Pyramid Lake**

Daily Operation

**January 2001**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Dec 31	2575.24	166,362								
1	2576.93	168,523	2,161	957	3,218	22	2,003	0	10	-23
2	2574.75	165,739	-2,784	0	2,634	21	5,375	0	10	-54
3	2573.48	164,131	-1,608	1,554	2,298	22	5,222	0	10	-250
4	2572.80	163,275	-857	1,669	1,806	22	4,547	0	10	203
5	2572.59	163,011	-264	1,472	1,462	22	3,003	0	10	-207
6	2573.53	164,194	1,184	3,032	1,453	22	3,247	0	10	-66
7	2576.34	167,767	3,572	3,975	1,562	22	2,075	0	10	98
8	2572.16	162,471	-5,296	2,076	1,429	23	8,843	0	10	29
9	2573.73	164,447	1,976	3,756	1,505	50	3,267	0	10	-58
10	2572.97	163,489	-958	1,539	1,721	174	4,606	0	10	224
11	2572.36	162,722	-767	1,403	1,805	97	4,457	0	10	395
12	2571.12	161,171	-1,551	2,291	1,590	55	5,288	0	10	-189
13	2571.87	162,108	937	2,882	1,787	45	3,804	0	10	37
14	2575.03	166,095	3,987	4,638	1,470	41	2,177	0	10	25
15	2572.28	162,622	-3,474	2,687	1,738	39	7,870	0	10	-58
16	2569.46	159,109	-3,512	3,285	1,745	34	8,498	0	10	-68
17	2569.30	158,912	-198	3,539	1,728	32	5,491	0	10	4
18	2570.28	160,125	1,214	4,632	2,173	32	5,589	0	10	-24
19	2573.85	164,599	4,473	3,957	3,258	32	2,686	0	10	-78
20	2574.60	165,549	950	1,306	1,825	30	2,135	0	12	-64
21	2577.22	168,896	3,347	3,375	1,652	30	1,444	0	12	-254
22	2578.30	170,289	1,393	0	2,278	30	900	0	12	-3
23	2575.59	166,808	-3,481	99	2,007	33	5,623	0	12	15
24	2574.10	164,915	-1,893	1,704	1,809	36	5,494	0	12	64
25	2570.57	160,486	-4,429	910	2,119	38	7,498	0	12	14
26	2569.59	159,270	-1,216	1,809	0	39	3,084	0	12	32
27	2569.96	159,728	458	3,173	0	36	2,782	0	12	43
28	2574.33	165,206	5,478	5,790	0	33	287	0	12	-46
29	2573.33	163,942	-1,264	3,286	0	33	4,614	0	11	42
30	2572.96	163,476	-466	2,702	800	32	3,792	0	11	-197
31	2569.21	158,800	-4,676	2,906	1,579	29	9,146	0	11	-33
<b>Total</b>			<b>-7,562</b>	<b>76,404</b>	<b>50,451</b>	<b>1,206</b>	<b>134,847</b>	<b>0</b>	<b>331</b>	<b>-445</b>

**Table 25. Pyramid Lake**

Daily Operation

**February 2001**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Jan 31	2569.21	158,800								
1	2571.17	161,233	2,433	3,137	1,561	29	2,325	0	10	41
2	2572.80	163,275	2,042	3,396	1,448	29	2,796	0	10	-25
3	2576.36	167,792	4,517	3,545	1,390	30	374	0	10	-64
4	2576.22	167,613	-179	187	2,293	30	2,652	0	10	-27
5	2575.86	167,153	-460	2,147	387	36	2,899	0	10	-121
6	2574.12	164,940	-2,213	2,675	375	43	5,416	0	10	120
7	2573.50	164,157	-783	3,621	638	45	4,999	0	10	-78
8	2571.16	161,221	-2,936	2,062	499	44	5,589	0	10	58
9	2568.64	158,097	-3,124	1,890	511	39	5,495	0	10	-59
10	2570.77	160,735	2,638	4,106	653	46	2,015	0	10	-142
11	2576.69	168,215	7,480	5,702	2,390	47	754	0	10	105
12	2574.89	165,917	-2,298	8	582	73	3,187	0	10	236
13	2570.01	159,790	-6,127	1,233	581	70	8,413	0	10	412
14	2571.85	162,083	2,293	3,780	565	61	2,199	0	10	96
15	2570.06	159,852	-2,231	5,919	563	62	8,426	0	10	-339
16	2571.98	162,246	2,394	4,369	614	64	2,732	0	10	89
17	2573.04	163,577	1,331	740	604	66	0	0	10	-69
18	2576.68	168,203	4,626	3,442	1,237	83	108	0	10	-18
19	2575.66	166,898	-1,305	952	623	143	3,028	0	10	15
20	2575.25	166,375	-523	2,219	548	242	3,712	0	10	190
21	2572.37	162,734	-3,641	880	537	166	5,257	0	12	45
22	2570.00	159,778	-2,956	1,485	452	181	4,939	0	12	-123
23	2570.96	160,971	1,193	765	469	157	246	0	12	60
24	2572.17	162,484	1,513	1,526	0	149	0	0	12	-150
25	2575.59	166,808	4,324	4,873	77	198	1,173	0	12	361
26	2574.27	165,130	-1,678	2,282	195	254	4,363	0	12	-34
27	2570.62	160,548	-4,582	2,201	194	232	7,238	0	12	41
28	2570.95	160,959	411	2,685	195	209	2,613	0	12	-53
Total			2,159	71,827	20,181	2,828	92,948	0	296	567

### Table 25. Pyramid Lake

Daily Operation

March 2001

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Feb 28	2570.95	160,959								
1	2573.32	163,929	2,970	3,792	192	200	1,352	0	10	148
2	2575.19	166,299	2,370	2,325	191	202	105	0	10	-233
3	2575.39	166,553	254	17	184	212	0	0	198	39
4	2577.05	168,678	2,125	2,065	251	400	634	0	198	241
5	2574.96	166,006	-2,672	639	184	4,253	4,517	0	2,261	-970
6	2575.15	166,248	242	1,759	193	5,624	2,268	0	6,357	1,291
7	2575.70	166,949	701	3,226	193	1,635	1,434	0	3,457	538
8	2573.20	163,778	-3,171	2,854	207	1,227	4,651	0	3,069	261
9	2571.23	161,308	-2,470	1,487	200	1,009	3,199	0	2,945	978
10	2573.19	163,766	2,458	3,285	193	785	326	0	1,673	194
11	2574.55	165,485	1,719	2,263	194	646	285	0	1,260	161
12	2574.57	165,511	26	1,851	222	586	1,717	0	1,093	177
13	2573.94	164,712	-799	1,570	209	553	2,442	0	758	69
14	2574.20	165,042	330	967	198	588	999	0	466	42
15	2573.80	164,535	-507	2,652	197	603	3,393	0	397	-169
16	2576.03	167,370	2,835	4,488	199	588	2,084	0	397	41
17	2576.31	167,728	358	1,537	191	603	1,494	0	397	-82
18	2575.74	167,000	-728	1,993	515	675	3,557	0	298	-56
19	2569.97	159,741	-7,259	2,901	1,196	794	11,687	0	496	33
20	2570.84	160,822	1,081	4,948	2,422	838	6,618	0	496	-13
21	2573.22	163,803	2,981	6,441	1,233	829	5,002	0	496	-24
22	2574.73	165,714	1,911	5,078	647	735	3,971	0	496	-82
23	2572.47	162,860	-2,854	2,012	821	667	5,841	0	496	-17
24	2576.56	168,049	5,189	4,305	1,150	656	467	0	397	-58
25	2576.53	168,010	-39	1,444	205	642	1,885	0	397	-48
26	2576.35	167,780	-230	1,811	1,144	603	3,230	0	298	-260
27	2574.09	164,902	-2,878	1,526	1,049	541	5,634	0	297	-63
28	2572.78	163,249	-1,653	1,505	1,760	516	5,113	0	261	-60
29	2574.27	165,130	1,881	3,549	1,718	591	3,603	0	293	-81
30	2573.29	163,892	-1,238	3,267	1,866	510	6,558	0	293	-30
31	2576.52	167,997	4,105	5,188	1,641	454	2,802	0	297	-79
<b>Total</b>			<b>7,038</b>	<b>82,745</b>	<b>20,765</b>	<b>28,765</b>	<b>96,868</b>	<b>0</b>	<b>30,257</b>	<b>1,888</b>



**Table 25. Pyramid Lake**

Daily Operation

**April 2001**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Mar 31	2576.52	167,997								
1	2576.28	167,690	-307	1,159	1,972	382	3,555	0	296	31
2	2576.53	168,010	320	1,165	2,346	285	2,871	0	296	-309
3	2575.15	166,248	-1,762	1,618	1,839	251	5,176	0	294	0
4	2574.17	165,004	-1,244	1,747	1,670	222	4,662	0	248	27
5	2573.88	164,637	-367	1,758	1,703	261	3,835	0	198	-56
6	2572.12	162,421	-2,216	801	1,633	237	4,633	0	149	-105
7	2574.14	164,966	2,545	1,318	1,254	220	305	0	99	157
8	2576.73	168,267	3,301	3,254	1,590	199	1,621	0	99	-22
9	2574.16	164,991	-3,276	1,754	0	192	5,142	0	99	19
10	2574.64	165,599	608	1,325	0	177	835	0	99	40
11	2575.63	166,859	1,260	527	1,304	163	583	0	99	-52
12	2575.02	166,082	-777	977	1,258	165	3,104	0	99	26
13	2575.88	167,179	1,097	1,913	1,118	174	1,923	0	99	-86
14	2575.84	167,127	-52	2,417	647	187	3,166	0	99	-38
15	2576.61	168,113	986	2,548	934	200	2,564	0	99	-33
16	2571.03	161,059	-7,054	1,403	829	218	9,367	0	81	-56
17	2570.11	159,914	-1,145	6,255	0	220	7,502	0	81	-37
18	2570.56	160,473	559	5,416	0	209	4,960	0	81	-25
19	2569.81	159,543	-930	2,622	0	213	3,526	0	81	-158
20	2569.77	159,493	-50	1,428	308	176	1,987	0	81	106
21	2573.28	163,879	4,386	4,005	317	160	135	0	81	120
22	2576.49	167,959	4,080	5,131	1,440	169	2,554	0	81	-25
23	2574.04	164,839	-3,120	2,216	688	200	6,091	0	81	-52
24	2571.40	161,520	-3,319	5,092	985	221	9,444	0	81	-92
25	2569.90	159,654	-1,866	6,437	853	228	9,220	0	71	-93
26	2570.35	160,212	558	6,208	601	228	6,406	0	71	-2
27	2567.35	156,514	-3,698	4,182	130	206	7,559	0	61	-596
28	2572.21	162,534	6,020	5,812	0	181	105	0	62	194
29	2575.08	166,159	3,625	6,318	340	182	3,086	0	62	-67
30	2573.51	164,169	-1,990	3,819	699	183	6,591	0	62	-38
Total			-3,828	90,625	26,458	6,309	122,508	0	3,490	-1,222

**Table 25. Pyramid Lake**

Daily Operation

**May 2001**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Apr 30	2573.51	164,169								
1	2572.21	162,534	-1,635	2,473	1,612	180	5,844	0	50	-6
2	2572.48	162,873	339	2,415	1,514	172	3,609	0	50	-103
3	2573.19	163,766	893	3,096	1,991	151	4,202	0	50	-93
4	2574.20	165,042	1,276	3,657	2,655	132	5,048	0	50	-70
5	2577.17	168,832	3,790	3,875	2,649	122	2,704	0	50	-102
6	2576.72	168,254	-578	0	2,685	117	3,400	0	50	70
7	2572.79	163,262	-4,992	1,774	2,712	113	9,571	0	50	30
8	2570.62	160,548	-2,714	5,864	2,395	110	10,896	0	50	-137
9	2570.57	160,486	-62	7,324	2,364	106	9,779	1	50	-26
10	2569.45	159,097	-1,389	5,604	2,792	101	9,711	0	50	-125
11	2571.41	161,533	2,436	6,893	2,975	94	7,447	0	50	-29
12	2573.94	164,712	3,179	6,453	1,928	90	5,213	0	50	-29
13	2576.50	167,972	3,260	4,386	2,725	86	3,861	0	50	-26
14	2575.08	166,159	-1,813	1,958	2,370	82	6,066	0	50	-107
15	2575.49	166,681	522	2,950	1,799	79	4,170	0	50	-86
16	2572.35	162,709	-3,972	2,814	1,906	75	8,666	0	50	-51
17	2571.30	161,395	-1,314	4,034	2,089	73	7,110	0	50	-350
18	2570.15	159,964	-1,431	4,021	2,056	71	7,439	0	50	-90
19	2573.83	164,573	4,609	4,114	1,822	68	1,250	0	49	-96
20	2573.76	164,485	-88	3,353	1,777	64	5,266	1	49	34
21	2573.89	164,649	164	4,467	2,263	60	6,552	0	49	-25
22	2571.37	161,483	-3,166	5,299	1,967	58	10,550	0	49	109
23	2568.53	157,962	-3,521	6,353	2,216	55	11,241	0	49	-855
24	2570.08	159,865	1,903	6,068	2,480	53	6,105	0	49	-544
25	2567.05	156,147	-3,718	2,787	2,645	50	9,020	0	49	-131
26	2570.31	160,163	4,016	5,384	2,048	48	3,433	0	49	18
27	2576.20	167,588	7,425	5,742	2,508	49	723	0	49	-102
28	2577.19	168,858	1,270	1,667	2,330	49	2,759	0	49	32
29	2575.10	166,184	-2,674	123	2,342	47	5,085	0	49	-52
30	2572.79	163,262	-2,922	3,263	1,611	45	7,620	0	49	-172
31	2568.66	158,122	-5,140	4,852	1,678	44	11,527	0	49	-138
<b>Total</b>			<b>-6,047</b>	<b>123,063</b>	<b>68,904</b>	<b>2,644</b>	<b>195,867</b>	<b>2</b>	<b>1,537</b>	<b>-3,252</b>

**Table 25. Pyramid Lake**

Daily Operation

June 2001

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
May 31	2568.66	158,122								
1	2568.86	158,368	246	5,416	1,648	41	6,523	0	52	-284
2	2572.01	162,283	3,915	2,999	1,342	43	345	0	52	-72
3	2576.41	167,856	5,573	5,742	1,931	42	1,947	0	52	-143
4	2575.83	167,115	-741	973	1,331	40	2,964	0	52	-69
5	2575.38	166,541	-574	1,915	1,374	39	3,840	0	52	-10
6	2573.10	163,652	-2,889	2,243	823	37	5,935	0	52	-5
7	2567.08	156,184	-7,468	1,083	955	35	9,324	0	52	-165
8	2565.81	154,636	-1,548	2,679	1,424	35	5,608	0	52	-26
9	2570.00	159,778	5,142	4,717	1,443	32	1,038	0	52	40
10	2572.84	163,325	3,547	5,955	0	33	2,353	0	52	-36
11	2576.33	167,754	4,429	5,739	1,450	30	2,702	0	52	-36
12	2574.16	164,991	-2,763	1,860	1,518	30	6,135	0	52	16
13	2575.51	166,706	1,715	2,205	1,436	28	1,733	1	52	-168
14	2573.04	163,577	-3,129	2,951	1,613	28	7,679	0	52	10
15	2569.76	159,481	-4,096	3,930	1,405	28	9,385	0	52	-22
16	2570.77	160,735	1,254	2,711	1,775	27	3,140	0	52	-67
17	2573.01	163,539	2,804	5,663	130	26	2,905	0	52	-58
18	2570.60	160,523	-3,016	5,474	1,366	25	9,798	0	52	-31
19	2572.02	162,296	1,773	6,265	1,552	24	6,020	0	52	4
20	2571.84	162,070	-226	4,773	1,471	24	6,396	0	52	-46
21	2567.89	157,175	-4,895	1,364	1,475	24	7,588	0	52	-118
22	2565.36	154,090	-3,085	2,587	1,783	23	7,456	0	52	30
23	2569.49	159,146	5,056	5,517	1,043	23	1,460	0	52	-15
24	2575.63	166,859	7,713	7,534	568	22	345	0	52	-14
25	2575.25	166,375	-484	1,738	1,363	23	3,520	0	52	-36
26	2570.60	160,523	-5,852	652	1,379	23	7,983	0	52	129
27	2569.54	159,208	-1,315	2,349	1,377	23	5,016	0	51	3
28	2568.54	157,974	-1,234	4,834	1,157	23	7,190	0	51	-7
29	2565.53	154,297	-3,677	2,984	1,662	23	7,699	0	51	-596
30	2566.59	155,585	1,288	4,113	1,354	22	4,084	0	51	-66
Total			-2,537	108,965	39,148	876	148,111	1	1,556	-1,858

### Table 25. Pyramid Lake

Daily Operation

July 2001

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Jun 30	2566.59	155,585								
1	2571.91	162,158	6,573	6,654	7	21	115	0	52	58
2	2569.22	158,813	-3,345	5,268	1,606	21	9,198	0	52	-990
3	2567.57	156,783	-2,030	6,662	1,634	22	9,568	0	52	-728
4	2574.03	164,826	8,043	6,812	1,360	23	152	0	52	52
5	2574.28	165,143	317	3,542	1,437	24	4,574	0	52	-60
6	2572.08	162,371	-2,772	411	1,354	28	4,387	0	52	-126
7	2573.56	164,232	1,861	4,723	1,399	43	4,193	0	52	-59
8	2573.06	163,589	-643	4,519	196	36	5,226	1	52	-115
9	2574.67	165,638	2,049	4,998	1,550	28	4,373	0	52	-102
10	2576.97	168,575	2,937	3,686	1,160	26	1,870	0	52	-13
11	2574.75	165,739	-2,836	696	1,543	25	4,999	0	52	-49
12	2570.51	160,411	-5,328	1,344	1,639	23	7,957	0	52	-325
13	2567.90	157,188	-3,223	834	1,773	21	5,574	0	52	-225
14	2570.78	160,747	3,559	2,271	1,560	21	231	0	52	-10
15	2575.76	167,025	6,278	5,531	1,076	22	316	0	52	17
16	2576.98	168,588	1,563	2,426	1,416	22	2,268	0	52	19
17	2572.08	162,371	-6,217	42	1,833	21	8,503	1	52	443
18	2571.40	161,520	-851	3,383	1,658	21	5,153	0	52	-708
19	2569.86	159,605	-1,915	3,591	1,769	21	7,070	0	52	-174
20	2567.08	156,184	-3,421	1,713	1,681	20	6,456	0	52	-327
21	2569.87	159,617	3,433	2,581	1,165	20	373	0	52	92
22	2573.72	164,434	4,817	5,916	401	20	1,486	0	52	18
23	2573.67	164,371	-63	4,219	1,815	19	5,880	0	52	-184
24	2571.70	161,895	-2,476	4,167	1,806	19	8,143	1	52	-272
25	2571.55	161,708	-187	3,887	1,860	18	5,766	0	52	-134
26	2568.02	157,335	-4,373	3,349	1,914	17	8,894	0	52	-707
27	2565.40	154,139	-3,196	3,357	1,915	16	8,029	0	52	-403
28	2569.91	159,666	5,527	4,048	1,885	16	495	0	54	127
29	2573.85	164,599	4,933	4,990	123	17	91	0	54	-52
30	2574.12	164,940	341	5,341	1,662	18	6,521	0	54	-105
31	2570.89	160,884	-4,056	3,713	1,771	18	9,140	0	54	-364
<b>Total</b>			5,299	114,674	43,968	687	147,001	3	1,620	-5,406

### Table 25. Pyramid Lake

Daily Operation

August 2001

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Aug 31	2570.89	160,884								
1	2571.77	161,983	1,099	1,877	1,790	17	2,377	0	52	-156
2	2573.09	163,640	1,657	3,422	1,909	17	3,594	0	52	-45
3	2569.79	159,518	-4,122	1,473	1,952	17	7,289	0	52	-223
4	2573.80	164,535	5,017	3,357	2,337	17	626	0	52	-16
5	2572.56	162,973	-1,562	5,167	0	17	6,467	0	52	-227
6	2572.31	162,659	-314	5,756	72	16	5,806	0	52	-300
7	2569.89	159,642	-3,017	3,167	0	16	5,968	0	52	-180
8	2571.28	161,370	1,728	3,289	0	15	1,576	0	52	52
9	2571.33	161,433	63	4,336	513	15	4,736	0	52	-13
10	2570.57	160,486	-947	4,750	2,281	14	7,581	0	52	-359
11	2568.95	158,479	-2,007	3,339	2,396	14	7,431	1	52	-272
12	2572.58	162,998	4,519	5,278	0	14	719	0	52	-2
13	2572.30	162,647	-351	4,175	1,570	13	5,877	0	52	-180
14	2574.81	165,815	3,168	4,348	1,987	13	3,074	0	52	-54
15	2570.77	160,735	-5,080	2,835	1,931	13	9,531	0	52	-276
16	2567.81	157,077	-3,658	2,565	1,856	13	7,441	0	52	-599
17	2564.01	152,460	-4,617	3,786	1,544	12	9,228	0	52	-679
18	2565.83	154,661	2,201	706	2,054	12	465	0	52	-54
19	2571.28	161,370	6,709	6,434	583	12	356	1	52	89
20	2573.62	164,308	2,938	6,223	1,855	13	5,108	0	52	7
21	2573.73	164,447	139	3,419	1,875	14	5,025	0	52	-92
22	2575.39	166,553	2,106	4,409	1,848	15	4,032	0	52	-82
23	2572.10	162,396	-4,157	2,023	1,779	14	7,867	0	52	-54
24	2569.37	158,998	-3,398	2,886	1,799	15	7,954	0	52	-92
25	2572.09	162,383	3,385	2,872	1,857	14	1,296	0	52	-10
26	2574.64	165,599	3,216	4,789	0	14	1,444	0	52	-91
27	2573.64	164,333	-1,266	3,450	1,803	14	6,468	0	52	-13
28	2572.60	163,023	-1,310	3,568	1,935	14	6,706	0	52	-69
29	2571.31	161,408	-1,615	2,877	1,648	14	6,032	0	52	-70
30	2570.52	160,424	-984	2,700	1,987	15	5,576	0	52	-58
31	2566.84	155,890	-4,534	2,868	1,971	16	9,250	0	53	-86
<b>Total</b>			<b>-4,994</b>	<b>112,144</b>	<b>45,132</b>	<b>449</b>	<b>156,900</b>	<b>2</b>	<b>1,613</b>	<b>-4,204</b>

**Table 25. Pyramid Lake**

Daily Operation

**September 2001**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Aug 31	2566.84	155,890								
1	2568.82	158,319	2,429	6,260	2,688	16	6,207	0	53	-275
2	2570.00	159,778	1,459	6,396	33	17	4,859	0	49	-79
3	2574.52	165,447	5,669	5,828	1,997	19	1,986	0	47	-142
4	2574.52	165,447	0	3,890	1,886	35	5,594	0	47	-170
5	2575.83	167,115	1,668	2,285	1,893	22	2,600	0	45	113
6	2573.84	164,586	-2,529	1,161	2,021	19	5,393	1	45	-291
7	2575.51	166,706	2,120	618	2,317	19	730	0	43	-61
8	2575.41	166,579	-127	2,131	2,517	18	4,677	0	43	-73
9	2574.88	165,904	-675	2,493	63	18	3,171	0	41	-37
10	2574.80	165,803	-101	1,894	2,254	17	4,184	0	41	-41
11	2574.05	164,852	-951	0	2,388	18	3,236	0	39	-82
12	2571.36	161,470	-3,382	950	2,287	17	6,565	0	39	-32
13	2568.27	157,642	-3,828	952	2,307	17	6,992	0	37	-75
14	2567.71	156,955	-687	3,966	2,248	16	6,825	0	37	-55
15	2573.69	164,396	7,441	4,995	2,520	16	0	0	35	-55
16	2573.21	163,791	-605	3,629	1,125	16	5,310	0	35	-30
17	2573.79	164,523	732	4,469	2,690	16	6,138	0	33	-272
18	2573.97	164,750	227	4,491	2,387	16	6,618	0	33	-16
19	2573.55	164,220	-530	4,208	1,782	16	6,463	1	31	-41
20	2571.17	161,233	-2,987	3,362	2,366	16	8,622	0	31	-78
21	2569.76	159,481	-1,752	4,139	2,217	16	7,957	0	29	-138
22	2573.31	163,917	4,436	3,445	2,561	16	1,518	0	29	-39
23	2575.16	166,260	2,343	4,317	3,150	15	5,084	0	27	-28
24	2573.12	163,677	-2,583	2,488	2,738	15	7,532	0	27	-265
25	2572.46	162,847	-830	2,934	2,484	15	6,150	0	25	-88
26	2572.42	162,797	-50	4,304	2,218	15	6,364	0	25	-198
27	2570.59	160,511	-2,286	3,178	2,346	15	7,024	0	22	-779
28	2568.94	158,467	-2,044	3,063	1,030	15	6,110	0	22	-20
29	2571.43	161,558	3,091	4,533	0	14	1,141	0	20	-295
30	2571.78	161,995	437	4,040	193	14	3,794	0	20	4
Total			6,105	100,419	58,706	514	148,844	2	1,050	-3,638

**Table 25. Pyramid Lake**

Daily Operation

**October 2001**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Sep 30	2571.78	161,995								
1	2569.64	159,332	-2,663	3,007	1,831	17	7,487	0	18	-13
2	2568.50	157,925	-1,407	3,958	2,045	15	6,960	0	18	-447
3	2567.25	156,391	-1,534	2,286	1,724	15	5,479	0	18	-62
4	2567.57	156,783	392	3,574	1,864	16	4,983	0	16	-63
5	2568.94	158,467	1,684	2,863	1,891	17	3,008	0	16	-63
6	2571.99	162,258	3,791	4,695	2,277	18	3,161	0	14	-24
7	2573.72	164,434	2,176	5,926	0	18	3,651	1	12	-104
8	2572.88	163,375	-1,059	3,565	1,966	18	6,378	0	12	-218
9	2570.85	160,834	-2,541	937	1,853	17	5,204	0	12	-132
10	2568.75	158,233	-2,601	2,130	2,174	17	6,624	0	12	-286
11	2571.32	161,420	3,187	2,781	1,962	17	1,618	0	12	57
12	2572.10	162,396	976	616	2,006	17	1,473	0	12	-178
13	2573.63	164,321	1,925	1,163	2,109	17	1,236	0	12	-116
14	2575.03	166,095	1,774	1,259	2,271	16	1,664	0	12	-96
15	2572.30	162,647	-3,448	443	2,363	16	6,221	0	12	-37
16	2571.16	161,221	-1,426	1,086	2,024	17	4,563	1	12	23
17	2569.70	159,406	-1,815	1,852	2,605	17	6,153	0	12	-124
18	2568.06	157,384	-2,022	373	2,224	17	4,528	0	12	-96
19	2569.80	159,530	2,146	4,552	2,238	17	4,650	0	12	1
20	2571.97	162,233	2,703	1,729	1,934	17	924	0	12	-41
21	2575.77	167,038	4,805	3,726	2,328	17	1,129	0	12	-125
22	2574.53	165,460	-1,578	1,355	2,147	17	4,993	0	12	-92
23	2572.66	163,099	-2,361	663	2,408	17	5,325	0	12	-112
24	2570.68	160,623	-2,476	803	2,331	17	5,503	0	13	-111
25	2568.62	158,073	-2,550	430	2,165	18	5,085	0	13	-65
26	2564.64	153,220	-4,853	0	2,295	18	7,017	0	13	-136
27	2567.78	157,040	3,820	1,603	2,260	18	36	0	13	-12
28	2571.12	161,171	4,131	2,014	2,345	19	126	0	13	-108
29	2570.41	160,287	-884	2,213	2,182	21	5,217	0	13	-70
30	2570.43	160,312	25	758	2,186	21	2,922	0	13	-5
31	2571.50	161,645	1,333	1,830	2,206	21	2,716	0	13	5
<b>Total</b>			<b>-350</b>	<b>64,190</b>	<b>64,214</b>	<b>540</b>	<b>126,034</b>	<b>2</b>	<b>408</b>	<b>-2,850</b>

### Table 25. Pyramid Lake

Daily Operation

November 2001

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Oct 31	2571.50	161,645								
1	2571.98	162,246	601	3,040	1,959	21	4,308	0	12	-99
2	2572.82	163,300	1,054	1,160	2,180	20	2,308	0	12	14
3	2573.25	163,841	541	0	2,407	20	1,748	0	12	-126
4	2575.99	167,319	3,478	1,842	2,401	20	771	0	12	-2
5	2574.85	165,866	-1,453	1,893	2,176	20	5,409	0	12	-121
6	2572.83	163,312	-2,554	1,685	2,224	21	6,562	0	12	90
7	2571.00	161,021	-2,291	563	1,580	20	4,333	0	12	-109
8	2568.70	158,171	-2,850	764	2,393	20	6,012	0	12	-3
9	2567.64	156,869	-1,302	759	2,355	20	4,413	0	12	-11
10	2570.29	160,138	3,269	2,045	1,526	20	391	0	12	81
11	2576.43	167,882	7,744	4,861	3,038	21	279	0	12	115
12	2574.00	164,788	-3,094	0	2,623	31	5,911	0	12	175
13	2571.58	161,745	-3,043	819	2,273	40	6,113	0	12	-50
14	2569.87	159,617	-2,128	1,727	2,008	38	5,835	0	12	-54
15	2568.01	157,323	-2,294	1,708	2,265	27	6,183	0	12	-99
16	2566.94	156,012	-1,311	1,682	2,063	24	5,251	0	12	183
17	2571.39	161,508	5,496	3,318	2,701	24	484	0	12	-51
18	2576.16	167,536	6,028	5,065	2,041	24	1,135	0	12	45
19	2573.45	164,093	-3,443	1,096	1,865	24	6,151	0	12	-265
20	2570.32	160,175	-3,918	1,794	2,066	24	7,763	0	12	-27
21	2568.06	157,384	-2,791	2,233	1,879	24	6,844	0	12	-71
22	2571.41	161,533	4,149	2,392	2,309	24	562	0	12	-2
23	2573.21	163,791	2,258	1,292	2,299	24	1,187	1	12	-157
24	2572.83	163,312	-479	1,457	2,216	27	4,138	0	12	-29
25	2573.20	163,778	466	3,304	2,024	33	4,751	0	12	-132
26	2573.02	163,551	-227	1,451	1,696	35	3,370	0	12	-27
27	2570.66	160,598	-2,953	762	1,611	29	5,212	0	12	-131
28	2568.29	157,667	-2,931	729	1,634	27	5,110	0	12	-199
29	2569.36	158,986	1,319	2,739	1,632	26	3,029	0	13	-36
30	2566.29	155,220	-3,766	1,862	1,484	27	7,003	0	13	-123
<b>Total</b>			<b>-6,425</b>	<b>54,042</b>	<b>62,928</b>	<b>755</b>	<b>122,566</b>	<b>1</b>	<b>362</b>	<b>-1,221</b>



**Table 25. Pyramid Lake**

Daily Operation

**December 2001**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Nov 30	2566.29	155,220								
1	2565.96	154,819	-401	17	1,609	27	1,926	0	12	-116
2	2570.38	160,250	5,431	3,860	1,596	28	0	0	12	-41
3	2572.47	162,860	2,610	3,434	1,583	27	2,346	0	12	-76
4	2570.75	160,710	-2,150	3,894	1,497	27	7,310	0	12	-246
5	2569.83	159,567	-1,143	0	1,637	26	2,655	0	12	-139
6	2569.34	158,961	-606	873	1,616	26	3,071	0	12	-38
7	2567.85	157,126	-1,835	1,244	1,651	26	4,498	0	12	-246
8	2569.43	159,072	1,946	851	1,428	25	315	0	12	-31
9	2571.46	161,595	2,523	1,220	1,571	26	108	0	12	-174
10	2573.28	163,879	2,284	2,383	37	25	378	0	12	229
11	2571.81	162,033	-1,846	840	0	25	3,163	0	12	464
12	2572.47	162,860	827	1,976	0	25	1,193	0	12	31
13	2572.47	162,860	0	1,186	0	25	1,133	0	12	-66
14	2572.24	162,571	-289	1,253	281	25	1,852	0	12	16
15	2572.37	162,734	163	0	627	25	380	0	12	-97
16	2573.75	164,472	1,738	734	1,384	24	216	0	12	-176
17	2572.35	162,709	-1,763	1,398	1,494	24	4,614	0	12	-53
18	2570.34	160,200	-2,509	0	1,312	24	3,928	0	12	95
19	2569.61	159,295	-905	1,424	1,597	24	3,813	0	12	-125
20	2568.15	157,495	-1,800	1,630	1,525	24	4,849	0	12	-118
21	2564.74	153,340	-4,155	1,175	1,584	30	6,620	0	12	-312
22	2567.70	156,942	3,602	2,855	1,690	27	973	0	12	15
23	2569.48	159,134	2,192	2,015	1,648	27	1,425	0	12	-61
24	2572.99	163,514	4,380	3,084	1,869	27	634	0	12	46
25	2574.26	165,118	1,604	1,305	3,072	27	2,662	0	12	-126
26	2572.62	163,048	-2,070	2,416	1,270	27	5,715	0	12	-56
27	2570.26	160,101	-2,947	1,422	1,457	27	5,791	0	13	-49
28	2567.50	156,697	-3,404	1,504	1,548	27	6,320	0	13	-150
29	2568.66	158,122	1,425	1,963	1,612	29	2,097	0	13	-69
30	2571.44	161,570	3,448	3,229	1,612	30	1,307	0	13	-103
31	2573.49	164,144	2,574	3,240	1,739	30	2,492	0	13	70
<b>Total</b>			<b>8,924</b>	<b>52,425</b>	<b>41,546</b>	<b>816</b>	<b>83,784</b>	<b>0</b>	<b>377</b>	<b>-1,702</b>

### Table 25. Pyramid Lake

Daily Operation

January 2002

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Dec 31	2573.49	164,144								
1	2574.55	165,485	1,341	1,709	1,707	33	1,957	0	13	-138
2	2574.77	165,765	280	2,237	2,018	34	3,846	0	13	-150
3	2573.38	164,005	-1,760	1,575	1,350	34	4,819	0	13	113
4	2570.92	160,921	-3,084	1,670	1,196	32	5,707	0	13	-262
5	2571.70	161,895	974	0	1,382	32	387	0	13	-40
6	2575.47	166,655	4,760	3,402	1,908	30	445	0	13	-122
7	2575.26	166,388	-267	2,638	1,122	31	3,939	0	13	-106
8	2572.74	163,199	-3,189	11	1,098	31	4,292	0	13	-24
9	2571.27	161,358	-1,841	1,824	904	32	4,439	0	13	-149
10	2569.62	159,307	-2,051	2,337	1,028	33	5,445	0	13	9
11	2567.89	157,175	-2,132	863	1,087	32	4,115	0	12	13
12	2570.00	159,778	2,603	1,670	1,190	31	131	0	12	-145
13	2574.14	164,966	5,188	4,089	1,390	32	176	0	12	-135
14	2573.91	164,675	-291	1,999	1,124	31	3,322	0	12	-111
15	2572.98	163,501	-1,174	1,690	1,133	31	3,804	0	12	-212
16	2572.19	162,509	-992	1,323	746	31	3,159	0	12	79
17	2571.96	162,220	-289	1,416	1,036	29	2,717	1	12	-40
18	2569.57	159,245	-2,975	7	689	33	3,545	0	12	-147
19	2570.00	159,778	533	0	1,000	31	440	0	12	-46
20	2573.21	163,791	4,013	3,076	1,130	33	97	0	12	-117
21	2574.31	165,181	1,390	1,393	1,173	33	1,079	0	12	-118
22	2574.93	165,968	787	1,551	1,206	33	2,100	0	12	109
23	2573.34	163,955	-2,013	12	1,168	30	3,076	0	12	-135
24	2572.40	162,772	-1,183	5	1,185	32	2,222	0	12	-171
25	2572.58	162,998	226	729	1,203	33	1,620	0	12	-107
26	2573.26	163,854	856	21	1,236	32	311	0	12	-110
27	2574.23	165,080	1,226	2,672	1,237	32	2,814	0	12	111
28	2573.95	164,725	-355	2,685	1,302	38	4,070	0	12	-298
29	2572.74	163,199	-1,526	1,651	1,323	34	4,293	0	12	-229
30	2572.44	162,822	-377	1,544	1,218	32	3,119	0	12	-40
31	2572.51	162,910	88	0	1,267	31	1,371	0	12	173
<b>Total</b>			<b>-1,234</b>	<b>45,799</b>	<b>37,756</b>	<b>996</b>	<b>82,857</b>	<b>1</b>	<b>382</b>	<b>-2,545</b>

### Table 25. Pyramid Lake

Daily Operation

February 2002

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Jan 31	2572.51	162,910								
1	2572.22	162,546	-364	717	1,249	30	2,158	0	12	-190
2	2573.52	164,182	1,636	719	1,194	30	250	0	12	-45
3	2574.37	165,257	1,075	23	1,415	30	350	0	12	-31
4	2574.48	165,396	139	1,246	1,461	30	2,535	0	12	-51
5	2574.23	165,080	-316	606	858	29	1,590	0	12	-207
6	2574.42	165,320	240	361	1,453	28	1,693	0	12	103
7	2574.50	165,422	102	744	1,446	29	2,085	0	12	-20
8	2574.58	165,523	101	1,413	1,465	29	2,728	0	12	-66
9	2575.19	166,299	776	0	1,436	28	433	0	12	-243
10	2576.20	167,588	1,289	244	1,486	27	441	0	12	-15
11	2576.07	167,421	-167	1,260	1,443	27	2,736	0	12	-149
12	2576.39	167,831	410	536	1,443	27	1,579	0	12	-5
13	2575.39	166,553	-1,278	0	1,442	27	2,658	0	19	-70
14	2574.45	165,358	-1,195	504	1,454	27	3,093	0	20	-67
15	2574.63	165,587	229	0	1,448	27	1,192	0	20	-34
16	2575.39	166,553	966	0	1,431	27	345	1	20	-126
17	2576.26	167,664	1,111	116	1,102	27	83	0	20	-31
18	2576.52	167,997	333	1,318	1,266	27	2,236	0	20	-22
19	2574.92	165,955	-2,042	341	1,457	27	3,867	0	20	20
20	2573.76	164,485	-1,470	0	1,260	27	2,755	0	20	18
21	2572.15	162,459	-2,026	33	1,455	28	3,522	0	20	0
22	2572.63	163,061	602	1,832	1,474	28	2,673	0	20	-39
23	2574.35	165,232	2,171	1,180	1,467	28	458	0	20	-26
24	2575.66	166,898	1,666	1,944	1,472	29	1,705	0	20	-54
25	2576.17	167,549	651	2,991	1,425	29	3,760	0	20	-14
26	2573.63	164,321	-3,228	671	1,454	29	5,317	0	20	-45
27	2573.03	163,564	-757	1,102	1,438	28	3,319	0	20	14
28	2573.39	164,018	454	1,501	1,447	28	2,463	0	20	-39
Total			1,108	21,402	38,841	787	58,024	1	463	-1,434

**Table 25. Pyramid Lake**

Daily Operation

**March 2002**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Feb 28	2573.39	164,018								
1	2573.08	163,627	-391	1,614	1,422	31	3,401	0	26	-31
2	2572.62	163,048	-579	0	1,434	31	1,922	0	26	-96
3	2573.42	164,056	1,008	0	1,384	30	348	0	26	-32
4	2572.16	162,471	-1,585	0	1,592	29	3,149	0	26	-31
5	2571.44	161,570	-901	0	1,508	30	3,088	0	24	673
6	2570.54	160,449	-1,121	709	1,740	29	2,795	0	24	-780
7	2570.17	159,989	-460	0	1,502	31	1,981	0	24	12
8	2570.54	160,449	460	0	2,302	31	2,462	0	24	613
9	2572.20	162,521	2,072	712	2,365	31	253	0	24	-759
10	2574.03	164,826	2,305	367	2,276	31	337	0	24	-8
11	2573.64	164,333	-493	562	1,870	31	2,809	1	24	-122
12	2573.21	163,791	-542	0	1,843	29	2,432	0	24	42
13	2573.90	164,662	871	1,961	2,084	29	3,114	0	24	-65
14	2572.23	162,559	-2,103	0	2,039	29	4,050	0	24	-97
15	2572.25	162,584	25	0	1,872	29	1,799	0	24	-53
16	2573.90	164,662	2,078	0	3,269	32	1,120	0	24	-79
17	2574.96	166,006	1,344	8	3,193	29	1,885	0	24	23
18	2574.52	165,447	-559	737	1,373	31	2,596	0	24	-80
19	2573.10	163,652	-1,795	0	2,063	29	3,860	0	24	-3
20	2570.86	160,847	-2,805	0	529	29	3,290	0	24	-49
21	2569.03	158,578	-2,269	0	691	29	2,951	0	24	-14
22	2567.83	157,102	-1,476	0	1,968	29	3,288	0	24	-161
23	2570.89	160,884	3,782	533	3,280	29	6	0	24	-30
24	2574.01	164,801	3,917	699	3,275	29	0	0	24	-62
25	2573.53	164,194	-607	816	3,273	29	4,635	0	24	-66
26	2573.19	163,766	-428	0	3,185	29	3,595	0	24	-23
27	2572.86	163,350	-416	0	3,098	29	3,475	0	24	-44
28	2573.42	164,056	706	0	3,206	29	2,458	0	25	-46
29	2573.87	164,624	568	746	3,020	29	3,116	0	25	-86
30	2574.09	164,902	278	547	3,083	28	3,358	0	25	3
31	2575.88	167,179	2,277	1,574	3,141	28	2,295	0	25	-146
<b>Total</b>			<b>3,161</b>	<b>11,585</b>	<b>68,880</b>	<b>918</b>	<b>75,868</b>	<b>1</b>	<b>756</b>	<b>-1,597</b>

### Table 25. Pyramid Lake

Daily Operation

April 2002

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Mar 31	2575.88	167,179								
1	2575.31	166,451	-728	1,597	3,088	26	5,406	0	24	-9
2	2575.40	166,566	115	1,606	3,224	26	4,646	0	52	-43
3	2574.11	164,928	-1,638	757	3,219	26	5,538	0	52	-50
4	2572.66	163,099	-1,829	548	3,197	26	5,447	0	51	-102
5	2572.01	162,283	-816	877	3,250	26	4,833	0	51	-85
6	2575.40	166,566	4,283	1,543	3,210	26	348	0	51	-97
7	2576.02	167,357	791	2,141	1,655	26	2,963	0	51	-17
8	2574.57	165,511	-1,846	1,814	1,844	26	5,353	0	51	-126
9	2574.70	165,676	165	2,281	1,804	25	3,863	0	51	-31
10	2572.54	162,948	-2,728	702	1,795	24	5,172	0	51	-26
11	2570.69	160,635	-2,313	741	1,418	23	4,402	0	51	-42
12	2571.20	161,271	636	1,316	2,443	23	3,021	0	51	-74
13	2571.95	162,208	937	0	2,165	22	1,386	1	51	188
14	2576.24	167,639	5,431	4,019	2,074	22	675	0	51	42
15	2575.82	167,102	-537	1,770	2,145	21	4,266	0	51	-156
16	2575.68	166,923	-179	1,949	2,159	22	4,224	0	51	-34
17	2572.57	162,986	-3,937	0	2,074	22	5,541	0	51	-441
18	2572.75	163,212	226	1,745	2,002	23	3,511	0	51	18
19	2570.17	159,989	-3,223	1,070	2,033	22	6,149	0	51	-148
20	2572.36	162,722	2,733	2,837	2,041	22	2,133	0	51	17
21	2575.80	167,076	4,354	4,157	2,168	22	1,904	0	51	-38
22	2571.92	162,170	-4,906	1,974	1,879	23	8,871	0	51	140
23	2570.17	159,989	-2,181	1,431	2,220	23	5,731	1	51	-72
24	2569.59	159,270	-719	1,695	3,138	24	5,437	0	51	-88
25	2568.18	157,531	-1,739	1,820	3,164	25	6,598	0	51	-99
26	2566.88	155,939	-1,592	2,349	3,155	25	6,905	0	63	-153
27	2571.17	161,233	5,294	2,738	3,024	29	365	0	63	-69
28	2575.42	166,592	5,359	4,834	2,892	26	2,245	0	63	-85
29	2574.26	165,118	-1,474	2,139	3,013	29	6,438	0	63	-154
30	2572.54	162,948	-2,170	2,239	3,050	28	7,471	0	63	47
<b>Total</b>			<b>-4,231</b>	<b>54,689</b>	<b>74,543</b>	<b>733</b>	<b>130,842</b>	<b>2</b>	<b>1,565</b>	<b>-1,787</b>

### Table 25. Pyramid Lake

Daily Operation

May 2002

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Apr 30	2572.54	162,948								
1	2571.78	161,995	-953	2,128	3,158	22	6,093	0	69	-99
2	2568.27	157,642	-4,353	0	3,123	21	7,332	0	70	-95
3	2567.27	156,416	-1,226	407	3,115	20	4,677	0	52	-39
4	2570.51	160,411	3,995	1,322	2,903	20	168	0	52	-30
5	2574.48	165,396	4,985	2,417	3,084	19	480	0	53	-2
6	2572.59	163,011	-2,385	1,839	3,224	19	7,302	0	53	-112
7	2570.68	160,623	-2,388	1,052	3,290	18	6,592	0	53	-103
8	2569.22	158,813	-1,810	3,135	2,226	18	7,114	0	52	-23
9	2567.20	156,330	-2,483	2,867	3,164	18	8,379	0	52	-101
10	2565.91	154,758	-1,572	2,743	3,194	18	7,180	0	52	-295
11	2568.86	158,368	3,610	3,927	3,291	18	3,510	0	52	-64
12	2573.80	164,535	6,167	3,998	2,772	17	561	0	53	-6
13	2572.14	162,446	-2,089	3,368	2,493	16	7,891	1	53	-21
14	2571.49	161,633	-813	3,337	3,201	16	7,127	0	53	-187
15	2571.42	161,545	-88	2,996	3,082	16	6,069	0	53	-60
16	2567.02	156,110	-5,435	2,028	3,098	15	10,391	0	53	-132
17	2564.59	153,159	-2,951	2,133	2,996	15	7,964	0	52	-79
18	2570.15	159,964	6,805	4,072	2,867	15	102	0	52	5
19	2573.79	164,523	4,559	2,677	2,919	16	889	0	53	-111
20	2574.33	165,206	683	2,333	1,727	16	3,206	0	53	-134
21	2574.44	165,346	140	1,124	2,263	17	3,188	0	53	-23
22	2569.78	159,505	-5,841	0	2,040	17	7,805	0	53	-40
23	2566.23	155,147	-4,358	1,807	1,773	17	7,791	0	52	-112
24	2564.25	152,749	-2,398	2,981	1,942	16	7,201	0	52	-84
25	2567.93	157,224	4,475	4,133	3,286	16	2,903	0	52	-5
26	2572.75	163,212	5,988	5,113	3,224	16	2,266	1	52	-46
27	2574.86	165,879	2,667	4,480	2,946	16	4,656	0	52	-67
28	2571.18	161,246	-4,633	950	3,125	16	8,600	0	52	-72
29	2569.88	159,629	-1,617	2,687	2,792	13	6,993	0	52	-64
30	2569.38	159,010	-619	4,163	3,267	13	7,938	0	53	-71
31	2568.53	157,962	-1,048	4,363	3,295	12	8,589	0	53	-76
<b>Total</b>			<b>-4,986</b>	<b>80,580</b>	<b>88,880</b>	<b>522</b>	<b>170,957</b>	<b>2</b>	<b>1,661</b>	<b>-2,348</b>

**Table 25. Pyramid Lake**

Daily Operation

**June 2002**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
May 31	2568.53	157,962								
1	2570.17	159,989	2,027	2,786	2,947	12	3,595	0	53	-70
2	2572.43	162,810	2,821	4,902	2,775	12	4,708	0	53	-107
3	2572.67	163,111	301	4,134	2,847	12	6,585	0	53	-54
4	2573.43	164,068	957	4,658	2,995	12	6,561	0	53	-94
5	2573.49	164,144	76	2,625	2,970	11	5,048	0	53	-429
6	2571.35	161,458	-2,686	1,759	3,108	10	7,476	0	53	-34
7	2568.99	158,529	-2,929	2,086	3,066	10	7,909	0	53	-129
8	2573.81	164,548	6,019	3,912	2,854	11	746	0	53	41
9	2574.60	165,549	1,001	1,425	936	11	1,305	0	53	-13
10	2572.74	163,199	-2,350	2,497	2,347	10	7,005	0	53	-146
11	2570.89	160,884	-2,315	2,943	2,115	10	7,221	1	53	-108
12	2570.62	160,548	-336	4,468	2,520	10	7,120	0	53	-161
13	2568.99	158,529	-2,019	4,378	2,444	10	8,528	0	53	-270
14	2567.25	156,391	-2,138	4,600	2,377	10	9,044	0	53	-28
15	2566.77	155,805	-586	4,639	2,536	10	7,623	0	53	-95
16	2570.46	160,349	4,544	6,875	701	9	3,009	0	53	21
17	2570.47	160,362	13	4,381	2,308	9	6,559	0	53	-73
18	2570.80	160,772	410	4,882	2,507	9	6,827	0	53	-108
19	2568.69	158,159	-2,613	4,427	2,753	9	9,611	0	53	-138
20	2567.00	156,086	-2,073	3,716	2,698	10	8,335	1	52	-109
21	2568.21	157,568	1,482	4,194	2,272	10	4,976	0	53	35
22	2572.63	163,061	5,493	4,804	3,089	10	2,247	0	53	-110
23	2573.34	163,955	894	2,752	982	10	3,080	0	53	283
24	2572.64	163,074	-881	3,174	2,543	9	6,227	0	53	-327
25	2571.00	161,021	-2,053	4,270	3,150	9	9,329	0	53	-100
26	2569.42	159,060	-1,961	2,823	3,206	9	7,824	0	53	-122
27	2570.23	160,063	1,003	2,615	3,202	7	4,651	0	53	-117
28	2569.09	158,652	-1,411	1,347	3,294	6	5,709	0	53	-296
29	2564.31	152,821	-5,831	1,341	3,235	6	10,256	0	52	-105
30	2570.38	160,250	7,429	5,279	2,500	6	471	0	51	166
Total			2,288	108,692	77,277	289	179,585	2	1,586	-2,797

### Table 25. Pyramid Lake

Daily Operation

July 2002

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Deliveries 1/	To Piru Creek	
Jun 30	2570.38	160,250								
1	2570.99	161,009	759	4,679	3,103	6	6,701	0	50	-278
2	2570.21	160,039	-970	3,562	3,135	6	7,374	0	50	-249
3	2568.98	158,516	-1,523	2,814	3,104	6	7,267	0	50	-130
4	2575.39	166,553	8,037	5,081	2,991	7	112	0	50	120
5	2570.87	160,859	-5,694	1	2,942	7	8,533	1	50	-60
6	2571.06	161,096	237	2,758	3,051	8	5,458	0	50	-72
7	2573.75	164,472	3,376	3,030	3,142	7	2,725	0	49	-29
8	2574.44	165,346	874	4,691	3,182	7	6,640	0	50	-316
9	2573.51	164,169	-1,177	3,831	3,229	7	8,184	0	49	-11
10	2570.11	159,914	-4,255	1,993	3,246	7	9,192	0	50	-259
11	2568.48	157,900	-2,014	2,493	3,272	7	7,823	0	49	86
12	2566.31	155,244	-2,656	3,729	2,947	7	9,129	0	50	-160
13	2568.14	157,482	2,238	3,712	859	6	2,320	0	49	30
14	2573.75	164,472	6,990	4,387	3,219	6	539	0	50	-33
15	2572.21	162,534	-1,938	3,140	2,889	6	7,729	0	49	-195
16	2570.61	160,536	-1,998	4,527	3,173	7	9,495	2	50	-158
17	2571.35	161,458	922	2,824	3,036	7	4,752	1	49	-143
18	2568.99	158,529	-2,929	3,508	2,992	7	9,245	2	50	-139
19	2567.36	156,526	-2,003	4,018	2,992	7	9,153	3	49	185
20	2571.50	161,645	5,119	3,863	2,911	7	1,560	4	50	-48
21	2574.20	165,042	3,397	4,193	2,111	7	2,771	4	49	-90
22	2573.55	164,220	-822	3,234	2,945	7	6,877	5	50	-76
23	2572.02	162,296	-1,924	3,273	2,998	7	7,843	6	49	-304
24	2570.43	160,312	-1,984	2,137	2,888	7	6,895	7	50	-64
25	2568.94	158,467	-1,845	2,881	2,854	6	6,979	9	49	-549
26	2564.83	153,449	-5,018	798	2,660	7	8,312	9	50	-112
27	2568.73	158,208	4,759	2,947	2,608	7	712	20	49	-22
28	2572.97	163,489	5,281	3,019	2,587	7	111	20	50	-151
29	2572.66	163,099	-390	4,337	2,077	8	6,697	20	49	-46
30	2570.10	159,902	-3,197	0	2,148	8	5,195	20	50	-88
31	2569.21	158,800	-1,102	2,044	2,263	7	5,235	19	49	-113
<b>Total</b>			<b>-1,450</b>	<b>97,504</b>	<b>87,554</b>	<b>213</b>	<b>181,558</b>	<b>152</b>	<b>1,537</b>	<b>-3,474</b>

1/ Includes 3 AF recreation and 149 AF entitlement to United Water Conservation District.



### Table 25. Pyramid Lake

Daily Operation

**August 2002**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Deliveries 1/	To Piru Creek	
Jul 31	2569.21	158,800								
1	2568.69	158,159	-641	3,213	2,157	8	5,881	19	50	-69
2	2567.56	156,771	-1,388	3,030	1,892	8	6,169	19	50	-80
3	2570.70	160,648	3,877	2,783	2,297	8	1,070	20	50	-71
4	2573.95	164,725	4,078	4,344	1,847	8	1,954	20	50	-97
5	2574.56	165,498	773	4,128	1,931	8	5,086	20	50	-138
6	2573.80	164,535	-963	2,678	2,568	9	6,034	20	50	-114
7	2572.55	162,960	-1,575	2,987	2,043	8	6,429	20	50	-114
8	2570.98	160,996	-1,964	2,690	2,065	8	6,356	20	50	-301
9	2566.69	155,707	-5,289	1,288	2,147	8	8,568	20	50	-94
10	2568.59	158,036	2,328	3,572	2,056	8	3,100	20	50	-138
11	2573.69	164,396	6,361	5,056	2,015	7	678	20	50	31
12	2573.36	163,980	-417	3,532	2,159	7	5,902	20	50	-143
13	2571.33	161,433	-2,547	1,392	2,209	7	5,951	21	50	-133
14	2570.05	159,840	-1,593	2,467	2,106	7	6,146	20	50	43
15	2568.53	157,962	-1,878	623	2,044	7	4,383	20	50	-99
16	2567.97	157,274	-688	1,757	1,985	8	4,389	20	49	20
17	2570.56	160,473	3,200	3,585	2,024	8	2,246	20	49	-102
18	2573.36	163,980	3,506	1,852	2,010	10	242	20	49	-55
19	2573.59	164,270	290	3,033	2,397	11	4,993	20	49	-89
20	2573.58	164,258	-13	3,056	1,340	10	4,265	20	49	-85
21	2574.61	165,561	1,304	2,791	1,424	8	2,746	20	49	-104
22	2571.39	161,508	-4,054	1,353	1,341	9	6,673	20	49	-15
23	2567.38	156,550	-4,957	1,056	1,297	9	7,194	20	49	-56
24	2571.19	161,258	4,708	2,970	2,070	9	261	20	49	-11
25	2575.76	167,025	5,767	4,853	1,439	9	350	21	49	-114
26	2574.75	165,739	-1,286	1,935	1,997	9	5,251	20	49	93
27	2571.84	162,070	-3,669	1,307	2,021	8	6,834	20	49	-102
28	2570.38	160,250	-1,821	1,838	2,027	8	5,594	20	49	-31
29	2568.93	158,455	-1,795	1,839	1,991	7	5,514	20	49	-49
30	2568.22	157,581	-874	1,819	2,066	7	4,527	20	49	-170
31	2570.15	159,964	2,383	3,353	2,022	7	2,974	20	49	44
<b>Total</b>			1,164	82,180	60,987	253	137,760	620	1,534	-2,342

1/ Includes 2 AF recreation and 618 AF entitlement to United Water Conservation District.

**Table 25. Pyramid Lake**  
Daily Operation

**September 2002**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Deliveries 1/	To Piru Creek	
Aug 31	2570.15	159,964								
1	2569.71	159,419	-545	2,973	2,303	8	5,708	22	50	-49
2	2569.64	159,332	-87	2,202	1,977	8	4,139	23	48	-64
3	2567.86	157,139	-2,193	923	1,817	8	4,761	24	47	-109
4	2567.58	156,795	-344	1,917	1,869	10	3,553	25	46	-516
5	2568.58	158,023	1,228	3,537	1,903	10	4,455	26	45	304
6	2567.40	156,575	-1,448	749	2,103	12	4,245	27	44	4
7	2569.35	158,973	2,398	1,291	1,501	12	272	28	42	-64
8	2574.15	164,978	6,005	4,677	1,795	12	328	30	41	-80
9	2574.27	165,130	152	2,964	1,936	10	4,584	29	40	-105
10	2573.21	163,791	-1,339	1,574	2,049	10	4,797	30	39	-106
11	2572.27	162,609	-1,182	858	1,796	10	3,719	30	38	-59
12	2571.45	161,583	-1,026	1,861	2,026	10	4,809	31	37	-46
13	2569.43	159,072	-2,511	1,522	1,997	10	5,898	32	36	-74
14	2572.11	162,408	3,336	3,406	2,071	10	2,048	33	36	-34
15	2573.84	164,586	2,178	3,950	1,966	10	3,584	34	35	-95
16	2574.58	165,523	937	3,344	1,756	10	3,984	35	34	-120
17	2573.66	164,359	-1,164	1,672	1,790	10	4,557	36	33	-10
18	2574.13	164,953	594	780	1,786	10	1,834	37	32	-79
19	2573.95	164,725	-228	2,006	1,782	10	3,855	38	31	-102
20	2573.18	163,753	-972	1,807	1,894	10	4,554	41	30	-58
21	2573.87	164,624	871	1,843	2,111	10	3,000	41	29	-23
22	2574.26	165,118	494	3,294	2,097	10	4,450	41	28	-388
23	2573.03	163,564	-1,554	1,622	2,076	10	5,108	42	27	-85
24	2572.16	162,471	-1,093	1,749	1,797	10	4,551	42	26	-30
25	2571.14	161,196	-1,275	1,654	1,931	10	4,739	43	25	-63
26	2569.93	159,691	-1,505	687	1,918	11	3,956	44	24	-97
27	2569.81	159,543	-148	1,760	1,914	12	3,741	45	23	-25
28	2571.34	161,445	1,902	1,365	1,920	12	1,246	46	22	-81
29	2574.52	165,447	4,002	3,144	2,629	12	1,625	47	21	-90
30	2574.09	164,902	-545	3,247	1,891	12	5,574	48	20	-53
Total			4,938	64,378	58,401	309	113,674	1,050	1,029	-2,397

1/ Includes 2 AF recreation and 1,048 AF entitlement to United Water Conservation District.

**Table 25. Pyramid Lake**

Daily Operation

**October 2002**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Deliveries 1/	To Piru Creek	
Sep 30	2574.09	164,902								
1	2572.60	163,023	-1,879	2,496	1,917	14	6,095	52	17	-142
2	2570.94	160,946	-2,077	2,699	2,072	14	6,645	52	16	-149
3	2570.38	160,250	-696	1,953	1,980	14	4,535	53	16	-39
4	2570.90	160,897	647	702	1,834	13	1,805	54	16	-27
5	2571.34	161,445	548	0	1,017	13	374	55	14	-39
6	2574.22	165,067	3,622	1,313	2,945	13	490	56	13	-90
7	2572.84	163,325	-1,742	772	1,784	13	4,167	57	13	-74
8	2571.38	161,495	-1,830	677	1,513	13	3,976	56	13	12
9	2570.38	160,250	-1,245	1,502	1,453	13	4,081	55	12	-65
10	2569.52	159,184	-1,066	1,571	1,539	13	4,051	54	11	-73
11	2568.10	157,433	-1,751	1,641	1,618	12	4,752	53	10	-207
12	2570.39	160,262	2,829	1,852	1,441	12	368	52	10	-46
13	2573.21	163,791	3,529	2,502	1,520	12	407	51	10	-37
14	2573.27	163,866	75	1,243	75	12	1,166	50	10	-29
15	2573.17	163,740	-126	1,228	0	12	1,290	47	9	-20
16	2572.94	163,451	-289	3,565	0	12	3,767	47	9	-43
17	2571.45	161,583	-1,868	1,447	0	12	3,266	43	9	-9
18	2569.93	159,691	-1,892	3,578	0	12	5,369	42	9	-62
19	2571.62	161,795	2,104	1,891	1,185	12	905	39	9	-31
20	2573.86	164,611	2,816	4,590	1,488	13	3,171	35	11	-58
21	2573.71	164,422	-189	1,747	1,566	13	3,402	33	11	-69
22	2572.48	162,873	-1,549	1,003	928	13	3,387	32	10	-64
23	2571.95	162,208	-665	1,130	1,565	13	3,332	29	11	-1
24	2571.34	161,445	-763	807	1,570	14	3,098	27	11	-18
25	2570.61	160,536	-909	672	1,561	14	3,053	25	11	-67
26	2572.08	162,371	1,835	698	1,467	15	298	23	11	-13
27	2575.94	167,255	4,884	4,599	1,593	15	1,207	21	11	-84
28	2575.46	166,643	-612	1,636	1,441	14	3,559	19	11	-114
29	2574.70	165,676	-967	529	1,409	14	2,821	18	10	-70
30	2573.66	164,359	-1,317	380	1,423	14	3,121	18	9	14
31	2572.46	162,847	-1,512	0	1,478	15	2,940	17	10	-38
<b>Total</b>			<b>-2,055</b>	<b>50,423</b>	<b>41,382</b>	<b>408</b>	<b>90,898</b>	<b>1,265</b>	<b>353</b>	<b>-1,752</b>

1/ Includes 1 AF recreation and 1,264 AF entitlement to United Water Conservation District.

### Table 25. Pyramid Lake

Daily Operation

November 2002

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Deliveries 1/	To Piru Creek	
Oct 31	2572.46	162,847								
1	2571.68	161,870	-977	0	1,902	14	2,885	14	13	19
2	2572.57	162,986	1,116	0	1,625	14	450	14	13	-46
3	2573.45	164,093	1,107	506	1,300	14	607	12	15	-79
4	2573.51	164,169	76	572	2,991	14	3,430	10	14	-47
5	2573.42	164,056	-113	1,071	3,096	14	4,172	8	14	-100
6	2572.82	163,300	-756	565	2,920	15	4,167	6	12	-71
7	2572.02	162,296	-1,004	615	2,921	16	4,555	4	17	20
8	2570.92	160,921	-1,375	1,196	2,870	31	5,477	2	14	21
9	2574.37	165,257	4,336	1,981	3,181	22	858	1	12	23
10	2576.77	168,318	3,061	3,661	2,329	19	2,826	0	12	-110
11	2574.65	165,612	-2,706	0	2,301	19	4,963	0	12	-51
12	2572.79	163,262	-2,350	0	2,663	17	4,963	0	12	-55
13	2571.60	161,770	-1,492	465	2,364	17	4,263	0	12	-63
14	2570.13	159,939	-1,831	1,444	2,394	17	5,615	0	12	-59
15	2569.07	158,628	-1,311	1,188	2,407	16	4,836	1	12	-73
16	2571.54	161,695	3,067	1,171	2,356	16	453	0	12	-11
17	2574.67	165,638	3,943	3,791	2,339	16	2,058	0	12	-133
18	2573.90	164,662	-976	2,420	2,605	16	5,973	0	12	-32
19	2574.97	166,019	1,357	1,995	2,801	16	3,345	0	12	-98
20	2572.89	163,388	-2,631	0	2,192	16	4,868	0	12	41
21	2570.97	160,984	-2,404	883	2,603	16	5,798	0	12	-96
22	2567.48	156,673	-4,311	706	3,070	16	8,000	0	12	-91
23	2569.40	159,035	2,362	512	2,889	17	973	0	12	-71
24	2573.31	163,917	4,882	2,503	3,117	17	727	0	12	-16
25	2570.92	160,921	-2,996	1,506	2,689	17	7,129	0	12	-67
26	2567.20	156,330	-4,591	0	2,781	17	7,293	0	12	-84
27	2564.98	153,630	-2,700	1,289	2,716	17	6,619	0	12	-91
28	2567.25	156,391	2,761	1,357	2,736	17	1,304	0	12	-33
29	2568.56	157,999	1,608	1,064	2,742	17	2,133	0	12	-70
30	2571.82	162,045	4,046	1,439	2,674	17	0	0	12	-72
<b>Total</b>			<b>-802</b>	<b>33,900</b>	<b>77,574</b>	<b>507</b>	<b>110,740</b>	<b>72</b>	<b>376</b>	<b>-1,595</b>

1/ Includes 1 AF recreation and 71 AF entitlement to United Water Conservation District.

**Table 25. Pyramid Lake**

Daily Operation

**December 2002**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Deliveries	To Piru Creek	
Nov 30	2571.82	162,045								
1	2574.80	165,803	3,758	2,521	2,725	18	1,444	0	12	-50
2	2572.39	162,760	-3,043	0	3,109	17	6,111	0	12	-46
3	2572.01	162,283	-477	796	3,042	17	4,267	0	12	-53
4	2571.69	161,883	-400	1,491	2,916	17	4,785	0	12	-27
5	2571.74	161,945	62	613	2,813	17	3,284	0	12	-85
6	2569.40	159,035	-2,910	0	2,843	17	5,695	0	12	-63
7	2571.19	161,258	2,223	0	3,240	17	1,002	0	12	-20
8	2574.53	165,460	4,202	1,860	3,137	17	568	0	12	-232
9	2574.50	165,422	-38	2,130	2,859	17	4,971	0	12	-61
10	2572.97	163,489	-1,933	492	2,780	17	5,124	0	12	-86
11	2571.72	161,920	-1,569	1,499	2,814	17	5,764	0	12	-123
12	2570.25	160,088	-1,832	0	2,457	17	4,926	0	12	632
13	2569.22	158,813	-1,275	1,291	3,058	17	5,568	0	12	-61
14	2571.83	162,058	3,245	1,559	3,238	18	1,472	0	12	-86
15	2575.37	166,528	4,470	1,751	3,150	18	376	0	12	-61
16	2577.21	168,883	2,355	2,177	3,153	40	3,000	0	12	-3
17	2574.35	165,232	-3,651	1,149	835	26	5,638	0	12	-11
18	2571.28	161,370	-3,862	2,161	0	25	5,968	0	12	-68
19	2567.90	157,188	-4,182	1,085	248	59	5,594	0	12	32
20	2569.18	158,763	1,575	0	1,572	32	137	0	12	120
21	2570.75	160,710	1,947	0	2,109	26	83	0	12	-93
22	2573.08	163,627	2,917	2,010	1,581	24	684	0	12	-2
23	2571.98	162,246	-1,381	822	2,557	23	4,736	0	12	-35
24	2570.50	160,399	-1,847	0	3,103	22	4,873	0	12	-87
25	2571.36	161,470	1,071	673	3,246	22	2,831	0	12	-27
26	2570.32	160,175	-1,295	668	2,930	21	4,876	0	12	-26
27	2571.13	161,183	1,008	0	3,201	21	2,130	0	13	-71
28	2572.95	163,463	2,280	1,307	3,193	22	2,171	0	13	-58
29	2575.80	167,076	3,613	2,828	2,739	22	1,788	0	13	-175
30	2574.62	165,574	-1,502	1,934	3,023	25	6,489	0	13	18
31	2574.54	165,473	-101	1,481	2,958	25	4,551	0	12	-2
<b>Total</b>			<b>3,428</b>	<b>34,298</b>	<b>80,629</b>	<b>693</b>	<b>110,906</b>	<b>0</b>	<b>376</b>	<b>-910</b>

### Table 25. Pyramid Lake

Daily Operation

January 2003

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Dec 31	2574.54	165,473								
1	2575.35	166,502	1,029	1,425	3,296	25	3,692	0	12	-13
2	2571.84	162,070	-4,432	597	1,097	24	6,110	0	12	-28
3	2570.17	159,989	-2,081	2,479	1,353	24	5,911	0	12	-14
4	2573.85	164,599	4,610	4,899	1,084	24	1,381	0	12	-4
5	2575.58	166,796	2,197	4,420	1,092	24	3,211	0	12	-116
6	2575.55	166,757	-39	2,376	2	24	2,461	0	12	32
7	2574.76	165,752	-1,005	1,898	0	24	2,878	0	12	-37
8	2573.23	163,816	-1,936	2,493	0	25	4,251	0	12	-191
9	2572.43	162,810	-1,006	1,559	0	26	2,519	0	12	-60
10	2572.07	162,358	-452	2,591	0	26	3,039	0	12	-18
11	2572.65	163,086	728	2,123	0	26	1,397	0	12	-12
12	2572.53	162,935	-151	2,528	0	25	2,681	0	12	-11
13	2573.56	164,232	1,297	2,653	0	25	1,363	0	12	-6
14	2573.64	164,333	101	2,980	0	24	2,896	0	12	5
15	2573.60	164,283	-50	2,547	0	24	2,560	0	12	-49
16	2573.29	163,892	-391	1,629	0	23	2,007	0	12	-24
17	2572.85	163,338	-554	1,638	0	23	2,204	1	12	2
18	2572.86	163,350	12	388	0	23	339	0	12	-48
19	2573.85	164,599	1,249	1,802	0	23	510	0	12	-54
20	2574.00	164,788	189	2,000	0	23	1,793	0	12	-29
21	2574.45	165,358	570	2,016	0	23	1,400	0	12	-57
22	2573.94	164,712	-646	1,429	0	23	2,109	0	12	23
23	2573.27	163,866	-846	1,212	0	23	2,037	0	12	-32
24	2573.08	163,627	-239	2,948	0	23	3,232	0	12	34
25	2574.26	165,118	1,491	3,181	0	25	1,633	0	12	-70
26	2575.34	166,490	1,372	1,728	0	25	347	0	12	-22
27	2575.99	167,319	829	3,350	0	24	2,501	0	12	-32
28	2575.98	167,306	-13	2,484	653	22	3,135	0	13	-24
29	2575.98	167,306	0	2,363	786	22	3,195	0	13	37
30	2575.13	166,222	-1,084	2,179	0	21	3,230	0	13	-41
31	2573.56	164,232	-1,990	2,229	0	21	4,248	0	13	21
<b>Total</b>			<b>-1,241</b>	<b>70,144</b>	<b>9,363</b>	<b>737</b>	<b>80,270</b>	<b>1</b>	<b>376</b>	<b>-838</b>

### Table 25. Pyramid Lake

Daily Operation

February 2003

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Jan 31	2573.56	164,232								
1	2574.72	165,701	1,469	3,230	0	21	1,711	0	12	-59
2	2576.26	167,664	1,963	2,701	0	21	624	0	12	-123
3	2576.44	167,895	231	1,913	0	21	1,610	0	12	-81
4	2576.58	168,074	179	1,553	0	21	1,456	0	12	73
5	2576.78	168,331	257	589	0	21	336	0	12	-5
6	2576.52	167,997	-334	0	0	20	309	0	12	-33
7	2576.78	168,331	334	1,227	0	20	916	0	12	15
8	2576.56	168,049	-282	0	0	20	219	0	12	-71
9	2576.33	167,754	-295	0	0	20	262	0	12	-41
10	2575.62	166,847	-907	0	0	20	886	0	12	-29
11	2575.32	166,464	-383	0	0	40	457	0	12	46
12	2576.78	168,331	1,867	0	63	1,457	480	0	12	839
13	2576.83	168,395	64	0	0	918	903	0	12	61
14	2575.10	166,184	-2,211	717	0	291	3,099	0	12	-108
15	2574.93	165,968	-216	0	0	164	366	0	12	-2
16	2574.80	165,803	-165	0	0	113	273	0	12	7
17	2576.40	167,844	2,041	1,902	0	87	60	0	12	124
18	2575.45	166,630	-1,214	1,503	0	71	2,716	1	12	-59
19	2575.12	166,210	-420	1,253	0	60	1,743	0	12	22
20	2574.22	165,067	-1,143	0	0	55	1,140	0	12	-46
21	2573.40	164,030	-1,037	581	0	50	1,646	0	12	-10
22	2574.54	165,473	1,443	1,872	0	46	481	0	12	18
23	2574.59	165,536	63	2,355	0	41	2,243	0	12	-78
24	2574.77	165,765	229	523	567	74	1,092	0	13	170
25	2573.97	164,750	-1,015	0	264	128	1,353	0	13	-41
26	2572.77	163,237	-1,513	371	0	81	1,928	0	13	-24
27	2572.87	163,363	126	0	3,026	70	2,898	0	13	-59
28	2573.80	164,535	1,172	931	3,065	58	2,835	0	13	-34
<b>Total</b>			303	23,221	6,985	4,009	34,042	1	341	472

### Table 25. Pyramid Lake

Daily Operation

March 2003

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)	
				Project		Natural	Project		Natural		
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek		
Feb 28	2573.80	164,535									
1	2575.48	166,668	2,133	0	3,175	56	1,069	0	12	-17	
2	2577.18	168,845	2,177	0	2,351	54	117	0	12	-99	
3	2574.89	165,917	-2,928	0	2,021	47	4,967	0	12	-17	
4	2574.58	165,523	-394	0	3,019	50	3,424	0	12	-27	
5	2573.73	164,447	-1,076	0	3,020	45	4,056	0	12	-73	
6	2572.49	162,885	-1,562	0	2,147	43	3,720	0	12	-20	
7	2571.71	161,908	-977	0	2,731	41	3,682	0	12	-55	
8	2573.47	164,119	2,211	0	2,603	39	327	0	12	-92	
9	2574.66	165,625	1,506	0	1,964	39	504	0	12	19	
10	2573.73	164,447	-1,178	0	2,491	37	3,597	0	12	-97	
11	2572.50	162,898	-1,549	0	2,421	37	3,808	0	12	-187	
12	2571.60	161,770	-1,128	889	1,936	35	4,046	0	12	70	
13	2571.71	161,908	138	686	3,194	35	3,604	0	12	-161	
14	2569.40	159,035	-2,873	0	3,299	35	5,928	0	12	-267	
15	2571.30	161,395	2,360	0	2,958	609	1,414	1	12	220	
16	2573.90	164,662	3,267	986	1,998	520	194	0	12	-31	
17	2573.90	164,662	0	941	2,810	242	4,039	0	12	58	
18	2573.91	164,675	13	0	2,810	160	2,796	0	12	-149	
19	2574.84	165,853	1,178	0	3,010	125	1,849	0	12	-96	
20	2574.12	164,940	-913	0	2,896	103	3,771	0	20	-121	
21	2573.15	163,715	-1,225	0	2,734	87	3,841	0	70	-135	
22	2570.70	160,648	-3,067	0	809	76	3,851	0	70	-31	
23	2572.23	162,559	1,911	9	3,230	69	1,369	0	67	39	
24	2572.82	163,300	741	1,970	2,031	63	3,080	0	53	-190	
25	2572.60	163,023	-277	2,166	2,025	58	4,417	0	53	-56	
26	2572.38	162,747	-276	2,359	2,372	52	4,934	0	54	-71	
27	2572.03	162,308	-439	1,152	3,266	50	4,699	0	54	-154	
28	2570.62	160,548	-1,760	545	3,070	48	5,261	0	54	-108	
29	2572.67	163,111	2,563	575	2,920	46	869	0	54	-55	
30	2574.72	165,701	2,590	893	2,724	41	992	0	54	-22	
31	2570.53	160,436	-5,265	0	3,131	42	8,284	0	54	-100	
<b>Total</b>			<b>-4,099</b>		<b>13,171</b>	<b>81,166</b>	<b>2,984</b>	<b>98,509</b>	<b>1</b>	<b>885</b>	<b>-2,025</b>



**Table 25. Pyramid Lake**

Daily Operation

**April 2003**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow			Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek	
Mar 31	2570.53	160,436								
1	2571.90	162,145	1,709	609	3,202	42	1,994	0	52	-98
2	2572.56	162,973	828	382	3,303	40	2,664	0	53	-180
3	2572.83	163,312	339	0	3,307	37	2,884	0	53	-68
4	2574.46	165,371	2,059	0	3,257	35	1,075	0	52	-106
5	2575.53	166,732	1,361	0	3,316	35	1,845	0	53	-92
6	2577.09	168,729	1,997	12	3,177	33	1,222	0	53	50
7	2575.90	167,204	-1,525	1,221	2,465	30	5,024	0	53	-164
8	2574.72	165,701	-1,503	1,580	2,621	29	5,542	0	53	-138
9	2573.84	164,586	-1,115	0	2,776	28	3,896	0	53	30
10	2573.06	163,602	-984	0	2,692	26	3,618	0	53	-31
11	2572.28	162,622	-980	0	2,633	26	3,377	0	53	-209
12	2574.86	165,879	3,257	958	2,679	25	244	1	52	-108
13	2575.91	167,217	1,338	12	1,567	56	480	0	53	236
14	2575.86	167,153	-64	1,286	2,718	465	4,842	0	242	551
15	2575.32	166,464	-689	1,534	3,302	297	5,387	0	374	-61
16	2573.86	164,611	-1,853	808	2,709	161	5,357	0	149	-25
17	2572.82	163,300	-1,311	1,512	2,983	122	5,656	0	120	-152
18	2571.07	161,108	-2,192	1,379	2,829	96	6,401	0	81	-14
19	2572.33	162,684	1,576	0	2,747	75	1,185	0	80	19
20	2574.70	165,676	2,992	950	2,189	65	92	0	80	-40
21	2574.45	165,358	-318	2,461	3,017	63	5,641	0	53	-165
22	2574.20	165,042	-316	2,053	3,140	59	5,411	0	53	-104
23	2572.83	163,312	-1,730	1,991	3,198	56	6,913	0	53	-9
24	2571.17	161,233	-2,079	721	3,298	52	6,039	0	53	-58
25	2572.97	163,489	2,256	2,317	2,932	52	2,924	0	53	-68
26	2573.81	164,548	1,059	0	2,911	47	1,796	0	53	-50
27	2576.29	167,703	3,155	51	3,295	47	124	0	52	-62
28	2575.28	166,413	-1,290	2,197	2,744	47	6,125	0	52	-101
29	2572.99	163,514	-2,899	1,373	2,658	47	6,706	0	52	-219
30	2571.53	161,683	-1,831	1,269	3,246	46	6,282	0	52	-58
Total			1,247	26,676	86,911	2,239	110,746	1	2,338	-1,494

### Table 25. Pyramid Lake

Daily Operation

May 2003

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek		
Apr 30	2571.53	161,683									
1	2570.10	159,902	-1,781	1,731	2,999	62	6,415	0	53	0	-105
2	2568.91	158,430	-1,472	1,726	3,298	83	6,488	0	53	0	-38
3	2573.60	164,283	5,853	3,021	3,290	598	1,025	0	56	0	25
4	2576.09	167,447	3,164	3,159	3,294	467	2,814	0	287	0	-655
5	2574.29	165,156	-2,291	1,402	3,171	218	6,850	0	199	0	-33
6	2573.12	163,677	-1,479	3,493	3,295	154	8,019	0	199	0	-203
7	2570.86	160,847	-2,830	2,835	3,030	132	8,621	0	199	0	-7
8	2568.23	157,593	-3,254	1,583	3,024	114	7,665	0	199	0	-111
9	2567.19	156,318	-1,275	2,604	3,206	94	6,945	0	199	0	-35
10	2570.66	160,598	4,280	5,066	3,173	83	3,798	0	199	0	-45
11	2575.57	166,783	6,185	5,184	3,197	74	1,947	0	199	0	-124
12	2573.86	164,611	-2,172	2,860	3,291	67	8,139	0	199	0	-52
13	2572.71	163,161	-1,450	3,670	3,199	62	8,111	0	199	0	-71
14	2573.84	164,586	1,425	3,566	3,049	60	4,851	0	199	0	-200
15	2570.91	160,909	-3,677	2,109	2,887	65	8,720	0	199	0	181
16	2567.96	157,261	-3,648	2,007	3,283	53	8,708	0	198	0	-85
17	2570.84	160,822	3,561	2,483	3,260	49	1,934	0	198	0	-99
18	2574.72	165,701	4,879	2,624	2,892	46	415	1	198	0	-69
19	2574.43	165,333	-368	2,930	1,669	41	4,762	0	157	0	-89
20	2572.39	162,760	-2,573	3,137	1,704	39	7,225	0	154	0	-74
21	2570.69	160,635	-2,125	2,937	1,997	37	6,995	0	0	100	-1
22	2568.96	158,492	-2,143	3,182	1,700	35	6,869	0	0	100	-91
23	2567.08	156,184	-2,308	3,820	1,882	34	7,915	0	0	100	-29
24	2571.55	161,708	5,524	5,557	1,686	33	1,627	0	0	100	-25
25	2576.32	167,741	6,033	4,962	1,926	32	667	0	0	100	-120
26	2574.32	165,194	-2,547	1,117	1,511	32	5,098	0	0	100	-9
27	2572.88	163,375	-1,819	4,182	1,631	28	7,475	0	0	100	-85
28	2569.85	159,592	-3,783	3,927	1,808	28	9,400	0	0	100	-46
29	2569.21	158,800	-792	4,180	2,096	27	6,902	0	0	100	-93
30	2566.82	155,866	-2,934	2,947	1,934	22	7,685	0	0	99	-53
31	2571.53	161,683	5,817	4,285	1,926	25	310	0	0	99	-10
<b>Total</b>			<b>0</b>	<b>98,286</b>	<b>80,308</b>	<b>2,894</b>	<b>174,395</b>	<b>1</b>	<b>3,543</b>	<b>1,098</b>	<b>-2,451</b>

**Table 25. Pyramid Lake**

Daily Operation

**June 2003**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek		
May 31	2571.53	161,683									
1	2575.56	166,770	5,087	4,051	2,129	23	986	0	0	100	-30
2	2574.27	165,130	-1,640	2,795	2,498	22	6,729	0	0	100	-126
3	2573.26	163,854	-1,276	3,845	2,479	21	7,413	0	0	100	-108
4	2571.22	161,296	-2,558	3,537	2,344	21	8,340	0	0	100	-20
5	2569.24	158,837	-2,459	4,359	2,387	21	8,968	0	0	100	-158
6	2567.89	157,175	-1,662	3,106	2,189	20	6,884	0	0	100	7
7	2572.80	163,275	6,100	5,504	2,809	20	2,032	0	0	100	-101
8	2576.85	168,421	5,146	5,957	2,777	18	3,441	0	0	100	-65
9	2575.15	166,248	-2,173	990	994	18	4,078	1	0	100	4
10	2573.37	163,993	-2,255	3,004	1,003	19	6,046	0	0	100	-135
11	2572.58	162,998	-995	4,299	1,093	19	6,294	0	0	100	-12
12	2571.02	161,046	-1,952	4,447	1,108	18	7,431	0	0	100	6
13	2568.23	157,593	-3,453	4,464	913	17	8,703	0	0	100	-44
14	2571.49	161,633	4,040	4,646	956	16	1,459	0	0	100	-19
15	2574.43	165,333	3,700	4,389	1,036	17	1,538	0	0	102	-102
16	2573.19	163,766	-1,567	3,375	2,107	17	6,939	0	0	102	-25
17	2571.50	161,645	-2,121	1,832	2,046	14	5,717	0	0	102	-194
18	2570.90	160,897	-748	0	2,110	12	2,705	1	0	102	-62
19	2570.31	160,163	-734	1,418	2,118	13	4,064	0	0	102	-117
20	2569.07	158,628	-1,535	3,072	2,348	14	6,816	0	0	102	-51
21	2571.70	161,895	3,267	4,846	2,065	14	3,472	0	0	102	-84
22	2576.46	167,921	6,026	4,537	2,091	14	347	0	0	102	-167
23	2576.04	167,383	-538	1,123	2,440	14	4,003	0	0	102	-10
24	2574.69	165,663	-1,720	1,808	2,068	13	5,450	0	0	102	-57
25	2573.71	164,422	-1,241	1,775	2,032	12	4,952	0	0	102	-6
26	2572.16	162,471	-1,951	716	2,123	11	4,690	0	0	102	-9
27	2571.68	161,870	-601	2,022	2,221	10	4,691	1	0	102	-60
28	2573.25	163,841	1,971	3,497	2,104	8	3,457	0	0	102	-79
29	2575.17	166,273	2,432	3,372	1,957	8	2,706	0	0	102	-97
30	2574.25	165,105	-1,168	3,622	1,740	7	6,367	0	0	102	-68
<b>Total</b>			<b>3,422</b>	<b>96,408</b>	<b>58,285</b>	<b>471</b>	<b>146,718</b>	<b>3</b>	<b>0</b>	<b>3,032</b>	<b>-1,989</b>

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**July 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback	Warne Powerplant	Stream Flow	Castaic Powerplant Generation	Recreation Deliveries	To Piru Creek		
Jun 30	2574.25	165,105									
1	2572.04	162,321	-2,784	869	1,998	7	5,474	0	0	102	-82
2	2568.84	158,344	-3,977	1,628	1,414	7	6,857	0	0	102	-67
3	2568.00	157,310	-1,034	2,814	2,027	6	5,749	0	0	102	-30
4	2568.07	157,396	86	3,167	1,981	6	4,929	0	0	102	-37
5	2569.69	159,394	1,998	3,630	2,120	6	3,516	0	0	102	-140
6	2574.45	165,358	5,964	4,255	1,953	6	180	0	0	102	32
7	2573.99	164,776	-582	3,357	2,054	6	5,783	0	0	102	-114
8	2573.41	164,043	-733	3,887	2,136	5	6,601	1	0	102	-57
9	2571.86	162,095	-1,948	3,929	2,298	6	8,006	0	0	102	-73
10	2568.73	158,208	-3,887	1,058	2,144	6	6,874	0	0	102	-119
11	2566.98	156,061	-2,147	1,415	2,250	6	5,413	0	0	102	-303
12	2568.26	157,630	1,569	1,599	1,851	6	1,731	0	0	102	-54
13	2570.91	160,909	3,279	1,982	1,866	6	442	0	0	102	-31
14	2570.75	160,710	-199	1,814	2,949	6	4,837	0	0	102	-29
15	2571.23	161,308	598	1,706	2,954	7	3,852	0	0	102	-115
16	2569.57	159,245	-2,063	0	2,909	5	4,824	0	0	102	-51
17	2570.55	160,461	1,216	1,795	2,945	4	3,351	0	0	102	-75
18	2569.43	159,072	-1,389	2,565	2,963	4	6,634	0	0	102	-185
19	2571.65	161,833	2,761	2,407	2,923	6	2,414	0	0	102	-59
20	2575.00	166,057	4,224	1,840	2,575	7	0	0	0	102	-96
21	2574.14	164,966	-1,091	718	2,752	7	4,382	1	0	102	-83
22	2573.69	164,396	-570	862	2,723	7	3,849	0	0	102	-211
23	2572.79	163,262	-1,134	1,812	2,542	6	5,319	0	0	102	-73
24	2570.99	161,009	-2,253	1,276	1,267	6	4,703	0	0	102	3
25	2569.14	158,714	-2,295	1,897	1,622	6	5,643	0	0	101	-76
26	2571.34	161,445	2,731	4,145	1,622	6	2,803	0	0	101	-138
27	2572.44	162,822	1,377	2,270	1,624	6	2,608	0	0	101	186
28	2572.58	162,998	176	2,596	1,624	6	3,911	0	0	101	-38
29	2570.96	160,971	-2,027	2,415	1,625	6	5,812	0	0	101	-160
30	2568.86	158,368	-2,603	0	1,893	6	4,307	0	0	101	-94
31	2568.75	158,233	-135	0	1,981	7	1,602	0	0	101	-420
<b>Total</b>			<b>-6,872</b>	<b>63,708</b>	<b>67,585</b>	<b>187</b>	<b>132,406</b>	<b>2</b>	<b>0</b>	<b>3,155</b>	<b>-2,789</b>

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**August 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Jul 31	2568.75	158,233									
1	2570.14	159,952	1,719	0	3,289	6	1,737	0	0	105	266
2	2571.91	162,158	2,206	0	3,288	15	933	0	0	105	-59
3	2576.66	168,177	6,019	3,696	3,293	15	763	0	0	105	-117
4	2575.07	166,146	-2,031	1,316	3,059	11	6,583	0	0	105	271
5	2573.20	163,778	-2,368	758	3,173	9	6,066	0	0	105	-137
6	2571.79	162,008	-1,770	2,665	3,295	9	7,470	0	0	105	-164
7	2570.30	160,150	-1,858	2,707	3,287	8	7,567	0	0	104	-189
8	2569.40	159,035	-1,115	2,026	3,280	8	6,265	1	0	103	-60
9	2569.52	159,184	149	752	3,161	8	3,499	0	0	102	-171
10	2569.07	158,628	-556	291	3,279	8	3,899	0	0	96	-139
11	2572.19	162,509	3,881	5,463	3,119	8	4,470	0	0	95	-144
12	2571.54	161,695	-814	2,150	3,080	8	5,849	0	0	93	-110
13	2570.78	160,747	-948	1,613	3,279	8	5,665	0	0	91	-92
14	2571.10	161,146	399	2,765	3,275	7	5,475	0	0	89	-84
15	2571.97	162,233	1,087	3,174	3,271	7	5,206	0	0	87	-72
16	2571.99	162,258	25	1,040	3,118	7	3,973	0	0	85	-82
17	2574.44	165,346	3,088	3,441	3,281	6	3,390	0	0	83	-167
18	2574.60	165,549	203	2,229	3,178	6	5,086	0	0	81	-43
19	2573.40	164,030	-1,519	706	3,172	6	5,213	0	0	79	-111
20	2572.84	163,325	-705	2,719	3,232	7	6,498	0	0	77	-88
21	2571.78	161,995	-1,330	1,462	3,284	8	5,866	1	0	75	-142
22	2569.89	159,642	-2,353	1,324	3,282	9	6,840	0	0	73	-55
23	2571.88	162,120	2,478	1,203	3,274	9	1,833	0	0	71	-104
24	2575.40	166,566	4,446	3,687	3,257	9	2,586	0	0	69	148
25	2575.13	166,222	-344	1,759	3,290	9	5,175	0	0	67	-160
26	2574.00	164,788	-1,434	955	2,944	9	5,213	0	0	65	-64
27	2572.79	163,262	-1,526	1,476	3,292	10	6,176	0	0	63	-65
28	2571.35	161,458	-1,804	601	3,291	8	5,524	0	0	61	-119
29	2569.57	159,245	-2,213	387	3,283	7	5,761	0	0	59	-70
30	2572.50	162,898	3,653	2,243	3,212	7	1,788	0	0	57	36
31	2573.46	164,106	1,208	2,550	3,283	8	4,498	0	0	55	-80
<b>Total</b>			<b>5,873</b>	<b>57,158</b>	<b>100,101</b>	<b>260</b>	<b>146,867</b>	<b>2</b>	<b>0</b>	<b>2,610</b>	<b>-2,167</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**September 2003**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		United Water Agency	Natural To Piru Creek	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries			
Aug 31	2573.46	164,106									
1	2574.32	165,194	1,088	2,665	3,282	8	4,742	0	0	52	-73
2	2573.44	164,081	-1,113	0	2,401	8	3,363	0	0	50	-109
3	2573.58	164,258	177	0	2,355	8	2,628	0	0	48	490
4	2572.24	162,571	-1,687	521	1,415	8	3,492	0	0	46	-93
5	2570.68	160,623	-1,948	1,142	1,407	8	4,229	0	0	44	-232
6	2572.15	162,459	1,836	1,169	1,394	8	684	0	0	42	-9
7	2577.09	168,729	6,270	4,982	1,523	8	18	0	0	40	-185
8	2575.04	166,108	-2,621	748	1,919	8	5,240	1	0	39	-16
9	2574.02	164,814	-1,294	2,847	2,154	8	5,980	0	0	37	-286
10	2572.59	163,011	-1,803	2,642	2,039	8	6,326	0	0	35	-131
11	2571.35	161,458	-1,553	2,757	2,039	8	6,228	0	0	33	-96
12	2569.33	158,949	-2,509	2,562	1,396	8	6,364	0	0	31	-80
13	2572.87	163,363	4,414	3,090	2,065	7	720	0	0	29	1
14	2576.23	167,626	4,263	4,587	1,986	7	2,231	0	0	27	-59
15	2574.50	165,422	-2,204	1,629	2,605	7	6,331	0	0	25	-89
16	2573.59	164,270	-1,152	3,174	2,594	6	6,833	0	0	23	-70
17	2571.90	162,145	-2,125	2,015	2,550	6	6,615	0	0	21	-60
18	2571.06	161,096	-1,049	3,770	2,035	6	6,761	0	0	20	-79
19	2568.72	158,196	-2,900	2,507	2,464	6	7,797	0	0	18	-62
20	2572.10	162,396	4,200	3,283	2,399	6	1,397	0	0	16	-75
21	2574.62	165,574	3,178	5,291	2,069	6	4,177	1	0	13	3
22	2574.34	165,219	-355	2,321	2,094	6	4,621	0	0	13	-142
23	2574.16	164,991	-228	1,568	1,836	6	3,574	0	0	13	-51
24	2573.30	163,904	-1,087	714	1,641	6	3,326	0	0	13	-109
25	2572.94	163,451	-453	2,485	1,726	7	4,657	0	0	13	-1
26	2572.00	162,271	-1,180	1,743	1,977	7	4,816	0	0	13	-78
27	2573.22	163,803	1,532	0	1,907	7	274	0	0	13	-95
28	2575.44	166,617	2,814	2,489	785	7	423	0	0	13	-31
29	2574.79	165,790	-827	1,630	3,136	8	5,456	0	11	6	-128
30	2574.24	165,092	-698	316	3,306	8	4,231	0	12	0	-85
Total			986	64,647	62,499	215	123,534	2	23	786	-2,030

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**October 2003**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Sep 30	2574.24	165,092									
1	2572.86	163,350	-1,742	0	3,301	8	4,960	0	12	0	-79
2	2572.38	162,747	-603	2,387	3,186	8	6,058	0	12	0	-114
3	2572.51	162,910	163	2,898	3,143	9	5,800	0	12	0	-75
4	2575.27	166,400	3,490	3,161	2,659	8	2,340	0	12	0	14
5	2574.91	165,942	-458	2,434	1,595	9	4,440	0	12	0	-44
6	2574.38	165,270	-672	2,077	333	9	2,897	0	12	0	-182
7	2572.75	163,212	-2,058	2,771	0	9	4,803	0	12	0	-23
8	2570.99	161,009	-2,203	1,469	0	9	3,566	1	12	0	-102
9	2569.94	159,704	-1,305	1,426	0	10	2,728	0	12	0	-1
10	2570.19	160,014	310	2,580	0	10	2,234	0	11	0	-35
11	2573.02	163,551	3,537	4,341	1,499	10	2,289	0	12	0	-12
12	2575.07	166,146	2,595	4,697	1,319	10	3,467	0	12	0	48
13	2574.11	164,928	-1,218	2,540	1,310	10	4,946	0	12	0	-120
14	2572.86	163,350	-1,578	1,462	1,464	9	4,464	0	12	0	-37
15	2571.84	162,070	-1,280	1,961	1,441	9	4,657	0	12	0	-22
16	2570.15	159,964	-2,106	873	1,181	9	4,238	0	12	0	81
17	2568.11	157,445	-2,519	1,522	1,632	9	5,391	0	11	0	-280
18	2566.53	155,512	-1,933	1,167	1,264	9	4,312	0	12	0	-49
19	2569.61	159,295	3,783	3,015	1,445	9	747	0	12	0	73
20	2569.16	158,739	-556	1,920	1,495	9	3,945	0	11	0	-24
21	2570.20	160,026	1,287	2,481	1,436	9	2,574	1	11	0	-53
22	2570.50	160,399	373	2,614	1,479	9	3,655	0	11	0	-63
23	2572.02	162,296	1,897	3,032	1,156	9	2,219	0	11	0	-70
24	2573.28	163,879	1,583	2,831	324	10	1,575	0	11	0	4
25	2574.58	165,523	1,644	512	1,532	9	339	0	11	0	-59
26	2575.80	167,076	1,553	1,157	1,633	10	1,128	0	11	0	-108
27	2575.40	166,566	-510	1,268	1,435	8	3,183	0	11	0	-27
28	2575.00	166,057	-509	2,511	1,441	8	4,437	0	11	0	-21
29	2573.99	164,776	-1,281	1,919	1,402	11	4,462	0	11	0	-140
30	2573.06	163,602	-1,174	1,554	1,499	12	4,131	0	11	0	-97
31	2571.24	161,320	-2,282	2,159	1,505	24	6,066	0	11	0	107
Total			-3,772	66,739	43,109	301	112,051	2	358	0	-1,510

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

**November 2003**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Oct 31	2571.24	161,320									
1	2574.50	165,422	4,102	2,768	1,530	18	147	0	12	0	-55
2	2575.37	166,528	1,106	2,833	1,525	16	3,270	0	12	0	14
3	2574.75	165,739	-789	2,454	1,443	13	4,518	0	12	0	-169
4	2573.70	164,409	-1,330	844	1,519	14	3,675	0	12	0	-20
5	2572.89	163,388	-1,021	66	1,495	14	2,546	0	12	0	-38
6	2573.10	163,652	264	0	1,426	14	1,152	0	12	0	-12
7	2572.01	162,283	-1,369	0	1,471	14	2,825	0	12	0	-17
8	2573.83	164,573	2,290	2,597	1,578	14	1,779	0	12	0	-108
9	2574.37	165,245	672	2,414	1,478	14	3,141	0	12	0	-81
10	2574.65	165,612	367	2,360	651	14	2,587	0	12	0	-59
11	2574.35	165,232	-380	1,604	1,496	14	3,431	0	12	0	-51
12	2575.06	166,133	901	1,988	1,430	14	2,520	0	12	0	1
13	2574.78	165,777	-356	1,528	1,483	14	3,295	0	12	0	-74
14	2573.72	164,434	-1,343	1,252	1,474	14	4,022	0	12	0	-49
15	2572.77	163,237	-1,197	1,799	1,528	14	4,508	0	12	0	-18
16	2575.64	166,872	3,635	3,248	1,528	14	1,089	0	13	0	-53
17	2575.12	166,210	-662	1,602	1,500	13	3,696	0	12	0	-69
18	2573.82	164,561	-1,649	1,624	1,200	13	4,469	0	12	0	-5
19	2570.91	160,909	-3,652	1,261	1,237	13	6,226	0	13	0	76
20	2569.47	159,122	-1,787	542	1,370	13	3,591	0	13	0	-108
21	2568.00	157,310	-1,812	1,357	1,294	13	4,343	0	13	0	-120
22	2571.07	161,108	3,798	800	3,036	13	174	0	13	0	136
23	2573.42	164,056	2,948	0	2,318	13	258	0	13	0	888
24	2572.14	162,446	-1,610	323	3,075	13	4,957	0	13	0	-51
25	2570.11	159,914	-2,532	0	3,114	14	5,570	0	13	0	-77
26	2568.23	157,593	-2,321	0	2,865	14	5,146	0	13	0	-41
27	2567.47	156,661	-932	0	3,071	14	3,940	0	13	0	-64
28	2569.07	158,628	1,967	731	2,943	14	1,645	0	13	0	-63
29	2572.31	162,659	4,031	1,203	3,118	14	283	0	13	0	-8
30	2575.65	166,885	4,226	1,883	3,203	14	755	0	13	0	-106
<b>Total</b>			<b>5,565</b>	<b>39,081</b>	<b>56,399</b>	<b>417</b>	<b>89,558</b>	<b>0</b>	<b>373</b>	<b>0</b>	<b>-401</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 25. Pyramid Lake**  
Daily Operation

**December 2003**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Nov 30	2575.65	166,885									
1	2575.46	166,643	-242	1,404	3,253	14	4,817	0	15	0	-81
2	2575.19	166,299	-344	1,282	3,159	14	4,740	0	15	0	-44
3	2573.48	164,131	-2,168	0	2,937	14	5,061	0	15	0	-43
4	2571.51	161,658	-2,473	528	3,171	14	6,099	0	14	0	-73
5	2570.26	160,101	-1,557	802	3,114	14	5,399	0	14	0	-74
6	2573.65	164,346	4,245	2,602	3,072	14	1,378	0	15	0	-50
7	2576.99	168,600	4,254	2,663	2,577	14	885	0	15	0	-100
8	2576.51	167,985	-615	1,558	1,810	14	3,964	0	15	0	-18
9	2575.28	166,413	-1,572	0	1,972	14	3,504	0	15	0	-39
10	2574.32	165,194	-1,219	992	1,861	14	4,014	0	15	0	-57
11	2573.15	163,715	-1,479	0	2,899	15	4,385	0	15	0	7
12	2570.73	160,685	-3,030	0	2,082	15	5,001	0	15	0	-111
13	2572.18	162,496	1,811	0	2,102	15	297	0	15	0	6
14	2575.46	166,643	4,147	2,398	1,945	16	108	0	15	0	-89
15	2574.34	165,219	-1,424	1,775	2,981	16	6,128	0	15	0	-53
16	2571.81	162,033	-3,186	0	2,669	16	5,829	0	15	0	-27
17	2570.73	160,685	-1,348	0	2,296	16	3,189	0	15	0	-456
18	2570.10	159,902	-783	800	2,482	16	3,972	0	15	0	-94
19	2569.10	158,665	-1,237	883	2,773	16	4,872	0	15	0	-22
20	2570.92	160,921	2,256	0	3,303	16	948	0	15	0	-100
21	2575.16	166,260	5,339	3,328	3,260	17	1,181	0	15	0	-70
22	2575.35	166,502	242	2,295	2,842	17	4,817	0	15	0	-80
23	2574.61	165,561	-941	1,324	2,820	18	5,035	0	15	0	-53
24	2573.97	164,750	-811	2,682	2,749	19	6,246	0	15	0	0
25	2574.04	164,839	89	1,366	2,738	92	4,181	0	16	0	90
26	2572.22	162,546	-2,293	980	2,643	81	5,928	0	73	0	4
27	2571.92	162,170	-376	0	3,194	34	3,530	0	51	0	-23
28	2574.89	165,917	3,747	1,069	3,263	24	476	0	30	0	-103
29	2573.17	163,740	-2,177	0	2,721	22	4,831	0	25	0	-64
30	2571.12	161,171	-2,569	0	2,677	21	5,211	0	24	0	-32
31	2570.89	160,884	-287	1,779	2,768	19	4,805	0	24	0	-24
<b>Total</b>			<b>-6,001</b>	<b>32,510</b>	<b>84,133</b>	<b>661</b>	<b>120,831</b>	<b>0</b>	<b>601</b>	<b>0</b>	<b>-1,873</b>

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

Daily Operation

January 2004

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Dec 31	2570.89	160,884									
1	2573.17	163,740	2,856	3,926	2,768	20	3,649	0	25	0	-184
2	2572.04	162,321	-1,419	1,458	2,703	20	5,611	0	25	0	36
3	2572.00	162,271	-50	722	2,991	20	3,691	0	26	0	-66
4	2574.58	165,523	3,252	1,797	3,017	20	1,547	0	25	0	-10
5	2573.98	164,763	-760	558	2,757	19	4,004	0	25	0	-65
6	2573.31	163,917	-846	0	2,752	19	3,543	0	25	0	-49
7	2571.88	162,120	-1,797	1,232	2,740	19	5,721	0	25	0	-42
8	2572.60	163,023	903	1,398	2,398	20	2,832	0	23	0	-58
9	2571.47	161,608	-1,415	1,373	2,909	20	5,649	0	21	0	-47
10	2573.52	164,182	2,574	0	3,190	19	555	0	21	0	-59
11	2575.63	166,859	2,677	1,714	2,835	19	1,788	0	20	0	-83
12	2575.55	166,757	-102	1,642	1,887	19	3,641	0	20	0	11
13	2575.64	166,872	115	1,504	2,160	19	3,474	0	20	0	-74
14	2574.49	165,409	-1,463	22	1,816	19	3,308	0	20	0	8
15	2574.21	165,054	-355	1,871	1,815	19	3,990	0	20	0	-50
16	2573.13	163,690	-1,364	730	1,758	19	3,845	0	20	0	-6
17	2574.47	165,384	1,694	0	2,142	18	369	0	20	0	-77
18	2576.25	167,652	2,268	875	1,851	19	395	0	20	0	-62
19	2576.56	168,049	397	895	1,972	19	2,402	0	20	0	-67
20	2575.68	166,923	-1,126	1,582	1,658	19	4,329	0	20	0	-36
21	2574.18	165,016	-1,907	1,404	459	19	3,779	0	20	0	10
22	2572.76	163,224	-1,792	1,151	768	18	3,712	0	20	0	3
23	2571.35	161,458	-1,766	0	2,758	18	4,497	0	20	0	-25
24	2573.91	164,675	3,217	1,347	2,538	19	625	0	20	0	-42
25	2576.86	168,434	3,759	1,718	2,651	19	491	0	20	0	-118
26	2575.94	167,255	-1,179	901	2,836	18	4,832	0	20	0	-82
27	2574.77	165,765	-1,490	0	2,689	18	4,166	0	20	0	-11
28	2574.69	165,663	-102	1,215	2,792	18	4,129	0	20	0	22
29	2573.50	164,157	-1,506	0	2,630	19	4,104	0	20	0	-31
30	2572.60	163,023	-1,134	775	2,703	19	4,570	0	20	0	-41
31	2574.40	165,295	2,272	0	2,686	19	405	0	20	0	-8
<b>Total</b>			<b>4,411</b>	<b>31,810</b>	<b>73,629</b>	<b>589</b>	<b>99,653</b>	<b>0</b>	<b>661</b>	<b>0</b>	<b>-1,303</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**February 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Jan 31	2574.40	165,295									
1	2576.37	167,805	2,510	0	3,034	19	381	0	20	0	-142
2	2575.60	166,821	-984	0	2,494	35	3,504	0	20	0	11
3	2574.77	165,765	-1,056	0	2,404	30	3,501	0	40	0	51
4	2573.93	164,699	-1,066	0	2,419	29	3,347	0	30	0	-137
5	2573.20	163,778	-921	0	2,315	27	3,556	0	30	0	323
6	2572.44	162,822	-956	0	2,151	24	3,046	0	30	0	-55
7	2573.11	163,665	843	0	2,199	24	1,338	0	30	0	-12
8	2575.09	166,171	2,506	1,204	1,857	23	503	0	30	0	-45
9	2574.71	165,688	-483	1,414	2,724	23	4,628	0	30	0	14
10	2573.38	164,005	-1,683	0	2,763	22	4,342	0	22	0	-104
11	2572.39	162,760	-1,245	0	2,614	21	3,763	0	22	0	-95
12	2571.35	161,458	-1,302	0	2,770	20	4,018	0	22	0	-52
13	2573.02	163,551	2,093	0	2,675	21	500	0	22	0	-81
14	2574.88	165,904	2,353	0	2,826	21	410	0	22	0	-62
15	2577.02	168,639	2,735	0	3,277	21	459	0	22	0	-82
16	2576.29	167,703	-936	0	2,348	21	3,272	0	22	0	-11
17	2575.33	166,477	-1,226	0	2,344	20	3,521	0	22	0	-47
18	2575.10	166,184	-293	1,251	2,256	21	3,818	0	22	0	19
19	2574.14	164,966	-1,218	364	2,445	22	3,955	0	22	0	-72
20	2573.08	163,627	-1,339	0	2,395	24	3,755	0	22	0	19
21	2572.50	162,898	-729	0	2,394	23	3,151	0	298	0	303
22	2574.96	166,006	3,108	1,201	2,397	159	463	0	40	0	-146
23	2575.78	167,051	1,045	2,329	585	85	1,775	0	149	0	-30
24	2575.34	166,490	-561	710	570	34	1,820	0	149	0	94
25	2575.50	166,694	204	1,281	444	154	1,966	0	79	0	370
26	2575.11	166,197	-497	574	506	1,534	2,365	0	1,713	0	967
27	2575.33	166,477	280	529	1,205	268	1,609	0	248	0	135
28	2575.10	166,184	-293	0	425	142	526	0	149	0	-185
29	2574.71	165,688	-496	0	420	99	821	0	99	0	-95
<b>Total</b>			<b>393</b>	<b>10,857</b>	<b>59,256</b>	<b>2,966</b>	<b>70,113</b>	<b>0</b>	<b>3,426</b>	<b>0</b>	<b>853</b>

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

Daily Operation

March 2004

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Feb 29	2574.71	165,688									
1	2574.25	165,105	-583	0	1,687	87	2,349	0	79	0	71
2	2574.00	164,788	-317	0	1,867	88	2,162	0	119	0	9
3	2573.57	164,245	-543	0	1,668	62	2,363	0	89	0	179
4	2573.49	164,144	-101	0	1,810	48	1,763	0	69	0	-127
5	2573.02	163,551	-593	0	1,667	43	2,182	0	50	0	-71
6	2574.27	165,130	1,579	0	1,754	39	157	0	51	0	-6
7	2575.18	166,286	1,156	0	1,429	36	242	0	51	0	-16
8	2574.27	165,130	-1,156	0	1,849	36	2,937	0	40	0	-64
9	2573.64	164,333	-797	0	1,556	36	2,331	0	40	0	-18
10	2573.71	164,422	89	684	1,722	38	2,324	0	40	0	9
11	2574.66	165,625	1,203	925	1,867	36	1,512	0	40	0	-73
12	2573.97	164,750	-875	0	1,772	36	2,641	0	40	0	-2
13	2573.97	164,750	0	1,335	1,834	36	3,135	0	40	0	-30
14	2575.69	166,936	2,186	943	1,681	34	383	0	40	0	-49
15	2575.53	166,732	-204	754	2,115	32	3,046	0	40	0	-19
16	2575.09	166,171	-561	0	2,205	29	2,656	0	40	0	-99
17	2574.87	165,892	-279	545	2,040	29	2,747	0	40	0	-106
18	2574.68	165,650	-242	1,440	2,432	28	4,061	0	40	0	-41
19	2572.79	163,262	-2,388	0	1,393	28	3,798	0	40	0	29
20	2572.26	162,596	-666	996	2,084	28	3,580	0	40	0	-154
21	2574.31	165,181	2,585	1,790	2,196	27	1,229	0	40	0	-159
22	2572.78	163,249	-1,932	1,689	2,508	27	6,024	0	40	0	-92
23	2572.05	162,333	-916	711	2,567	27	4,124	0	40	0	-57
24	2571.36	161,470	-863	2,084	2,590	27	5,461	0	40	0	-63
25	2571.13	161,183	-287	2,776	2,488	27	5,463	0	40	0	-75
26	2569.89	159,642	-1,541	1,240	2,351	27	5,121	0	42	0	4
27	2571.85	162,083	2,441	2,102	2,430	27	1,947	0	44	0	-127
28	2574.95	165,993	3,910	2,673	2,566	27	1,248	0	44	0	-64
29	2575.15	166,248	255	2,359	2,515	25	4,514	0	46	0	-84
30	2574.69	165,663	-585	931	2,534	25	3,979	0	48	0	-48
31	2575.28	166,413	750	2,432	2,596	24	4,187	0	51	0	-64
<b>Total</b>			<b>725</b>	<b>28,409</b>	<b>63,773</b>	<b>1,119</b>	<b>89,666</b>	<b>0</b>	<b>1,503</b>	<b>0</b>	<b>-1,407</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

**April 2004**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Mar 31	2575.28	166,413									
1	2574.69	165,663	-750	1,609	1,927	24	4,116	0	52	0	-142
2	2572.85	163,338	-2,325	793	2,529	24	5,609	0	52	0	-10
3	2570.91	160,909	-2,429	0	2,873	25	5,335	0	52	0	60
4	2572.65	163,086	2,177	4	2,354	25	146	0	52	0	-8
5	2573.15	163,715	629	1,830	2,574	23	3,722	0	52	0	-24
6	2572.75	163,212	-503	567	2,730	23	3,746	0	52	0	-25
7	2572.09	162,383	-829	679	2,761	23	4,172	0	52	0	-68
8	2570.80	160,772	-1,611	2,249	2,780	22	6,574	0	52	0	-36
9	2571.35	161,458	686	1,938	2,983	22	4,128	0	52	0	-77
10	2573.19	163,766	2,308	1,914	2,376	22	1,914	0	52	0	-38
11	2573.51	164,169	403	754	1,485	22	1,710	0	52	0	-96
12	2573.20	163,778	-391	1,623	2,555	22	4,407	0	52	0	-132
13	2572.34	162,697	-1,081	1,285	2,282	22	4,569	0	52	0	-49
14	2570.77	160,735	-1,962	1,587	2,766	22	6,179	0	52	0	-106
15	2570.71	160,660	-75	0	2,328	22	2,385	0	52	0	12
16	2569.71	159,419	-1,241	0	2,724	22	3,780	0	52	0	-155
17	2571.65	161,833	2,414	0	2,586	22	87	0	52	0	-55
18	2575.31	166,451	4,618	2,042	3,113	23	462	0	52	0	-46
19	2575.78	167,051	600	824	3,236	23	3,383	0	52	0	-48
20	2573.87	164,624	-2,427	0	3,107	22	5,435	0	52	0	-69
21	2573.27	163,866	-758	1,614	2,619	21	4,842	0	52	0	-118
22	2572.91	163,413	-453	540	1,567	20	2,484	0	52	0	-44
23	2572.29	162,634	-779	560	1,668	19	2,861	0	52	0	-113
24	2573.27	163,866	1,232	1,181	1,703	17	1,351	0	52	0	-266
25	2574.75	165,739	1,873	1,944	1,635	17	1,900	0	52	0	229
26	2573.71	164,422	-1,317	1,052	1,620	16	3,854	0	52	0	-99
27	2572.54	162,948	-1,474	423	1,585	16	3,434	0	52	0	-12
28	2571.34	161,445	-1,503	0	1,724	16	3,086	0	51	0	-106
29	2571.52	161,670	225	1,434	1,929	16	3,087	0	51	0	-16
30	2570.93	160,934	-736	935	1,850	16	3,239	0	51	0	-247
Total			-5,479	29,381	69,969	629	101,997	0	1,557	0	-1,904

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

#### Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

May 2004

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Apr 30	2570.93	160,934									
1	2572.65	163,086	2,152	2,841	1,924	15	2,682	0	52	0	106
2	2574.42	165,320	2,234	4,062	1,469	15	3,170	0	52	0	-90
3	2574.74	165,726	406	2,899	1,155	15	3,578	1	52	0	-32
4	2574.20	165,042	-684	1,676	460	14	2,731	0	52	0	-51
5	2573.67	164,371	-671	1,668	786	14	3,058	1	52	0	-28
6	2573.87	164,624	253	2,613	694	13	2,959	0	52	0	-56
7	2572.80	163,275	-1,349	593	522	13	2,348	0	52	0	-77
8	2573.75	164,472	1,197	1,265	153	13	116	0	52	0	-66
9	2575.15	166,248	1,776	1,868	0	13	32	1	52	0	-20
10	2572.29	162,634	-3,614	660	0	13	4,194	0	52	0	-41
11	2570.96	160,971	-1,663	813	2,382	13	4,692	0	52	0	-127
12	2570.90	160,897	-74	1,568	2,829	13	4,306	0	52	0	-126
13	2572.01	162,283	1,386	3,125	2,552	13	4,156	0	52	0	-96
14	2572.18	162,496	213	1,546	2,387	12	3,602	1	52	0	-77
15	2572.72	163,174	678	1,569	2,301	12	3,182	0	52	0	30
16	2574.28	165,143	1,969	2,148	2,629	12	2,658	0	52	0	-110
17	2574.03	164,826	-317	1,522	2,256	13	3,962	0	52	0	-94
18	2573.42	164,056	-770	1,536	3,113	13	5,288	1	52	0	-91
19	2572.34	162,697	-1,359	1,897	2,786	13	5,979	0	52	0	-24
20	2571.92	162,170	-527	1,125	3,146	13	4,673	0	52	0	-86
21	2569.36	158,986	-3,184	1,637	3,090	13	7,756	0	52	0	-116
22	2572.02	162,296	3,310	955	3,254	12	846	1	52	0	-12
23	2575.93	167,242	4,946	2,720	3,065	12	707	0	52	0	-92
24	2574.84	165,853	-1,389	1,058	3,043	12	5,336	0	52	0	-114
25	2575.15	166,248	395	1,877	2,883	12	4,293	0	52	0	-32
26	2572.86	163,343	-2,905	1,112	2,643	11	6,577	1	53	0	-40
27	2571.23	161,308	-2,035	2,453	2,820	11	7,111	0	53	0	-155
28	2570.33	160,188	-1,120	3,664	3,098	10	7,798	0	53	0	-41
29	2567.33	156,489	-3,699	1,058	2,730	10	7,315	0	53	0	-129
30	2571.22	161,296	4,807	5,400	2,903	9	3,455	0	53	0	3
31	2573.78	164,510	3,214	4,731	3,107	8	4,479	0	53	0	-100
<b>Total</b>			<b>3,576</b>	<b>63,659</b>	<b>66,180</b>	<b>385</b>	<b>123,039</b>	<b>7</b>	<b>1,618</b>	<b>0</b>	<b>-1,984</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

June 2004

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
May 31	2573.78	164,510									
1	2573.90	164,662	152	3,723	2,680	8	6,239	0	53	0	33
2	2572.52	162,923	-1,739	1,734	2,946	7	6,280	0	52	0	-94
3	2571.13	161,183	-1,740	954	3,090	7	5,742	0	52	0	3
4	2570.83	160,809	-374	3,809	142	6	4,221	0	52	0	-58
5	2572.83	163,312	2,503	4,407	0	6	1,715	1	52	0	-142
6	2573.76	164,485	1,173	3,278	2,876	6	4,750	0	52	0	-185
7	2572.89	163,388	-1,097	3,656	2,961	6	7,443	0	52	0	-225
8	2572.37	162,734	-654	3,427	3,110	6	7,116	0	52	0	-29
9	2573.78	164,510	1,776	3,637	2,760	7	4,522	0	52	0	-54
10	2571.66	161,845	-2,665	3,542	1,987	7	8,145	0	52	0	-4
11	2567.97	157,274	-4,571	3,091	3,135	7	10,694	1	52	0	-57
12	2570.29	160,138	2,864	2,449	3,151	6	2,642	0	52	0	-48
13	2573.95	164,725	4,587	3,934	3,116	6	2,330	0	52	0	-87
14	2574.90	165,930	1,205	3,953	2,709	6	5,327	1	53	0	-82
15	2574.33	165,206	-724	1,418	3,135	6	5,183	0	53	0	-47
16	2572.94	163,451	-1,755	1,502	2,713	5	5,639	0	52	0	-284
17	2571.34	161,445	-2,006	717	3,002	4	5,521	1	52	0	-155
18	2570.75	160,710	-735	0	2,732	4	3,422	0	52	0	3
19	2571.91	162,158	1,448	754	3,167	5	2,378	0	52	0	-48
20	2574.36	165,244	3,086	4,345	3,149	5	4,206	0	52	0	-155
21	2574.42	165,320	76	3,368	3,049	4	6,175	0	52	0	-118
22	2573.79	164,523	-797	2,432	3,168	4	6,291	1	52	0	-57
23	2571.71	161,908	-2,615	1,458	2,870	4	6,668	0	52	0	-227
24	2570.83	160,809	-1,099	3,344	2,967	4	7,140	0	52	0	-222
25	2568.30	157,679	-3,130	2,306	2,960	3	8,299	0	52	0	-48
26	2571.12	161,171	3,492	3,783	3,018	4	3,179	1	52	0	-81
27	2575.57	166,783	5,612	3,380	3,134	4	698	0	52	0	-156
28	2573.51	164,169	-2,614	1,337	2,969	4	6,765	0	52	0	-107
29	2575.64	166,872	2,703	1,872	3,072	4	2,061	0	52	0	-132
30	2574.35	165,232	-1,640	2,121	2,378	4	5,681	1	51	0	-410
Total			722	79,731	82,146	159	156,472	7	1,562	0	-3,273

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**July 2004**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Jun 30	2574.35	165,232									
1	2572.55	162,960	-2,272	3,330	3,041	5	8,517	0	53	0	-78
2	2569.42	159,060	-3,900	1,929	3,057	5	8,772	0	53	0	-66
3	2572.94	163,451	4,391	3,317	3,112	5	1,901	0	53	0	-89
4	2574.48	165,396	1,945	1,286	3,173	5	2,455	0	53	0	-11
5	2575.91	167,217	1,821	3,270	3,078	5	4,374	1	52	0	-105
6	2573.89	164,649	-2,568	1,875	3,033	5	7,316	0	52	0	-113
7	2573.54	164,207	-442	3,141	3,051	5	6,484	0	52	0	-103
8	2572.13	162,433	-1,774	2,081	3,056	5	6,693	0	52	0	-171
9	2570.35	160,212	-2,221	851	3,075	5	6,013	0	52	0	-87
10	2570.77	160,735	523	1,666	2,940	5	3,923	0	52	0	-113
11	2573.99	164,776	4,041	3,409	2,835	4	2,061	0	52	0	-94
12	2573.52	164,182	-594	1,632	2,787	4	5,013	0	52	0	48
13	2572.89	163,388	-794	2,349	3,220	4	6,028	1	52	0	-286
14	2571.74	161,945	-1,443	982	3,061	4	5,353	0	52	0	-85
15	2571.02	161,046	-899	914	3,076	4	4,748	0	52	0	-93
16	2570.16	159,977	-1,069	1,459	3,027	4	5,454	0	52	0	-53
17	2573.18	163,753	3,776	2,270	2,993	4	1,317	0	52	0	-122
18	2575.49	166,681	2,928	2,024	3,090	4	2,011	0	52	0	-127
19	2572.52	162,923	-3,758	0	3,062	4	6,689	0	52	0	-83
20	2571.18	161,246	-1,677	1,525	2,856	4	5,765	0	52	0	-245
21	2573.29	163,892	2,646	2,477	2,799	4	2,477	0	52	0	-105
22	2570.55	160,461	-3,431	975	3,067	4	7,068	1	52	0	-356
23	2571.20	161,271	810	752	2,935	4	2,803	0	52	0	-26
24	2571.98	162,246	975	2,124	2,918	4	3,892	0	52	0	-127
25	2574.79	165,790	3,544	2,242	2,726	4	1,247	0	52	0	-129
26	2575.38	166,541	751	1,982	3,149	4	4,272	0	52	0	-60
27	2574.13	164,953	-1,588	1,448	3,003	4	5,890	0	52	0	-101
28	2573.75	164,472	-481	2,394	3,074	4	5,807	0	52	0	-94
29	2572.44	162,821	-1,651	1,935	3,067	3	6,379	0	52	0	-225
30	2571.37	161,483	-1,338	1,473	3,201	3	5,917	0	52	0	-46
31	2572.04	162,321	838	2,399	2,150	3	3,587	0	52	0	-75
Total			-2,911	59,511	92,712	131	150,226	3	1,616	0	-3,420

1/ Values supplied by LADWP, not verified by DWR.



**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**August 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant 2/	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Jul 31	2572.04	162,321									
1	2574.36	165,244	2,923	2,602	3,102	4	2,717	0	0	52	-16
2	2574.40	165,295	51	2,433	3,193	5	5,504	0	0	52	-24
3	2573.31	163,917	-1,378	1,823	3,112	5	6,242	0	0	52	-24
4	2572.40	162,772	-1,145	730	3,220	5	5,042	0	0	52	-6
5	2571.19	161,258	-1,514	1,003	2,847	5	5,646	1	0	53	331
6	2569.43	159,072	-2,186	1,755	3,295	5	6,940	0	0	53	-248
7	2570.30	160,150	1,078	2,748	1,243	5	2,788	0	0	53	-77
8	2574.14	164,966	4,816	4,123	3,145	5	2,359	0	0	53	-45
9	2573.88	164,637	-329	2,032	3,297	5	5,511	0	0	53	-99
10	2573.41	164,043	-594	1,599	3,272	5	5,313	0	0	53	-104
11	2572.98	163,501	-542	402	3,076	5	3,901	0	0	53	-71
12	2573.76	164,485	984	1,837	3,216	5	3,956	0	0	53	-65
13	2572.62	163,048	-1,437	634	3,074	5	4,973	0	0	53	-124
14	2574.33	165,206	2,158	1,583	3,063	5	2,369	0	0	53	-71
15	2576.25	167,652	2,446	3,387	2,888	5	3,594	0	0	53	-187
16	2575.75	167,012	-640	2,069	3,253	5	5,837	0	0	53	-77
17	2575.09	166,171	-841	2,261	3,257	5	6,057	0	0	53	-254
18	2573.97	164,750	-1,421	2,663	3,007	5	6,939	0	0	53	-104
19	2572.33	162,684	-2,066	2,759	2,508	5	7,111	0	0	52	-175
20	2568.88	158,393	-4,291	1,757	3,279	5	8,838	0	0	52	-442
21	2571.06	161,096	2,703	3,230	3,176	5	3,543	0	0	52	-113
22	2575.02	166,082	4,986	4,768	3,274	4	3,046	0	0	52	38
23	2574.20	165,042	-1,040	3,079	3,120	4	7,016	0	0	52	-175
24	2574.36	165,244	202	3,990	3,180	4	6,820	0	0	52	-100
25	2571.72	161,920	-3,324	2,832	3,186	4	9,197	1	0	52	-96
26	2570.30	160,150	-1,770	2,089	3,154	4	6,863	0	0	52	-102
27	2567.16	156,281	-3,869	2,963	2,970	4	9,691	0	0	52	-63
28	2571.79	162,008	5,727	3,071	3,021	4	271	0	0	52	-46
29	2576.17	167,549	5,541	4,431	2,904	4	1,701	0	0	52	-45
30	2575.29	166,426	-1,123	1,426	3,191	4	5,700	0	0	52	8
31	2574.79	165,790	-636	2,078	3,181	5	5,778	0	0	52	-70
<b>Total</b>			<b>3,469</b>	<b>74,157</b>	<b>94,704</b>	<b>145</b>	<b>161,263</b>	<b>2</b>	<b>0</b>	<b>1,626</b>	<b>-2,646</b>

1/ Values supplied by LADWP, not verified by DWR.

2/ Includes 93 AF of Bypass Water.

### Table 25. Pyramid Lake

Daily Operation

September 2004

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Aug 31	2574.79	165,790									
1	2571.90	162,145	-3,645	2,876	2,927	2	9,105	0	0	49	-296.10
2	2571.37	161,483	-662	3,669	3,283	2	7,493	0	0	49	-74.10
3	2568.52	157,950	-3,533	2,523	3,187	2	9,060	0	0	47	-138.20
4	2570.86	160,847	2,897	4,132	3,124	2	4,226	0	0	47	-88.20
5	2574.18	165,016	4,169	3,845	2,957	2	2,540	0	0	45	-50.10
6	2575.61	166,834	1,818	3,945	3,152	2	5,093	0	0	45	-143.00
7	2574.20	165,042	-1,792	2,368	3,035	2	7,048	0	0	43	-106.00
8	2572.42	162,797	-2,245	1,436	3,150	2	6,752	0	0	43	-38.00
9	2571.03	161,059	-1,738	2,066	3,172	2	6,876	0	0	41	-61.10
10	2569.00	158,541	-2,518	1,870	3,068	2	7,438	0	0	41	21.00
11	2570.03	159,815	1,274	817	3,251	2	2,699	0	0	39	-58.00
12	2573.96	164,738	4,923	4,187	3,213	2	2,443	0	0	39	2.80
13	2573.65	164,346	-392	2,502	2,975	2	5,652	0	0	37	-182.10
14	2572.52	162,923	-1,423	1,101	3,194	2	5,704	0	0	37	20.80
15	2572.21	162,534	-389	3,086	3,176	2	6,359	0	0	35	-259.00
16	2571.05	161,083	-1,451	1,433	3,211	2	6,019	0	0	35	-43.00
17	2568.32	157,704	-3,379	1,788	3,082	2	8,085	0	0	33	-133.00
18	2570.59	160,511	2,807	2,139	3,228	2	2,430	0	0	33	-99.00
19	2575.40	166,566	6,055	4,859	2,750	3	1,373	0	0	31	-152.50
20	2575.61	166,834	268	2,486	2,696	3	4,800	0	0	31	-85.50
21	2573.67	164,371	-2,463	2,271	2,669	3	7,245	0	29	5	-126.50
22	2571.75	161,958	-2,413	2,174	2,885	3	7,457	0	24	0	6.50
23	2569.75	159,468	-2,490	3,662	2,664	2	8,710	0	27	0	-81.00
24	2566.92	155,988	-3,480	3,030	2,614	2	8,957	0	27	0	-142.30
25	2569.60	159,283	3,295	2,639	2,587	2	1,850	0	25	0	-58.30
26	2574.45	165,358	6,075	5,305	2,471	2	1,605	0	25	0	-73.20
27	2574.66	165,625	267	3,506	2,945	2	6,100	0	23	0	-63.00
28	2573.40	164,030	-1,595	2,937	1,910	2	6,417	0	23	0	-4.30
29	2571.99	162,258	-1,772	2,920	2,118	3	6,760	0	22	0	-30.50
30	2570.96	160,971	-1,287	3,181	2,126	3	6,319	0	21	0	-256.50
<b>Total</b>			<b>-4,819</b>	<b>84,753</b>	<b>86,820</b>	<b>68</b>	<b>172,615</b>	<b>0</b>	<b>246</b>	<b>805</b>	<b>-2,791</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**October 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant 2/	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Sep 30	2570.96	160,971									
1	2571.95	162,208	1,237	3,292	2,354	6	4,338	0	19	0	-58
2	2575.12	166,210	4,002	2,812	1,847	6	561	0	19	0	-83
3	2575.48	166,668	458	2,300	2,081	7	3,954	0	16	0	40
4	2574.84	165,853	-815	1,828	2,416	7	4,613	0	16	0	-437
5	2574.41	165,308	-545	691	2,007	7	3,223	0	17	0	-10
6	2573.83	164,573	-735	2,502	2,127	6	5,281	0	14	0	-75
7	2572.78	163,249	-1,324	2,822	1,889	6	5,965	0	12	0	-64
8	2570.18	160,001	-3,248	1,985	1,911	6	7,102	0	12	0	-36
9	2572.48	162,873	2,872	2,336	2,057	6	1,513	0	12	0	-2
10	2575.89	167,191	4,318	3,581	2,149	7	1,226	0	12	0	-181
11	2575.11	166,197	-994	1,689	2,093	6	4,749	0	12	0	-21
12	2572.62	163,048	-3,149	1,646	2,274	6	7,043	0	12	0	-20
13	2571.35	161,458	-1,590	1,089	2,113	6	4,758	0	12	0	-28
14	2571.58	161,745	287	1,469	2,378	6	3,378	0	12	0	-176
15	2570.65	160,585	-1,160	1,999	1,228	6	4,360	0	12	0	-21
16	2573.01	163,539	2,954	2,618	2,273	7	1,893	0	12	0	-39
17	2575.38	166,541	3,002	4,368	2,049	11	3,435	0	12	0	21
18	2575.30	166,439	-102	2,631	1,594	8	4,288	0	12	0	-35
19	2574.47	165,384	-1,055	1,440	1,744	38	4,475	1	12	0	211
20	2571.59	161,758	-3,626	995	1,455	54	6,181	0	12	0	63
21	2570.12	159,927	-1,831	2,822	1,637	16	6,288	0	12	0	-6
22	2571.94	162,195	2,268	2,191	1,953	11	1,831	0	12	0	-44
23	2574.43	165,333	3,138	1,871	1,571	9	204	0	12	0	-97
24	2576.24	167,639	2,306	3,463	1,185	8	2,277	0	12	0	-61
25	2575.47	166,655	-984	1,531	1,701	8	4,106	0	12	0	-106
26	2575.11	166,197	-458	825	1,772	36	3,065	0	12	0	-14
27	2574.67	165,638	-559	490	1,865	75	2,831	0	13	0	-145
28	2574.63	165,587	-51	2,002	1,515	29	3,564	0	13	0	-20
29	2573.40	164,030	-1,557	764	1,692	19	4,039	0	13	0	20
30	2574.94	165,981	1,951	668	1,588	16	250	0	13	0	-58
31	2576.65	168,164	2,183	2,752	2,316	16	2,784	0	13	0	-104
<b>Total</b>			<b>7,193</b>	<b>63,472</b>	<b>58,834</b>	<b>455</b>	<b>113,575</b>	<b>1</b>	<b>406</b>	<b>0</b>	<b>-1,586</b>

1/ Values supplied by LADWP, not verified by DWR.

2/ Includes 44 AF of bypass.

### Table 25. Pyramid Lake

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

November 2004

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Oct 31	2576.65	168,164									
1	2575.64	166,872	-1,292	1,374	6	13	2,659	0	12	0	-14
2	2575.54	166,745	-127	1,666	0	12	1,749	0	12	0	-44
3	2575.56	166,770	25	2,101	0	12	2,134	0	12	0	58
4	2575.00	166,057	-713	1,592	0	12	2,228	0	12	0	-77
5	2574.52	165,447	-610	898	0	12	1,507	0	12	0	-1
6	2575.28	166,413	966	1,123	0	12	139	0	12	0	-18
7	2575.56	166,770	357	2,226	0	12	1,773	0	12	0	-96
8	2575.64	166,872	102	1,971	1,017	12	2,895	0	12	0	9
9	2575.65	166,885	13	1,558	1,172	11	2,698	0	12	0	-18
10	2575.69	166,936	51	1,578	1,130	11	2,614	0	12	0	-42
11	2575.62	166,847	-89	1,542	884	11	2,428	0	12	0	-86
12	2575.36	166,515	-332	882	1,021	11	2,261	0	12	0	27
13	2575.04	166,108	-407	0	1,036	11	1,442	0	12	0	0
14	2575.60	166,821	713	0	1,007	11	195	0	12	0	-98
15	2575.65	166,885	64	0	0	11	0	0	12	0	65
16	2575.62	166,847	-38	0	0	11	0	0	12	0	-37
17	2576.04	167,383	536	0	580	11	0	0	12	0	-43
18	2576.06	167,409	26	0	66	11	0	0	12	0	-39
19	2576.20	167,588	179	0	212	11	0	0	12	0	-32
20	2576.30	167,716	128	0	166	11	0	0	12	0	-37
21	2576.34	167,767	51	0	107	10	0	0	12	0	-54
22	2574.87	165,892	-1,875	16	2,475	10	4,355	0	12	0	-9
23	2574.32	165,194	-698	2,032	2,938	10	5,580	0	12	0	-86
24	2571.66	161,845	-3,349	2,126	2,813	10	8,275	0	12	0	-11
25	2573.43	164,068	2,223	0	2,997	10	780	0	12	0	8
26	2572.50	162,898	-1,170	0	2,933	10	4,097	0	12	0	-4
27	2571.41	161,533	-1,365	0	2,942	10	4,378	0	12	0	73
28	2571.52	161,670	137	687	2,897	10	3,281	0	12	0	-164
29	2570.16	159,977	-1,693	0	2,812	10	4,419	0	12	0	-84
30	2569.57	159,245	-732	0	2,751	10	3,448	0	12	0	-33
<b>Total</b>			<b>-8,919</b>	<b>23,372</b>	<b>33,962</b>	<b>329</b>	<b>65,335</b>	<b>0</b>	<b>360</b>	<b>0</b>	<b>-887</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**December 2004**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Nov 30	2569.57	159,245									
1	2570.29	160,138	893	0	3,225	14	2,322	0	12	0	-12
2	2571.18	161,246	1,108	578	3,046	14	2,395	0	12	0	-123
3	2571.39	161,508	262	0	3,158	14	2,871	0	12	0	-27
4	2572.44	162,822	1,314	0	3,002	14	1,939	0	12	0	249
5	2574.36	165,244	2,422	0	2,882	17	498	0	12	0	33
6	2573.39	164,018	-1,226	474	1,867	16	3,523	0	12	0	-48
7	2572.66	163,099	-919	1,000	2,263	16	4,048	0	12	0	-138
8	2572.72	163,174	75	1,065	3,175	16	4,198	0	12	0	29
9	2574.04	164,839	1,665	657	2,991	16	1,858	0	12	0	-129
10	2572.12	162,421	-2,418	973	2,973	16	6,353	0	12	0	-15
11	2572.92	163,426	1,005	1,285	2,998	16	3,236	0	12	0	-46
12	2574.17	165,004	1,578	1,776	2,746	16	2,863	0	12	0	-85
13	2575.16	166,260	1,256	2,999	2,597	16	4,204	0	12	0	-140
14	2574.67	165,638	-622	0	3,077	16	3,729	0	12	0	26
15	2573.45	164,093	-1,545	0	2,607	16	4,068	0	12	0	-88
16	2572.83	163,312	-781	676	3,035	16	4,456	0	12	0	-40
17	2571.56	161,720	-1,592	550	2,848	15	5,033	0	12	0	40
18	2573.46	164,106	2,386	773	2,983	15	1,279	0	12	0	-94
19	2575.15	166,248	2,142	1,718	1,613	14	1,132	0	12	0	-59
20	2573.92	164,687	-1,561	1,662	2,674	14	5,883	0	12	0	-16
21	2571.28	161,370	-3,317	545	2,659	14	6,478	0	12	0	-45
22	2570.03	159,815	-1,555	546	2,934	14	4,986	0	12	0	-51
23	2570.08	159,877	62	0	3,119	14	2,983	0	12	0	-76
24	2569.58	159,258	-619	726	2,924	14	4,116	0	12	0	-155
25	2571.81	162,033	2,775	0	2,636	13	0	0	12	0	138
26	2573.75	164,472	2,439	0	2,790	17	296	0	12	0	-60
27	2574.42	165,320	848	1,188	3,000	447	3,835	0	12	0	60
28	2576.07	167,421	2,101	0	3,048	3,124	3,453	0	12	0	-606
29	2573.59	164,270	-3,151	890	2,026	892	6,571	0	71	0	-317
30	2570.91	160,909	-3,361	0	2,787	356	6,068	0	395	0	-41
31	2569.23	158,825	-2,084	0	1,805	829	4,686	0	395	0	363
<b>Total</b>			-420	20,081	85,488	6,041	109,360	0	1,197	0	-1,473

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**January 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Dec 31	2569.23	158,825									
1	2568.42	157,827	-998	0	1,362	436	2,152	0	319	0	-325
2	2569.42	159,060	1,233	0	1,568	254	256	0	787	0	454
3	2570.35	160,212	1,152	790	1,576	360	1,754	0	292	0	472
4	2569.96	159,728	-484	0	1,622	297	1,972	0	393	0	-38
5	2570.10	159,902	174	11	1,628	235	1,332	0	300	0	-68
6	2569.52	159,184	-718	0	1,625	177	2,084	0	242	0	-194
7	2568.72	158,196	-988	0	70	721	1,525	0	222	0	-32
8	2570.00	159,778	1,582	1,164	0	3,415	901	0	2,136	0	40
9	2571.79	162,008	2,230	0	0	12,111	2,159	0	10,643	0	2,921
10	2575.06	166,133	4,125	1,405	0	13,903	512	0	10,883	0	212
11	2576.99	168,600	2,467	0	0	5,342	541	0	2,315	0	-19
12	2575.16	166,260	-2,340	0	0	1,791	3,364	0	913	0	146
13	2573.00	163,526	-2,734	0	0	1,163	4,127	0	794	0	1,024
14	2572.51	162,910	-616	822	85	614	3,384	0	416	0	1,663
15	2570.31	160,163	-2,747	0	0	430	397	0	376	0	-2,404
16	2570.13	159,939	-224	0	0	392	358	0	411	0	153
17	2570.06	159,852	-87	0	0	385	322	0	252	0	102
18	2569.83	159,567	-285	0	12	389	473	0	269	0	56
19	2569.71	159,419	-148	0	0	414	403	0	256	0	97
20	2570.02	159,803	384	0	0	462	4	0	253	0	179
21	2570.22	160,051	248	0	0	455	44	0	43	0	-120
22	2570.62	160,548	497	0	0	452	0	0	40	0	85
23	2571.09	161,133	585	0	0	475	0	0	46	0	156
24	2571.40	161,520	387	0	0	479	54	0	41	0	3
25	2571.66	161,845	325	0	0	519	4	0	44	0	-146
26	2572.08	162,371	526	0	0	563	0	0	42	0	5
27	2572.42	162,797	426	0	0	538	0	0	51	0	-61
28	2572.77	163,237	440	0	22	473	0	0	38	0	-17
29	2573.10	163,652	415	0	0	440	0	0	47	0	22
30	2573.30	163,904	252	0	0	361	0	0	43	0	-66
31	2573.84	164,586	682	0	375	316	63	0	38	0	92
<b>Total</b>			<b>5,761</b>	<b>4,192</b>	<b>9,945</b>	<b>48,362</b>	<b>28,185</b>	<b>0</b>	<b>32,945</b>	<b>0</b>	<b>4,392</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**February 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Jan 31	2573.84	164,586									
1	2575.06	166,133	1,547	0	1,530	274	0	0	45	0	-212
2	2576.17	167,549	1,416	0	1,526	236	332	0	43	0	29
3	2576.28	167,690	141	0	1,526	230	1,320	0	177	0	-118
4	2574.84	165,853	-1,837	0	1,434	225	3,361	0	218	0	83
5	2575.33	166,477	624	0	1,532	221	292	0	172	0	-665
6	2576.87	168,446	1,969	0	1,529	216	241	0	222	0	687
7	2576.60	168,100	-346	0	1,430	214	1,688	0	163	0	-139
8	2576.57	168,061	-39	0	1,433	210	1,442	0	160	0	-80
9	2575.91	167,217	-844	0	1,435	203	2,307	0	144	0	-31
10	2575.32	166,464	-753	0	1,418	199	2,245	0	122	0	-3
11	2575.23	166,350	-114	0	1,533	855	2,252	0	158	0	-92
12	2576.91	168,498	2,148	0	1,484	765	5	0	47	0	-49
13	2576.68	168,203	-295	0	1,481	567	2,053	0	55	0	-235
14	2575.33	166,477	-1,726	0	1,474	390	3,537	0	54	0	1
15	2573.81	164,548	-1,929	0	1,482	348	3,363	0	53	0	-343
16	2573.18	163,753	-795	0	1,476	324	2,534	0	50	0	-11
17	2572.83	163,312	-441	0	1,526	565	2,385	0	54	0	-93
18	2576.40	167,844	4,532	0	1,127	6,353	2,872	0	54	0	-22
19	2577.00	168,613	769	0	0	6,615	5,795	0	48	0	-3
20	2575.65	166,885	-1,728	0	0	5,976	7,681	0	49	0	26
21	2576.90	168,485	1,600	0	0	14,124	3,360	0	8,927	0	-237
22	2577.08	168,716	231	0	65	7,217	404	0	6,614	0	-33
23	2576.89	168,472	-244	0	109	5,815	391	0	5,725	0	-52
24	2576.63	168,138	-334	0	266	3,675	160	0	4,109	0	-6
25	2575.91	167,217	-921	0	0	2,351	425	0	2,861	0	14
26	2575.89	167,191	-26	0	0	2,070	412	0	1,699	0	15
27	2575.85	167,140	-51	0	0	2,274	967	0	1,374	0	16
28	2576.06	167,409	269	0	0	1,313	537	0	514	0	7
<b>Total</b>			<b>2,823</b>	<b>0</b>	<b>26,816</b>	<b>63,825</b>	<b>52,361</b>	<b>0</b>	<b>33,911</b>	<b>0</b>	<b>-1,546</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**March 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Feb 28	2576.06	167,409									
1	2576.20	167,588	179	0	0	940	491	0	324	0	54
2	2576.35	167,780	192	0	0	952	660	0	264	0	164
3	2577.00	168,613	833	0	0	981	464	0	102	0	418
4	2577.50	169,257	644	0	0	963	356	0	50	0	87
5	2577.55	169,321	64	0	0	949	718	0	57	0	-110
6	2577.70	169,514	193	0	0	934	621	0	57	0	-63
7	2578.16	170,108	594	0	0	905	359	0	50	0	98
8	2578.17	170,121	13	0	0	868	505	0	248	0	-102
9	2577.98	169,876	-245	0	0	847	795	0	404	0	107
10	2577.90	169,772	-104	0	0	823	142	0	447	0	-338
11	2578.21	170,173	401	0	0	800	0	0	474	0	75
12	2578.21	170,173	0	0	0	776	0	0	470	0	-306
13	2578.27	170,250	77	0	0	747	0	0	668	0	-2
14	2578.25	170,224	-26	0	0	699	0	0	715	0	-10
15	2578.17	170,121	-103	0	0	635	0	0	930	0	192
16	2578.06	169,979	-142	0	0	575	0	0	949	0	232
17	2577.95	169,837	-142	0	24	524	0	0	670	0	-20
18	2577.40	169,128	-709	0	50	449	0	0	1,050	0	-158
19	2577.29	168,986	-142	0	45	399	0	0	637	0	51
20	2577.16	168,819	-167	0	111	401	0	0	977	0	298
21	2576.81	168,369	-450	0	112	380	0	0	720	0	-222
22	2576.98	168,588	219	0	112	390	0	0	568	0	285
23	2577.40	169,128	540	0	111	521	0	0	43	0	-49
24	2578.04	169,953	825	0	0	444	0	0	48	0	429
25	2578.20	170,160	207	0	0	407	0	0	468	0	268
26	2578.14	170,082	-78	0	0	380	0	0	656	0	198
27	2578.07	169,992	-90	0	0	372	0	0	732	0	270
28	2577.78	169,617	-375	0	0	378	0	0	442	0	-311
29	2577.74	169,566	-51	0	0	370	0	0	490	0	69
30	2577.76	169,592	26	0	0	359	0	0	307	0	-26
31	2577.73	169,553	-39	0	0	354	0	0	426	0	33
Total			2,144	0	565	19,522	5,111	0	14,443	0	1,611

1/ Values supplied by LADWP, not verified by DWR.



**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**April 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Mar 31	2577.73	169,553									
1	2577.89	169,759	206	0	0	295	0	0	248	0	159
2	2577.85	169,708	-51	0	0	248	0	0	248	0	-51
3	2577.88	169,746	38	0	0	261	0	0	248	0	25
4	2576.85	168,413	-1,333	0	0	270	2,354	0	248	0	999
5	2575.43	166,604	-1,809	0	678	266	2,866	0	248	0	361
6	2574.24	165,092	-1,512	0	1,609	280	3,005	0	214	0	-182
7	2573.36	163,980	-1,112	0	2,377	300	2,819	0	179	0	-791
8	2572.12	162,421	-1,559	0	3,711	297	6,706	0	179	0	1,318
9	2571.51	161,658	-763	0	3,296	299	2,216	0	179	0	-1,963
10	2573.55	164,220	2,562	0	3,296	294	0	0	165	0	-863
11	2573.65	164,346	126	0	3,293	295	5,153	0	151	0	1,842
12	2572.87	163,363	-983	0	3,292	314	4,202	0	151	0	-236
13	2572.29	162,634	-729	0	3,289	330	4,624	0	151	0	427
14	2572.60	163,023	389	0	3,290	325	2,783	0	151	0	-292
15	2574.49	165,409	2,386	0	3,288	318	1,458	0	151	0	389
16	2576.24	167,639	2,230	0	3,282	323	1,386	0	151	0	162
17	2576.68	168,203	564	0	2,818	334	2,352	0	151	0	-85
18	2571.66	161,845	-6,358	0	2,676	333	9,186	0	151	0	-30
19	2572.15	162,459	614	0	2,897	334	2,321	0	151	0	-145
20	2572.82	163,300	841	0	3,307	312	2,022	0	151	0	-605
21	2573.01	163,539	239	0	3,303	304	4,733	0	151	0	1,516
22	2571.90	162,145	-1,394	0	3,243	304	1,904	0	151	0	-2,886
23	2571.70	161,895	-250	0	3,299	296	3,662	0	151	0	-32
24	2571.40	161,520	-375	0	3,232	294	3,817	0	151	0	67
25	2570.60	160,523	-997	0	2,372	285	3,196	0	151	0	-307
26	2572.30	162,647	2,124	0	2,326	282	429	0	151	0	96
27	2571.70	161,895	-752	0	1,007	277	1,735	0	150	0	-151
28	2571.00	161,021	-874	171	997	326	2,292	0	150	0	74
29	2571.50	161,645	624	0	994	307	321	0	163	0	-193
30	2572.30	162,647	1,002	0	992	288	366	0	177	0	265
<b>Total</b>			<b>-6,906</b>	<b>171</b>	<b>68,164</b>	<b>8,991</b>	<b>77,908</b>	<b>0</b>	<b>5,212</b>	<b>0</b>	<b>-1,112</b>

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

#### Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

May 2005

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Apr 30	2572.30	162,647									
1	2572.90	163,400	753	0	991	282	352	0	179	0	11
2	2572.20	162,521	-879	0	1,559	281	2,708	0	179	0	168
3	2572.90	163,400	879	0	1,517	282	293	0	179	0	-448
4	2573.90	164,662	1,262	0	1,458	280	287	0	179	0	-10
5	2575.40	166,566	1,904	1,152	1,479	317	619	0	180	0	-245
6	2577.00	168,613	2,047	1,183	1,446	394	760	0	180	0	-36
7	2576.63	168,138	-475	715	1,475	321	2,727	0	180	0	-79
8	2576.70	168,228	90	804	1,484	302	2,207	0	188	0	-105
9	2575.68	166,923	-1,305	822	1,102	294	3,629	0	206	0	312
10	2576.21	167,600	677	1,332	1,145	283	1,717	0	228	0	-138
11	2575.86	167,153	-447	1,302	639	263	2,173	0	258	0	-220
12	2574.56	165,498	-1,655	1,749	574	250	3,909	0	238	0	-81
13	2574.18	165,016	-482	2,446	314	243	3,202	0	234	0	-49
14	2573.67	164,371	-645	1,972	215	236	2,784	0	218	0	-66
15	2574.15	164,978	607	3,119	266	233	2,873	0	218	0	80
16	2574.07	164,877	-101	2,325	942	233	3,395	0	218	0	12
17	2573.62	164,308	-569	2,221	1,266	229	3,829	0	218	0	-238
18	2574.53	165,460	1,152	2,554	1,464	218	3,140	0	212	0	268
19	2572.29	162,634	-2,826	2,092	1,378	211	6,249	0	198	0	-60
20	2571.93	162,183	-451	2,523	987	204	3,993	0	198	0	26
21	2572.90	163,400	1,217	2,798	1,441	200	2,889	0	196	0	-137
22	2574.26	165,118	1,718	5,194	1,374	193	4,775	0	188	0	-80
23	2575.08	166,159	1,041	3,974	1,828	184	4,723	0	169	0	-53
24	2573.82	164,561	-1,598	3,175	1,781	178	6,430	0	169	0	-133
25	2573.69	164,396	-165	577	1,754	171	2,405	0	171	0	-91
26	2572.58	162,998	-1,398	2,501	1,747	162	5,607	0	159	0	-42
27	2573.00	163,526	528	3,440	1,749	157	4,643	0	159	0	-16
28	2575.62	166,847	3,321	3,390	1	153	160	0	136	0	73
29	2575.54	166,745	-102	2,424	0	149	2,611	0	135	0	71
30	2576.54	168,023	1,278	2,518	1,896	146	2,858	0	119	0	-305
31	2577.07	168,703	680	1,053	1,746	141	2,102	0	120	0	-38
<b>Total</b>			<b>6,056</b>	<b>59,355</b>	<b>37,018</b>	<b>7,190</b>	<b>90,049</b>	<b>0</b>	<b>5,809</b>	<b>0</b>	<b>-1,649</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**June 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
May 31	2577.07	168,703									
1	2574.09	164,902	-3,801	591	1,777	136	6,125	0	119	0	-61
2	2573.70	164,409	-493	2,593	1,765	128	4,777	0	119	0	-83
3	2571.93	162,183	-2,226	3,810	1,818	126	7,644	0	119	0	-217
4	2572.93	163,438	1,255	3,483	0	121	2,233	0	119	0	3
5	2576.15	167,524	4,086	5,003	0	116	1,023	0	114	0	104
6	2575.57	166,783	-741	2,305	1,680	114	4,817	0	101	0	78
7	2574.67	165,638	-1,145	2,136	1,910	114	4,996	0	101	0	-208
8	2575.01	166,070	432	2,897	1,592	112	4,055	0	101	0	-13
9	2573.93	164,700	-1,370	2,099	1,729	110	5,160	0	101	0	-47
10	2572.76	163,224	-1,476	1,833	1,738	113	4,856	0	101	0	-203
11	2572.40	162,772	-452	3,010	0	105	3,210	0	101	0	-256
12	2574.56	165,498	2,726	4,752	0	100	1,902	0	101	0	-123
13	2573.37	163,993	-1,505	3,323	1,167	96	5,960	0	101	0	-30
14	2573.18	163,753	-240	3,008	1,363	91	4,535	0	101	0	-66
15	2571.23	161,308	-2,445	1,707	1,432	86	5,528	0	101	0	-41
16	2570.23	160,063	-1,245	2,416	1,480	89	5,073	0	101	0	-56
17	2569.67	159,369	-694	1,847	1,384	91	3,914	0	101	0	-1
18	2571.95	162,208	2,839	2,161	1,514	94	834	0	101	0	5
19	2574.02	164,814	2,606	3,582	0	89	896	0	101	0	-68
20	2572.12	162,421	-2,393	791	1,436	84	4,535	0	101	0	-68
21	2571.73	161,933	-488	1,418	1,924	80	3,732	0	101	0	-77
22	2571.26	161,345	-588	1,151	1,434	78	3,090	0	101	0	-60
23	2569.67	159,369	-1,976	0	2,189	73	4,030	0	101	0	-107
24	2570.29	160,138	769	1,027	2,212	72	2,431	0	101	0	-10
25	2572.97	163,489	3,351	1,222	2,189	72	62	0	100	0	30
26	2575.98	167,306	3,817	3,941	0	75	98	0	100	0	-1
27	2575.59	166,808	-498	2,455	1,865	71	4,751	0	100	0	-38
28	2577.54	169,308	2,500	1,867	1,007	66	432	0	100	0	92
29	2575.18	166,286	-3,022	0	1,965	66	4,832	0	100	0	-121
30	2573.67	164,371	-1,915	1,917	1,973	64	5,688	0	100	0	-81
<b>Total</b>			<b>-4,332</b>	<b>68,345</b>	<b>40,543</b>	<b>2,832</b>	<b>111,219</b>	<b>0</b>	<b>3,109</b>	<b>0</b>	<b>-1,724</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**July 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Jun 30	2573.67	164,371									
1	2572.49	162,885	-1,486	1,746	1,978	60	5,010	0	101	0	-159
2	2574.35	165,232	2,347	2,259	1,953	58	1,920	0	101	0	98
3	2576.05	167,396	2,164	3,590	739	56	2,019	0	101	0	-101
4	2575.97	167,294	-102	1,815	734	54	2,572	0	101	0	-32
5	2575.70	166,949	-345	1,687	2,386	54	4,312	0	101	0	-59
6	2574.29	165,156	-1,793	0	2,382	52	4,035	0	101	0	-91
7	2573.25	163,841	-1,315	1,379	2,366	51	4,899	0	101	0	-111
8	2570.76	160,722	-3,119	575	2,536	49	6,097	0	101	0	-81
9	2572.29	162,634	1,912	0	2,435	52	470	0	99	0	-6
10	2574.67	165,638	3,004	4,913	755	49	2,594	0	99	0	-20
11	2574.37	165,257	-381	2,512	3,200	48	5,891	0	99	0	-151
12	2573.93	164,700	-557	3,599	2,775	45	7,093	0	93	0	210
13	2571.55	161,708	-2,992	1,522	2,778	46	7,392	0	87	0	141
14	2570.15	159,964	-1,744	920	3,161	44	5,700	0	81	0	-88
15	2568.48	157,900	-2,064	1,386	3,135	42	6,499	0	75	0	-53
16	2570.78	160,747	2,847	2,009	3,187	44	2,305	0	50	0	-38
17	2574.57	165,511	4,764	2,615	3,163	42	1,000	0	63	0	7
18	2575.08	166,159	648	3,194	2,872	40	5,092	0	58	0	-308
19	2573.14	163,703	-2,456	1,753	2,587	40	6,622	0	52	0	-162
20	2572.10	162,396	-1,307	1,689	1,845	37	4,820	0	52	0	-6
21	2569.31	158,924	-3,472	1,449	1,800	40	6,527	0	50	0	-184
22	2568.98	158,516	-408	987	1,830	37	3,206	0	48	0	-8
23	2572.34	162,697	4,181	2,313	2,276	37	396	0	48	0	-1
24	2576.58	168,074	5,377	3,654	1,823	71	185	0	48	0	62
25	2576.18	167,562	-512	1,647	2,422	47	4,523	0	48	0	-57
26	2575.05	166,120	-1,442	1,851	1,494	42	4,679	0	48	0	-102
27	2575.16	166,260	140	2,876	1,845	39	4,471	1	48	0	-100
28	2574.64	165,599	-661	2,003	1,861	38	4,412	1	48	0	-102
29	2574.00	164,788	-811	1,772	1,863	38	4,467	1	45	0	29
30	2576.37	167,805	3,017	2,666	1,752	36	1,343	1	45	0	-48
31	2575.93	167,242	-563	1,261	1,728	36	3,458	1	45	0	-84
<b>Total</b>			<b>2,871</b>	<b>61,642</b>	<b>67,661</b>	<b>1,424</b>	<b>124,009</b>	<b>5</b>	<b>2,237</b>	<b>0</b>	<b>-1,605</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**August 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Jul 31	2575.93	167,242									
1	2575.02	166,082	-1,160	2,400	1,376	35	4,874	0	48	0	-49
2	2573.49	164,144	-1,938	613	1,423	33	3,917	0	42	0	-48
3	2571.81	162,033	-2,111	1,812	1,379	33	5,221	0	39	0	-75
4	2570.99	161,009	-1,024	1,623	1,420	33	4,009	0	38	0	-53
5	2568.68	158,147	-2,862	0	1,403	33	4,047	0	38	0	-213
6	2569.92	159,679	1,532	1,065	1,442	33	998	0	39	0	29
7	2571.13	161,183	1,504	695	1,380	35	532	0	39	0	-35
8	2571.40	161,520	337	2,753	1,259	35	3,705	0	37	0	32
9	2571.52	161,670	150	1,531	1,362	33	2,683	0	36	0	-57
10	2571.20	161,271	-399	2,675	1,417	31	4,494	0	36	0	8
11	2570.46	160,349	-922	1,593	1,403	29	3,750	0	33	0	-164
12	2569.34	158,961	-1,388	1,481	1,410	29	4,189	0	31	0	-88
13	2571.82	162,045	3,084	2,191	1,423	27	584	0	31	0	58
14	2574.42	165,320	3,275	2,431	1,321	29	506	0	31	0	31
15	2573.70	164,409	-911	2,694	1,789	29	5,135	0	31	0	-257
16	2572.55	162,960	-1,449	1,731	1,207	29	4,428	0	27	0	39
17	2570.78	160,747	-2,213	1,203	1,498	29	4,764	0	27	0	-152
18	2570.16	159,977	-770	1,004	1,529	29	3,243	0	26	0	-63
19	2568.96	158,492	-1,485	1,295	1,518	27	4,175	0	26	0	-124
20	2572.97	163,489	4,997	4,046	2,328	27	1,483	0	26	0	105
21	2575.62	166,847	3,358	2,761	2,348	27	1,714	0	26	0	-38
22	2574.79	165,790	-1,057	2,002	1,516	26	4,459	0	26	0	-116
23	2573.33	163,942	-1,848	618	1,392	26	3,900	0	26	0	42
24	2571.62	161,795	-2,147	1,595	1,678	25	5,156	0	26	0	-263
25	2568.10	157,433	-4,362	0	1,580	25	5,805	0	26	0	-136
26	2566.03	154,904	-2,529	1,632	1,536	25	5,534	0	26	0	-162
27	2569.04	158,590	3,686	2,207	2,331	25	952	0	26	0	101
28	2572.01	162,283	3,693	3,028	2,300	25	1,608	0	26	0	-26
29	2571.01	161,034	-1,249	1,368	1,524	25	4,102	0	26	0	-38
30	2570.46	160,349	-685	1,674	1,513	25	3,799	0	26	0	-72
31	2568.40	157,802	-2,547	1,071	1,513	24	5,019	1	26	0	-109
<b>Total</b>			<b>-9,440</b>	<b>52,792</b>	<b>48,518</b>	<b>896</b>	<b>108,785</b>	<b>1</b>	<b>967</b>	<b>0</b>	<b>-1,893</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**September 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Aug 31	2568.40	157,802									
1	2568.16	157,507	-295	2,678	1,509	25	4,347	0	26	0	-134
2	2566.52	155,500	-2,007	1,632	1,931	22	5,463	0	26	0	-103
3	2570.76	160,722	5,222	3,759	2,407	22	1,012	0	26	0	72
4	2574.79	165,790	5,068	5,223	2,322	22	2,487	0	24	0	12
5	2574.70	165,676	-114	3,481	1,484	23	5,004	0	24	0	-74
6	2574.24	165,092	-584	3,727	1,475	23	5,774	0	24	0	-11
7	2573.23	163,816	-1,276	2,930	1,472	23	5,536	0	24	0	-141
8	2571.09	161,133	-2,683	1,877	1,477	23	5,956	0	24	0	-80
9	2570.23	160,063	-1,070	1,037	1,463	24	3,562	0	25	0	-7
10	2571.38	161,495	1,432	3,290	853	25	2,667	1	25	0	-43
11	2575.92	167,230	5,735	3,866	2,332	27	463	0	24	0	-3
12	2577.13	168,780	1,550	1,408	3,304	27	3,037	0	24	0	-128
13	2575.63	166,859	-1,921	0	3,295	27	5,150	0	24	0	-69
14	2575.42	166,592	-267	1,579	3,194	27	4,910	0	24	0	-133
15	2574.35	165,232	-1,360	583	2,198	27	5,056	0	24	0	912
16	2575.70	166,949	1,717	1,703	17	27	40	0	24	0	34
17	2575.66	166,898	-51	0	0	27	0	0	27	0	-51
18	2574.92	165,955	-943	0	0	27	880	0	24	0	-66
19	2574.23	165,080	-875	1,891	1,808	26	4,272	0	24	0	-304
20	2571.99	162,258	-2,822	0	1,857	28	4,784	0	24	0	101
21	2569.62	159,307	-2,951	742	1,854	29	5,457	0	24	0	-95
22	2569.95	159,716	409	999	1,850	29	2,216	0	24	0	-229
23	2571.79	162,008	2,292	528	1,779	29	83	0	24	0	63
24	2573.15	163,715	1,707	0	1,799	27	0	0	24	0	-95
25	2574.62	165,574	1,859	0	1,846	27	0	0	24	0	10
26	2573.29	163,892	-1,682	0	2,239	27	3,828	0	23	0	-97
27	2571.88	162,120	-1,772	0	2,383	34	4,166	0	23	0	0
28	2569.81	159,543	-2,577	808	2,124	31	5,240	0	23	0	-277
29	2568.57	158,011	-1,532	542	2,289	29	4,217	0	23	0	-152
30	2570.35	160,212	2,201	734	2,285	27	851	0	24	0	30
<b>Total</b>			2,410	45,017	54,846	791	96,458	1	727	0	-1,058

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**October 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Sep 30	2570.35	160,212									
1	2571.32	161,420	1,208	940	2,291	24	1,973	0	23	0	-51
2	2574.15	164,978	3,558	1,794	2,297	26	632	0	23	0	96
3	2573.59	164,270	-708	1,513	2,897	27	5,144	0	23	0	22
4	2574.57	165,511	1,241	511	3,002	26	2,362	0	23	0	87
5	2574.44	165,346	-165	684	3,017	25	3,518	0	25	0	-348
6	2573.45	164,093	-1,253	1,279	2,822	26	5,310	0	25	0	-45
7	2572.88	163,375	-718	1,274	3,286	27	5,219	0	25	0	-61
8	2574.59	165,536	2,161	853	3,160	27	2,055	0	25	0	201
9	2576.96	168,562	3,026	2,058	3,283	26	1,798	0	25	0	-518
10	2577.69	169,501	939	737	2,602	25	2,400	0	25	0	0
11	2577.04	168,665	-836	0	1,560	25	2,298	0	25	0	-98
12	2574.95	165,993	-2,672	0	724	24	3,384	0	25	0	-11
13	2574.90	165,930	-63	745	1,576	24	2,337	0	25	0	-46
14	2575.12	166,210	280	964	1,579	23	2,152	0	25	0	-109
15	2575.04	166,108	-102	0	1,566	22	1,827	0	25	0	162
16	2575.63	166,859	751	14	1,573	22	590	1	26	0	-241
17	2575.51	166,706	-153	1,040	1,569	158	3,131	0	27	0	238
18	2574.54	165,473	-1,233	0	1,570	257	2,929	0	185	0	54
19	2573.91	164,675	-798	1,120	1,569	60	3,506	0	39	0	-2
20	2572.89	163,388	-1,287	0	1,572	36	2,791	0	34	0	-70
21	2572.12	162,421	-967	0	1,576	30	2,447	0	36	0	-90
22	2572.30	162,647	226	0	1,579	28	1,322	0	38	0	-21
23	2573.09	163,640	993	1,154	1,578	28	1,634	0	34	0	-99
24	2573.47	164,119	479	890	1,571	27	2,062	0	32	0	85
25	2578.65	170,742	6,623	0	1,574	28	1,443	0	32	0	6,496
26	2573.36	163,980	-6,762	889	1,304	29	2,388	0	32	0	-6,564
27	2572.89	163,388	-592	713	1,574	29	2,862	0	30	0	-16
28	2571.62	161,795	-1,593	660	1,576	32	3,747	0	30	0	-84
29	2573.41	164,043	2,248	1,279	1,923	34	1,016	0	26	0	54
30	2574.19	165,029	986	1,052	1,644	35	1,753	0	26	0	34
31	2575.59	166,808	1,779	2,040	2,237	38	2,336	0	26	0	-174
<b>Total</b>			<b>6,596</b>	<b>24,203</b>	<b>61,651</b>	<b>1,248</b>	<b>78,366</b>	<b>1</b>	<b>1,020</b>	<b>0</b>	<b>-1,119</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**November 2005**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Oct 31	2575.59	166,808									
1	2574.90	165,930	-878	1,266	2,216	37	4,293	0	26	0	-78
2	2574.47	165,384	-546	1,655	2,276	60	4,410	0	39	0	-88
3	2574.43	165,333	-51	999	2,277	71	3,323	0	39	0	-36
4	2574.80	165,803	470	728	2,242	69	2,450	0	39	0	-80
5	2573.80	164,535	-1,268	0	2,248	66	3,467	0	39	0	-76
6	2573.42	164,056	-479	0	2,231	62	2,548	0	39	0	-185
7	2573.65	164,346	290	1,799	1,514	58	3,033	0	39	0	-9
8	2573.03	163,564	-782	0	1,634	56	2,271	0	39	0	-162
9	2573.12	163,677	113	0	1,653	75	1,597	0	39	0	21
10	2573.13	163,690	13	803	1,493	121	2,290	0	39	0	-75
11	2572.51	162,910	-780	564	1,672	90	3,031	0	39	0	-36
12	2573.73	164,447	1,537	268	2,275	69	878	0	39	0	-158
13	2574.52	165,447	1,000	445	2,283	57	1,786	0	39	0	40
14	2574.21	165,054	-393	1,572	1,686	52	3,574	0	39	0	-90
15	2574.54	165,473	419	751	1,707	48	2,098	0	39	0	50
16	2574.19	165,029	-444	552	1,558	46	2,485	0	40	0	-75
17	2572.36	162,722	-2,307	0	0	46	2,116	0	40	0	-197
18	2570.49	160,386	-2,336	0	76	46	2,398	0	40	0	-20
19	2570.35	160,212	-174	1,146	0	43	1,261	0	40	0	-62
20	2568.34	157,728	-2,484	0	0	44	2,404	0	40	0	-84
21	2568.70	158,171	443	857	1,576	44	1,983	0	40	0	-11
22	2568.35	157,740	-431	0	1,662	41	2,065	0	40	0	-29
23	2568.23	157,593	-147	0	1,658	41	1,754	0	40	0	-52
24	2569.02	158,566	973	847	1,676	46	1,467	0	40	0	-89
25	2568.44	157,851	-715	1,443	1,646	48	3,991	0	40	0	179
26	2567.67	156,906	-945	0	1,619	48	2,241	0	40	0	-331
27	2568.88	158,393	1,487	1,230	1,580	48	1,371	0	40	0	40
28	2568.79	158,282	-111	569	1,678	48	2,241	0	40	0	-125
29	2568.46	157,876	-406	0	1,677	49	1,970	0	40	0	-122
30	2569.16	158,739	863	386	1,678	49	1,251	0	40	0	41
Total			-8,069	17,880	47,491	1,678	72,047	0	1,172	0	-1,899

1/ Values supplied by LADWP, not verified by DWR.



**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**December 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Nov 30	2569.16	158,739									
1	2568.73	158,208	-531	0	1,677	43	2,099	0	45	0	-107
2	2568.49	157,913	-296	595	1,683	52	2,638	0	45	0	57
3	2568.62	158,073	160	594	1,681	57	2,059	0	45	0	-68
4	2569.88	159,629	1,557	693	1,624	46	743	0	46	0	-17
5	2570.24	160,076	447	603	1,688	43	1,829	0	46	0	-12
6	2569.88	159,629	-447	0	1,205	41	1,571	0	46	0	-76
7	2569.56	159,233	-396	0	1,601	42	1,881	0	46	0	-112
8	2569.34	158,961	-272	0	1,612	42	1,820	0	45	0	-61
9	2568.82	158,319	-642	0	1,614	42	2,185	0	45	0	-68
10	2569.88	159,629	1,310	0	1,624	40	408	0	44	0	98
11	2570.43	160,312	683	388	1,628	40	1,039	0	45	0	-289
12	2571.36	161,470	1,158	876	2,434	41	2,191	0	45	0	43
13	2571.89	162,133	663	733	1,743	41	2,462	0	45	0	653
14	2572.15	162,459	326	0	1,826	39	1,495	0	45	0	1
15	2572.42	162,797	339	0	2,006	39	1,548	0	46	0	-112
16	2572.04	162,321	-477	339	2,397	37	3,068	1	46	0	-135
17	2573.33	163,942	1,621	46	2,375	39	736	0	46	0	-57
18	2574.78	165,777	1,835	0	2,409	39	518	0	46	0	-49
19	2574.19	165,029	-748	0	0	39	843	0	46	0	102
20	2574.30	165,168	139	641	0	39	446	0	46	0	-49
21	2573.91	164,675	-494	656	0	41	1,150	0	46	0	5
22	2573.02	163,551	-1,123	1,608	0	42	2,710	0	46	0	-17
23	2571.66	161,845	-1,706	769	0	42	2,493	0	46	0	22
24	2571.48	161,620	-225	2,077	0	42	2,227	0	46	0	-71
25	2573.38	164,005	2,385	2,340	385	42	290	0	46	0	-46
26	2574.02	164,814	809	2,291	635	44	2,215	0	46	0	100
27	2573.33	163,942	-872	2,386	108	43	3,254	0	46	0	-109
28	2573.48	164,131	189	989	0	46	933	0	46	0	133
29	2573.57	164,245	114	2,693	0	48	2,529	0	46	0	-52
30	2573.92	164,687	442	1,836	0	47	1,408	0	46	0	13
31	2574.78	165,777	1,090	2,458	0	56	1,310	0	46	0	-68
<b>Total</b>			<b>7,038</b>	<b>25,611</b>	<b>33,955</b>	<b>1,334</b>	<b>52,098</b>	<b>1</b>	<b>1,415</b>	<b>0</b>	<b>-348</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**January 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Dec 31	2574.78	165,777									
1	2575.13	166,222	445	1,765	0	112	1,605	0	46	0	219
2	2575.58	166,796	574	2,613	227	2,903	4,378	0	46	0	-745
3	2575.52	166,719	-77	1,298	384	1,222	2,125	0	46	0	-810
4	2573.89	164,649	-2,070	0	0	327	2,310	0	46	0	-41
5	2571.65	161,833	-2,816	0	404	211	3,162	0	46	0	-223
6	2569.91	159,666	-2,167	544	390	165	2,970	0	46	0	-250
7	2571.95	162,208	2,542	632	3,238	134	1,396	0	46	0	-20
8	2574.40	165,295	3,087	1,165	3,244	119	1,358	0	46	0	-37
9	2574.46	165,371	76	0	3,232	98	3,090	0	46	0	-118
10	2572.86	163,350	-2,021	0	3,245	85	5,227	0	46	0	-78
11	2572.66	163,099	-251	0	3,255	78	3,436	0	46	0	-102
12	2572.54	162,948	-151	1,276	3,193	70	4,557	0	46	0	-87
13	2571.20	161,271	-1,677	718	1,315	67	3,747	0	46	0	16
14	2572.30	162,647	1,376	1,053	3,235	61	2,841	0	56	0	-76
15	2573.92	164,687	2,040	0	3,245	55	1,168	0	56	0	-36
16	2574.01	164,801	114	1,484	3,137	49	4,388	0	56	0	-112
17	2573.95	164,725	-76	0	3,140	46	3,139	0	56	0	-67
18	2574.24	165,092	367	0	3,153	44	2,762	0	56	0	-12
19	2573.30	163,904	-1,188	861	3,164	44	5,084	0	56	0	-117
20	2572.48	162,873	-1,031	0	3,174	42	4,224	0	56	0	33
21	2572.84	163,325	452	13	3,113	41	2,723	0	56	0	64
22	2573.45	164,093	768	0	2,429	38	1,473	0	56	0	-170
23	2570.85	160,834	-3,259	1,598	1,929	38	6,628	0	56	0	-140
24	2570.78	160,747	-87	907	2,227	37	3,179	0	56	0	-23
25	2570.54	160,449	-298	1,267	2,251	37	3,822	0	57	0	26
26	2570.91	160,909	460	2,212	2,145	37	3,854	0	57	0	-23
27	2571.30	161,395	486	1,974	2,162	35	3,596	0	57	0	-32
28	2571.95	162,208	813	802	2,047	35	2,043	0	57	0	29
29	2573.01	163,539	1,331	738	2,044	36	1,406	0	57	0	-24
30	2573.29	163,892	353	1,142	2,096	36	2,914	0	57	0	50
31	2573.42	164,052	160	1,292	2,221	35	3,405	0	57	0	74
<b>Total</b>			<b>-1,725</b>	<b>25,354</b>	<b>69,039</b>	<b>6,337</b>	<b>98,010</b>	<b>0</b>	<b>1,613</b>	<b>0</b>	<b>-2,832</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**February 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Jan 31	2573.42	164,052									
1	2572.89	163,388	-664	473	2,250	33	3,234	0	51	0	-135
2	2572.24	162,571	-817	6	2,160	31	2,945	0	56	0	-13
3	2572.48	162,873	302	1,101	2,151	29	2,867	0	67	0	-45
4	2572.35	162,709	-164	0	1,788	30	1,978	0	49	0	45
5	2574.10	164,915	2,206	1,779	1,778	30	1,360	0	73	0	52
6	2575.31	166,451	1,536	2,052	2,154	31	2,463	0	79	0	-159
7	2575.07	166,146	-305	0	2,150	32	2,396	0	72	0	-19
8	2576.13	167,498	1,352	502	1,724	33	674	0	87	0	-146
9	2575.70	166,949	-549	652	1,487	35	2,654	0	86	0	17
10	2575.18	166,286	-663	0	1,491	37	2,116	0	71	0	-4
11	2575.99	167,319	1,033	0	1,486	37	462	0	79	0	51
12	2575.55	166,757	-562	0	1,189	41	1,824	0	78	0	110
13	2575.33	166,477	-280	743	1,500	43	2,491	0	80	0	5
14	2574.63	165,587	-890	0	1,505	47	2,343	0	78	0	-21
15	2574.27	165,130	-457	0	1,499	50	1,813	0	76	0	-117
16	2573.36	163,980	-1,150	0	1,501	52	2,567	0	81	0	-55
17	2572.66	163,099	-881	0	1,497	54	2,462	0	71	0	101
18	2572.84	163,325	226	0	1,607	55	1,079	0	103	0	-254
19	2573.60	164,283	958	0	1,503	57	563	0	102	0	63
20	2572.84	163,325	-958	0	1,501	52	2,307	0	100	0	-104
21	2572.80	163,275	-50	0	1,504	49	1,513	0	97	0	7
22	2573.38	164,005	730	0	1,504	46	584	0	91	0	-145
23	2573.51	164,169	164	0	1,505	45	1,235	0	101	0	-50
24	2573.81	164,548	379	15	1,505	43	1,047	0	97	0	-40
25	2574.38	165,270	722	11	1,505	42	687	0	113	0	-36
26	2575.07	166,146	876	0	1,509	39	628	0	87	0	43
27	2573.78	164,510	-1,636	811	2,021	357	3,597	0	1,151	0	-77
28	2573.64	164,333	-177	0	2,072	1,673	980	0	2,909	0	-33
<b>Total</b>			281	8,145	47,046	3,103	50,869	0	6,185	0	-959

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**March 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Feb 28	2573.64	164,333									
1	2573.57	164,245	-88	1,118	3,181	344	1,760	0	2,504	0	-467
2	2572.96	163,476	-769	0	3,168	210	3,052	0	929	0	-166
3	2572.33	162,684	-792	673	2,109	271	2,745	0	376	0	-724
4	2572.54	162,948	264	61	1,652	243	1,415	0	277	0	0
5	2573.73	164,447	1,499	749	1,460	190	1,504	0	180	0	784
6	2572.57	162,986	-1,461	0	2,797	132	3,454	0	80	0	-856
7	2573.89	164,649	1,663	0	2,787	259	2,265	0	80	0	962
8	2573.57	164,245	-404	0	2,837	206	3,213	0	85	0	-149
9	2572.95	163,463	-782	0	2,890	162	3,212	0	98	0	-524
10	2572.13	162,434	-1,029	0	2,403	123	3,426	0	80	0	-49
11	2573.03	163,564	1,130	0	3,184	167	1,849	0	80	0	-292
12	2573.87	164,624	1,060	0	3,140	274	2,099	0	75	0	-180
13	2574.31	165,181	557	0	3,217	308	2,735	0	75	0	-158
14	2573.77	164,498	-683	0	2,909	182	3,830	0	75	0	131
15	2575.87	167,166	2,668	0	3,210	103	875	0	75	0	305
16	2575.93	167,242	76	859	3,171	75	3,947	0	75	0	-7
17	2575.08	166,159	-1,083	0	3,214	67	4,317	0	75	0	28
18	2576.69	168,215	2,056	0	3,205	195	1,168	0	75	0	-101
19	2576.48	167,946	-269	0	3,206	171	3,224	0	75	0	-347
20	2576.23	167,626	-320	0	3,204	99	3,178	0	75	0	-370
21	2576.40	167,844	218	0	3,207	90	3,149	0	75	0	145
22	2575.57	166,783	-1,061	0	1,793	88	2,725	0	75	0	-142
23	2575.25	166,375	-408	0	1,787	72	2,231	0	75	0	39
24	2575.43	166,604	229	0	1,781	59	1,732	0	75	0	196
25	2575.84	167,127	523	0	1,781	46	1,312	0	75	0	83
26	2576.27	167,677	550	0	1,780	54	1,139	0	75	0	-70
27	2575.69	166,936	-741	0	1,804	83	2,514	0	75	0	-39
28	2575.89	167,191	255	0	1,774	541	1,979	0	124	0	43
29	2576.67	168,190	999	0	1,195	1,197	645	0	628	0	-120
30	2575.86	167,153	-1,037	0	1,193	468	1,992	0	559	0	-147
31	2575.04	166,108	-1,045	0	1,052	387	1,739	0	688	0	-57
<b>Total</b>			<b>1,775</b>	<b>3,460</b>	<b>76,091</b>	<b>6,866</b>	<b>74,425</b>	<b>0</b>	<b>7,968</b>	<b>0</b>	<b>-2,249</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**April 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Mar 31	2575.04	166,108									
1	2573.74	164,460	-1,648	0	716	343	1,685	0	994	0	-28
2	2572.31	162,659	-1,801	0	755	364	2,162	0	754	0	-4
3	2572.49	162,885	226	0	1,233	1,696	650	0	525	0	-1,528
4	2574.36	165,244	2,359	0	963	5,765	555	0	3,316	0	-498
5	2574.52	165,447	203	0	396	2,607	416	0	2,269	0	-115
6	2574.13	164,953	-494	780	929	937	1,818	0	1,611	0	289
7	2574.19	165,029	76	758	826	653	1,958	0	992	0	789
8	2573.68	164,384	-645	766	847	564	2,210	0	797	0	185
9	2573.52	164,182	-202	1,597	808	553	2,680	0	625	0	145
10	2573.71	164,422	240	2,319	906	456	2,941	0	411	0	-89
11	2573.01	163,539	-883	2,292	837	348	3,986	0	327	0	-47
12	2572.59	163,011	-528	1,497	837	314	2,824	0	298	0	-54
13	2573.15	163,715	704	3,768	865	304	3,987	0	258	0	12
14	2572.00	162,271	-1,444	1,850	1,154	286	4,503	0	250	0	19
15	2575.36	166,515	4,244	3,602	867	273	355	0	248	0	105
16	2577.02	168,639	2,124	1,338	956	246	258	0	250	0	92
17	2573.98	164,763	-3,876	0	1,533	236	5,263	0	250	0	-132
18	2572.56	162,973	-1,790	0	1,490	229	3,002	0	250	0	-257
19	2573.33	163,942	969	1,826	1,505	220	2,354	0	254	0	26
20	2573.07	163,614	-328	708	1,474	207	2,941	0	200	0	424
21	2573.03	163,564	-50	1,630	1,610	194	3,095	0	200	0	-189
22	2574.22	165,067	1,503	1,978	1,464	186	2,044	0	200	0	119
23	2574.47	165,384	317	1,312	1,455	181	2,505	0	200	0	74
24	2574.00	164,788	-596	1,844	1,474	179	3,429	0	198	0	-466
25	2573.10	163,652	-1,136	800	1,533	163	3,066	0	198	0	-368
26	2574.07	164,877	1,225	874	1,497	157	2,007	0	159	0	863
27	2573.89	164,649	-228	1,329	1,488	155	2,840	0	159	0	-201
28	2572.32	162,672	-1,977	744	1,491	154	3,921	0	159	0	-286
29	2573.77	164,498	1,826	1,100	1,375	157	700	0	159	0	53
30	2575.75	167,012	2,514	2,273	1,518	157	1,715	0	159	0	440
Total			904	36,985	34,802	18,284	71,870	0	16,670	0	-627

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

#### Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

May 2006

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Apr 30	2575.75	167,012									
1	2574.29	165,156	-1,856	0	1,427	154	3,277	0	158	0	-2
2	2572.77	163,237	-1,919	1,855	1,492	152	5,245	0	100	0	-73
3	2572.77	163,237	0	1,596	1,434	148	2,974	0	99	0	-105
4	2572.45	162,835	-402	1,774	1,495	142	3,628	0	99	0	-86
5	2571.20	161,271	-1,564	959	1,499	136	3,560	0	99	0	-499
6	2574.44	165,346	4,075	3,375	1,245	130	1,059	0	99	0	483
7	2575.74	167,000	1,654	2,284	1,429	127	1,797	0	99	0	-290
8	2573.47	164,119	-2,881	1,681	1,661	118	5,732	0	100	0	-509
9	2573.38	164,005	-114	1,518	1,400	114	2,965	0	99	0	-82
10	2573.41	164,043	38	1,106	1,555	108	2,438	0	99	0	-194
11	2573.12	163,677	-366	893	1,560	103	3,696	0	99	0	873
12	2570.75	160,710	-2,968	0	1,512	102	4,341	0	99	0	-142
13	2571.58	161,745	1,035	535	1,505	99	1,162	0	99	0	157
14	2573.05	163,589	1,844	1,275	1,467	93	688	0	99	0	-204
15	2572.88	163,375	-214	775	1,533	86	2,490	0	98	0	-20
16	2572.81	163,287	-88	855	1,696	81	2,621	0	98	0	-1
17	2573.25	163,841	554	2,473	1,557	78	2,957	0	98	0	-499
18	2572.35	162,709	-1,132	1,904	1,814	89	5,061	0	98	0	220
19	2569.88	159,629	-3,080	630	1,567	80	4,624	0	98	0	-635
20	2570.02	159,803	174	0	1,635	77	1,983	0	98	0	543
21	2572.55	162,960	3,158	2,191	1,532	83	376	0	99	0	-173
22	2571.62	161,795	-1,165	1,558	1,588	145	3,349	0	99	0	-1,008
23	2572.38	162,747	952	2,596	1,563	124	4,371	0	99	0	1,139
24	2572.00	162,271	-476	2,808	1,495	96	4,819	0	99	0	43
25	2572.02	162,296	25	2,258	1,653	79	2,914	0	99	0	-952
26	2571.79	162,008	-288	3,179	1,492	75	4,861	0	99	0	-74
27	2571.21	161,283	-725	1,895	1,483	71	4,172	0	99	0	97
28	2575.54	166,745	5,462	4,610	1,502	70	447	0	99	0	-174
29	2575.95	167,268	523	2,460	1,501	70	3,047	1	99	0	-361
30	2574.59	165,536	-1,732	2,076	1,497	65	5,277	0	99	0	6
31	2574.49	165,409	-127	2,968	1,493	62	5,097	0	99	0	546
<b>Total</b>			-1,603	54,087	47,282	3,157	101,028	1	3,124	0	-1,976

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**June 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
May 31	2574.49	165,409									
1	2574.14	164,966	-443	2,613	1,504	62	4,608	0	100	0	86
2	2571.81	162,033	-2,933	3,320	1,377	58	7,047	0	90	0	-551
3	2571.02	161,046	-987	2,894	1,526	55	5,310	0	79	0	-73
4	2572.38	162,747	1,701	3,978	1,990	52	4,509	0	61	0	251
5	2573.32	163,929	1,182	3,819	1,847	51	4,412	0	61	0	-62
6	2573.53	164,194	265	2,844	1,499	50	4,128	0	61	0	61
7	2574.32	165,197	1,003	3,290	1,581	47	3,911	0	61	0	57
8	2572.85	163,338	-1,859	3,157	1,505	45	5,180	0	61	0	-1,325
9	2571.79	162,008	-1,330	2,693	1,509	47	5,937	0	61	0	419
10	2571.67	161,858	-150	2,548	794	44	3,001	0	62	0	-473
11	2573.36	163,980	2,122	4,141	0	47	2,527	1	62	0	524
12	2573.92	164,687	707	3,994	0	43	3,202	0	62	0	-66
13	2573.55	164,220	-467	3,775	0	43	4,128	0	62	0	-95
14	2572.77	163,237	-983	4,132	0	43	4,924	0	62	0	-172
15	2571.66	161,845	-1,392	4,034	0	40	5,101	0	62	0	-303
16	2569.87	159,617	-2,228	3,444	0	40	5,512	0	60	0	-140
17	2569.31	158,924	-693	3,266	3	36	4,613	0	50	0	665
18	2572.34	162,697	3,773	4,022	1,398	36	1,494	0	50	0	-139
19	2572.29	162,634	-63	2,258	2,086	34	4,394	0	50	0	3
20	2572.49	162,885	251	3,052	2,409	32	5,116	0	51	0	-75
21	2573.02	163,551	666	3,741	2,426	31	5,533	0	51	0	52
22	2571.52	161,670	-1,881	3,327	2,512	31	7,386	1	51	0	-313
23	2570.20	160,026	-1,644	3,298	2,331	29	7,254	0	51	0	3
24	2572.32	162,672	2,646	1,472	2,430	29	1,208	0	51	0	-26
25	2574.40	165,295	2,623	3,636	2,372	29	3,323	0	51	0	-40
26	2574.02	164,814	-481	2,123	2,804	30	5,311	0	51	0	-76
27	2573.04	163,577	-1,237	1,538	2,795	31	5,399	0	51	0	-151
28	2571.69	161,883	-1,694	792	2,788	30	5,428	0	51	0	175
29	2571.43	161,558	-325	1,261	2,802	27	4,377	0	51	0	13
30	2569.45	159,097	-2,461	1,085	2,803	27	6,145	0	51	0	-180
<b>Total</b>			<b>-6,312</b>	<b>89,547</b>	<b>47,091</b>	<b>1,199</b>	<b>140,418</b>	<b>2</b>	<b>1,778</b>	<b>0</b>	<b>-1,951</b>

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

Daily Operation

July 2006

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Jun 30	2569.45	159,097									
1	2569.85	159,592	495	2,509	2,799	25	4,697	0	51	0	-90
2	2571.34	161,445	1,853	1,944	2,785	24	2,929	0	32	0	61
3	2570.40	160,275	-1,170	1,664	1,967	23	4,270	0	30	0	-524
4	2572.67	163,111	2,836	1,220	1,904	23	653	0	30	0	372
5	2570.67	160,610	-2,501	1,726	1,906	23	5,797	0	30	0	-329
6	2569.89	159,642	-968	2,972	2,232	22	5,620	0	30	0	-544
7	2571.52	161,670	2,028	2,390	1,895	22	2,322	0	28	0	71
8	2572.13	162,433	763	2,268	1,939	21	3,452	0	26	0	13
9	2572.14	162,446	13	1,075	1,493	21	2,465	0	26	0	-85
10	2573.58	164,258	1,812	3,730	2,558	21	4,573	0	26	0	102
11	2574.21	165,054	796	1,912	2,347	20	3,347	0	26	0	-110
12	2573.91	164,675	-379	447	2,296	20	3,055	0	26	0	-61
13	2574.90	165,930	1,255	1,551	2,322	19	2,499	1	26	0	-111
14	2573.70	164,409	-1,521	1,139	2,335	19	4,891	0	26	0	-97
15	2573.37	163,993	-416	1,026	2,330	18	3,567	0	25	0	-198
16	2574.60	165,549	1,556	935	2,262	18	1,661	0	23	0	25
17	2573.64	164,333	-1,216	1,501	2,577	17	5,134	0	24	0	-153
18	2573.91	164,675	342	2,017	2,673	17	4,550	0	22	0	207
19	2573.66	164,359	-316	2,479	2,585	17	5,227	0	22	0	-148
20	2573.25	163,841	-518	2,020	2,462	16	5,193	0	22	0	199
21	2573.19	163,766	-75	1,875	2,459	16	4,323	0	22	0	-80
22	2572.31	162,659	-1,107	743	2,468	16	3,832	0	22	0	-480
23	2572.77	163,237	578	1,602	2,431	16	3,745	0	22	0	296
24	2571.51	161,658	-1,579	821	2,452	16	4,824	0	22	0	-22
25	2571.96	162,220	562	2,220	2,481	28	4,169	0	21	0	23
26	2571.78	161,995	-225	2,404	1,964	25	4,172	0	21	0	-425
27	2571.66	161,845	-150	2,155	2,066	20	4,242	0	21	0	-128
28	2571.60	161,770	-75	1,602	2,124	19	3,714	0	21	0	-85
29	2571.81	162,033	263	2,986	2,037	18	4,278	0	21	0	-479
30	2574.93	165,968	3,935	2,584	2,161	18	1,355	0	21	0	548
31	2574.70	165,676	-292	1,506	2,060	18	3,995	0	21	0	140
<b>Total</b>			<b>6,579</b>	<b>57,023</b>	<b>70,370</b>	<b>616</b>	<b>118,551</b>	<b>1</b>	<b>786</b>	<b>0</b>	<b>-2,092</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**August 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Jul 31	2574.70	165,676									
1	2574.42	165,320	-356	1,359	1,737	18	3,434	0	21	0	-15
2	2573.97	164,750	-570	772	1,858	18	3,044	0	21	0	-153
3	2573.47	164,119	-631	860	1,524	17	2,659	0	21	0	-352
4	2572.85	163,338	-781	725	1,714	17	3,052	0	21	0	-164
5	2573.18	163,753	415	1,347	1,679	17	2,482	0	21	0	-125
6	2574.51	165,435	1,682	1,110	1,236	17	699	0	21	0	39
7	2574.74	165,726	291	1,126	1,982	16	2,700	0	21	0	-112
8	2574.65	165,612	-114	1,022	1,662	16	2,713	0	21	0	-80
9	2574.62	165,574	-38	1,058	1,683	16	2,671	0	21	0	-103
10	2574.35	165,232	-342	687	1,669	16	2,585	0	21	0	-108
11	2572.62	163,048	-2,184	575	1,653	16	4,388	1	21	0	-18
12	2573.58	164,258	1,210	621	1,685	17	1,001	0	21	0	-91
13	2575.03	166,095	1,837	2,460	665	17	1,305	0	21	0	21
14	2574.92	165,955	-140	1,715	1,669	17	3,395	0	21	0	-125
15	2574.14	164,966	-989	909	1,381	18	3,204	0	21	0	-72
16	2573.09	163,640	-1,326	669	1,483	18	3,421	0	19	0	-56
17	2572.46	162,847	-793	941	1,502	18	3,219	0	17	0	-18
18	2571.62	161,795	-1,052	0	1,482	18	2,466	0	17	0	-69
19	2572.53	162,935	1,140	1,079	1,492	18	1,383	0	17	0	-49
20	2574.41	165,308	2,373	2,355	1,383	18	1,320	0	17	0	-46
21	2573.70	164,409	-899	930	1,487	16	3,248	0	17	0	-67
22	2573.32	163,929	-480	919	1,431	16	2,772	0	17	0	-57
23	2573.02	163,551	-378	744	1,537	15	2,604	0	16	0	-54
24	2572.20	162,521	-1,030	61	1,321	15	2,856	0	16	0	445
25	2571.70	161,895	-626	1,381	1,527	15	3,480	0	16	0	-53
26	2573.74	164,460	2,565	2,295	1,542	14	1,258	0	16	0	-12
27	2574.46	165,371	911	1,534	1,563	14	2,244	0	16	0	60
28	2574.05	164,852	-519	1,506	1,463	14	3,411	0	16	0	-75
29	2573.62	164,308	-544	1,124	1,530	14	3,094	0	16	0	-102
30	2573.18	163,753	-555	786	1,515	14	2,791	0	16	0	-63
31	2573.18	163,753	0	1,947	1,665	15	3,525	0	16	0	-86
<b>Total</b>			-1,923	34,617	47,720	505	82,424	1	580	0	-1,760

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**September 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Aug 31	2573.18	163,753									
1	2572.09	162,383	-1,370	2,165	1,424	15	4,868	0	16	0	-90.00
2	2572.37	162,734	351	2,566	1,494	14	3,655	0	16	0	-52.00
3	2574.26	165,118	2,384	2,730	1,562	14	1,932	0	16	0	26.00
4	2575.18	166,286	1,168	2,207	1,433	14	2,427	0	16	0	-43.00
5	2574.00	164,788	-1,498	607	1,504	14	3,555	0	16	0	-52.00
6	2573.88	164,637	-151	1,260	1,509	14	1,826	0	16	0	-1,092.00
7	2572.05	162,333	-2,304	435	1,538	14	4,126	0	14	0	-151.00
8	2572.47	162,860	527	0	1,453	14	905	0	14	0	-21.00
9	2573.85	164,599	1,739	770	1,512	14	1,435	0	14	0	892.00
10	2576.35	167,780	3,181	2,315	1,397	15	549	0	14	0	17.00
11	2575.21	166,324	-1,456	849	1,028	15	3,304	0	14	0	-30.00
12	2574.37	165,257	-1,067	994	1,109	14	3,063	0	14	0	-107.00
13	2574.02	164,814	-443	1,236	1,198	16	2,875	0	14	0	-4.00
14	2571.88	162,120	-2,694	557	1,193	16	4,284	0	14	0	-162.00
15	2571.02	161,046	-1,074	0	1,004	16	2,086	1	14	0	7.00
16	2572.47	162,860	1,814	1,243	1,102	16	548	0	14	0	15.00
17	2574.59	165,536	2,676	2,628	1,013	15	907	0	14	0	-59.00
18	2572.27	162,609	-2,927	981	1,624	16	5,355	0	14	0	-179.00
19	2571.26	161,345	-1,264	665	1,583	16	3,376	0	14	0	-138.00
20	2573.07	163,614	2,269	2,520	1,409	16	1,685	0	14	0	23.00
21	2572.70	163,149	-465	622	1,322	17	2,392	0	14	0	-20.00
22	2574.74	165,726	2,577	1,456	1,520	17	437	0	14	0	35.00
23	2575.36	166,515	789	1,072	213	16	405	0	14	0	-93.00
24	2575.85	167,140	625	1,255	0	16	592	0	14	0	-40.00
25	2575.24	166,362	-778	701	1,473	16	2,901	0	14	0	-53.00
26	2574.90	165,927	-435	1,696	1,467	16	5,041	0	14	0	1,441.00
27	2572.97	163,489	-2,438	0	1,628	16	2,506	0	15	0	-1,561.00
28	2572.38	162,747	-742	0	1,238	18	1,987	0	15	0	4.00
29	2572.12	162,421	-326	907	1,367	18	2,498	0	15	0	-105.00
30	2572.86	163,350	929	1,419	0	18	471	0	15	0	-22.00
<b>Total</b>			<b>-403</b>	<b>35,856</b>	<b>37,317</b>	<b>466</b>	<b>71,991</b>	<b>1</b>	<b>436</b>	<b>0</b>	<b>-1,614</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**October 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Sep 30	2572.86	163,350									
1	2571.99	162,258	-1,092	0	0	20	1,131	0	14	0	33
2	2572.70	163,149	891	0	1,387	20	492	0	14	0	-10
3	2572.21	162,534	-615	0	1,184	20	1,785	0	14	0	-20
4	2571.95	162,208	-326	0	1,729	21	1,955	0	21	0	-100
5	2572.23	162,559	351	605	1,427	21	1,615	0	21	0	-66
6	2572.44	162,822	263	1,550	1,424	22	2,787	0	21	0	75
7	2574.57	165,511	2,689	3,053	0	22	398	0	21	0	33
8	2575.21	166,324	813	1,372	0	22	383	1	21	0	-176
9	2576.19	167,575	1,251	586	1,389	22	751	0	20	0	25
10	2575.22	166,337	-1,238	0	1,397	22	2,653	0	21	0	17
11	2574.47	165,384	-953	683	1,390	22	2,906	0	21	0	-121
12	2573.35	163,967	-1,417	0	1,456	23	2,916	0	21	0	41
13	2572.12	162,421	-1,546	614	1,434	23	3,494	0	20	0	-103
14	2571.62	161,795	-626	0	0	39	628	0	40	0	3
15	2571.88	162,120	325	1,302	0	28	1,100	0	41	0	136
16	2571.77	161,983	-137	808	1,381	27	2,237	0	26	0	-90
17	2572.21	162,534	551	1,507	1,464	26	2,378	1	25	0	-42
18	2571.97	162,233	-301	790	1,398	25	2,370	0	25	0	-119
19	2572.05	162,333	100	1,453	1,403	24	2,715	0	25	0	-40
20	2572.05	162,333	0	881	1,401	24	2,211	0	25	0	-70
21	2572.12	162,421	88	988	0	24	1,004	0	25	0	105
22	2571.58	161,745	-676	0	0	24	508	0	25	0	-167
23	2572.12	162,421	676	877	1,472	24	1,685	0	25	0	13
24	2571.55	161,708	-713	0	980	24	1,570	0	25	0	-122
25	2572.38	162,747	1,039	1,243	1,014	24	1,202	1	25	0	-14
26	2573.53	164,194	1,447	846	1,000	24	352	0	25	0	-46
27	2573.57	164,245	51	602	1,023	24	1,621	0	25	0	48
28	2573.95	164,725	480	1,116	0	23	542	0	25	0	-92
29	2576.60	168,100	3,375	3,711	0	24	353	0	25	0	18
30	2575.77	167,038	-1,062	1,233	573	24	2,763	0	25	0	-104
31	2575.73	166,987	-51	1,008	574	25	1,670	0	25	0	37
<b>Total</b>			<b>3,637</b>	<b>26,828</b>	<b>27,900</b>	<b>737</b>	<b>50,175</b>	<b>3</b>	<b>732</b>	<b>0</b>	<b>-918</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**November 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Oct 31	2575.73	166,987									
1	2574.68	165,650	-1,337	920	650	27	2,795	0	25	0	-114
2	2573.54	164,207	-1,443	935	753	27	3,121	0	25	0	-12
3	2572.18	162,496	-1,711	0	701	27	2,337	0	25	0	-77
4	2571.23	161,308	-1,188	0	0	27	445	0	25	0	-745
5	2570.76	160,722	-586	0	0	27	581	0	25	0	-7
6	2569.01	158,553	-2,169	6	669	27	3,376	0	25	0	530
7	2569.78	159,505	952	2,255	693	27	1,882	0	25	0	-116
8	2570.73	160,685	1,180	873	1,020	27	816	0	25	0	101
9	2572.27	162,609	1,924	1,441	790	28	455	0	25	0	145
10	2573.10	163,652	1,043	2,628	734	27	2,083	0	25	0	-238
11	2573.01	163,539	-113	3	0	28	368	0	25	0	249
12	2573.74	164,460	921	1,548	0	28	371	0	25	0	-259
13	2574.42	165,320	860	1,727	558	28	1,352	0	25	0	-76
14	2573.19	163,766	-1,554	559	0	29	1,957	0	25	0	-160
15	2572.03	162,308	-1,458	673	9	28	2,209	0	25	0	66
16	2571.93	162,183	-125	1,337	0	29	1,330	0	25	0	-136
17	2571.67	161,858	-325	0	0	29	399	0	25	0	70
18	2571.62	161,795	-63	0	0	29	42	0	25	0	-25
19	2571.79	162,008	213	166	0	29	6	0	25	0	49
20	2572.40	162,772	764	0	0	29	0	0	25	0	760
21	2571.68	161,870	-902	0	0	29	0	0	25	0	-906
22	2571.65	161,833	-37	0	0	29	90	1	25	0	50
23	2571.07	161,108	-725	0	0	29	218	0	25	0	-511
24	2570.96	160,965	-143	0	0	29	92	0	25	0	-55
25	2571.05	161,083	118	0	0	30	0	0	25	0	113
26	2571.00	161,021	-62	0	0	30	0	0	25	0	-67
27	2571.53	161,683	662	0	0	30	0	0	25	0	657
28	2570.97	160,984	-699	0	0	30	0	0	25	0	-704
29	2571.29	161,383	399	0	0	30	0	0	25	0	394
30	2571.14	161,196	-187	0	0	30	0	0	30	0	-187
<b>Total</b>			<b>-5,791</b>	<b>15,071</b>	<b>6,577</b>	<b>853</b>	<b>26,325</b>	<b>1</b>	<b>755</b>	<b>0</b>	<b>-1,211</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**December 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow			Outflow				Computed Losses (-) And Gains (+)
				Project		Natural	Project		Natural	United Water Agency	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek		
Nov 30	2571.14	161,196									
1	2571.15	161,208	12	0	0	30	0	0	30	0	12
2	2571.12	161,171	-37	0	0	30	0	0	30	0	-37
3	2571.18	161,246	75	0	0	30	0	0	30	0	75
4	2571.05	161,083	-163	0	0	30	0	0	30	0	-163
5	2571.00	161,021	-62	0	0	30	0	0	30	0	-62
6	2570.93	160,934	-87	0	0	31	0	0	30	0	-88
7	2570.93	160,934	0	0	0	32	0	0	30	0	-2
8	2570.97	160,984	50	0	0	32	0	0	30	0	48
9	2571.03	161,059	75	0	0	35	0	0	30	0	70
10	2570.98	160,996	-63	0	0	42	0	0	30	0	-75
11	2571.03	161,059	63	0	0	38	0	0	30	0	55
12	2571.05	161,083	24	0	0	36	0	0	33	0	21
13	2570.99	161,009	-74	0	0	34	0	0	35	0	-73
14	2570.96	160,971	-38	0	0	34	0	0	35	0	-37
15	2570.91	160,909	-62	0	0	34	0	0	35	0	-61
16	2570.88	160,872	-37	0	0	34	0	0	35	0	-36
17	2570.86	160,847	-25	0	0	35	0	0	35	0	-25
18	2570.91	160,909	62	0	0	35	0	0	35	0	62
19	2570.88	160,872	-37	0	0	33	0	0	35	0	-35
20	2570.80	160,772	-100	0	0	35	0	0	36	0	-99
21	2570.82	160,797	25	0	0	35	0	0	36	0	26
22	2570.88	160,872	75	0	0	35	0	0	36	0	76
23	2570.80	160,772	-100	0	0	34	0	0	36	0	-98
24	2570.80	160,772	0	0	0	33	0	0	36	0	3
25	2570.76	160,722	-50	0	0	32	0	0	36	0	-46
26	2570.53	160,436	-286	0	0	32	0	0	36	0	-282
27	2570.51	160,411	-25	0	0	35	0	0	36	0	-24
28	2570.25	160,088	-323	0	0	36	0	0	36	0	-323
29	2570.12	159,927	-161	0	0	33	0	0	36	0	-158
30	2570.11	159,914	-13	0	0	33	0	0	36	0	-10
31	2570.21	160,039	125	0	0	33	0	0	36	0	128
<b>Total</b>			<b>-1,157</b>	<b>0</b>	<b>0</b>	<b>1,041</b>	<b>0</b>	<b>0</b>	<b>1,040</b>	<b>0</b>	<b>-1,158</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**January 2007**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project			Natural	
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improve. Channel	Steam Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	To Piru Creek	United Water Agency	
Dec 31	2570.21	160,039										
1	2570.18	160,001	-38	0	0	0	30	0	0	36	0	-32
2	2570.03	159,815	-186	0	0	0	30	0	0	36	0	-180
3	2570.05	159,840	25	0	0	0	29	64	0	36	0	96
4	2568.96	158,492	-1,348	0	0	0	30	1,441	0	36	0	99
5	2567.88	157,163	-1,329	0	0	0	29	1,099	0	36	0	-223
6	2567.34	156,501	-662	0	0	0	29	689	0	36	0	34
7	2566.13	155,025	-1,476	0	0	0	29	1,443	0	36	0	-26
8	2564.69	153,280	-1,745	0	0	0	29	1,444	0	36	0	-294
9	2563.64	152,015	-1,265	0	799	0	30	1,922	0	36	0	-136
10	2563.40	151,727	-288	0	1,691	0	30	1,882	0	32	0	-95
11	2560.38	148,129	-3,598	0	2,462	0	30	5,945	0	32	0	-113
12	2557.59	144,852	-3,277	0	2,672	0	29	5,774	0	36	0	-168
13	2556.12	143,143	-1,709	0	3,309	0	26	4,860	0	36	0	-148
14	2555.35	142,253	-890	0	3,305	0	22	4,308	0	33	0	124
15	2554.30	141,044	-1,209	0	3,305	372	26	4,621	0	33	0	-258
16	2554.70	141,504	460	0	2,275	0	31	1,605	0	33	0	-208
17	2555.12	141,987	483	0	612	0	30	189	0	33	0	63
18	2554.96	141,803	-184	0	0	0	30	0	0	33	0	-181
19	2554.88	141,711	-92	0	0	0	30	0	0	33	0	-89
20	2554.95	141,791	80	0	0	0	30	0	0	33	0	83
21	2554.74	141,550	-241	0	0	0	30	0	0	37	0	-234
22	2554.65	141,446	-104	0	0	0	29	0	0	37	0	-96
23	2555.76	142,726	1,280	0	1,557	0	30	324	0	37	0	54
24	2558.42	145,823	3,097	0	3,280	0	30	0	0	37	0	-176
25	2561.16	149,053	3,230	0	3,236	0	30	14	0	37	0	15
26	2562.22	150,315	1,262	0	3,261	0	29	1,865	0	37	0	-126
27	2563.55	151,907	1,592	0	3,275	0	64	1,833	0	37	0	123
28	2564.67	153,256	1,349	0	3,282	0	175	2,035	0	50	0	-23
29	2565.97	154,831	1,575	0	3,280	0	58	1,718	0	50	0	5
30	2566.85	155,903	1,072	0	3,277	0	50	2,059	0	171	0	-25
31	2567.67	156,906	1,003	0	3,274	0	49	2,013	0	187	0	-120
<b>Total</b>			<b>-3,133</b>	<b>0</b>	<b>48,152</b>	<b>372</b>	<b>1,153</b>	<b>49,147</b>	<b>0</b>	<b>1,408</b>	<b>0</b>	<b>-2,255</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**February 2007**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Gorman Creek Improve. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek	United Water Agency		
Jan 31	2567.67	156,906											
1	2568.76	158,245	1,339	0	3,273	0	46	1,993	0	51	0	0	64
2	2569.77	159,493	1,248	0	3,272	0	41	1,970	0	51	0	0	-44
3	2570.32	160,175	682	0	2,842	0	38	2,018	0	51	0	0	-129
4	2571.15	161,208	1,033	0	3,248	0	36	2,237	0	51	0	0	37
5	2570.85	160,834	-374	0	3,244	0	36	3,366	0	51	0	0	-237
6	2570.62	160,548	-286	0	3,250	0	36	3,509	0	51	0	0	-12
7	2570.25	160,088	-460	0	3,263	0	36	3,634	0	26	0	0	-99
8	2570.68	160,623	535	0	3,282	0	36	2,740	0	51	0	0	8
9	2571.00	161,021	398	0	3,301	0	36	2,800	0	71	0	0	-68
10	2572.09	162,383	1,362	0	3,301	0	36	1,949	0	71	0	0	45
11	2570.93	160,934	-1,449	0	3,285	397	39	4,665	0	89	0	0	-416
12	2572.12	162,421	1,487	0	3,278	632	43	2,093	0	132	0	0	-241
13	2572.07	162,358	-63	0	3,276	655	43	3,954	0	164	0	0	81
14	2572.57	162,986	628	0	3,277	655	40	2,936	0	151	0	0	-257
15	2572.53	162,935	-51	0	3,279	655	38	3,793	0	128	0	0	-102
16	2572.11	162,408	-527	0	3,275	655	37	4,343	0	145	0	0	-6
17	2573.12	163,677	1,269	0	3,280	655	37	2,379	0	115	0	0	-209
18	2574.00	164,788	1,111	0	3,282	655	37	2,609	0	114	0	0	-140
19	2573.62	164,308	-480	0	3,278	655	43	4,293	0	100	0	0	-63
20	2572.74	163,199	-1,109	0	3,275	655	41	4,827	0	111	0	0	-142
21	2573.82	164,561	1,362	0	3,279	655	41	2,470	0	117	0	0	-26
22	2572.68	163,124	-1,437	0	3,278	655	41	4,618	0	115	0	0	-678
23	2572.24	162,571	-553	0	3,281	655	46	4,475	0	115	0	0	55
24	2573.56	164,232	1,661	0	3,281	655	43	2,304	0	151	0	0	137
25	2572.95	163,463	-769	0	3,282	655	39	4,597	0	147	0	0	-1
26	2572.32	162,672	-791	0	3,280	655	36	4,448	0	128	0	0	-186
27	2571.68	161,870	-802	0	3,279	655	40	4,549	0	126	0	0	-101
28	2570.82	160,797	-1,073	0	3,279	655	39	4,581	0	93	0	0	-372
<b>Total</b>			<b>3,891</b>	<b>0</b>	<b>91,300</b>	<b>11,509</b>	<b>1,100</b>	<b>94,150</b>	<b>0</b>	<b>2,766</b>	<b>0</b>	<b>0</b>	<b>-3,102</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**March 2007**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		United Water Agency
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improve. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek			
Feb 28	2570.82	160,797											
1	2570.85	160,834	37	0	3,278	536	38	4,300	0	101	0	586	
2	2570.08	159,877	-957	0	3,281	694	36	4,476	0	101	0	-391	
3	2570.85	160,834	957	0	3,279	793	34	3,138	0	94	0	83	
4	2571.21	161,283	449	0	3,284	793	34	3,473	0	45	0	-144	
5	2570.97	160,984	-299	0	3,283	793	33	4,418	0	40	0	50	
6	2571.00	161,021	37	0	3,278	853	31	4,129	0	40	0	44	
7	2571.79	162,008	987	0	3,264	873	31	3,571	0	40	0	430	
8	2571.64	161,820	-188	0	3,292	1,031	32	4,110	0	40	0	-393	
9	2571.88	162,120	300	0	3,286	1,031	32	4,027	0	40	0	18	
10	2573.09	163,640	1,520	0	3,277	1,031	32	2,601	0	40	0	-179	
11	2573.62	164,308	668	0	3,144	992	30	3,264	0	40	0	-194	
12	2573.29	163,892	-416	0	3,275	1,031	30	4,724	0	40	0	12	
13	2573.38	164,005	113	0	3,275	1,031	30	4,278	0	40	0	95	
14	2573.93	164,700	695	0	3,275	1,031	30	3,820	0	40	0	219	
15	2573.69	164,523	-177	0	3,268	1,031	29	4,634	0	40	0	169	
16	2573.59	164,270	-253	0	3,266	1,031	28	4,848	0	37	0	307	
17	2575.30	166,439	2,169	0	3,266	1,031	29	2,363	0	37	0	243	
18	2575.12	166,210	-229	0	3,266	248	30	3,934	0	37	0	198	
19	2573.85	164,599	-1,611	0	3,246	248	29	4,813	0	37	0	-284	
20	2572.86	163,350	-1,249	0	3,275	248	29	4,707	0	37	0	-57	
21	2572.82	163,300	-50	0	3,282	248	30	3,544	0	37	0	-29	
22	2572.00	162,271	-1,029	0	3,309	248	30	4,483	0	37	0	-96	
23	2571.88	162,120	-151	0	3,309	459	29	3,771	0	37	0	-140	
24	2574.30	165,168	3,048	0	3,310	595	29	765	0	37	0	-84	
25	2575.56	166,770	1,602	0	3,274	595	29	2,074	0	37	0	-185	
26	2574.05	164,852	-1,918	0	3,213	550	29	5,487	0	37	0	-186	
27	2572.77	163,237	-1,615	0	3,174	595	32	5,485	0	37	0	106	
28	2573.14	163,703	466	0	3,277	595	34	2,994	0	37	0	-409	
29	2574.68	165,650	1,947	0	3,276	595	32	2,024	0	37	0	105	
30	2576.59	168,087	2,437	0	3,276	595	32	1,260	0	37	0	-169	
31	2576.36	167,792	-295	0	3,276	595	33	4,284	0	37	0	122	
Total			6,995	0	101,334	22,020	966	115,799	0	1,373	0	-153	

1/ Values supplied by LADWP, not verified by DWR.



**Table 25. Pyramid Lake**

Daily Operation

**April 2007**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		United Water Agency
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improve. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek			
Mar 31	2576.36	167,792											
1	2576.47	167,933	141	0	3,276	595	30	3,599	0	36	0	-125	
2	2576.51	167,985	52	0	3,274	595	30	3,739	0	36	0	-72	
3	2576.01	167,345	-640	0	3,269	595	30	4,396	0	33	0	-105	
4	2574.95	165,993	-1,352	0	3,264	0	29	4,549	0	30	0	-66	
5	2573.91	164,675	-1,318	0	3,263	0	29	4,305	0	29	0	-276	
6	2572.91	163,413	-1,262	0	3,264	595	27	5,054	0	29	0	-65	
7	2572.56	162,973	-440	0	3,263	594	28	3,883	0	29	0	-413	
8	2574.20	165,042	2,069	0	3,262	595	28	1,675	0	29	0	-112	
9	2573.79	164,523	-519	0	3,261	595	28	4,271	0	29	0	-103	
10	2572.85	163,338	-1,185	0	3,259	595	28	4,705	0	29	0	-333	
11	2571.77	161,983	-1,355	0	3,259	595	28	5,442	0	29	0	234	
12	2570.56	160,473	-1,510	0	3,259	595	28	4,939	0	29	0	-424	
13	2569.58	159,258	-1,215	0	3,255	595	28	4,900	0	29	0	-164	
14	2571.47	161,608	2,350	0	3,258	793	28	1,715	0	29	0	15	
15	2572.12	162,421	813	0	3,256	892	28	3,364	0	29	0	30	
16	2571.88	162,120	-301	0	3,257	1,203	27	4,613	0	29	0	-146	
17	2572.35	162,709	589	0	3,259	1,203	27	4,137	0	29	0	266	
18	2573.12	163,677	968	0	3,257	1,388	30	3,704	0	29	0	26	
19	2573.14	163,703	26	0	3,245	1,388	35	4,536	0	29	0	-77	
20	2573.07	163,614	-89	0	3,252	1,386	33	4,460	0	36	0	-264	
21	2575.54	166,745	3,131	0	3,254	1,386	35	1,381	0	36	0	-127	
22	2576.13	167,498	753	0	3,255	1,386	30	4,463	0	36	0	581	
23	2575.27	166,400	-1,098	0	3,256	0	29	3,768	0	36	0	-579	
24	2574.76	165,752	-648	0	2,616	116	26	3,446	0	34	0	74	
25	2575.16	166,260	508	0	3,278	562	26	3,387	0	31	0	60	
26	2575.34	166,490	230	157	3,275	693	24	3,754	0	31	0	-134	
27	2574.65	165,612	-878	17	3,267	694	23	4,626	0	31	0	-222	
28	2575.62	166,847	1,235	83	3,252	694	22	2,566	0	31	0	-219	
29	2576.37	167,805	958	0	3,253	694	21	2,792	0	31	0	-187	
30	2575.56	166,770	-1,035	0	3,253	694	21	4,972	0	30	0	-1	
Total			-1,022		257	97,171	21,716	836	117,141	0	933	0	-2,928

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**May 2007**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project			Natural	
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improve. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek	United Water Agency	
Apr 30	2575.56	166,770										
1	2574.98	166,031	-739	0	3,248	955	21	5,002	0	30	0	69
2	2573.44	164,081	-1,950	0	3,255	694	22	5,601	0	30	0	-290
3	2573.47	164,119	38	98	3,259	363	22	3,378	0	30	0	-296
4	2572.68	163,124	-995	625	3,259	198	22	5,024	0	24	0	-51
5	2574.79	165,790	2,666	0	3,264	0	23	510	0	24	0	-87
6	2575.36	166,515	725	879	3,262	0	22	3,348	0	24	0	-66
7	2573.49	164,144	-2,371	439	3,264	0	22	5,906	1	24	0	-165
8	2572.81	163,287	-857	933	3,266	0	21	4,907	0	24	0	-146
9	2571.32	161,420	-1,867	0	3,271	0	20	4,844	0	24	0	-290
10	2570.22	160,051	-1,369	0	3,253	0	20	4,453	0	24	0	-165
11	2568.92	158,442	-1,609	0	3,256	0	20	4,728	0	24	0	-133
12	2569.26	158,862	420	0	3,258	0	20	2,847	0	24	0	13
13	2570.49	160,386	1,524	43	3,255	0	20	1,595	0	24	0	-175
14	2569.93	159,691	-695	1,117	3,252	0	20	4,963	0	24	0	-97
15	2570.96	160,971	1,280	1,207	3,192	0	20	3,138	0	24	0	23
16	2572.01	162,283	1,312	1,487	3,251	0	20	3,637	0	21	0	212
17	2571.67	161,858	-425	1,162	2,509	0	19	4,063	0	20	0	-32
18	2570.99	161,009	-849	956	2,490	0	19	4,211	0	20	0	-83
19	2570.78	160,747	-262	0	2,507	0	18	2,476	0	20	0	-291
20	2572.05	162,333	1,586	1,164	2,493	0	18	2,077	0	20	0	8
21	2571.37	161,483	-850	739	2,745	0	18	4,175	0	20	0	-157
22	2571.21	161,283	-200	693	2,746	0	18	3,563	0	20	0	-74
23	2570.08	159,877	-1,406	0	2,192	0	18	3,421	0	20	0	-175
24	2569.15	158,726	-1,151	0	2,787	0	18	3,649	0	18	0	-289
25	2568.33	157,716	-1,010	0	2,883	0	17	3,713	0	16	0	-181
26	2569.37	158,998	1,282	0	2,817	0	17	1,548	0	16	0	12
27	2572.21	162,534	3,536	1,199	2,939	0	17	692	0	16	0	89
28	2574.26	165,118	2,584	1,072	2,944	0	17	1,491	0	16	0	58
29	2573.70	164,409	-709	949	2,718	0	17	4,090	0	16	0	-287
30	2572.23	162,559	-1,850	0	2,573	0	17	4,267	0	15	0	-158
31	2571.26	161,345	-1,214	0	2,041	0	17	3,450	0	15	0	193
Total			-5,425	14,762	91,449	2,210	600	110,767	1	667	0	-3,011

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**June 2007**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		United Water Agency
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improve. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek			
May 31	2571.26	161,345											
1	2572.05	162,333	988	0	2,321	0	16	2,149	0	16	0	0	816
2	2572.02	162,296	-38	733	2,035	0	16	1,372	0	16	0	0	-1,434
3	2572.22	162,546	251	1,142	527	0	15	1,413	0	16	0	0	-4
4	2571.57	161,733	-814	1,471	1,415	0	15	3,638	0	16	0	0	-61
5	2571.62	161,795	63	930	1,386	0	16	2,326	1	16	0	0	74
6	2570.90	160,897	-898	1,227	1,385	0	16	3,155	0	16	0	0	-355
7	2569.35	158,973	-1,923	558	1,394	0	16	3,605	0	16	0	0	-270
8	2566.81	155,854	-3,120	938	1,388	0	16	5,200	0	14	0	0	-248
9	2568.57	158,011	2,157	1,069	1,390	0	15	491	0	14	0	0	188
10	2570.90	160,897	2,885	1,989	1,396	0	14	548	0	14	0	0	48
11	2570.02	159,803	-1,094	730	1,398	0	14	3,168	0	14	0	0	-54
12	2569.43	159,072	-731	739	1,395	0	14	2,149	0	14	0	0	-716
13	2569.43	159,072	0	1,959	1,395	0	14	3,319	0	14	0	0	-35
14	2567.89	157,175	-1,897	1,076	1,395	0	13	4,243	0	14	0	0	-124
15	2566.90	155,964	-1,212	901	1,386	0	13	3,431	0	12	0	0	-69
16	2567.92	157,212	1,249	1,041	1,399	0	13	1,163	0	12	0	0	-29
17	2571.40	161,520	4,308	3,255	1,315	0	13	421	0	12	0	0	158
18	2570.84	160,822	-698	1,491	1,398	0	13	3,442	0	12	0	0	-146
19	2570.40	160,275	-547	1,076	1,407	0	13	2,869	0	12	0	0	-162
20	2570.13	159,939	-335	1,068	1,478	0	12	2,785	0	12	0	0	-96
21	2569.52	159,184	-756	997	1,451	0	12	3,249	0	10	0	0	43
22	2569.10	158,665	-519	1,192	1,527	0	12	3,146	0	10	0	0	-94
23	2570.69	160,635	1,971	1,123	1,538	0	12	766	0	10	0	0	74
24	2573.20	163,778	3,143	1,982	1,381	0	12	344	0	10	0	0	122
25	2572.87	163,363	-416	1,174	1,286	0	12	2,643	0	10	0	0	-235
26	2572.20	162,521	-841	591	1,342	0	12	2,678	0	10	0	0	-98
27	2570.57	160,486	-2,035	0	1,150	0	12	3,209	0	10	0	0	22
28	2570.45	160,337	-149	576	1,653	0	12	2,086	0	9	0	0	-295
29	2569.43	159,072	-1,264	1,610	1,259	0	12	3,904	0	9	0	0	-232
30	2572.11	162,408	3,336	2,016	1,275	0	11	110	0	9	0	0	153
Total			1,063	34,654	42,465	0	406	73,022	1	379	0	0	-3,060

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

July 2007

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improve. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	To Piru Creek	United Water Agency		
Jun 30	2572.11	162,408											
1	2572.93	163,438	1,030	1,047	1,837	0	10	1,797	0	10	0	0	-57
2	2572.24	162,571	-867	1,588	2,601	260	10	5,058	0	10	0	0	-258
3	2570.03	159,815	-2,756	496	2,622	366	10	6,082	0	10	0	0	-158
4	2570.77	160,735	920	2,093	2,595	377	10	3,883	0	10	0	0	-262
5	2570.18	160,001	-734	3,035	2,569	377	9	6,610	0	10	0	0	-104
6	2568.40	157,802	-2,199	845	2,575	377	8	5,730	0	10	0	0	-264
7	2569.15	158,726	924	1,200	2,578	377	8	3,174	0	10	0	0	-55
8	2572.96	163,476	4,750	2,346	2,597	0	8	602	0	10	0	0	411
9	2572.85	163,338	-138	1,591	2,672	0	9	4,379	0	10	0	0	-21
10	2573.23	163,816	478	1,664	2,650	0	10	3,733	0	10	0	0	-103
11	2571.57	161,733	-2,083	694	2,672	0	10	5,278	0	10	0	0	-171
12	2570.40	160,275	-1,458	837	2,701	0	10	5,010	0	10	0	0	14
13	2568.80	158,295	-1,980	1,823	2,696	0	9	6,232	0	10	0	0	-266
14	2569.40	159,035	740	0	1,737	0	9	1,010	0	10	0	0	14
15	2572.01	162,283	3,248	1,120	1,837	594	9	234	0	10	0	0	-68
16	2572.43	162,810	527	1,388	2,699	565	8	4,336	0	10	0	0	213
17	2572.69	163,136	326	1,790	2,701	370	9	4,459	0	9	0	0	-76
18	2571.55	161,708	-1,428	775	2,710	371	9	5,185	1	9	0	0	-98
19	2570.43	160,312	-1,396	784	2,727	367	9	4,810	0	9	0	0	-464
20	2569.96	159,728	-584	884	2,704	367	9	4,349	0	9	0	0	-190
21	2571.36	161,470	1,742	702	2,710	367	8	1,954	0	9	0	0	-82
22	2573.32	163,930	2,460	1,342	2,717	367	8	1,946	0	8	0	0	-20
23	2572.76	163,224	-706	850	2,701	744	8	4,689	0	8	0	0	-312
24	2572.77	163,237	13	1,866	2,709	744	9	5,051	0	8	0	0	-256
25	2571.51	161,658	-1,579	992	2,772	744	9	5,933	0	8	0	0	-155
26	2570.92	160,922	-736	1,100	2,721	744	9	5,107	0	8	0	0	-195
27	2568.40	157,802	-3,120	1,076	2,721	744	8	7,302	0	8	0	0	-359
28	2569.27	158,875	1,073	1,246	2,737	744	8	3,646	0	8	0	0	-8
29	2571.98	162,246	3,371	1,975	2,731	744	8	2,048	0	8	0	0	-31
30	2571.78	161,995	-251	1,907	2,729	744	8	5,522	0	8	0	0	-109
31	2571.13	161,183	-812	575	2,728	744	8	4,592	0	8	0	0	-267
<b>Total</b>			-1,225	39,631	80,456	12,198	274	129,741	1	285	0	0	-3,757

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**August 2007**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		United Water Agency
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improve. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek			
Jul 31	2571.13	161,183											
1	2570.25	160,088	-1,095	0	2,735	744	8	4,425	0	8	0	-149	
2	2569.74	159,456	-632	686	2,739	731	8	4,623	0	6	0	-167	
3	2568.42	157,827	-1,629	0	2,737	731	8	4,835	0	6	0	-264	
4	2569.36	158,986	1,159	1,015	2,723	731	8	3,288	0	6	0	-24	
5	2572.62	163,048	4,062	979	2,725	731	8	386	0	6	0	11	
6	2571.43	161,558	-1,490	1,328	2,727	731	9	5,939	0	6	0	-340	
7	2572.66	163,099	1,541	2,035	2,724	744	9	3,943	0	6	0	-22	
8	2573.11	163,665	566	2,116	2,728	744	10	4,973	0	6	0	-53	
9	2572.79	163,262	-403	1,854	2,728	744	10	5,685	0	6	0	-48	
10	2572.04	162,321	-941	1,544	2,728	744	9	5,803	0	6	0	-157	
11	2572.99	163,514	1,193	1,182	2,723	744	9	3,406	0	6	0	-53	
12	2575.16	166,260	2,746	1,212	2,728	744	9	1,882	1	6	0	-58	
13	2575.58	166,789	529	1,236	2,720	744	9	5,202	0	6	0	1,028	
14	2573.43	164,068	-2,721	726	2,713	744	9	5,296	0	6	0	-1,611	
15	2573.16	163,728	-340	977	2,719	744	9	4,656	0	6	0	-127	
16	2572.60	163,023	-705	570	2,719	744	9	4,427	0	6	0	-314	
17	2571.36	161,470	-1,553	967	2,323	744	10	5,308	0	6	0	-283	
18	2571.23	161,308	-162	476	2,745	744	10	4,010	0	6	0	-121	
19	2573.32	163,929	2,621	1,173	2,741	744	10	2,018	0	6	0	-23	
20	2572.14	162,446	-1,483	580	2,697	411	10	4,886	0	6	0	-289	
21	2572.43	162,810	364	1,565	2,534	397	9	3,932	0	6	0	-203	
22	2571.78	161,995	-815	725	2,689	396	9	4,469	0	6	0	-159	
23	2570.37	160,237	-1,758	0	2,688	397	9	4,536	0	6	0	-310	
24	2568.71	158,184	-2,053	622	2,694	397	9	5,442	0	5	0	-328	
25	2571.37	161,483	3,299	837	2,703	397	9	797	0	5	0	155	
26	2572.64	163,074	1,591	2,409	2,690	397	9	3,791	0	5	0	-118	
27	2573.37	163,993	919	2,815	2,684	209	9	4,707	0	5	0	-86	
28	2572.25	162,584	-1,409	736	2,693	198	9	4,859	0	5	0	-181	
29	2571.27	161,358	-1,226	948	2,615	198	9	4,870	0	5	0	-121	
30	2569.74	159,456	-1,902	444	2,680	198	9	5,026	0	5	0	-202	
31	2569.42	159,060	-396	1,816	2,680	198	9	5,038	0	5	0	-56	
<b>Total</b>			<b>-2,123</b>	<b>33,573</b>	<b>83,472</b>	<b>17,864</b>	<b>280</b>	<b>132,458</b>	<b>1</b>	<b>180</b>	<b>0</b>	<b>-4,673</b>	

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**September 2007**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		United Water Agency
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improve. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek			
Aug 31	2569.42	159,060											
1	2571.00	161,021	1,961	991	2,622	198	9	1,943	0	6	0	90	
2	2573.40	164,030	3,009	1,935	2,622	198	9	1,831	0	6	0	82	
3	2574.45	165,358	1,328	967	2,772	544	8	2,865	0	6	0	-92	
4	2575.02	166,082	724	1,910	2,696	225	10	3,936	0	6	0	-175	
5	2574.23	165,080	-1,002	729	2,703	0	10	4,287	0	6	0	-151	
6	2571.78	161,995	-3,085	644	2,622	0	10	6,157	0	8	0	-196	
7	2571.11	161,158	-837	618	2,622	0	10	4,022	0	8	0	-57	
8	2573.11	163,665	2,507	1,181	2,622	0	11	1,448	0	8	0	149	
9	2574.97	166,019	2,354	1,092	2,622	0	10	1,435	0	8	0	73	
10	2574.90	165,930	-89	1,055	2,622	0	11	3,747	0	8	0	-22	
11	2575.08	166,159	229	1,892	2,736	0	11	4,330	0	8	0	-72	
12	2575.02	166,082	-77	1,905	2,706	0	10	4,567	0	8	0	-123	
13	2574.81	165,805	-277	1,789	2,709	0	10	5,164	0	8	0	387	
14	2573.11	163,665	-2,140	826	2,732	0	11	5,029	0	8	0	-672	
15	2573.04	163,577	-88	1,157	2,731	0	11	3,871	0	8	0	-108	
16	2574.88	165,904	2,327	1,200	2,742	0	11	1,565	0	8	0	-53	
17	2574.34	165,219	-685	895	2,735	0	11	4,079	0	8	0	-239	
18	2574.82	165,828	609	1,027	2,738	0	11	3,265	0	8	0	106	
19	2574.18	165,016	-812	1,508	2,737	0	11	4,878	0	8	0	-182	
20	2572.82	163,300	-1,716	625	2,742	0	11	4,921	0	8	0	-165	
21	2571.79	162,008	-1,292	681	2,764	0	12	4,654	0	8	0	-87	
22	2572.64	163,074	1,066	720	2,782	0	17	2,411	0	8	0	-34	
23	2575.88	167,179	4,105	1,268	2,780	0	16	0	0	11	0	52	
24	2575.26	166,388	-791	963	2,779	0	14	4,338	0	12	0	-197	
25	2575.32	166,464	76	913	2,787	0	13	3,538	0	14	0	-85	
26	2574.59	165,536	-928	907	2,784	0	13	4,424	0	16	0	-192	
27	2574.07	164,877	-659	1,032	2,788	0	12	4,471	0	16	0	-4	
28	2573.18	163,753	-1,124	782	2,787	0	12	4,425	0	16	0	-264	
29	2573.91	164,675	922	0	2,786	0	12	1,827	0	16	0	-33	
30	2575.08	166,159	1,484	0	2,787	0	12	1,229	0	16	0	-70	
<b>Total</b>			<b>7,099</b>	<b>31,212</b>	<b>81,657</b>	<b>1,165</b>	<b>339</b>	<b>104,657</b>	<b>0</b>	<b>283</b>	<b>0</b>	<b>-2,334</b>	

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**October 2007**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		United Water Agency
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improve. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek			
Sep 30	2575.08	166,159											
1	2574.62	165,574	-585	954	1,829	0	12	3,402	0	16	0	38	
2	2572.73	163,187	-2,387	789	1,537	0	12	4,480	0	16	0	-229	
3	2571.37	161,483	-1,704	665	1,531	0	12	3,721	0	16	0	-175	
4	2570.02	159,803	-1,680	1,094	1,531	0	12	4,210	0	16	0	-91	
5	2570.73	160,685	882	697	1,533	0	13	1,618	0	16	0	273	
6	2571.44	161,570	885	0	1,529	0	13	259	0	16	0	-382	
7	2572.08	162,371	801	0	1,529	0	13	617	0	16	0	-108	
8	2571.64	161,820	-551	1,927	1,530	0	13	3,995	0	16	0	-10	
9	2570.73	160,685	-1,135	790	1,166	0	13	2,968	0	16	0	-120	
10	2570.29	160,138	-547	776	1,577	0	14	2,963	0	16	0	65	
11	2569.99	159,766	-372	941	1,579	0	14	2,775	0	16	0	-115	
12	2569.93	159,691	-75	1,521	1,582	0	14	3,098	0	16	0	-78	
13	2572.18	162,496	2,805	1,211	1,583	0	15	119	0	16	0	131	
14	2572.76	163,224	728	0	1,585	0	15	734	0	16	0	-122	
15	2572.82	163,300	76	1,356	1,583	0	15	2,718	0	16	0	-144	
16	2572.38	162,747	-553	1,316	1,584	0	15	3,443	0	18	0	-7	
17	2573.73	164,447	1,700	1,409	1,583	0	15	1,396	0	18	0	107	
18	2571.76	161,970	-2,477	700	1,585	0	15	4,529	0	18	0	-230	
19	2570.78	160,747	-1,223	768	1,570	0	16	3,428	0	18	0	-131	
20	2572.26	162,596	1,849	0	1,551	0	15	108	0	18	0	409	
21	2572.53	162,935	339	19	1,547	0	15	714	0	18	0	-510	
22	2574.91	165,942	3,007	1,987	1,543	0	15	559	0	18	0	39	
23	2574.43	165,333	-609	1,632	1,543	0	15	3,600	0	18	0	-181	
24	2573.37	163,993	-1,340	964	1,548	0	15	3,770	0	18	0	-79	
25	2571.76	161,970	-2,023	1,040	1,546	0	15	4,435	0	18	0	-171	
26	2570.87	160,859	-1,111	0	1,549	0	15	2,525	0	18	0	-132	
27	2571.62	161,795	936	0	1,548	0	15	642	0	18	0	33	
28	2572.69	163,136	1,341	0	1,547	0	16	111	0	18	0	-93	
29	2570.73	160,685	-2,451	0	1,543	0	16	3,882	0	18	0	-110	
30	2570.20	160,026	-659	0	1,543	0	16	2,168	0	18	0	-32	
31	2568.22	157,581	-2,445	0	1,544	0	16	3,822	0	18	0	-165	
<b>Total</b>			<b>-8,578</b>	<b>22,556</b>	<b>48,078</b>	<b>0</b>	<b>445</b>	<b>76,809</b>	<b>0</b>	<b>528</b>	<b>0</b>	<b>-2,320</b>	

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

#### Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

November 2007

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project			Natural	
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improve. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	To Piru Creek	United Water Agency	
Oct 31	2568.22	157,581										
1	2568.20	157,556	-25	126	214	0	16	295	0	16	0	-70
2	2566.99	156,074	-1,482	796	0	888	15	3,093	0	16	0	-72
3	2567.10	156,208	134	0	0	1,388	15	993	0	16	0	-260
4	2567.40	156,575	367	0	0	1,388	15	1,199	0	16	24	203
5	2567.57	156,783	208	770	0	685	16	1,258	0	16	24	35
6	2567.57	156,783	0	833	0	0	16	776	0	16	49	-8
7	2567.43	156,612	-171	10	0	0	16	176	0	16	64	59
8	2567.24	156,379	-233	0	0	0	15	48	0	16	64	-120
9	2567.14	156,257	-122	0	0	0	16	0	0	16	73	-49
10	2566.96	156,037	-220	80	0	0	16	0	0	16	103	-197
11	2568.93	158,455	2,418	2,302	0	0	16	1	0	16	103	220
12	2569.96	159,728	1,273	1,388	0	0	16	38	0	16	103	26
13	2569.57	159,245	-483	1,342	0	0	16	1,558	0	16	113	-154
14	2569.33	158,949	-296	1,420	0	0	16	1,618	0	16	133	35
15	2567.31	156,465	-2,484	17	0	0	16	2,270	0	16	143	-88
16	2566.92	155,988	-477	0	0	807	16	986	0	16	143	-155
17	2568.13	157,470	1,482	512	0	1,386	16	250	0	16	159	-7
18	2569.57	159,245	1,775	818	0	1,386	16	373	0	16	182	126
19	2569.29	158,899	-346	643	0	1,452	16	2,306	0	16	182	47
20	2568.64	158,097	-802	0	0	1,485	16	2,228	0	16	133	74
21	2569.52	159,184	1,087	1,058	0	1,448	17	1,271	0	16	41	-108
22	2570.05	159,840	656	0	0	1,388	17	622	0	16	24	-87
23	2569.70	159,406	-434	0	0	1,388	17	1,394	0	16	24	-405
24	2569.10	158,665	-741	0	0	1,388	17	1,811	0	16	6	-313
25	2568.46	157,876	-789	0	0	1,388	18	1,901	0	16	0	-278
26	2567.75	157,004	-872	0	0	1,388	17	2,190	0	16	0	-71
27	2567.99	157,298	294	0	0	1,388	18	1,154	0	16	0	58
28	2567.31	156,465	-833	564	0	1,388	18	2,651	0	16	0	-136
29	2567.40	156,575	110	803	0	1,388	18	2,139	0	16	0	56
30	2566.40	155,354	-1,221	0	423	1,388	18	2,906	0	15	0	-129
Total			-2,227	13,482	637	24,805	491	37,505	0	479	1,890	-1,768

1/ Values supplied by LADWP, not verified by DWR.



**Table 25. Pyramid Lake**

Daily Operation

**December 2007**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		United Water Agency
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improve. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek			
Nov 30	2566.40	155,354											
1	2567.85	157,126	1,772	0	2,144	925	18	1,040	0	20	0		-255
2	2569.81	159,543	2,417	0	2,146	1,041	18	901	0	20	0		133
3	2570.65	160,585	1,042	1,025	535	0	18	437	0	20	0		-79
4	2571.05	161,083	498	939	529	0	18	894	0	20	0		-74
5	2571.29	161,383	300	761	597	0	18	967	0	20	0		-89
6	2571.35	161,458	75	1,509	584	0	18	2,008	0	20	0		-8
7	2571.26	161,345	-113	610	599	0	18	1,427	0	20	0		107
8	2572.62	163,048	1,703	1,114	601	0	19	32	0	20	0		21
9	2572.96	163,476	428	0	603	0	20	58	0	20	0		-117
10	2572.91	163,413	-63	0	595	0	20	677	0	20	0		19
11	2572.54	162,948	-465	0	586	0	20	1,011	0	20	0		-40
12	2572.32	162,672	-276	0	603	0	20	895	0	20	0		16
13	2571.59	161,758	-914	0	602	0	20	1,248	0	20	0		-268
14	2572.05	162,333	575	0	612	0	20	76	0	20	0		39
15	2572.18	162,496	163	0	611	0	20	354	0	20	0		-94
16	2572.24	162,571	75	286	608	0	20	819	1	20	0		1
17	2571.44	161,570	-1,001	0	2,153	0	20	3,024	0	20	0		-130
18	2570.85	160,834	-736	0	2,153	0	24	2,871	0	20	0		-22
19	2570.38	160,250	-584	0	2,163	0	26	2,608	0	20	0		-145
20	2570.33	160,188	-62	625	1,819	0	24	2,655	0	28	0		153
21	2568.64	158,097	-2,091	0	2,154	0	22	3,904	0	28	0		-335
22	2569.11	158,677	580	0	2,149	0	20	1,411	0	27	0		-151
23	2569.95	159,716	1,039	0	2,154	0	20	1,119	0	27	0		11
24	2569.43	159,072	-644	0	2,140	0	20	2,782	0	27	0		5
25	2569.23	158,825	-247	784	2,139	0	20	2,886	1	27	0		-276
26	2569.64	159,332	507	0	2,137	0	20	1,441	0	27	0		-182
27	2569.37	158,998	-334	467	2,143	0	19	2,873	0	27	0		-63
28	2568.49	157,913	-1,085	0	2,141	0	21	3,123	0	27	0		-97
29	2570.25	160,088	2,175	819	2,140	744	21	1,379	0	27	0		-143
30	2572.51	162,910	2,822	824	2,158	1,190	20	1,373	0	26	0		29
31	2572.56	162,973	63	0	2,149	1,190	20	3,023	0	26	0		-247
Total			7,619		9,763	44,447	5,090	622	49,316	2	704	0	-2,281

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**January 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project			Natural	
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek	United Water Agency	
Dec 31	2572.56	162,973										
1	2573.02	163,551	578	0	2,149	1,188	19	2,523	0	27	0	-228
2	2572.14	162,446	-1,105	0	2,147	1,190	19	3,870	0	27	0	-564
3	2570.95	160,959	-1,487	0	2,149	1,190	20	4,540	0	27	0	-279
4	2570.40	160,264	-695	0	2,151	1,190	55	4,160	0	27	0	96
5	2571.51	161,658	1,394	0	2,151	1,190	384	1,698	0	793	0	160
6	2571.93	162,183	525	0	2,157	1,190	174	2,164	0	298	0	-534
7	2570.80	160,772	-1,411	0	2,145	1,190	119	4,677	0	99	0	-89
8	2570.04	159,828	-944	0	2,144	1,190	74	3,687	0	99	0	-566
9	2570.40	160,275	447	0	2,147	1,188	54	2,431	0	79	0	-432
10	2569.87	159,617	-658	0	2,155	1,188	50	3,746	0	129	0	-176
11	2568.87	158,381	-1,236	0	2,161	1,188	43	4,198	0	50	0	-380
12	2570.56	160,473	2,093	0	2,168	1,188	38	1,011	0	41	0	-249
13	2572.18	162,496	2,023	0	2,162	1,188	36	1,498	0	41	0	176
14	2572.74	163,199	703	733	2,147	1,188	32	3,521	0	41	0	165
15	2572.90	163,400	201	777	1,725	1,188	32	3,796	0	41	0	316
16	2572.49	162,885	-515	0	2,147	1,190	29	3,784	1	41	0	-55
17	2572.99	163,514	629	0	2,154	1,190	28	3,468	0	41	0	766
18	2572.59	163,011	-503	0	2,158	1,190	27	3,463	0	41	0	-374
19	2573.44	164,081	1,070	0	2,155	1,190	25	1,998	0	41	0	-261
20	2575.01	166,070	1,989	557	2,153	694	25	1,003	0	41	0	-396
21	2574.87	165,892	-178	718	2,135	0	24	2,985	0	41	0	-29
22	2574.57	165,511	-381	655	1,593	0	29	2,585	0	41	0	-32
23	2573.77	164,498	-1,013	0	1,597	0	101	2,917	0	56	0	262
24	2573.36	163,980	-518	0	980	0	86	1,815	0	80	0	311
25	2573.21	163,791	-189	568	986	0	299	2,286	0	151	0	395
26	2573.30	163,904	113	602	1,033	0	398	1,499	0	217	0	-204
27	2575.07	166,146	2,242	1,366	1,075	0	5,125	1,001	0	4,017	0	-306
28	2573.98	164,763	-1,383	699	1,206	0	1,773	1,307	0	2,763	0	-991
29	2574.14	164,966	203	638	1,030	0	1,001	1,140	0	852	0	-475
30	2573.44	164,081	-885	0	815	0	594	1,346	0	496	0	-452
31	2573.09	163,640	-441	0	845	0	438	976	0	393	0	-355
<b>Total</b>			<b>667</b>	<b>7,313</b>	<b>55,920</b>	<b>23,288</b>	<b>11,151</b>	<b>81,093</b>	<b>1</b>	<b>11,131</b>	<b>0</b>	<b>-4,780</b>

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

Daily Operation

**February 2008**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		United Water Agency
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	To Piru Creek			
Jan 31	2573.09	163,640											
1	2572.70	163,149	-491	616	844	0	181	1,771	0	397	0	36	
2	2573.71	164,422	1,273	0	834	0	181	0	0	246	0	504	
3	2574.95	165,993	1,571	722	856	0	183	84	0	246	0	140	
4	2574.79	165,790	-203	532	643	0	264	1,312	0	268	0	-62	
5	2574.45	165,358	-432	0	622	0	197	989	0	248	0	-14	
6	2574.12	164,940	-418	0	632	0	182	944	0	198	0	-90	
7	2573.98	164,763	-177	0	624	0	199	945	0	248	0	193	
8	2573.14	163,703	-1,060	0	0	0	269	449	0	248	0	-632	
9	2571.79	162,008	-1,695	0	0	0	313	1,957	0	248	0	197	
10	2571.18	161,246	-762	0	0	0	320	761	0	298	0	-23	
11	2570.93	160,934	-312	0	0	0	335	305	0	298	0	-44	
12	2570.67	160,610	-324	0	0	0	348	307	0	298	0	-67	
13	2571.18	161,246	636	573	0	0	390	68	0	298	0	39	
14	2572.71	163,161	1,915	793	1,188	0	449	280	0	298	0	63	
15	2573.51	164,169	1,008	407	1,122	0	302	379	0	298	0	-146	
16	2574.10	164,915	746	0	1,210	0	256	387	0	298	0	-35	
17	2575.74	167,000	2,085	540	1,790	0	245	415	0	298	0	223	
18	2575.30	166,439	-561	589	0	0	260	1,091	0	248	0	-71	
19	2573.09	163,640	-2,799	0	0	0	267	2,578	0	248	0	-240	
20	2569.95	159,716	-3,924	0	0	0	294	3,609	0	258	0	-351	
21	2567.34	156,501	-3,215	0	0	0	299	3,377	0	298	0	161	
22	2565.63	154,782	-1,719	0	0	0	287	4,941	0	298	0	3,233	
23	2560.95	148,804	-5,978	0	0	0	314	1,909	0	323	0	-4,060	
24	2560.23	147,952	-852	0	0	0	492	1,025	0	424	0	105	
25	2558.26	145,635	-2,317	0	0	0	527	2,126	0	495	0	-223	
26	2559.87	147,517	1,882	0	0	0	389	2,598	0	495	0	4,586	
27	2554.21	140,940	-6,577	662	0	0	329	1,908	0	425	0	-5,235	
28	2552.79	139,316	-1,624	847	0	0	315	2,187	0	356	0	-243	
29	2550.22	136,402	-2,914	539	0	0	311	2,956	0	356	0	-452	
<b>Total</b>			<b>-27,238</b>	<b>6,820</b>	<b>10,365</b>	<b>0</b>	<b>8,698</b>	<b>41,658</b>	<b>0</b>	<b>8,955</b>	<b>0</b>	<b>-2,508</b>	

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

March 2008

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		United Water Agency
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek			
Feb 29	2550.22	136,402											
1	2550.40	136,605	203	555	0	0	308	375	0	357	0	72	
2	2549.78	135,904	-701	0	0	0	301	0	0	357	0	-645	
3	2549.89	136,027	123	507	0	0	244	273	0	278	0	-77	
4	2550.37	136,571	544	883	0	0	211	348	0	278	0	76	
5	2550.79	137,045	474	689	0	0	198	207	0	238	0	32	
6	2551.40	137,736	691	758	0	0	179	227	0	198	0	179	
7	2552.00	138,416	680	840	0	0	166	460	0	169	0	303	
8	2550.99	137,271	-1,145	0	0	0	162	510	0	169	0	-628	
9	2550.37	136,571	-700	0	0	0	157	851	0	149	0	143	
10	2551.25	137,566	995	863	0	0	151	310	0	149	0	440	
11	2550.01	136,166	-1,400	721	0	0	151	1,860	0	149	0	-263	
12	2549.88	136,016	-150	770	0	0	164	979	0	149	0	44	
13	2550.32	136,515	499	746	0	0	171	387	0	149	0	118	
14	2550.34	136,537	22	663	0	0	210	428	0	149	0	-274	
15	2550.62	136,853	316	814	0	0	179	201	0	149	0	-327	
16	2551.43	137,769	916	1,440	0	0	161	334	0	149	0	-202	
17	2550.25	136,436	-1,333	760	0	0	144	1,956	0	149	0	-132	
18	2548.41	134,369	-2,067	750	0	0	126	2,619	0	139	0	-185	
19	2548.19	134,124	-245	1,013	0	0	120	1,364	0	139	0	125	
20	2547.78	133,667	-457	809	79	0	118	1,085	0	139	0	-239	
21	2548.24	134,180	513	895	2,435	0	117	2,671	0	139	0	-124	
22	2549.90	136,039	1,859	1,255	3,537	0	113	3,418	0	139	0	511	
23	2553.46	140,081	4,042	1,126	3,549	0	106	1,204	0	139	0	604	
24	2555.02	141,872	1,791	1,151	2,156	0	106	1,779	0	139	0	296	
25	2557.41	144,642	2,770	1,024	2,156	0	106	902	0	119	0	505	
26	2558.97	146,468	1,826	641	2,147	0	104	1,134	0	117	0	185	
27	2561.19	149,089	2,621	865	2,150	0	113	469	0	99	0	61	
28	2564.54	153,099	4,010	1,467	2,144	0	113	247	0	99	0	632	
29	2566.19	155,098	1,999	0	2,149	0	109	365	0	92	0	198	
30	2567.49	156,685	1,587	0	2,151	0	107	476	0	92	0	-103	
31	2568.08	157,409	724	0	2,153	0	105	1,214	0	92	0	-228	
<b>Total</b>			<b>21,007</b>	<b>22,005</b>	<b>26,806</b>	<b>0</b>	<b>4,820</b>	<b>28,653</b>	<b>0</b>	<b>5,068</b>	<b>0</b>	<b>1,097</b>	

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**April 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project			Natural	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek	United Water Agency	
Mar 31	2568.08	157,409										
1	2569.62	159,307	1,898	0	2,155	0	130	318	0	94	0	25
2	2571.44	161,570	2,263	0	2,148	0	122	129	0	95	0	217
3	2573.02	163,551	1,981	0	0	0	117	187	0	95	0	2,146
4	2574.56	165,498	1,947	0	2,159	0	110	119	0	95	0	-108
5	2575.77	167,038	1,540	0	2,151	0	104	961	1	85	0	332
6	2576.54	168,023	985	0	0	0	97	1,060	0	85	0	2,033
7	2575.14	166,235	-1,788	0	2,089	0	90	3,326	0	61	0	-580
8	2574.59	165,536	-699	0	2,153	0	84	2,909	0	50	0	23
9	2573.89	164,649	-887	0	2,154	0	77	2,826	0	50	0	-242
10	2573.00	163,526	-1,123	0	2,156	0	70	3,072	0	50	0	-227
11	2571.84	162,070	-1,456	0	2,157	0	61	3,241	0	50	0	-383
12	2571.97	162,233	163	0	2,156	0	56	2,244	0	50	0	245
13	2572.20	162,521	288	0	2,149	0	51	1,769	0	50	0	-93
14	2570.60	160,523	-1,998	0	670	398	47	2,591	1	50	0	-471
15	2571.00	161,021	498	0	0	1,000	45	620	0	50	0	123
16	2571.55	161,708	687	0	527	1,322	43	727	0	50	0	-428
17	2572.69	163,136	1,428	0	1,058	1,388	74	1,703	0	50	0	661
18	2573.26	163,854	718	0	1,016	1,388	76	1,682	0	50	0	-30
19	2574.49	165,409	1,555	0	1,019	1,388	72	953	0	48	0	77
20	2575.71	166,961	1,552	0	1,017	1,388	72	807	0	44	0	-74
21	2575.18	166,286	-675	0	1,015	1,388	70	2,749	0	38	0	-361
22	2575.03	166,095	-191	0	1,016	1,388	67	2,574	0	36	0	-52
23	2574.53	165,460	-635	0	1,018	1,126	66	2,568	1	36	0	-240
24	2574.59	165,536	76	579	1,019	1,190	63	2,242	0	34	0	-499
25	2574.47	165,384	-152	0	1,020	1,190	63	2,385	0	34	0	-6
26	2574.14	164,966	-418	0	1,018	1,190	60	2,273	0	33	0	-380
27	2574.70	165,676	710	0	1,016	1,190	56	1,658	0	33	0	139
28	2571.75	161,947	-3,729	0	1,013	1,388	56	3,032	0	33	0	-3,121
29	2572.49	162,885	938	952	1,017	1,388	52	4,801	0	33	0	2,363
30	2572.82	163,300	415	580	1,014	1,386	53	2,624	0	33	0	39
Total			5,891	2,111	39,100	21,096	2,204	58,150	3	1,595	0	1,128

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

Daily Operation

May 2008

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	To Piru Creek	United Water Agency		
Apr 30	2572.82	163,300											
1	2571.38	161,495	-1,805	0	1,022	1,386	44	3,888	0	32	0		-337
2	2571.11	161,158	-337	0	1,023	1,386	44	3,013	0	32	0		255
3	2572.44	162,822	1,664	0	1,018	1,386	44	802	0	32	0		50
4	2573.89	164,649	1,827	0	1,016	1,386	44	627	1	30	0		39
5	2574.30	165,168	519	748	1,013	1,388	43	3,045	0	30	0		402
6	2573.88	164,637	-531	591	1,017	1,388	43	3,185	0	30	0		-355
7	2573.62	164,308	-329	537	1,022	1,388	41	3,407	0	30	0		120
8	2573.91	164,675	367	641	1,020	1,388	38	2,691	0	30	0		1
9	2573.67	164,371	-304	781	1,021	1,388	38	3,291	0	30	0		-211
10	2575.59	166,808	2,437	1,072	1,019	1,388	37	914	0	30	0		-135
11	2577.45	169,192	2,384	480	1,017	1,388	37	939	0	30	0		431
12	2575.70	166,949	-2,243	0	1,011	397	37	3,302	0	30	0		-356
13	2575.26	166,388	-561	727	1,016	397	35	2,655	0	30	0		-51
14	2574.85	165,866	-522	1,173	989	397	35	3,015	0	30	0		-71
15	2573.14	163,703	-2,163	0	1,018	397	33	2,869	0	30	0		-712
16	2573.19	163,766	63	1,053	1,022	396	35	2,768	0	30	0		355
17	2572.92	163,426	-340	0	1,024	397	32	1,600	0	30	0		-163
18	2572.10	162,396	-1,030	0	1,022	397	30	1,799	1	30	0		-649
19	2571.87	162,108	-288	0	1,015	397	31	1,564	0	30	0		-137
20	2571.08	161,121	-987	0	996	0	29	1,803	0	30	0		-179
21	2571.05	161,083	-38	968	809	0	29	1,553	0	30	0		-261
22	2570.73	160,685	-398	758	1,062	0	32	2,020	0	29	0		-201
23	2570.35	160,212	-473	847	1,281	0	48	2,883	0	28	0		262
24	2570.85	160,834	622	0	1,286	0	52	544	0	28	0		-144
25	2572.56	162,973	2,139	2,342	1,254	0	45	1,651	0	38	0		187
26	2573.74	164,460	1,487	2,615	1,050	0	43	2,311	0	37	0		127
27	2573.49	164,144	-316	1,738	1,002	0	40	2,980	0	35	0		-81
28	2572.02	162,296	-1,848	1,809	1,100	0	37	4,640	1	35	0		-118
29	2572.08	162,371	75	3,408	1,099	0	35	4,447	0	35	0		15
30	2569.48	159,134	-3,237	2,956	1,098	0	33	6,762	0	33	0		-529
31	2569.96	159,728	594	2,353	1,110	0	33	3,040	0	31	0		169
<b>Total</b>			<b>-3,572</b>	<b>27,597</b>	<b>32,472</b>	<b>18,435</b>	<b>1,177</b>	<b>80,008</b>	<b>3</b>	<b>965</b>	<b>0</b>		<b>-2,277</b>

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

June 2008

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek	United Water Agency		
May 31	2569.96	159,728											
1	2571.64	161,820	2,092	3,858	754	0	36	3,083	0	32	0	559	
2	2571.13	161,183	-637	1,211	1,514	0	33	3,499	0	32	0	136	
3	2571.79	162,000	817	1,877	2,024	0	30	3,911	1	32	0	830	
4	2570.64	160,573	-1,427	2,038	2,200	0	30	4,032	0	32	0	-1,631	
5	2570.10	159,902	-671	2,033	3,337	0	30	4,999	0	32	0	-1,040	
6	2568.96	158,492	-1,410	2,434	1,977	0	29	5,563	0	32	0	-255	
7	2571.13	161,183	2,691	2,816	1,975	0	28	1,227	0	32	0	-869	
8	2575.02	166,082	4,899	3,497	1,975	0	27	924	0	32	0	356	
9	2574.29	165,156	-926	2,050	2,221	0	26	4,898	1	32	0	-292	
10	2572.37	162,734	-2,422	843	1,978	0	25	4,999	0	32	0	-237	
11	2571.37	161,483	-1,251	2,122	2,416	0	24	5,112	0	33	0	-668	
12	2570.25	160,088	-1,395	1,131	2,665	0	23	5,146	0	31	0	-37	
13	2568.51	157,937	-2,151	1,237	2,769	0	23	6,196	1	30	0	47	
14	2571.40	161,520	3,583	2,157	2,780	0	22	1,676	0	30	0	330	
15	2574.61	165,553	4,033	3,035	2,781	0	21	1,941	0	28	0	165	
16	2568.29	157,655	-7,898	2,142	2,589	0	21	5,009	0	27	0	-7,614	
17	2572.40	162,772	5,117	1,068	2,573	0	20	5,798	1	26	0	7,281	
18	2571.75	161,958	-814	918	2,574	0	19	4,399	0	26	0	100	
19	2570.53	160,436	-1,522	714	2,572	0	18	4,175	0	24	0	-627	
20	2569.71	159,419	-1,017	1,035	2,586	0	18	4,242	0	24	0	-390	
21	2569.98	159,753	334	758	2,520	0	18	3,436	1	21	0	496	
22	2569.03	158,578	-1,175	0	2,593	0	18	3,570	0	21	0	-195	
23	2570.34	160,200	1,622	2,335	2,064	0	17	2,729	0	21	0	-44	
24	2571.78	161,995	1,795	4,009	2,075	0	17	4,147	0	21	0	-138	
25	2570.11	159,914	-2,081	2,416	1,864	0	18	5,621	0	21	0	-737	
26	2567.75	157,004	-2,910	1,042	1,885	0	18	5,407	1	21	0	-426	
27	2565.31	154,030	-2,974	831	1,921	0	18	5,180	0	21	0	-543	
28	2568.07	157,396	3,366	972	1,890	0	17	519	0	20	0	1,026	
29	2571.52	161,670	4,274	3,011	1,896	0	16	989	0	20	0	360	
30	2570.81	160,785	-885	1,764	1,875	0	16	4,458	1	20	0	-61	
<b>Total</b>			<b>1,057</b>	<b>55,354</b>	<b>66,843</b>	<b>0</b>	<b>676</b>	<b>116,885</b>	<b>7</b>	<b>806</b>	<b>0</b>	<b>-4,118</b>	

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**July 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek	United Water Agency		
Jun 30	2570.81	160,785											
1	2571.37	161,483	698	3,243	1,871	0	12	4,072	0	18	0		-338
2	2569.71	159,419	-2,064	3,264	1,885	0	11	6,689	0	18	0		-517
3	2568.15	157,495	-1,924	2,113	1,885	0	11	5,621	1	18	0		-293
4	2567.71	156,955	-540	2,419	3,088	0	11	5,784	0	18	0		-256
5	2569.63	159,320	2,365	1,979	2,873	0	11	2,731	0	18	0		251
6	2574.79	165,790	6,470	3,238	3,005	0	11	241	1	18	0		476
7	2574.21	165,054	-736	2,765	2,413	0	11	5,734	0	18	0		-173
8	2572.95	163,463	-1,591	1,663	2,449	0	10	5,519	0	18	0		-176
9	2572.60	163,023	-440	1,459	2,620	0	10	4,443	0	18	0		-68
10	2572.52	162,923	-100	975	2,638	0	10	3,624	1	18	0		-80
11	2571.16	161,221	-1,702	1,444	1,032	0	10	4,157	0	18	0		-13
12	2570.90	160,897	-324	1,023	1,090	0	11	2,398	0	16	0		-34
13	2572.38	162,747	1,850	592	2,209	0	12	930	0	16	0		-17
14	2572.52	162,923	176	1,772	2,443	0	51	3,837	1	16	0		-236
15	2571.40	161,520	-1,403	627	2,495	0	70	4,779	0	16	0		200
16	2569.14	158,714	-2,806	0	2,506	0	22	4,818	0	61	0		-455
17	2568.11	157,445	-1,269	884	2,494	0	17	4,536	0	49	0		-79
18	2569.42	159,060	1,615	570	2,411	0	14	1,619	1	30	0		270
19	2571.80	162,020	2,960	952	2,379	0	13	562	0	24	0		202
20	2575.23	166,350	4,330	1,291	3,289	0	12	606	0	22	0		366
21	2575.37	166,528	178	1,594	2,479	0	12	3,624	1	20	0		-262
22	2574.64	165,599	-929	993	2,488	0	12	4,284	0	20	0		-118
23	2573.55	164,220	-1,379	648	2,490	0	12	4,267	0	20	0		-242
24	2572.49	162,885	-1,335	876	2,480	0	12	4,200	1	20	0		-482
25	2571.15	161,208	-1,677	1,037	2,491	0	11	4,441	0	20	0		-755
26	2572.22	162,546	1,338	1,006	2,496	0	11	2,500	0	18	0		343
27	2574.84	165,852	3,306	1,007	2,149	0	11	0	1	18	0		158
28	2572.87	163,363	-2,489	770	2,420	0	11	3,913	0	16	0		-1,761
29	2572.19	162,509	-854	785	2,418	0	12	3,864	0	16	0		-189
30	2572.79	163,262	753	731	2,411	0	11	3,536	0	16	0		1,152
31	2572.01	162,283	-979	782	2,407	0	11	4,154	0	16	0		-9
<b>Total</b>			<b>1,498</b>	<b>42,502</b>	<b>73,804</b>	<b>0</b>	<b>466</b>	<b>111,483</b>	<b>8</b>	<b>648</b>	<b>0</b>		<b>-3,135</b>

1/ Values supplied by LADWP, not verified by DWR.



### Table 25. Pyramid Lake

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**August 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek	United Water Agency		
Jul 31	2572.01	162,283											
1	2571.84	162,070	-213	526	2,362	0	10	3,117	0	13	0		19
2	2573.40	164,030	1,960	864	2,411	0	9	1,366	0	13	0		55
3	2574.73	165,714	1,684	0	2,480	0	9	809	1	13	0		18
4	2573.43	164,068	-1,646	562	2,053	0	10	4,014	0	13	0		-244
5	2575.04	166,108	2,040	1,396	1,847	0	10	2,502	0	13	0		1,302
6	2573.16	163,728	-2,380	820	1,837	0	11	3,594	0	13	0		-1,441
7	2572.73	163,187	-541	778	1,835	0	11	3,842	0	13	0		690
8	2571.92	162,170	-1,017	1,653	1,826	0	11	3,767	0	13	0		-727
9	2573.81	164,548	2,378	1,712	1,820	0	10	1,298	0	13	0		147
10	2576.04	167,383	2,835	2,390	1,803	0	10	1,529	1	13	0		175
11	2575.58	166,796	-587	1,028	1,827	0	11	3,486	0	13	0		46
12	2575.13	166,222	-574	963	1,829	0	11	3,319	0	13	0		-45
13	2573.92	164,687	-1,535	663	1,868	0	11	3,836	0	13	0		-228
14	2572.74	163,199	-1,488	741	1,744	0	10	3,741	0	13	0		-229
15	2572.92	163,426	227	790	1,853	0	11	2,466	0	13	0		52
16	2574.88	165,904	2,478	1,266	1,853	0	10	827	1	12	0		189
17	2576.53	168,010	2,106	1,770	1,710	0	10	1,527	0	12	0		155
18	2575.79	167,064	-946	728	1,849	0	11	3,383	0	12	0		-139
19	2575.29	166,426	-638	998	1,676	0	11	3,372	0	12	0		61
20	2574.46	165,371	-1,055	1,019	1,780	0	11	3,928	0	12	0		75
21	2573.08	163,627	-1,744	1,616	1,478	0	11	4,600	0	10	0		-239
22	2572.85	163,338	-289	963	2,506	0	11	3,638	1	10	0		-120
23	2573.97	164,750	1,412	1,423	1,592	0	10	1,717	0	10	0		114
24	2575.52	166,719	1,969	1,151	1,574	0	10	860	0	10	0		104
25	2575.73	166,987	268	1,959	2,030	0	9	3,865	0	10	0		145
26	2576.04	167,383	396	2,200	1,865	0	9	3,557	0	10	0		-111
27	2574.81	165,815	-1,568	1,132	2,030	0	9	4,471	0	10	0		-258
28	2574.63	165,587	-228	1,186	2,008	0	9	3,600	0	10	0		179
29	2570.65	160,585	-5,002	1,356	1,866	0	9	7,669	0	10	0		-554
30	2572.03	162,308	1,723	2,453	2,044	0	9	2,875	0	10	0		102
31	2574.87	165,892	3,584	2,445	2,048	0	9	1,022	0	10	0		114
<b>Total</b>			<b>3,609</b>	<b>38,551</b>	<b>59,304</b>	<b>0</b>	<b>313</b>	<b>93,597</b>	<b>4</b>	<b>365</b>	<b>0</b>		<b>-593</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**September 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		United Water Agency
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek			
Aug 31	2574.87	165,892											
1	2575.34	166,490	598	2,763	1,849	0	10	4,112	0	10	0	98	
2	2573.69	164,396	-2,094	1,667	1,800	0	9	5,406	0	9	0	-155	
3	2573.40	164,030	-366	1,934	1,739	0	9	3,843	0	9	0	-196	
4	2574.20	165,042	1,012	1,431	2,446	0	9	3,019	1	9	0	155	
5	2572.52	162,923	-2,119	980	2,085	0	9	4,844	0	9	0	-340	
6	2573.93	164,700	1,777	1,218	2,074	0	9	1,590	0	8	0	74	
7	2575.78	167,051	2,351	2,439	1,747	0	9	2,034	0	8	0	198	
8	2575.43	166,604	-447	1,578	1,996	0	9	3,930	0	8	0	-92	
9	2574.58	165,523	-1,081	1,604	2,022	0	9	4,507	0	7	0	-202	
10	2573.73	164,447	-1,076	1,653	2,081	0	9	4,739	0	7	0	-73	
11	2573.29	163,892	-555	1,583	2,082	0	9	4,549	0	7	0	327	
12	2571.34	161,445	-2,447	1,079	671	0	9	4,099	0	7	0	-100	
13	2573.14	163,703	2,258	2,672	1,698	0	9	2,344	0	7	0	230	
14	2576.11	167,472	3,769	2,533	2,024	0	9	1,147	0	7	0	357	
15	2574.57	165,511	-1,961	1,012	0	0	9	2,593	0	7	0	-382	
16	2574.73	165,714	203	2,166	0	0	9	1,984	1	7	0	20	
17	2574.60	165,549	-165	1,043	0	0	9	1,606	0	7	0	396	
18	2573.71	164,422	-1,127	1,019	0	0	9	2,063	0	7	0	-85	
19	2573.20	163,778	-644	1,065	0	0	9	1,770	0	7	0	59	
20	2574.00	164,788	1,010	1,012	0	0	9	30	0	7	0	26	
21	2575.30	166,439	1,651	2,475	0	0	10	989	0	7	0	162	
22	2574.22	165,067	-1,372	1,722	0	0	10	2,859	0	7	0	-238	
23	2573.55	164,220	-847	1,790	0	0	10	2,584	0	7	0	-56	
24	2572.99	163,514	-706	923	0	0	10	1,597	1	7	0	-34	
25	2572.54	162,948	-566	800	0	0	10	1,384	0	7	0	15	
26	2572.31	162,659	-289	1,215	0	0	10	1,569	0	7	0	62	
27	2572.79	163,262	603	2,940	0	0	10	2,363	0	7	0	23	
28	2574.20	165,042	1,780	2,754	0	0	10	1,209	1	7	0	233	
29	2573.69	164,396	-646	2,166	1,366	0	10	3,737	0	6	0	-445	
30	2572.97	163,489	-907	926	1,523	0	10	3,311	0	6	0	-49	
Total			-2,403	50,162	29,203	0	281	81,811	4	222	0	-12	

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**October 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project			Natural	
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek	United Water Agency	
Sep 30	2572.97	163,489										
1	2571.15	161,208	-2,281	647	1,099	0	10	3,644	0	7	0	-386
2	2572.37	162,734	1,526	1,563	1,522	0	10	1,905	0	7	0	343
3	2572.49	162,885	151	1,516	1,528	0	10	2,623	0	7	0	-273
4	2574.59	165,536	2,651	528	1,529	0	10	0	1	7	0	592
5	2576.41	167,856	2,320	1,336	1,529	0	10	442	0	7	0	-106
6	2575.64	166,872	-984	915	1,522	0	10	3,041	0	7	0	-383
7	2575.05	166,120	-752	739	1,522	0	11	2,952	0	7	0	-65
8	2574.00	164,788	-1,332	684	1,530	0	11	3,306	0	7	0	-244
9	2573.14	163,703	-1,085	1,510	1,525	0	11	3,966	0	7	0	-158
10	2574.21	165,054	1,351	0	1,532	0	11	0	0	7	0	-185
11	2575.51	166,706	1,652	0	1,509	0	12	0	0	7	0	138
12	2576.66	168,177	1,471	0	1,531	0	13	508	0	7	0	442
13	2575.82	167,102	-1,075	568	631	0	13	2,112	0	7	0	-168
14	2576.33	167,754	652	1,325	650	0	13	1,487	0	7	0	158
15	2575.55	166,757	-997	1,546	566	0	13	2,585	0	7	0	-530
16	2574.73	165,714	-1,043	810	620	0	13	2,350	1	7	0	-128
17	2573.49	164,144	-1,570	950	627	0	13	2,878	0	7	0	-275
18	2575.26	166,388	2,244	1,541	632	0	13	171	0	7	0	236
19	2577.00	168,613	2,225	2,191	634	0	14	910	0	7	0	303
20	2577.05	168,678	65	1,091	632	0	14	1,699	0	7	0	34
21	2576.45	167,908	-770	985	641	0	14	2,254	0	7	0	-149
22	2575.25	166,375	-1,533	793	642	0	14	2,715	0	7	0	-260
23	2574.41	165,308	-1,067	1,020	655	0	14	2,504	0	7	0	-245
24	2575.38	166,541	1,233	1,471	660	0	14	1,701	1	6	0	796
25	2575.56	166,770	229	1,514	610	0	14	1,079	0	6	0	-824
26	2575.00	166,057	-713	1,142	0	0	14	1,727	0	6	0	-136
27	2573.73	164,447	-1,610	0	0	0	15	1,369	0	6	0	-250
28	2573.22	163,803	-644	1,262	0	0	15	1,872	0	6	0	-43
29	2572.97	163,489	-314	1,002	418	0	15	2,112	0	6	0	369
30	2572.99	163,514	25	689	977	0	15	1,706	0	6	0	56
31	2572.76	163,224	-290	870	1,110	0	15	2,150	0	6	0	-129
Total			-265	30,208	28,583	0	394	57,768	3	209	0	-1,470

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

November 2008

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	To Piru Creek	United Water Agency		
Oct 31	2572.76	163,224											
1	2572.81	163,287	63	0	1,002	0	70	811	0	28	0		-170
2	2573.62	164,308	1,021	699	1,078	0	93	1,126	0	99	0		376
3	2573.12	163,677	-631	774	1,744	0	35	2,708	0	54	5		-417
4	2573.85	164,599	922	1,522	2,059	0	27	2,928	0	27	23		292
5	2573.38	164,005	-594	779	2,111	0	24	3,255	0	24	41		-188
6	2572.84	163,325	-680	572	2,052	0	22	3,169	1	22	43		-91
7	2573.14	163,703	378	633	1,983	0	22	2,090	0	22	43		-105
8	2574.88	165,904	2,201	858	2,128	0	21	874	0	22	43		133
9	2576.84	168,408	2,504	1,143	2,110	0	21	861	0	22	43		156
10	2577.18	168,845	437	800	2,104	0	22	1,995	0	22	43		-429
11	2577.53	169,295	450	633	1,475	0	22	1,609	0	22	43		-6
12	2576.08	167,434	-1,861	0	1,482	0	21	3,088	0	22	43		-211
13	2575.14	166,235	-1,199	871	1,457	0	21	3,350	0	22	43		-133
14	2573.58	164,258	-1,977	786	997	0	20	3,554	1	22	43		-160
15	2571.84	162,070	-2,188	0	1,548	0	19	3,641	0	22	43		-49
16	2570.87	160,859	-1,211	28	1,355	0	19	3,029	0	22	43		481
17	2572.85	163,338	2,479	1,390	1,480	0	20	402	0	22	43		56
18	2573.93	164,700	1,362	757	1,403	0	20	779	0	22	43		26
19	2573.49	164,144	-556	888	1,393	0	20	2,711	0	22	43		-81
20	2574.96	165,996	1,852	1,344	1,808	0	20	2,121	0	22	43		866
21	2574.23	165,080	-916	1,277	2,416	0	21	3,625	0	22	43		-940
22	2574.47	165,384	304	0	2,783	0	21	2,348	0	21	43		-88
23	2577.96	169,850	4,466	1,420	3,174	0	21	480	0	21	42		394
24	2574.82	165,828	-4,022	160	3,026	0	22	6,591	0	22	41		-576
25	2573.62	164,308	-1,520	363	3,177	0	25	4,780	0	25	38		-242
26	2572.16	162,471	-1,837	0	2,497	0	209	4,619	0	75	0		151
27	2570.67	160,610	-1,861	0	2,687	0	125	4,183	0	198	0		-292
28	2569.16	158,739	-1,871	0	1,508	0	62	2,829	0	207	0		-405
29	2570.46	160,349	1,610	0	1,472	0	41	347	0	40	98		582
30	2570.87	160,859	510	0	1,395	0	37	861	0	62	77		78
<b>Total</b>			<b>-2,365</b>	<b>17,697</b>	<b>56,904</b>	<b>0</b>	<b>1,143</b>	<b>74,764</b>	<b>2</b>	<b>1,255</b>	<b>1,096</b>		<b>-992</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**December 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			Natural		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	To Piru Creek	United Water Agency		
Nov 30	2570.87	160,859											
1	2569.46	159,109	-1,750	0	937	0	35	2,262	0	40	109		-311
2	2567.59	156,808	-2,301	0	863	0	33	2,227	0	40	109		-821
3	2565.84	154,673	-2,135	586	541	0	30	2,735	0	40	109		-408
4	2564.15	152,629	-2,044	0	732	0	29	2,424	0	40	109		-232
5	2561.79	149,802	-2,827	561	712	0	28	3,275	0	40	109		-704
6	2562.45	150,590	788	604	555	0	26	360	0	40	109		112
7	2563.71	152,099	1,509	993	744	0	26	749	0	40	109		644
8	2561.74	149,743	-2,356	957	566	0	25	3,828	0	109	31		64
9	2559.31	146,867	-2,876	0	979	0	24	3,547	0	35	30		-267
10	2557.44	144,677	-2,190	0	853	0	23	2,879	0	20	30		-137
11	2555.12	141,987	-2,690	0	994	0	23	3,025	1	0	30		-651
12	2555.00	141,849	-138	0	2,248	0	23	2,219	0	30	0		-160
13	2556.49	143,572	1,723	0	2,295	0	22	494	0	30	0		-70
14	2557.53	144,782	1,210	0	2,327	0	22	1,185	0	30	0		76
15	2557.68	144,957	175	0	1,398	0	33	1,371	0	30	0		145
16	2557.02	144,188	-769	0	1,471	0	26	1,997	0	42	0		-227
17	2556.24	143,282	-906	0	1,248	0	38	2,116	0	42	0		-34
18	2555.85	142,831	-451	0	1,707	0	34	1,797	0	42	0		-353
19	2556.09	143,108	277	876	1,349	0	29	2,275	0	42	0		340
20	2555.97	142,969	-139	509	1,520	0	28	2,184	0	42	0		30
21	2558.23	145,600	2,631	0	3,276	0	26	863	0	42	0		234
22	2562.79	150,996	5,396	1,183	3,264	0	27	183	0	42	0		1,147
23	2564.73	153,328	2,332	576	3,154	0	30	1,674	0	42	0		288
24	2567.04	156,135	2,807	1,017	3,303	0	36	1,836	0	42	0		329
25	2569.44	159,085	2,950	1,048	3,296	0	79	1,677	0	56	0		260
26	2569.78	159,505	420	740	3,290	0	77	3,489	0	60	0		-138
27	2571.73	161,933	2,428	0	3,289	0	52	622	0	60	0		-231
28	2573.53	164,194	2,261	0	3,286	0	39	1,180	0	56	0		172
29	2575.65	166,885	2,691	922	3,282	0	37	1,044	0	41	0		-465
30	2576.10	167,460	575	635	3,280	0	35	2,616	0	40	0		-719
31	2576.24	167,639	179	0	3,229	0	35	3,042	0	40	0		-3
<b>Total</b>			<b>6,780</b>	<b>11,207</b>	<b>59,988</b>	<b>0</b>	<b>1,030</b>	<b>61,175</b>	<b>1</b>	<b>1,295</b>	<b>884</b>		<b>-2,090</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**January 2009**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Dec 31	2576.24	167,639										
1	2575.49	166,681	-958	0	589	0	35	1,475	0	42	0	-65
2	2574.80	165,803	-878	960	582	0	35	2,457	0	42	0	44
3	2574.79	165,790	-13	2,682	583	0	37	3,339	0	42	0	66
4	2574.26	165,118	-672	1,475	594	0	37	2,620	0	42	0	-116
5	2574.38	165,270	152	1,623	1,076	0	37	2,614	0	42	0	72
6	2574.62	165,574	304	826	1,066	0	34	1,575	0	42	0	-5
7	2574.82	165,828	254	765	1,351	0	34	2,071	0	42	0	217
8	2574.76	165,752	-76	1,189	1,052	0	34	2,335	0	42	0	26
9	2573.09	163,640	-2,112	0	1,051	0	35	2,969	0	42	0	-187
10	2573.98	164,763	1,123	563	1,076	0	35	821	0	42	0	312
11	2574.47	165,384	621	1,093	578	0	33	1,004	0	42	0	-37
12	2574.35	165,232	-152	1,579	1,006	0	32	2,704	0	42	0	-23
13	2575.03	166,095	863	2,008	1,604	0	32	2,746	0	42	0	7
14	2575.21	166,324	229	1,629	1,642	0	33	2,949	0	42	0	-84
15	2573.53	164,194	-2,130	0	1,408	0	33	3,372	1	42	0	-156
16	2573.49	164,144	-50	921	1,402	0	33	2,180	0	42	0	-184
17	2574.19	165,029	885	1,140	1,386	0	33	1,655	0	42	0	23
18	2575.38	166,541	1,512	1,290	1,410	0	31	1,346	0	38	0	165
19	2575.32	166,464	-77	1,351	1,366	0	31	2,784	0	38	0	-3
20	2575.76	167,025	561	2,177	1,391	0	31	2,982	0	36	0	-20
21	2575.14	166,235	-790	1,078	1,294	21	31	3,124	0	36	0	-54
22	2575.26	166,388	153	1,994	1,383	0	43	3,140	0	36	0	-91
23	2575.18	166,286	-102	1,058	1,577	0	84	2,858	0	36	0	73
24	2576.20	167,588	1,302	0	1,635	0	102	419	0	58	0	42
25	2577.92	169,798	2,210	1,303	1,387	0	75	444	0	58	0	-53
26	2576.18	167,562	-2,236	0	1,762	0	57	3,729	0	58	0	-268
27	2576.15	167,524	-38	0	1,532	0	50	1,500	0	58	0	-62
28	2576.77	168,318	794	0	1,481	0	45	842	0	58	0	168
29	2574.65	165,612	-2,706	0	1,599	0	42	4,095	0	54	0	-198
30	2574.42	165,320	-292	0	1,608	0	40	1,696	0	53	0	-191
31	2575.01	166,070	750	0	1,621	0	38	842	0	48	0	-19
<b>Total</b>			-1,569	28,704	39,092	21	1,282	68,687	1	1,379	0	-601

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**February 2009**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Jan 31	2575.01	166,070										
1	2575.59	166,808	738	0	1,577	0	36	897	0	46	0	68
2	2575.27	166,400	-408	596	1,616	0	36	2,457	0	46	0	-153
3	2574.91	165,942	-458	850	1,568	0	34	2,634	0	46	0	-230
4	2574.85	165,866	-76	979	1,596	0	34	3,023	0	46	0	384
5	2574.15	164,978	-888	1,012	1,609	0	47	3,332	0	40	0	-184
6	2574.71	165,688	710	809	1,654	0	137	1,946	0	40	0	96
7	2575.43	166,604	916	2,020	1,589	0	207	1,739	0	60	0	-1,101
8	2576.75	168,292	1,688	1,847	1,597	0	149	1,938	0	139	0	172
9	2576.21	167,600	-692	918	1,058	0	119	2,508	0	198	0	-81
10	2575.15	166,248	-1,352	677	1,348	0	76	2,930	0	159	0	-364
11	2575.92	167,230	982	581	2,247	0	58	1,857	0	89	0	42
12	2574.75	165,739	-1,491	821	1,620	0	50	3,693	0	60	0	-229
13	2574.11	164,928	-811	0	1,623	0	53	2,350	0	60	0	-77
14	2575.95	167,268	2,340	1,359	1,642	0	44	859	0	89	0	243
15	2576.63	168,138	870	0	1,635	0	37	837	1	123	0	159
16	2576.03	167,370	-768	679	1,352	0	145	2,791	0	298	0	145
17	2574.88	165,904	-1,466	715	1,606	0	121	3,299	0	238	0	-371
18	2575.96	167,281	1,377	693	1,659	0	66	1,236	0	109	0	304
19	2574.95	165,993	-1,288	602	1,660	0	46	3,295	0	105	0	-196
20	2574.56	165,498	-495	725	1,606	0	46	2,743	0	60	0	-69
21	2575.65	166,885	1,387	0	1,583	0	55	507	0	61	0	317
22	2577.26	168,948	2,063	1,479	1,622	0	72	1,346	0	61	0	297
23	2576.33	167,754	-1,194	710	1,597	0	162	3,119	0	60	0	-484
24	2575.65	166,885	-869	892	1,632	0	307	3,490	0	232	0	22
25	2574.62	165,574	-1,311	0	1,701	0	222	2,752	0	295	0	-187
26	2573.76	164,485	-1,089	820	1,045	0	182	3,180	0	168	0	212
27	2573.12	163,677	-808	822	1,450	0	168	3,018	0	79	0	-151
28	2574.56	165,498	1,821	1,058	1,346	0	155	1,133	0	60	0	455
<b>Total</b>			<b>-572</b>	<b>21,664</b>	<b>43,838</b>	<b>0</b>	<b>2,864</b>	<b>64,909</b>	<b>1</b>	<b>3,067</b>	<b>0</b>	<b>-961</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**March 2009**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	Natural	Del. To United W.A.	
Feb 28	2574.56	165,498										
1	2574.85	165,866	368	0	1,737	0	153	1,569	0	60	0	107
2	2574.65	165,612	-254	1,142	1,341	0	165	2,552	0	83	0	-267
3	2574.07	164,877	-735	0	1,458	0	268	2,481	0	115	0	135
4	2575.71	166,961	2,084	1,736	1,458	0	270	1,245	0	198	0	63
5	2574.95	165,993	-968	660	1,292	0	290	2,386	0	234	0	-590
6	2576.15	167,524	1,531	1,766	1,425	0	233	1,798	0	198	0	103
7	2575.35	166,502	-1,022	0	1,363	0	195	2,070	0	196	0	-314
8	2576.12	167,485	983	0	1,369	0	169	635	0	159	0	239
9	2574.74	165,726	-1,759	0	1,596	0	156	3,079	0	135	0	-297
10	2575.24	166,362	636	0	1,490	0	140	762	1	123	0	-108
11	2573.90	164,662	-1,700	0	1,216	0	129	2,516	0	89	0	-440
12	2574.14	164,966	304	0	1,456	0	116	1,335	0	60	0	127
13	2573.76	164,485	-481	0	1,367	0	106	1,782	0	60	0	-112
14	2573.93	164,700	215	0	1,395	0	97	1,214	0	52	0	-11
15	2576.33	167,754	3,054	2,616	1,448	0	88	1,358	0	52	0	312
16	2575.93	167,242	-512	886	1,419	0	81	2,911	0	52	0	65
17	2575.30	166,439	-803	732	1,473	0	74	3,019	0	52	0	-11
18	2574.70	165,676	-763	855	1,450	0	72	2,894	0	52	0	-194
19	2574.85	165,866	190	629	1,577	0	72	1,953	0	52	0	-83
20	2574.05	164,852	-1,014	818	1,451	0	76	3,111	1	52	0	-195
21	2575.05	166,120	1,268	0	1,429	0	81	186	0	52	0	-4
22	2575.88	167,179	1,059	0	1,389	0	80	482	0	52	0	124
23	2575.88	167,179	0	0	1,567	0	80	1,482	0	52	0	-113
24	2577.30	168,999	1,820	700	795	0	73	748	0	51	0	1,051
25	2576.44	167,895	-1,104	0	1,575	0	66	2,740	0	51	0	46
26	2574.64	165,599	-2,296	0	1,575	0	62	3,373	0	51	0	-509
27	2573.23	163,816	-1,783	0	1,577	0	60	2,987	0	51	0	-382
28	2574.65	165,612	1,796	367	1,574	0	58	311	0	51	0	159
29	2577.15	168,806	3,194	1,937	1,570	0	55	647	0	51	0	330
30	2576.63	168,138	-668	0	1,567	0	53	2,131	0	51	0	-106
31	2576.30	167,716	-422	0	1,565	0	53	2,156	0	51	0	167
Total			2,218	14,844	44,964	0	3,671	57,913	2	2,638	0	-708

1/ Values supplied by LADWP, not verified by DWR.



**Table 25. Pyramid Lake**

Daily Operation

**April 2009**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Mar 31	2576.30	167,716										
1	2574.56	165,498	-2,218	0	1,265	0	53	3,100	0	50	0	-386
2	2573.65	164,346	-1,152	0	909	0	53	1,874	0	50	0	-190
3	2573.82	164,561	215	0	1,526	0	53	1,217	0	50	0	-97
4	2574.18	165,016	455	0	787	0	50	872	0	52	0	542
5	2575.47	166,655	1,639	0	704	0	50	342	0	52	0	1,279
6	2574.97	166,019	-636	0	819	0	48	1,016	0	52	0	-435
7	2574.79	165,790	-229	0	826	0	49	884	0	52	0	-168
8	2575.00	166,057	267	0	753	0	49	1,040	0	52	0	557
9	2575.82	167,102	1,045	0	996	0	51	84	0	52	0	134
10	2575.79	167,064	-38	0	851	0	51	363	1	52	0	-524
11	2576.33	167,747	683	0	645	0	54	582	0	52	0	618
12	2576.20	167,588	-159	0	830	0	53	510	0	52	0	-480
13	2576.35	167,780	192	0	855	0	49	541	0	52	0	-119
14	2576.19	167,575	-205	0	793	0	49	677	0	52	0	-318
15	2576.14	167,511	-64	0	792	0	47	856	0	52	0	5
16	2576.77	168,318	807	0	825	0	44	123	0	52	0	113
17	2577.26	168,948	630	0	847	0	42	248	0	52	0	41
18	2578.19	170,147	1,199	0	772	0	40	373	0	50	0	810
19	2577.79	169,630	-517	0	765	0	38	1,073	0	49	0	-198
20	2575.58	166,796	-2,834	0	827	0	38	2,864	0	47	0	-788
21	2574.53	165,460	-1,336	0	703	0	36	1,677	1	45	0	-352
22	2574.34	165,219	-241	0	624	0	36	595	0	42	0	-264
23	2575.09	166,171	952	0	746	0	38	278	0	42	0	488
24	2574.82	165,828	-343	0	817	0	36	1,097	0	42	0	-57
25	2575.38	166,541	713	0	750	0	35	188	0	42	0	158
26	2575.98	167,306	765	0	764	0	35	4	0	42	0	12
27	2574.00	164,788	-2,518	0	1,471	0	35	3,519	0	42	0	-463
28	2574.67	165,638	850	0	1,507	0	35	682	0	42	0	32
29	2575.10	166,184	546	0	1,506	0	33	698	0	42	0	-253
30	2576.32	167,741	1,557	0	1,511	0	33	358	0	42	0	413
Total			25	0	27,786	0	1,313	27,735	2	1,447	0	110

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**May 2009**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Apr 30	2576.32	167,741										
1	2574.88	165,904	-1,837	0	1,360	0	30	2,484	0	42	0	-701
2	2575.41	166,579	675	0	1,516	0	31	952	0	42	0	122
3	2576.26	167,664	1,085	0	1,528	0	30	855	0	41	0	423
4	2574.98	166,031	-1,633	0	1,524	900	30	3,724	0	40	0	-323
5	2574.49	165,409	-622	0	1,554	1,388	30	3,664	0	40	0	110
6	2573.40	164,030	-1,379	0	1,569	1,386	28	4,315	0	40	0	-7
7	2573.02	163,551	-479	0	1,571	1,386	28	3,247	0	38	0	-179
8	2572.96	163,476	-75	0	1,571	926	27	2,371	0	37	0	-191
9	2573.90	164,662	1,186	0	1,571	0	27	467	1	36	0	92
10	2574.46	165,371	709	0	784	0	26	691	0	33	0	623
11	2575.14	166,235	864	704	1,565	0	26	1,452	0	33	0	54
12	2574.09	164,902	-1,333	1,331	720	186	25	3,495	0	31	0	-69
13	2574.29	165,154	252	1,472	1,525	217	25	3,708	0	31	0	752
14	2573.09	163,629	-1,525	1,253	1,524	0	24	3,786	0	31	0	-509
15	2572.36	162,722	-907	1,503	1,524	0	24	2,867	0	31	0	-1,060
16	2572.86	163,350	628	1,578	1,526	0	24	2,520	0	31	0	51
17	2575.81	167,089	3,739	3,047	1,528	0	23	1,183	0	31	0	355
18	2574.60	165,549	-1,540	1,721	1,526	744	22	4,755	0	31	0	-767
19	2574.64	165,599	50	1,074	1,531	721	22	3,481	1	31	0	215
20	2573.23	163,816	-1,783	697	1,530	0	21	3,624	0	31	0	-376
21	2572.88	163,375	-441	931	1,527	0	21	3,214	0	31	0	325
22	2571.43	161,558	-1,817	1,285	1,526	0	20	4,226	0	31	0	-391
23	2574.35	165,232	3,674	1,753	1,525	0	20	122	0	30	0	528
24	2577.02	168,639	3,407	2,807	1,523	0	20	864	0	30	0	-49
25	2577.29	168,986	347	0	1,523	0	20	1,226	0	30	0	60
26	2574.88	165,904	-3,082	0	1,525	0	19	4,204	0	29	0	-393
27	2574.43	165,333	-571	1,122	1,525	441	18	3,913	0	27	0	263
28	2573.40	164,030	-1,303	2	1,530	694	17	3,440	1	25	0	-80
29	2573.41	164,043	13	1,137	1,529	694	18	3,198	0	23	0	-144
30	2574.08	164,890	847	0	1,533	694	17	1,463	0	22	0	88
31	2577.13	168,780	3,890	1,717	1,528	694	17	87	0	22	0	43
Total			1,039	25,134	45,841	11,071	730	79,598	3	1,001	0	-1,135

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**June 2009**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
May 31	2577.13	168,780										
1	2575.97	167,294	-1,486	0	1,523	413	19	2,958	0	24	0	-459
2	2574.34	165,219	-2,075	0	1,525	651	19	3,891	0	24	0	-355
3	2573.05	163,589	-1,630	0	1,547	495	19	3,408	0	24	0	-259
4	2571.46	161,595	-1,994	0	1,573	990	19	4,110	0	22	0	-444
5	2572.73	163,187	1,592	0	1,574	992	20	960	1	20	0	-13
6	2574.67	165,638	2,451	0	1,575	992	20	167	0	20	0	51
7	2576.42	167,869	2,231	0	1,575	992	20	508	0	20	0	172
8	2575.82	167,102	-767	0	1,568	496	20	2,681	0	20	0	-150
9	2575.44	166,617	-485	0	1,571	248	20	2,183	0	20	0	-121
10	2575.70	166,949	332	0	1,574	0	21	1,160	0	20	0	-83
11	2575.32	166,464	-485	0	1,572	0	20	1,873	0	20	0	-184
12	2575.20	166,311	-153	0	1,572	0	21	1,972	0	20	0	246
13	2576.08	167,434	1,123	0	1,578	0	21	956	0	20	0	500
14	2576.88	168,459	1,025	0	1,577	0	21	673	0	20	0	120
15	2575.88	167,179	-1,280	0	1,578	0	21	2,072	0	20	0	-787
16	2574.73	165,714	-1,465	0	851	165	21	2,430	0	20	0	-52
17	2574.58	165,523	-191	0	1,532	145	20	1,978	1	20	0	111
18	2574.01	164,801	-722	0	1,533	0	19	1,846	0	20	0	-408
19	2574.73	165,714	913	0	1,534	0	18	1,312	0	20	0	693
20	2575.43	166,604	890	0	1,532	0	16	123	0	20	0	-515
21	2576.55	168,036	1,432	0	1,526	0	15	218	0	20	0	129
22	2575.79	167,064	-972	0	1,524	0	14	2,172	0	20	0	-318
23	2574.93	165,968	-1,096	0	1,528	0	13	4,187	0	20	0	1,570
24	2573.78	164,510	-1,458	1,813	1,528	0	12	3,470	1	20	0	-1,320
25	2574.57	165,511	1,001	1,926	1,531	0	12	2,036	0	19	0	-413
26	2572.16	162,471	-3,040	2	1,534	0	12	3,994	0	17	0	-577
27	2571.81	162,033	-438	1,084	1,534	0	12	3,506	0	17	0	455
28	2574.04	164,839	2,806	2,748	1,531	0	12	1,548	0	17	0	80
29	2575.16	166,260	1,421	4,154	1,529	0	11	3,576	0	17	0	-680
30	2575.37	166,528	268	2,500	1,529	0	11	3,748	0	17	0	-7
<b>Total</b>			<b>-2,252</b>	<b>14,227</b>	<b>45,758</b>	<b>6,579</b>	<b>519</b>	<b>65,716</b>	<b>3</b>	<b>598</b>	<b>0</b>	<b>-3,018</b>

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

July 2009

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Jun 30	2575.37	166,528										
1	2574.73	165,714	-814	1,645	1,531	0	11	4,045	0	18	0	62
2	2573.66	164,359	-1,355	1,129	1,534	0	10	4,569	0	18	0	559
3	2574.10	164,915	556	1,130	1,533	0	9	2,266	0	16	0	166
4	2574.85	165,866	951	1,782	1,535	0	9	2,408	0	16	0	49
5	2575.97	167,294	1,428	1,875	1,538	0	9	2,029	0	16	0	51
6	2576.49	167,959	665	1,663	1,531	0	8	2,836	0	16	0	315
7	2576.08	167,434	-525	0	1,534	0	8	1,887	1	16	0	-163
8	2574.78	165,777	-1,657	0	1,534	0	9	3,436	0	16	0	252
9	2574.90	165,930	153	963	1,536	0	8	2,234	0	16	0	-104
10	2573.84	164,586	-1,344	0	1,538	0	8	2,522	0	16	0	-352
11	2574.69	165,663	1,077	0	1,540	0	8	699	0	16	0	244
12	2575.84	167,127	1,464	0	1,537	0	7	149	0	15	0	84
13	2575.31	166,451	-676	0	1,534	0	7	1,949	1	15	0	-252
14	2575.43	165,333	-1,118	575	1,535	0	7	3,253	0	15	0	33
15	2573.89	164,649	-684	1,212	1,533	0	6	3,282	0	15	0	-138
16	2572.42	162,797	-1,852	1,299	1,539	198	6	4,575	0	15	0	-304
17	2571.54	161,695	-1,102	1,232	1,539	793	6	4,456	0	15	0	-201
18	2572.54	162,948	1,253	1,597	1,542	992	5	2,746	0	15	0	-122
19	2575.43	166,604	3,656	2,409	1,542	990	5	1,457	0	14	0	181
20	2575.52	166,719	115	1,590	1,538	992	5	3,580	0	14	0	-416
21	2575.47	166,655	-64	1,108	1,539	992	4	3,519	1	14	0	-173
22	2574.24	165,092	-1,563	1,530	1,540	992	4	4,488	0	14	0	-1,127
23	2573.66	164,359	-733	2,153	1,539	992	5	4,877	0	12	0	-533
24	2571.92	162,170	-2,189	1,793	1,541	992	5	5,909	0	12	0	-599
25	2570.30	160,150	-2,020	2,136	1,539	992	4	6,063	0	12	0	-616
26	2572.63	163,061	2,911	2,882	1,532	992	4	2,346	0	12	0	-141
27	2574.34	165,219	2,158	2,638	1,533	331	4	2,544	0	12	0	208
28	2575.11	166,197	978	2,251	1,534	0	4	3,182	1	12	0	384
29	2574.73	165,714	-483	1,302	1,534	0	4	3,235	0	12	0	-76
30	2575.66	166,898	1,184	2,483	1,535	0	5	2,780	0	12	0	-47
31	2575.04	166,108	-790	2,040	1,534	0	5	4,250	0	12	0	-107
<b>Total</b>			<b>-420</b>	<b>42,417</b>	<b>47,623</b>	<b>10,248</b>	<b>199</b>	<b>97,571</b>	<b>4</b>	<b>449</b>	<b>0</b>	<b>-2,883</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**August 2009**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Jul 31	2575.04	166,108										
1	2574.99	166,044	-64	2,083	1,537	0	4	3,621	0	12	0	-55
2	2575.81	167,089	1,045	2,682	1,534	0	4	3,064	0	12	0	-99
3	2576.04	167,383	294	1,428	1,534	0	4	2,745	0	12	0	85
4	2575.64	166,872	-511	1,817	1,534	0	4	4,278	0	12	0	424
5	2575.46	166,643	-229	1,406	1,534	0	4	3,112	0	8	0	-53
6	2575.88	167,179	536	1,966	1,530	0	4	2,656	1	8	0	-299
7	2575.76	167,025	-154	2,213	1,533	0	5	3,715	0	6	0	-184
8	2575.84	167,127	102	1,572	1,533	0	4	2,901	0	6	0	-100
9	2575.22	166,337	-790	1,110	1,528	0	4	3,317	0	6	0	-109
10	2575.22	166,337	0	1,501	1,529	0	4	3,045	0	6	0	17
11	2576.01	167,345	1,008	2,200	1,536	0	4	2,682	0	6	0	-44
12	2575.60	166,821	-524	1,471	1,536	0	4	3,514	1	6	0	-14
13	2575.31	166,451	-370	1,955	1,533	0	4	3,881	0	6	0	25
14	2574.49	165,409	-1,042	0	1,533	0	4	2,104	0	6	0	-469
15	2575.58	166,796	1,387	0	1,533	0	4	182	0	6	0	38
16	2576.53	168,010	1,214	0	1,520	0	4	278	0	6	0	-26
17	2576.13	167,498	-512	0	1,517	0	4	2,022	0	6	0	-5
18	2575.96	167,281	-217	0	1,525	0	4	1,663	0	6	0	-77
19	2575.66	166,898	-383	0	1,565	0	4	1,837	1	6	0	-108
20	2575.43	166,604	-294	0	1,563	0	4	1,880	0	6	0	25
21	2574.96	166,006	-598	0	1,540	0	5	1,996	0	6	0	-141
22	2575.88	167,179	1,173	0	1,533	0	5	307	0	6	0	-52
23	2576.55	168,036	857	0	1,534	0	5	630	0	6	0	-46
24	2575.73	166,987	-1,049	0	1,531	0	5	2,331	0	5	0	-249
25	2575.34	166,490	-497	0	1,532	0	5	2,124	1	4	0	95
26	2575.25	166,388	-102	0	1,531	0	4	1,942	0	4	0	309
27	2574.66	165,625	-763	0	1,530	0	4	2,137	0	4	0	-156
28	2573.69	164,396	-1,229	0	1,536	0	5	2,618	0	4	0	-148
29	2573.77	164,498	102	0	1,538	0	5	1,398	0	4	0	-39
30	2575.19	166,299	1,801	2,607	1,538	0	5	2,381	0	4	0	36
31	2575.43	166,604	305	975	1,533	0	5	2,143	0	4	0	-61
Total			496	26,986	47,563	0	134	72,504	4	199	0	-1,480

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**September 2009**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Aug 31	2575.43	166,604										
1	2575.81	167,089	485	580	1,535	0	4	1,553	0	5	0	-76
2	2576.04	167,383	294	771	1,539	0	4	2,017	0	5	0	2
3	2575.34	166,490	-893	0	1,539	0	4	2,441	0	5	0	10
4	2574.48	165,396	-1,094	0	1,541	0	4	2,458	0	5	0	-176
5	2575.31	166,451	1,055	0	1,541	0	4	484	1	5	0	0
6	2576.49	167,959	1,508	0	1,541	0	4	68	0	5	0	36
7	2577.35	169,063	1,104	0	1,540	0	5	387	0	5	0	-49
8	2576.16	167,536	-1,527	0	1,538	0	5	2,084	0	5	0	-981
9	2575.76	167,025	-511	0	1,540	0	6	2,138	0	5	0	86
10	2574.48	165,396	-1,629	0	1,544	0	5	2,749	0	5	0	-424
11	2573.87	164,624	-772	0	1,545	0	5	2,398	0	5	0	81
12	2574.58	165,523	899	0	1,543	0	5	526	0	5	0	-118
13	2576.41	167,856	2,333	980	1,539	0	6	155	1	5	0	-31
14	2577.05	168,678	822	1,051	1,537	0	7	1,887	0	5	0	119
15	2576.43	167,882	-796	0	1,539	0	7	2,154	0	5	0	-183
16	2574.01	164,798	-3,084	0	866	186	6	3,488	0	5	0	-649
17	2573.19	163,766	-1,032	2,002	0	992	6	3,974	0	5	0	-53
18	2572.25	162,584	-1,182	2,288	0	992	6	4,250	0	5	0	-213
19	2575.73	166,987	4,403	3,481	0	992	6	275	0	5	0	204
20	2577.18	168,845	1,858	1,147	0	764	6	0	0	5	0	-54
21	2575.11	166,197	-2,648	30	0	558	6	3,051	0	5	0	-186
22	2574.11	164,928	-1,269	1,934	0	992	6	3,994	0	5	0	-202
23	2573.81	164,548	-380	2,270	0	992	6	3,764	0	5	0	121
24	2570.51	160,411	-4,137	1,827	0	992	7	6,729	1	5	0	-228
25	2569.66	159,357	-1,054	2,377	335	992	7	4,575	0	5	0	-185
26	2570.92	160,921	1,564	3,430	1,061	990	7	3,870	0	5	0	-49
27	2573.52	164,182	3,261	3,574	1,060	992	7	2,293	0	5	0	-74
28	2574.78	165,777	1,595	2,689	1,054	992	7	2,612	0	5	0	-530
29	2574.20	165,042	-735	85	1,059	992	8	2,689	0	5	0	-185
30	2574.90	165,930	888	1,198	489	992	8	1,627	0	4	0	-168
Total			-674	31,714	29,025	13,410	174	70,690	3	149	0	-4,155

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**October 2009**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	Natural	Del. To United W.A.	
Sep 30	2574.90	165,930										
1	2574.08	164,890	-1,040	0	1,055	943	8	2,859	0	5	0	-182
2	2571.98	162,246	-2,644	0	1,057	943	8	4,325	0	5	0	-322
3	2572.29	162,634	388	0	1,059	558	9	1,192	0	5	0	-41
4	2573.12	163,677	1,043	0	1,054	943	10	708	1	5	0	-250
5	2573.64	164,333	656	0	1,054	943	10	1,382	0	5	0	36
6	2572.88	163,375	-958	0	1,063	943	10	2,843	0	5	0	-126
7	2573.62	164,308	933	1,032	1,059	943	10	2,185	0	5	0	79
8	2573.40	164,030	-278	1,040	1,057	943	10	3,141	0	5	0	-182
9	2572.05	162,333	-1,697	838	1,057	943	11	4,355	0	5	0	-186
10	2573.31	163,917	1,584	0	1,057	943	11	320	0	5	0	-102
11	2575.47	166,655	2,738	1,583	1,059	943	12	848	0	5	0	-6
12	2574.67	165,638	-1,017	817	1,056	943	12	3,357	1	5	0	-482
13	2574.88	165,904	266	628	1,053	943	12	2,576	0	5	0	211
14	2574.58	165,523	-381	865	1,054	943	15	3,133	0	5	0	-120
15	2573.99	164,776	-747	830	1,061	943	13	3,407	0	5	0	-182
16	2572.25	162,584	-2,192	719	1,060	943	13	4,688	0	5	0	-234
17	2572.76	163,224	640	0	1,065	943	12	1,419	0	7	0	46
18	2574.60	165,549	2,325	772	1,056	943	12	325	0	7	0	-126
19	2574.25	165,105	-444	883	0	930	12	2,207	0	7	0	-55
20	2574.20	165,042	-63	805	0	943	12	1,652	0	7	0	-164
21	2574.32	165,194	152	570	0	943	12	1,270	0	7	0	-96
22	2573.31	163,917	-1,277	613	0	943	12	2,061	0	7	0	-777
23	2573.66	164,359	442	0	0	943	12	294	1	7	0	-211
24	2574.88	165,904	1,545	1,131	0	943	12	546	0	7	0	12
25	2575.14	166,235	331	0	0	943	13	435	0	7	0	-183
26	2574.52	165,447	-788	262	400	943	13	2,333	0	7	0	-66
27	2574.05	164,852	-595	0	1,060	943	13	2,384	0	12	0	-215
28	2574.44	165,346	494	709	1,060	943	13	2,372	0	12	0	153
29	2574.49	165,409	63	0	1,060	943	13	1,555	0	12	0	-386
30	2574.67	165,638	229	0	1,063	943	13	1,776	0	12	0	-2
31	2576.64	168,151	2,513	981	1,060	943	13	366	0	12	0	-106
<b>Total</b>			<b>2,221</b>	<b>15,078</b>	<b>24,739</b>	<b>28,835</b>	<b>361</b>	<b>62,314</b>	<b>3</b>	<b>210</b>	<b>0</b>	<b>-4,265</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**November 2009**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Oct 31	2576.64	168,151										
1	2576.86	168,434	283	0	1,109	982	13	1,673	0	12	0	-136
2	2576.02	167,357	-1,077	0	1,055	943	13	2,764	0	12	0	-312
3	2575.56	166,770	-587	0	1,059	943	13	2,468	0	12	0	-122
4	2575.14	166,235	-535	0	1,063	943	13	2,311	1	0	48	-194
5	2575.20	166,311	76	598	1,063	943	13	2,457	0	0	48	-36
6	2574.41	165,308	-1,003	0	1,064	943	13	2,976	0	0	48	1
7	2575.85	167,140	1,832	559	1,062	943	13	491	0	0	48	-206
8	2576.68	168,203	1,063	0	1,054	943	14	754	0	0	48	-146
9	2575.65	166,885	-1,318	0	1,054	943	14	3,115	0	0	48	-166
10	2574.67	165,638	-1,247	0	1,057	943	14	3,000	0	0	48	-213
11	2574.62	165,574	-64	1,024	1,062	943	14	2,938	1	0	48	-120
12	2574.00	164,788	-786	588	1,059	943	14	3,409	0	0	48	67
13	2574.03	164,826	38	749	1,061	943	14	2,630	0	0	48	-51
14	2575.33	166,477	1,651	0	1,066	943	14	225	0	0	48	-99
15	2576.55	168,036	1,559	0	1,053	943	14	248	0	0	48	-155
16	2575.14	166,235	-1,801	0	1,053	943	14	3,303	0	0	48	-460
17	2574.02	164,814	-1,421	0	1,057	943	15	3,244	0	10	0	-182
18	2573.85	164,599	-215	0	1,059	943	15	2,105	1	10	0	-116
19	2574.18	165,016	417	842	1,065	943	15	2,228	0	10	0	-210
20	2573.74	164,460	-556	0	1,064	943	15	2,504	0	10	0	-64
21	2574.82	165,828	1,368	0	1,064	943	15	311	0	10	0	-333
22	2576.42	167,869	2,041	0	1,053	943	16	238	0	10	0	277
23	2575.11	166,197	-1,672	0	1,059	943	15	3,130	0	10	0	-549
24	2575.12	166,210	13	932	1,057	943	15	2,302	0	10	0	-622
25	2575.76	167,025	815	0	1,058	943	16	2,208	0	10	0	1,016
26	2574.32	165,194	-1,831	0	1,061	943	15	2,472	1	12	8	-1,357
27	2573.29	163,892	-1,302	0	1,060	943	16	2,899	0	53	58	-311
28	2574.56	165,498	1,606	0	1,058	943	17	244	0	30	180	42
29	2575.12	166,210	712	0	1,061	943	17	941	0	30	180	-158
30	2574.53	165,460	-750	822	1,057	943	17	3,234	0	30	180	-145
Total			-2,691	6,114	31,827	28,329	436	62,822	4	281	1,230	-5,060

1/ Values supplied by LADWP, not verified by DWR.



**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**December 2009**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	Natural	Del. To United W.A.	
Nov 30	2574.53	165,460										
1	2574.24	165,092	-368	627	1,059	992	18	2,731	0	12	200	-121
2	2573.18	163,753	-1,339	581	1,060	992	18	3,546	0	12	200	-232
3	2571.52	161,670	-2,083	0	1,055	992	19	3,485	0	12	200	-452
4	2569.93	159,691	-1,979	0	1,051	992	25	3,652	0	12	200	-183
5	2570.40	160,275	584	0	1,057	992	25	1,146	0	12	200	-132
6	2572.23	162,559	2,284	835	1,056	992	25	297	0	12	200	-115
7	2570.87	160,859	-1,700	678	1,058	992	27	4,159	0	12	200	-84
8	2571.99	162,258	1,399	794	1,061	992	31	1,165	0	12	200	-102
9	2573.14	163,703	1,445	637	1,068	992	38	1,070	0	12	200	-8
10	2573.04	163,577	-126	0	1,068	992	47	2,261	0	36	120	184
11	2572.21	162,534	-1,043	0	793	992	86	2,646	0	14	0	-254
12	2573.65	164,346	1,812	1	999	992	383	186	0	14	0	-363
13	2577.27	168,960	4,614	2,973	1,069	992	467	419	1	253	0	-214
14	2576.42	167,869	-1,091	604	1,069	992	126	3,509	0	99	0	-274
15	2575.69	166,925	-944	0	1,069	992	53	2,813	0	99	0	-146
16	2574.62	165,574	-1,351	0	1,064	992	35	3,244	0	56	0	-142
17	2573.23	163,816	-1,758	0	1,074	992	29	3,354	0	40	0	-459
18	2574.14	164,966	1,150	653	1,074	992	27	1,536	0	36	0	-24
19	2575.59	166,808	1,842	0	1,076	992	25	9	0	32	0	-210
20	2576.89	168,472	1,664	0	1,070	992	24	344	0	32	0	-46
21	2577.68	169,488	1,016	550	912	992	23	1,293	0	30	0	-138
22	2575.62	166,847	-2,641	0	1,062	873	22	4,592	0	30	0	24
23	2576.01	167,345	498	715	1,016	873	22	1,837	0	30	0	-261
24	2573.58	164,258	-3,087	0	1,061	873	22	5,019	0	30	0	6
25	2575.12	166,210	1,952	0	1,066	873	21	0	0	30	0	22
26	2574.58	165,523	-687	0	1,060	873	21	2,497	0	30	0	-114
27	2575.62	166,847	1,324	606	1,062	873	21	1,141	0	30	0	-67
28	2574.74	165,726	-1,121	620	1,058	873	21	3,540	0	30	0	-123
29	2573.97	164,750	-976	0	1,055	873	20	2,864	0	30	0	-30
30	2573.70	164,409	-341	1,074	1,060	873	21	3,283	0	30	0	-56
31	2572.85	163,338	-1,071	0	1,059	873	21	2,878	0	30	0	-116
Total			-2,122	11,948	32,421	29,562	1,763	70,516	1	1,149	1,920	-4,230

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**January 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Dec 31	2572.85	163,338										
1	2573.34	163,955	617	0	1,065	992	23	1,288	0	28	0	-147
2	2574.65	165,612	1,657	996	1,056	992	23	1,190	0	28	0	-192
3	2575.05	166,120	508	709	1,047	992	22	2,051	0	28	0	-183
4	2574.85	165,866	-254	596	1,050	992	23	2,618	0	28	0	-269
5	2574.79	165,790	-76	645	1,049	873	24	2,691	0	28	0	52
6	2574.53	165,460	-330	762	1,048	873	24	2,882	0	28	0	-127
7	2573.53	164,194	-1,266	512	1,053	992	24	3,799	0	40	0	-8
8	2572.62	163,048	-1,146	0	1,048	992	24	3,086	0	50	0	-74
9	2574.26	165,118	2,070	781	811	992	22	487	0	61	0	12
10	2575.82	167,102	1,984	665	1,048	992	21	724	0	61	0	43
11	2575.56	166,770	-332	569	1,045	992	22	2,885	0	61	0	-14
12	2574.70	165,676	-1,094	0	351	992	21	2,355	0	61	0	-42
13	2573.76	164,485	-1,191	0	330	992	22	2,746	0	61	0	272
14	2573.00	163,526	-959	0	1,051	992	22	2,632	1	61	0	-330
15	2572.37	162,734	-792	0	1,051	992	22	2,647	0	61	0	-149
16	2573.93	164,700	1,966	0	1,047	992	21	112	0	61	0	79
17	2575.47	166,655	1,955	535	1,047	992	21	616	0	61	0	37
18	2576.42	167,869	1,214	648	1,053	0	242	573	0	198	0	42
19	2576.88	168,459	590	0	1,054	0	396	304	0	506	0	-50
20	2575.68	166,923	-1,536	0	1,052	0	314	2,435	0	793	0	326
21	2576.86	168,434	1,511	1,054	1,053	0	279	752	0	595	0	472
22	2577.10	168,742	308	0	1,053	0	257	646	0	260	0	-96
23	2576.75	168,292	-450	0	1,048	0	151	1,420	0	198	0	-31
24	2576.63	168,138	-154	0	1,048	0	116	1,159	0	149	0	-10
25	2576.74	168,280	142	450	1,052	0	113	1,272	0	130	0	-71
26	2575.89	167,191	-1,089	0	1,049	0	105	1,798	0	130	0	-315
27	2575.90	167,204	13	0	1,051	0	109	1,123	0	150	0	126
28	2575.04	166,103	-1,101	0	818	0	145	1,702	0	150	0	-212
29	2574.85	165,866	-237	0	1,051	0	147	1,279	0	150	0	-6
30	2575.51	166,706	840	0	1,052	0	145	275	0	150	0	68
31	2575.56	166,770	64	0	1,053	0	145	974	0	151	0	-9
<b>Total</b>			<b>3,432</b>	<b>8,922</b>	<b>30,684</b>	<b>16,626</b>	<b>3,045</b>	<b>50,521</b>	<b>1</b>	<b>4,517</b>	<b>0</b>	<b>-806</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**February 2010**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Jan 31	2575.56	166,770										
1	2575.56	166,770	0	0	1,054	0	134	1,385	0	149	0	346
2	2575.74	167,000	230	0	1,046	0	137	812	0	149	0	8
3	2576.09	167,447	447	625	1,046	0	135	1,152	0	149	0	-58
4	2574.46	165,371	-2,076	0	1,052	0	135	2,924	1	149	0	-189
5	2575.44	166,617	1,246	926	1,052	0	235	975	0	129	0	137
6	2576.70	168,228	1,611	0	1,054	0	699	132	0	129	0	119
7	2577.40	169,128	900	0	1,054	0	364	141	0	317	0	-60
8	2576.89	168,472	-656	98	1,057	0	258	1,743	1	280	0	-45
9	2576.42	167,869	-603	0	1,059	0	242	1,894	0	159	0	149
10	2575.95	167,268	-601	0	1,058	0	203	1,583	0	159	0	-120
11	2575.43	166,604	-664	0	1,059	0	178	1,678	0	139	0	-84
12	2575.12	166,210	-394	0	1,053	0	160	1,489	0	79	0	-39
13	2575.73	166,987	777	0	1,054	0	159	363	0	79	0	6
14	2575.56	166,770	-217	0	1,054	0	159	1,358	0	127	0	55
15	2575.91	167,217	447	747	1,058	0	164	1,499	0	127	0	104
16	2576.65	168,164	947	711	1,058	0	162	1,067	0	127	0	210
17	2575.47	166,655	-1,509	0	1,055	0	162	2,551	0	127	0	-48
18	2574.97	166,019	-636	913	1,060	0	166	2,487	0	127	0	-161
19	2575.09	166,171	152	758	1,062	0	164	1,707	1	127	0	3
20	2575.11	166,197	26	0	1,060	0	153	981	0	109	0	-97
21	2575.44	166,617	420	0	1,059	0	142	682	0	109	0	10
22	2575.02	166,082	-535	751	762	0	149	2,005	0	109	0	-83
23	2575.30	166,439	357	568	554	0	133	777	0	109	0	-12
24	2575.13	166,222	-217	0	552	0	120	787	0	109	0	7
25	2575.82	167,102	880	959	557	0	149	705	0	109	0	29
26	2575.95	167,268	166	0	523	0	144	335	0	91	0	-75
27	2576.41	167,856	588	0	517	0	392	396	1	91	0	167
28	2576.67	168,190	334	0	514	0	378	391	0	297	0	130
<b>Total</b>			<b>1,420</b>	<b>7,056</b>	<b>26,143</b>	<b>0</b>	<b>5,776</b>	<b>33,999</b>	<b>4</b>	<b>3,961</b>	<b>0</b>	<b>409</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**March 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	Natural	Del. To United W.A.	
Feb 28	2576.67	168,190										
1	2576.86	168,434	244	553	514	0	299	905	0	357	0	140
2	2576.63	168,138	-296	0	521	0	246	539	0	337	0	-187
3	2576.74	168,280	142	706	520	0	213	1,167	0	317	0	187
4	2576.84	168,408	128	902	523	0	195	1,230	1	238	0	-23
5	2576.32	167,741	-667	0	523	0	171	1,155	0	228	0	22
6	2576.45	167,908	167	0	525	0	163	239	0	159	0	-123
7	2576.47	167,933	25	0	528	0	175	497	0	159	0	-22
8	2576.53	168,010	77	603	1,061	0	162	1,493	0	159	0	-97
9	2577.01	168,626	616	680	1,062	0	147	1,058	1	159	0	-55
10	2576.77	168,318	-308	0	1,092	0	136	1,317	0	159	0	-60
11	2576.74	168,280	-38	0	527	0	125	597	0	159	0	66
12	2576.84	168,408	128	0	525	0	116	335	0	159	0	-19
13	2576.69	168,215	-193	0	525	0	116	663	0	159	0	-12
14	2576.68	168,203	-12	0	501	0	114	380	0	159	0	-88
15	2576.35	167,780	-423	0	524	0	109	843	0	159	0	-54
16	2575.97	167,294	-486	0	525	0	105	945	0	159	0	-12
17	2576.44	167,895	601	867	525	0	109	770	0	159	0	29
18	2576.56	168,049	154	660	532	0	118	1,025	0	159	0	28
19	2576.70	168,228	179	852	528	0	120	1,062	0	159	0	-100
20	2576.60	168,099	-129	0	527	0	113	388	1	159	0	-221
21	2575.65	166,880	-1,219	0	527	0	111	123	0	159	0	-1,575
22	2576.46	167,921	1,041	0	516	0	108	1,236	0	159	0	1,812
23	2575.74	167,000	-921	0	508	0	106	1,266	0	159	0	-110
24	2576.09	167,447	447	867	500	0	102	871	0	149	0	-2
25	2576.23	167,626	179	666	516	0	95	796	0	149	0	-153
26	2576.82	168,382	756	578	517	0	90	392	0	139	0	102
27	2576.91	168,498	116	0	516	0	84	141	0	128	0	-215
28	2577.14	168,793	295	0	522	0	77	218	0	108	0	22
29	2576.33	167,754	-1,039	0	523	0	73	1,403	0	98	0	-134
30	2576.02	167,357	-397	0	519	0	73	788	0	98	0	-103
31	2576.33	167,754	397	0	516	0	70	218	0	98	0	127
Total			-436	7,934	17,788	0	4,041	24,060	3	5,306	0	-830

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**April 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Mar 31	2576.33	167,754										
1	2576.30	167,716	-38	0	518	0	70	478	0	89	0	-59
2	2576.48	167,946	230	0	517	0	66	335	0	79	0	61
3	2576.66	168,177	231	0	519	0	59	159	0	79	0	-109
4	2576.89	168,472	295	0	520	0	57	123	0	79	0	-80
5	2576.89	168,472	0	0	519	0	71	614	0	79	0	103
6	2576.76	168,305	-167	0	527	0	90	629	1	85	0	-69
7	2576.74	168,280	-25	0	531	0	66	513	0	79	0	-30
8	2576.95	168,549	269	0	539	0	59	265	0	79	0	15
9	2577.18	168,845	296	0	533	0	53	141	0	79	0	-70
10	2577.51	169,269	424	0	542	0	51	103	0	79	0	13
11	2577.33	169,038	-231	0	536	0	56	784	0	79	0	40
12	2577.33	169,038	0	0	535	0	153	737	0	120	0	169
13	2576.79	168,344	-694	0	533	0	144	1,096	0	121	0	-154
14	2576.55	168,036	-308	0	532	0	123	784	0	121	0	-58
15	2576.35	167,780	-256	0	529	0	116	718	0	121	0	-62
16	2576.35	167,780	0	2,353	536	0	110	635	0	121	0	-2,243
17	2576.18	167,562	-218	0	536	0	99	668	0	121	0	-64
18	2575.79	167,064	-498	0	539	0	87	908	0	101	0	-115
19	2575.58	166,796	-268	4	536	0	81	895	0	101	0	107
20	2575.68	166,923	127	11	535	0	83	282	0	101	0	-119
21	2576.35	167,780	857	743	536	0	132	379	1	101	0	-73
22	2576.33	167,754	-26	623	535	0	118	410	0	101	0	-791
23	2576.56	168,049	295	0	535	0	109	363	0	101	0	115
24	2577.00	168,613	564	0	534	0	91	141	0	101	0	181
25	2577.04	168,665	52	0	535	0	82	188	0	101	0	-276
26	2575.81	167,085	-1,580	0	528	0	75	719	0	100	0	-1,364
27	2576.05	167,396	311	0	534	0	73	2,042	0	100	0	1,846
28	2576.85	168,421	1,025	730	533	0	73	185	0	80	0	-46
29	2577.74	169,566	1,145	631	546	0	72	367	0	80	0	343
30	2576.97	168,575	-991	0	533	0	71	1,179	0	80	0	-336
<b>Total</b>			<b>821</b>	<b>5,095</b>	<b>15,961</b>	<b>0</b>	<b>2,590</b>	<b>16,840</b>	<b>2</b>	<b>2,858</b>	<b>0</b>	<b>-3,125</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**May 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	Natural	Del. To United W.A.	
Apr 30	2576.97	168,575										
1	2577.29	168,986	411	0	530	0	69	159	0	79	0	50
2	2576.49	167,959	-1,027	0	532	0	63	1,094	0	69	0	-459
3	2576.49	167,959	0	833	535	0	61	1,672	0	69	0	312
4	2574.64	165,599	-2,360	0	539	0	59	2,856	0	63	0	-39
5	2574.08	164,890	-709	0	541	0	54	1,252	0	60	0	8
6	2574.64	165,598	708	1,258	535	0	49	95	0	58	0	-981
7	2575.49	166,681	1,083	0	529	0	47	343	1	56	0	907
8	2575.46	166,643	-38	0	536	0	45	468	0	56	0	-95
9	2575.70	166,949	306	0	537	0	47	188	0	52	0	-38
10	2575.81	167,089	140	23	537	0	48	244	0	52	0	-172
11	2576.97	168,575	1,486	960	539	0	46	183	0	52	0	176
12	2576.67	168,190	-385	0	530	0	46	863	0	52	0	-46
13	2574.96	166,006	-2,184	0	533	0	43	2,706	0	52	0	-2
14	2574.99	166,044	38	768	530	0	41	1,248	0	50	0	-3
15	2575.16	166,260	216	0	538	0	41	278	0	50	0	-35
16	2575.93	167,242	982	1,386	543	0	36	982	0	50	0	49
17	2576.80	168,357	1,115	634	1,022	0	37	472	0	50	0	-56
18	2575.16	166,260	-2,097	0	889	0	41	2,886	1	50	0	-90
19	2574.88	165,904	-356	0	1,023	0	41	1,493	0	50	0	123
20	2574.84	165,853	-51	1,190	1,024	0	38	2,109	0	50	0	-144
21	2576.49	167,959	2,106	1,337	1,021	0	35	195	0	50	0	-42
22	2576.82	168,382	423	0	1,024	0	35	512	0	48	0	-76
23	2577.36	169,076	694	0	1,020	0	36	349	0	46	0	33
24	2576.54	168,023	-1,053	0	1,018	0	36	2,003	0	49	0	-55
25	2577.59	169,372	1,349	0	1,015	0	35	302	0	45	0	646
26	2575.68	166,923	-2,449	0	1,014	0	35	2,756	1	43	0	-698
27	2575.58	166,796	-127	842	1,014	0	36	1,996	0	41	0	18
28	2575.47	166,655	-141	0	1,012	0	36	1,145	0	41	0	-3
29	2576.05	167,396	741	0	1,013	0	34	218	0	41	0	-47
30	2577.32	169,025	1,629	1,147	1,019	0	31	546	0	41	0	19
31	2578.02	169,927	902	0	1,018	0	30	105	0	41	0	0
<b>Total</b>			<b>1,352</b>	<b>10,378</b>	<b>23,710</b>	<b>0</b>	<b>1,331</b>	<b>31,718</b>	<b>3</b>	<b>1,606</b>	<b>0</b>	<b>-740</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**June 2010**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
May 31	2578.02	169,927										
1	2576.16	167,536	-2,391	0	1,011	0	28	2,019	0	40	0	-1,371
2	2575.93	167,242	-294	38	1,012	0	28	2,307	0	36	0	971
3	2575.22	166,337	-905	1,443	1,017	0	26	3,192	1	34	0	-164
4	2573.87	164,624	-1,713	1,916	1,024	0	24	4,762	0	32	0	117
5	2574.22	165,067	443	2,299	916	0	23	2,588	0	28	0	-179
6	2575.34	166,490	1,423	3,027	1,021	0	22	2,640	0	26	0	19
7	2574.96	166,006	-484	1,977	1,024	0	21	3,429	1	24	0	-52
8	2574.60	165,549	-457	2,431	1,023	0	20	4,061	0	24	0	154
9	2574.80	165,803	254	3,078	1,022	0	20	3,497	0	22	0	-347
10	2574.88	165,904	101	1,933	1,021	0	19	3,043	0	22	0	193
11	2575.58	166,796	892	1,266	1,017	0	19	1,241	1	22	0	-146
12	2576.22	167,613	817	2	1,017	0	20	155	0	22	0	-45
13	2576.52	167,997	384	1,643	1,015	0	20	2,276	0	22	0	4
14	2575.45	166,630	-1,367	1,422	1,018	0	18	3,687	0	22	0	-116
15	2574.84	165,853	-777	2,077	1,019	0	18	3,850	1	22	0	-18
16	2574.96	166,006	153	2,510	1,016	0	18	3,393	0	21	0	23
17	2574.93	165,968	-38	2,352	1,021	0	17	3,175	0	20	0	-233
18	2573.76	164,485	-1,483	1,339	1,023	0	18	3,943	0	20	0	100
19	2573.85	164,599	114	2,686	1,014	0	18	3,706	0	19	0	121
20	2574.64	165,599	1,000	1,390	1,021	0	17	1,369	1	18	0	-40
21	2576.25	167,652	2,053	2,296	1,118	0	17	1,659	0	18	0	299
22	2575.02	166,082	-1,570	1,461	1,118	0	17	4,305	0	18	0	157
23	2575.41	166,579	497	2,523	1,106	0	16	2,961	0	18	0	-169
24	2573.40	164,030	-2,549	2,311	1,070	0	15	5,884	0	18	0	-43
25	2574.22	165,067	1,037	3,594	1,072	0	15	3,621	0	18	0	-5
26	2575.58	166,796	1,729	1,541	1,071	0	15	888	0	18	0	8
27	2575.69	166,936	140	1,540	1,066	0	14	2,504	1	18	0	43
28	2574.84	165,853	-1,083	1,213	1,072	0	13	3,327	0	18	0	-36
29	2574.19	165,029	-824	2,037	1,076	0	12	3,904	0	15	0	-30
30	2573.62	164,308	-721	2,255	1,076	0	12	4,111	0	15	0	62
Total			-5,619	55,600	31,117	0	560	91,497	6	670	0	-723

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**July 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Jun 30	2573.62	164,308										
1	2572.87	163,363	-945	2,389	1,269	0	11	4,473	0	14	0	-127
2	2570.01	159,790	-3,573	3,075	1,023	0	11	7,387	0	13	0	-282
3	2573.32	163,929	4,139	3,296	1,129	0	11	297	0	12	0	12
4	2576.73	168,267	4,338	3,148	1,336	0	11	157	0	12	0	12
5	2577.37	169,089	822	0	1,342	0	11	439	1	12	0	-79
6	2575.60	166,821	-2,268	60	1,345	0	11	3,612	0	11	0	-61
7	2577.02	168,639	1,818	2,281	1,453	0	10	1,834	0	11	0	-81
8	2575.60	166,821	-1,818	0	1,444	0	9	3,220	0	11	0	-40
9	2574.95	165,993	-828	1,240	1,519	0	8	3,458	0	11	0	-126
10	2575.89	167,191	1,198	0	1,328	0	8	141	0	11	0	14
11	2576.78	168,331	1,140	0	1,329	0	8	159	0	11	0	-27
12	2575.63	166,859	-1,472	822	1,330	0	8	3,499	0	11	0	-122
13	2575.22	166,337	-522	2,160	1,335	0	7	3,941	1	11	0	-71
14	2575.86	167,153	816	1,837	1,332	0	6	2,293	0	11	0	-55
15	2573.54	164,207	-2,946	0	2,465	0	6	5,230	0	11	0	-176
16	2573.48	164,131	-76	0	2,224	0	6	2,474	0	11	0	179
17	2575.33	166,477	2,346	957	2,638	0	6	1,287	0	8	0	40
18	2576.38	167,818	1,341	0	1,861	0	6	1,114	0	8	0	596
19	2576.27	167,677	-141	1,292	1,675	0	5	3,093	0	8	0	-12
20	2575.39	166,553	-1,124	1,203	1,627	0	5	3,300	0	8	0	-651
21	2575.14	166,235	-318	2,021	1,630	0	5	4,553	1	8	0	588
22	2574.10	164,915	-1,320	2,855	1,363	0	4	5,290	0	8	0	-244
23	2573.04	163,577	-1,338	1,465	1,391	0	4	4,107	0	8	0	-83
24	2574.80	165,803	2,226	2,386	1,391	0	4	1,631	0	8	0	84
25	2576.37	167,805	2,002	2,514	1,380	0	4	1,960	0	8	0	72
26	2575.55	166,757	-1,048	1,357	1,381	0	4	3,713	0	8	0	-69
27	2574.90	165,930	-827	1,721	1,369	0	4	3,882	1	8	0	-30
28	2574.99	166,044	114	2,052	1,326	0	4	3,219	0	8	0	-41
29	2574.93	165,968	-76	2,002	1,367	0	4	3,354	0	8	0	-87
30	2573.31	163,917	-2,051	1,357	1,446	0	4	4,807	0	8	0	-43
31	2575.76	167,025	3,108	1,924	1,483	0	4	327	0	7	0	31
Total			2,717	45,414	46,531	0	209	88,251	4	303	0	-879

1/ Values supplied by LADWP, not verified by DWR.



**Table 25. Pyramid Lake**

Daily Operation

**August 2010**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Jul 31	2575.76	167,025										
1	2576.92	168,511	1,486	1,405	1,460	0	4	1,292	0	8	0	-83
2	2576.08	167,434	-1,077	420	1,891	0	4	3,322	0	6	0	-64
3	2575.93	167,242	-192	1,781	1,785	0	4	3,744	0	6	0	-12
4	2575.29	166,426	-816	1,548	1,778	0	5	4,118	0	6	0	-23
5	2574.20	165,042	-1,384	1,109	1,761	0	5	4,022	0	6	0	-231
6	2573.84	164,586	-456	1,733	1,845	0	5	3,851	1	6	0	-181
7	2574.64	165,599	1,013	1,169	1,797	0	5	1,955	0	6	0	3
8	2576.67	168,190	2,591	3,213	1,037	0	5	1,596	0	6	0	-62
9	2575.90	167,204	-986	1,009	1,763	0	6	3,676	0	6	0	-82
10	2575.40	166,566	-638	1,326	1,771	0	5	3,676	0	6	0	-58
11	2573.87	164,624	-1,942	1,544	1,751	0	6	5,155	0	6	0	-82
12	2572.66	163,099	-1,525	2,404	1,041	0	6	4,966	0	6	0	-4
13	2571.98	162,246	-853	2,208	1,940	0	6	4,963	1	6	0	-37
14	2574.07	164,877	2,631	1,660	2,649	0	6	1,524	0	6	0	-154
15	2577.22	168,896	4,019	2,819	2,675	0	5	1,325	0	6	0	-149
16	2575.54	166,745	-2,151	46	2,565	0	5	4,682	0	6	0	-79
17	2575.51	166,706	-39	2,119	2,491	0	5	4,326	0	6	0	-322
18	2574.59	165,536	-1,170	1,199	2,487	29	5	4,705	0	6	0	-179
19	2574.31	165,181	-355	766	2,498	0	6	3,540	0	6	0	-79
20	2573.84	164,586	-595	1,096	2,391	0	6	3,982	1	6	0	-99
21	2573.00	163,526	-1,060	1,317	2,604	0	6	4,871	0	6	0	-110
22	2576.93	168,523	4,997	2,538	2,482	0	6	154	0	6	0	131
23	2576.55	168,036	-487	743	1,674	0	6	2,775	0	6	0	-129
24	2575.92	167,230	-806	1,382	1,694	0	6	3,733	0	6	0	-149
25	2575.12	166,210	-1,020	1,551	1,615	0	6	4,119	0	6	0	-67
26	2573.80	164,535	-1,675	1,129	1,616	0	6	4,371	0	6	0	-49
27	2571.01	161,034	-3,501	1,341	1,083	0	6	5,678	1	6	0	-246
28	2574.05	164,852	3,818	1,950	1,661	0	6	54	0	6	0	261
29	2576.62	168,126	3,274	1,841	1,676	0	6	15	0	6	0	-228
30	2578.25	170,224	2,098	790	1,584	0	6	300	0	7	0	25
31	2575.10	166,184	-4,040	115	1,575	0	7	5,469	0	7	0	-261
Total			-841	45,271	58,640	29	171	101,959	4	190	0	-2,799

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**September 2010**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Aug 31	2575.10	166,184										
1	2574.19	165,029	-1,155	2,667	1,551	0	8	5,367	0	6	0	-8
2	2573.04	163,577	-1,452	1,996	1,868	0	7	5,289	0	6	0	-28
3	2571.80	162,020	-1,557	2,203	1,876	0	7	5,431	0	6	0	-206
4	2571.33	161,433	-587	1,731	1,874	0	7	4,219	0	6	0	26
5	2574.84	165,853	4,420	3,988	1,878	0	7	1,480	0	6	0	33
6	2576.70	168,228	2,375	2,847	1,879	0	7	2,416	1	6	0	65
7	2576.73	168,267	39	788	1,873	0	7	2,643	0	6	0	20
8	2576.18	167,562	-705	777	1,872	0	7	3,183	0	6	0	-172
9	2573.16	163,728	-3,834	0	1,876	0	8	5,860	0	6	0	148
10	2571.33	161,433	-2,295	1,225	2,016	0	7	5,406	0	6	0	-131
11	2573.04	163,577	2,144	0	2,532	0	7	391	0	6	0	2
12	2576.07	167,421	3,844	1,738	2,540	0	7	393	0	6	0	-42
13	2574.26	165,118	-2,303	0	1,583	0	7	3,928	0	6	0	41
14	2574.64	165,599	481	1,563	2,125	0	6	3,172	0	6	0	-35
15	2573.92	164,687	-912	936	1,569	0	6	3,410	0	6	0	-7
16	2574.43	165,333	646	713	1,629	0	6	1,632	1	6	0	-63
17	2573.20	163,778	-1,555	0	1,627	0	6	3,198	0	6	0	16
18	2574.37	165,257	1,479	1,548	1,626	0	6	1,673	0	6	0	-22
19	2575.52	166,719	1,462	1,390	1,629	0	6	1,616	0	6	0	59
20	2575.96	167,281	562	2,009	1,830	0	6	3,065	0	6	0	-212
21	2576.11	167,472	191	683	1,866	0	7	2,488	0	6	0	129
22	2575.41	166,579	-893	973	1,836	0	7	3,604	0	6	0	-99
23	2575.55	166,757	178	930	1,831	0	7	2,561	0	6	0	-23
24	2573.78	164,510	-2,247	0	1,825	0	6	3,962	1	6	0	-109
25	2574.30	165,168	658	0	1,821	0	6	1,033	0	6	0	-130
26	2575.43	166,604	1,436	1,776	1,833	0	6	2,167	0	6	0	-6
27	2572.69	163,136	-3,468	2,184	1,844	0	5	7,058	0	6	0	-437
28	2575.19	166,299	3,163	4,693	1,875	0	5	3,460	0	6	0	56
29	2573.62	164,307	-1,992	964	1,901	0	5	3,042	0	6	0	-1,814
30	2573.62	164,308	1	0	1,844	0	4	3,468	0	6	0	1,627
Total			-1,876	40,322	55,729	0	193	96,615	3	180	0	-1,322

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

October 2010

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Sep 30	2573.62	164,308										
1	2574.20	165,042	734	0	1,957	0	6	1,612	0	6	0	389
2	2575.96	167,281	2,239	635	2,545	0	7	872	0	6	0	-70
3	2576.67	168,190	909	0	2,543	0	8	1,683	0	6	0	47
4	2576.74	168,280	90	0	2,544	0	8	2,352	0	6	0	-104
5	2577.00	168,613	333	784	2,541	0	9	2,866	0	6	0	-129
6	2576.67	168,190	-423	0	2,545	0	12	2,765	0	6	0	-209
7	2576.60	168,100	-90	0	2,545	0	13	2,782	1	6	0	141
8	2576.29	167,703	-397	0	2,546	0	12	3,057	0	6	0	108
9	2575.52	166,719	-984	0	2,542	0	10	3,641	0	6	0	111
10	2575.58	166,796	77	0	1,816	0	10	1,618	0	6	0	-125
11	2574.13	164,953	-1,843	0	1,008	0	9	2,243	0	6	0	-611
12	2573.90	164,662	-291	0	1,161	0	8	1,390	0	6	0	-64
13	2573.71	164,422	-240	575	1,002	0	8	1,690	0	6	0	-129
14	2572.92	163,426	-996	0	1,013	0	8	1,932	0	6	0	-79
15	2571.98	162,246	-1,180	0	1,011	0	8	2,106	0	6	0	-87
16	2572.25	162,584	338	0	1,009	0	9	550	0	6	0	-124
17	2572.08	162,371	-213	0	1,016	0	9	1,065	0	6	0	-167
18	2572.01	162,283	-88	0	2,734	0	12	2,756	1	6	0	-71
19	2572.90	163,400	1,117	728	2,731	0	20	2,864	0	6	0	508
20	2573.29	163,892	492	728	2,723	0	29	2,201	0	9	0	-778
21	2572.73	163,187	-705	581	2,720	0	21	3,927	0	12	0	-88
22	2571.96	162,220	-967	1,011	2,674	91	17	4,695	0	12	0	-53
23	2573.78	164,510	2,290	1,245	2,779	0	16	151	0	12	0	-1,587
24	2576.76	168,305	3,795	1,183	2,779	0	15	1,076	0	12	0	906
25	2576.55	168,036	-269	0	2,780	0	15	3,218	0	12	0	166
26	2576.75	168,292	256	819	2,751	0	14	3,186	0	12	0	-130
27	2576.46	167,921	-371	947	2,606	0	13	3,802	1	12	0	-122
28	2575.30	166,439	-1,482	0	2,561	0	13	3,439	0	13	0	-604
29	2575.30	166,439	0	0	2,551	0	13	2,893	0	13	0	342
30	2576.44	167,895	1,456	0	2,546	0	15	944	0	14	0	-147
31	2578.07	169,992	2,097	0	2,552	0	15	667	0	14	0	211
<b>Total</b>			<b>5,684</b>	<b>9,236</b>	<b>68,831</b>	<b>91</b>	<b>382</b>	<b>70,043</b>	<b>3</b>	<b>261</b>	<b>0</b>	<b>-2,549</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**November 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Oct 31	2578.07	169,992										
1	2576.95	168,549	-1,443	0	2,557	0	14	3,833	0	14	10	-157
2	2577.02	168,639	90	0	2,703	0	13	2,149	0	4	20	-453
3	2575.69	166,936	-1,703	0	554	0	13	1,932	0	43	40	-255
4	2573.84	164,586	-2,350	0	0	0	13	1,843	1	23	60	-436
5	2573.62	164,308	-278	0	0	0	13	561	0	13	80	363
6	2573.69	164,396	88	0	500	0	14	210	0	15	100	-101
7	2575.33	166,477	2,081	0	2,362	0	14	213	0	10	118	46
8	2575.80	167,076	599	0	1,088	0	15	278	0	19	118	-89
9	2575.90	167,204	128	0	1,050	0	15	779	0	19	118	-21
10	2574.75	165,739	-1,465	0	1,051	0	16	2,409	0	19	118	14
11	2575.05	166,120	381	0	1,050	0	15	307	0	10	139	-228
12	2574.20	165,042	-1,078	0	1,051	0	15	1,954	0	18	139	-33
13	2574.60	165,549	507	0	1,051	0	16	123	0	18	139	-280
14	2576.04	167,383	1,834	1,147	1,050	0	16	117	0	18	139	-105
15	2576.22	167,613	230	932	1,051	0	16	1,586	0	11	150	-22
16	2576.49	167,959	346	0	1,045	0	16	367	1	9	158	-180
17	2575.68	166,923	-1,036	0	1,046	0	16	1,796	0	17	158	-127
18	2575.55	166,757	-166	883	1,049	0	16	1,822	0	17	158	-117
19	2575.49	166,681	-76	529	1,045	0	17	1,417	0	17	158	-75
20	2575.90	167,204	523	0	1,071	0	18	248	0	17	158	-143
21	2576.38	167,818	614	0	1,071	0	22	159	0	22	158	-140
22	2576.24	167,639	-179	611	1,057	0	21	1,579	0	17	158	-114
23	2574.44	165,346	-2,293	0	1,048	0	21	3,004	0	30	138	-190
24	2572.95	163,463	-1,883	0	1,048	0	20	2,682	0	40	118	-111
25	2573.49	164,144	681	0	1,050	0	20	123	0	20	98	-148
26	2573.56	164,232	88	0	1,053	0	20	662	0	21	78	-224
27	2574.22	165,067	835	0	1,053	0	20	141	0	16	60	-21
28	2574.66	165,625	558	0	1,054	0	20	307	0	20	40	-149
29	2575.35	166,502	877	0	1,427	0	20	333	0	4	24	-209
30	2575.30	166,439	-63	0	1,420	0	20	1,351	0	19	0	-133
Total			-3,553	4,102	33,655	0	505	34,285	2	540	3,150	-3,838

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**December 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	Natural	Del. To United W.A.	
Nov 30	2575.30	166,439										
1	2574.66	165,625	-814	0	1,454	0	18	2,000	0	20	0	-266
2	2573.08	163,627	-1,998	0	1,593	0	18	3,358	0	20	0	-231
3	2571.47	161,608	-2,019	972	1,424	0	18	4,287	0	20	0	-126
4	2572.32	162,672	1,064	0	1,304	0	18	190	0	20	0	-48
5	2573.53	164,194	1,522	0	1,443	0	20	105	0	20	0	184
6	2574.55	165,485	1,291	0	1,431	0	25	159	0	20	0	14
7	2574.16	164,991	-494	0	1,426	0	22	1,871	0	20	0	-51
8	2574.33	165,206	215	0	1,444	0	21	1,280	0	20	0	50
9	2574.01	164,801	-405	0	1,143	0	21	1,358	0	20	0	-191
10	2574.12	164,940	139	0	1,465	0	20	1,488	0	20	0	162
11	2574.90	165,930	990	0	1,513	0	20	404	0	20	0	-119
12	2575.85	167,140	1,210	0	1,434	0	19	218	0	20	0	-5
13	2575.82	167,102	-38	936	1,414	0	19	2,326	0	20	0	-61
14	2575.90	167,204	102	1,093	2,081	368	20	3,293	1	20	0	-146
15	2575.90	167,204	0	728	2,711	1,357	20	4,662	0	20	0	-134
16	2575.99	167,319	115	0	2,092	877	20	2,848	0	20	0	-6
17	2575.57	166,783	-536	0	1,046	0	23	1,674	0	20	0	89
18	2574.57	165,511	-1,272	0	1,049	0	27	2,330	0	20	0	2
19	2576.34	167,767	2,256	1,400	612	0	433	188	1	40	0	40
20	2575.96	167,281	-486	1,732	1,051	0	1,131	3,983	0	50	0	-367
21	2573.96	164,738	-2,543	0	1,051	0	765	2,907	0	283	0	-1,169
22	2573.55	164,220	-518	0	1,048	0	1,512	2,503	0	1,031	0	456
23	2573.82	164,561	341	574	1,046	0	726	1,485	0	746	0	226
24	2574.04	164,839	278	645	1,047	0	356	1,271	0	561	0	62
25	2574.34	165,219	380	1,240	1,043	0	260	1,611	0	198	0	-354
26	2576.43	167,882	2,663	1,960	1,048	0	239	156	0	194	0	-234
27	2576.62	168,126	244	984	515	0	193	1,496	0	175	0	223
28	2576.86	168,434	308	747	590	0	165	1,032	0	138	0	-24
29	2576.98	168,588	154	752	530	0	240	1,455	0	138	0	225
30	2575.48	166,668	-1,920	0	485	0	256	2,135	0	138	0	-388
31	2573.63	164,321	-2,347	0	495	0	171	2,676	0	136	0	-201
<b>Total</b>			<b>-2,118</b>	<b>13,763</b>	<b>38,028</b>	<b>2,602</b>	<b>6,816</b>	<b>56,749</b>	<b>2</b>	<b>4,188</b>	<b>0</b>	<b>-2,388</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**January 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Dec 31	2573.63	164,321										
1	2573.67	164,371	50	0	493	0	142	389	0	136	0	-60
2	2575.01	166,070	1,699	1,525	484	0	132	414	0	138	0	110
3	2574.88	165,904	-166	638	0	0	118	854	0	136	0	68
4	2575.04	166,108	204	622	0	0	117	430	0	136	0	31
5	2574.91	165,942	-166	672	482	0	106	1,322	0	110	0	6
6	2573.19	163,766	-2,176	0	384	702	101	2,809	1	110	0	-443
7	2572.44	162,822	-944	0	1,455	1,273	99	3,404	0	110	0	-257
8	2574.70	165,676	2,854	0	1,499	1,388	99	188	0	100	0	156
9	2576.98	168,588	2,912	0	1,497	1,388	97	133	0	100	0	163
10	2577.15	168,806	218	0	1,496	405	87	1,636	0	90	0	-44
11	2575.89	167,191	-1,615	561	477	533	78	3,194	0	90	0	20
12	2576.02	167,357	166	0	1,450	1,388	74	2,658	0	110	0	22
13	2575.87	167,166	-191	0	1,453	1,388	78	2,854	0	110	0	-146
14	2574.70	165,676	-1,490	10	1,026	405	80	2,725	0	130	0	-156
15	2575.23	166,350	674	0	1,027	0	82	363	1	130	0	59
16	2576.42	167,869	1,519	1,529	1,028	0	86	996	0	130	0	2
17	2577.25	168,935	1,066	1,044	372	0	105	157	0	130	0	-168
18	2577.53	169,295	360	649	306	0	128	673	0	180	0	130
19	2575.81	167,089	-2,206	32	304	0	116	2,546	0	173	0	61
20	2575.92	167,230	141	594	305	0	101	641	0	167	0	-51
21	2575.39	166,553	-677	716	304	0	84	1,534	0	150	0	-97
22	2576.64	168,151	1,598	1,452	305	0	78	216	0	150	0	129
23	2577.31	169,012	861	672	308	0	72	182	1	150	0	142
24	2576.58	168,074	-938	0	315	0	67	1,012	0	130	0	-178
25	2576.96	168,562	488	816	310	0	62	716	0	118	0	134
26	2575.99	167,319	-1,243	831	308	0	58	2,134	0	118	0	-188
27	2576.26	167,664	345	735	293	0	53	729	0	118	0	111
28	2577.11	168,755	1,091	1,187	294	0	51	282	0	118	0	-41
29	2577.21	168,883	128	0	301	0	51	123	0	118	0	17
30	2576.37	167,805	-1,078	0	321	0	50	1,382	0	118	0	51
31	2576.87	168,446	641	1,003	1,020	0	50	1,235	0	118	0	-79
<b>Total</b>			<b>4,125</b>	<b>15,288</b>	<b>19,617</b>	<b>8,870</b>	<b>2,702</b>	<b>37,931</b>	<b>3</b>	<b>3,922</b>	<b>0</b>	<b>-496</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**February 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Jan 31	2576.87	168,446										
1	2576.76	168,305	-141	995	1,024	0	40	2,105	0	119	0	24
2	2575.93	167,242	-1,063	0	1,017	0	38	1,771	0	119	0	-228
3	2574.85	165,866	-1,376	0	1,142	0	33	2,388	0	99	0	-64
4	2574.62	165,574	-292	0	1,030	0	33	1,189	0	69	0	-97
5	2575.31	166,451	877	0	1,064	0	33	248	0	50	0	78
6	2575.70	166,949	498	0	1,066	0	31	446	0	50	0	-103
7	2575.81	167,089	140	757	1,012	0	31	1,173	0	50	0	-437
8	2575.79	167,064	-25	482	1,034	0	31	1,515	0	50	0	-7
9	2575.30	166,439	-625	0	1,034	0	31	1,585	1	50	0	-54
10	2574.90	165,930	-509	85	1,031	0	29	1,524	0	50	0	-80
11	2574.88	165,904	-26	737	974	0	28	1,756	0	50	0	41
12	2573.74	164,460	-1,444	0	975	0	27	2,301	0	50	0	-95
13	2575.62	166,847	2,387	1,493	1,034	0	27	300	0	40	0	173
14	2576.54	168,023	1,176	1,266	1,054	0	27	1,120	0	40	0	-11
15	2576.07	167,421	-602	1,010	1,053	0	27	2,612	0	40	0	-40
16	2576.27	167,677	256	62	1,174	0	28	933	0	48	0	-27
17	2576.40	167,844	167	793	1,477	0	33	2,121	0	48	0	33
18	2574.40	165,295	-2,549	436	1,481	364	53	4,694	0	60	0	-129
19	2576.19	167,575	2,280	0	1,478	1,104	139	396	0	109	0	64
20	2576.79	168,344	769	0	1,479	1,110	104	1,585	0	129	0	-210
21	2576.56	168,049	-295	0	1,473	461	99	2,160	0	129	0	-39
22	2575.10	166,184	-1,865	0	1,465	992	84	3,958	1	126	0	-321
23	2575.08	166,159	-25	0	1,465	992	84	2,296	0	109	0	-161
24	2573.88	164,637	-1,522	0	1,466	455	89	3,252	0	109	0	-171
25	2572.93	163,438	-1,199	0	1,468	0	96	2,591	0	109	0	-63
26	2574.70	165,676	2,238	1,015	1,467	0	160	410	0	146	0	152
27	2576.00	167,332	1,656	529	1,463	0	143	367	0	149	0	37
28	2576.84	168,408	1,076	1,090	513	0	134	496	0	149	0	-16
<b>Total</b>			<b>-38</b>	<b>10,750</b>	<b>33,413</b>	<b>5,478</b>	<b>1,712</b>	<b>47,292</b>	<b>2</b>	<b>2,346</b>	<b>0</b>	<b>-1,751</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**March 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	Natural	Del. To United W.A.	
Feb 28	2576.84	168,408										
1	2576.20	167,588	-820	0	485	0	134	1,292	0	147	0	0
2	2575.78	167,051	-537	0	491	0	138	896	1	146	0	-123
3	2576.81	168,369	1,318	802	495	0	272	117	0	179	0	45
4	2577.01	168,626	257	17	495	0	294	114	0	182	0	-253
5	2577.28	168,973	347	0	498	0	244	123	0	198	0	-74
6	2577.49	169,244	271	0	491	0	230	218	0	198	0	-34
7	2576.03	167,370	-1,874	36	550	0	274	2,541	0	198	0	5
8	2575.56	166,770	-600	1,289	561	0	227	2,218	0	198	0	-261
9	2575.47	166,655	-115	0	1,521	0	185	1,532	0	198	0	-91
10	2575.23	166,350	-305	0	1,553	0	168	1,629	0	177	0	-220
11	2576.36	167,792	1,442	747	1,553	0	161	720	0	177	0	-122
12	2577.22	168,896	1,104	0	1,552	0	155	470	0	179	0	46
13	2577.67	169,476	580	0	1,483	0	142	803	0	179	0	-63
14	2576.78	168,331	-1,145	0	977	0	126	1,864	0	159	0	-225
15	2575.56	166,770	-1,561	0	975	0	118	2,282	0	139	0	-233
16	2575.99	167,319	549	870	978	0	111	1,201	0	139	0	-70
17	2575.79	167,064	-255	0	1,083	0	107	1,243	0	119	0	-83
18	2577.18	168,845	1,781	0	1,528	0	96	181	0	119	0	457
19	2577.89	169,759	914	0	1,529	0	98	510	0	119	0	-84
20	2576.73	168,267	-1,492	0	839	0	706	3,873	0	300	0	1,136
21	2576.35	167,780	-487	0	770	0	492	1,214	0	391	0	-144
22	2576.86	168,434	654	716	741	0	371	704	0	357	0	-113
23	2576.40	167,844	-590	0	1,525	0	339	2,092	0	298	0	-64
24	2576.31	167,728	-116	0	1,521	0	300	1,698	0	268	0	29
25	2575.68	166,923	-805	993	1,530	0	405	3,239	0	309	0	-185
26	2577.29	168,986	2,063	1,116	1,523	0	613	542	0	462	0	-185
27	2577.49	169,244	258	0	1,510	0	703	1,529	0	470	0	44
28	2576.43	167,882	-1,362	0	1,534	0	1,127	3,087	0	676	0	-260
29	2576.09	167,447	-435	0	1,529	0	1,246	2,198	0	968	0	-44
30	2576.92	168,511	1,064	1,043	1,401	0	1,330	1,616	0	988	0	-106
31	2576.58	168,074	-437	0	1,403	0	1,461	2,290	0	1,085	0	74
Total			-334	7,629	34,624	0	12,373	44,036	1	9,722	0	-1,201

1/ Values supplied by LADWP, not verified by DWR.



**Table 25. Pyramid Lake**

Daily Operation

April 2011

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Mar 31	2576.58	168,074										
1	2576.22	167,613	-461	754	1,409	0	1,359	3,394	0	1,472	0	883
2	2576.49	167,959	346	0	1,402	0	1,129	1,224	0	1,275	0	314
3	2576.89	168,472	513	0	700	0	889	123	0	1,009	0	56
4	2575.50	166,694	-1,778	0	383	0	700	1,924	0	738	0	-199
5	2575.51	166,706	12	891	384	0	589	1,151	1	635	0	-65
6	2575.56	166,770	64	959	391	0	528	1,162	0	549	0	-103
7	2573.93	164,700	-2,070	0	391	0	480	1,992	0	536	0	-413
8	2574.30	165,168	468	975	326	0	420	1,345	0	536	0	628
9	2575.07	166,146	978	891	327	0	375	231	0	476	0	92
10	2576.20	167,588	1,442	1,733	392	0	335	638	0	377	0	-3
11	2575.14	166,235	-1,353	895	455	0	307	2,004	0	337	0	-669
12	2574.74	165,726	-509	905	455	0	290	1,990	0	317	0	148
13	2575.25	166,375	649	996	584	0	270	928	0	278	0	5
14	2574.21	165,054	-1,321	0	452	0	254	1,523	0	268	0	-236
15	2573.92	164,687	-367	753	516	0	234	1,505	0	268	0	-97
16	2574.00	164,788	101	0	515	0	228	248	0	266	0	-128
17	2575.14	166,235	1,447	1,119	452	0	228	101	0	260	0	9
18	2574.23	165,080	-1,155	0	1,535	0	222	2,291	0	252	0	-369
19	2573.95	164,725	-355	0	1,538	0	210	1,742	0	246	0	-115
20	2574.62	165,574	849	0	1,542	0	190	557	0	238	0	-88
21	2576.08	167,434	1,860	867	1,538	0	173	658	0	228	0	168
22	2574.79	165,790	-1,644	0	1,529	0	163	2,777	0	218	0	-341
23	2575.67	166,910	1,120	0	1,539	0	155	343	0	208	0	-23
24	2576.87	168,446	1,536	0	1,536	0	143	123	0	198	0	178
25	2577.71	169,527	1,081	0	1,541	0	127	605	0	188	0	206
26	2577.84	169,695	168	0	1,546	0	115	944	0	182	0	-367
27	2577.22	168,896	-799	0	1,543	0	105	1,937	0	163	0	-347
28	2576.77	168,318	-578	0	1,547	0	94	2,168	0	163	0	112
29	2576.62	168,126	-192	0	1,544	0	84	1,558	0	143	0	-119
30	2577.62	169,411	1,285	0	1,551	0	79	123	0	138	0	-84
Total			1,337	11,738	29,563	0	10,475	37,309	1	12,162	0	-967

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**May 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Apr 30	2577.62	169,411										
1	2576.22	167,613	-1,798	0	1,544	0	75	2,914	0	129	0	-374
2	2575.33	166,477	-1,136	0	581	0	69	1,477	0	115	0	-194
3	2575.38	166,541	64	0	577	0	64	510	0	114	0	47
4	2574.59	165,536	-1,005	0	573	0	62	1,196	0	114	0	-330
5	2574.75	165,739	203	0	574	0	59	301	0	109	0	-20
6	2576.14	167,511	1,772	1,231	568	0	57	258	0	100	0	274
7	2576.38	167,818	307	0	569	0	59	159	1	90	0	-71
8	2576.62	168,126	308	0	563	0	62	141	0	74	0	-102
9	2575.98	167,306	-820	0	681	0	66	1,328	0	69	0	-170
10	2576.05	167,396	90	2	693	0	70	544	0	69	0	-62
11	2575.45	166,630	-766	0	710	0	65	1,312	0	69	0	-160
12	2573.58	164,258	-2,372	81	678	0	63	2,750	1	69	0	-374
13	2572.19	162,502	-1,756	1,219	696	0	60	3,737	0	69	0	75
14	2574.09	164,902	2,400	1,968	764	0	63	113	0	69	0	-213
15	2576.09	167,447	2,545	1,885	703	0	72	173	0	69	0	127
16	2575.54	166,739	-708	741	1	0	81	1,541	0	69	0	79
17	2575.63	166,853	114	0	2	0	85	335	1	69	0	432
18	2575.59	166,808	-45	829	0	0	91	137	0	69	0	-759
19	2574.92	165,955	-853	0	0	0	84	605	0	69	0	-263
20	2573.31	163,917	-2,038	0	0	0	75	1,814	0	69	0	-230
21	2573.89	164,649	732	0	958	0	71	159	0	70	0	-68
22	2575.07	166,146	1,497	1,180	961	0	67	746	1	70	0	106
23	2575.09	166,171	25	998	965	0	65	1,870	0	70	0	-63
24	2575.18	166,286	115	1,022	1,032	0	65	1,733	0	70	0	-201
25	2575.43	166,604	318	1,315	1,025	0	63	2,010	0	70	0	-5
26	2577.00	168,613	2,009	1,189	1,025	0	61	443	1	68	0	246
27	2575.02	166,082	-2,531	0	1,020	0	61	3,006	0	67	0	-539
28	2574.25	165,105	-977	25	964	0	59	1,743	0	67	0	-215
29	2576.14	167,511	2,406	1,503	957	0	62	194	0	67	0	145
30	2577.29	168,986	1,475	1,085	957	0	63	666	0	67	0	103
31	2575.23	166,350	-2,636	0	960	0	58	3,241	0	67	0	-346
Total			-3,061	16,273	21,301	0	2,077	37,156	5	2,426	0	-3,125

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

June 2011

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
May 31	2575.23	166,350										
1	2575.40	166,566	216	983	1,527	0	57	2,344	0	65	0	58
2	2576.45	167,908	1,342	0	1,531	0	57	157	0	60	0	-29
3	2575.92	167,230	-678	0	1,526	0	55	1,893	0	58	0	-308
4	2577.00	168,613	1,383	0	1,532	0	53	105	0	56	0	-41
5	2577.02	168,639	26	0	1,522	0	51	1,443	0	56	0	-48
6	2576.53	168,010	-629	0	1,532	0	62	2,159	0	56	0	-8
7	2575.67	166,910	-1,100	205	1,531	0	60	2,493	0	56	0	-347
8	2576.64	168,151	1,241	1,187	1,531	0	50	1,546	0	56	0	75
9	2576.22	167,613	-538	0	1,520	0	48	1,876	0	56	0	-174
10	2576.91	168,498	885	0	1,516	0	46	543	0	56	0	-78
11	2578.05	169,966	1,468	0	1,524	0	44	105	0	56	0	61
12	2577.27	168,960	-1,006	0	1,529	0	44	2,384	0	56	0	-139
13	2575.91	167,217	-1,743	0	1,516	0	43	3,085	0	56	0	-161
14	2575.38	166,541	-676	1,131	1,522	0	41	3,213	0	53	0	-104
15	2574.07	164,877	-1,664	0	1,528	0	39	2,833	0	52	0	-346
16	2572.14	162,446	-2,431	0	1,517	0	39	3,402	1	52	0	-532
17	2570.79	160,760	-1,686	145	1,534	0	40	2,975	0	51	0	-379
18	2572.62	163,048	2,288	897	1,559	0	40	243	0	50	0	85
19	2573.87	164,624	1,576	70	1,558	0	37	152	0	50	0	113
20	2573.35	163,967	-657	1,183	1,544	0	36	3,147	0	49	0	-224
21	2573.89	164,649	682	1,227	1,538	0	34	2,038	0	49	0	-30
22	2574.60	165,549	900	1,149	1,522	0	34	1,587	0	46	0	-172
23	2573.27	163,866	-1,683	0	1,534	0	33	2,909	0	44	0	-297
24	2573.00	163,526	-340	1,486	1,507	0	33	3,106	1	42	0	-217
25	2573.47	164,119	593	1,100	1,492	0	33	1,880	0	40	0	-112
26	2576.44	167,895	3,776	2,133	1,496	0	33	146	0	37	0	297
27	2574.71	165,688	-2,207	0	1,506	0	31	3,215	0	34	0	-495
28	2576.63	168,138	2,450	968	1,420	0	31	65	0	32	0	128
29	2577.38	169,102	964	0	1,001	0	32	16	0	31	0	-22
30	2574.62	165,574	-3,528	0	999	0	34	4,084	0	30	0	-447
Total			-776	13,864	44,614	0	1,270	55,144	2	1,485	0	-3,893

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

July 2011

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project		To Piru Creek			
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.		
Jun 30	2574.62	165,574											
1	2573.47	164,119	-1,455	1,235	1,059	0	31	3,496	0	30	0		-254
2	2575.04	166,108	1,989	1,375	1,233	0	29	681	0	30	0		63
3	2576.41	167,856	1,748	1,323	799	0	26	435	0	30	0		65
4	2575.46	166,643	-1,213	0	0	0	26	1,073	0	30	0		-136
5	2574.04	164,839	-1,804	1,113	0	0	31	2,638	0	30	0		-280
6	2572.75	163,212	-1,627	952	113	0	33	2,402	0	30	0		-293
7	2571.84	162,070	-1,142	1,211	328	0	53	2,459	0	52	0		-223
8	2571.74	161,945	-125	999	1,431	0	35	2,169	0	44	0		-377
9	2572.58	162,998	1,053	1,339	1,454	0	29	1,679	0	29	0		-61
10	2575.46	166,643	3,645	3,476	1,469	0	26	1,501	0	28	0		203
11	2574.00	164,788	-1,855	1,186	1,435	0	24	4,164	0	26	0		-310
12	2573.76	164,485	-303	2,526	1,395	0	24	4,040	0	26	0		-182
13	2575.58	166,796	2,311	2,629	1,403	0	23	1,724	0	26	0		6
14	2573.36	163,980	-2,816	1,339	1,416	0	24	5,158	0	26	0		-411
15	2571.07	161,108	-2,872	2,352	1,408	0	24	6,037	0	26	0		-593
16	2575.02	166,070	4,962	3,068	1,425	0	23	2,222	1	26	0		2,695
17	2575.64	166,872	802	3,489	1,426	0	21	1,906	0	26	0		-2,202
18	2575.49	166,681	-191	1,897	1,422	0	18	3,501	0	26	0		-1
19	2574.85	165,866	-815	1,920	1,403	0	17	3,872	0	26	0		-257
20	2574.99	166,044	178	1,742	1,404	0	18	2,764	0	24	0		-198
21	2574.20	165,042	-1,002	1,858	1,404	0	17	3,986	0	24	0		-271
22	2572.65	163,086	-1,956	2,003	1,405	0	17	4,975	0	21	0		-385
23	2571.79	162,008	-1,078	1,438	1,406	0	16	3,577	0	21	0		-340
24	2574.15	164,978	2,970	3,276	1,400	0	15	1,922	0	21	0		222
25	2574.44	165,346	368	2,107	1,407	0	14	3,039	0	21	0		-100
26	2574.56	165,498	152	1,840	1,408	0	14	2,909	0	21	0		-180
27	2574.31	165,181	-317	1,304	1,408	0	14	2,772	0	21	0		-250
28	2574.02	164,814	-367	2,200	1,404	0	14	3,721	0	21	0		-243
29	2572.75	163,212	-1,602	0	1,398	0	14	2,687	1	20	0		-306
30	2573.16	163,728	516	849	1,399	0	13	1,673	0	20	0		-52
31	2573.14	163,703	-25	976	1,405	0	13	2,216	0	20	0		-183
<b>Total</b>			<b>-1,871</b>	<b>53,022</b>	<b>37,467</b>	<b>0</b>	<b>696</b>	<b>87,398</b>	<b>2</b>	<b>822</b>	<b>0</b>		<b>-4,834</b>

1/ Values supplied by LADWP, not verified by DWR.

### Table 25. Pyramid Lake

Daily Operation

**August 2011**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Jul 31	2573.14	163,703										
1	2572.64	163,073	-630	1,798	1,414	0	13	3,557	0	20	0	-278
2	2573.55	164,220	1,147	2,640	1,414	0	12	2,741	0	20	0	-158
3	2572.76	163,224	-996	1,097	1,413	0	12	3,236	0	20	0	-262
4	2571.66	161,845	-1,379	1,261	1,409	0	12	3,755	0	20	0	-286
5	2570.81	160,785	-1,060	1,574	1,410	0	12	3,779	0	18	0	-259
6	2571.70	161,895	1,110	3,547	1,410	0	13	3,851	0	19	0	10
7	2573.86	164,611	2,716	2,828	1,407	0	12	1,697	1	16	0	183
8	2573.66	164,359	-252	814	1,396	0	13	2,218	0	16	0	-241
9	2572.47	162,860	-1,499	0	1,397	0	12	2,459	0	16	0	-433
10	2572.01	162,276	-584	1,029	1,396	0	12	2,660	0	16	0	-345
11	2572.56	162,973	697	690	1,395	0	12	1,334	0	16	0	-50
12	2571.97	162,233	-740	0	1,394	0	12	1,853	0	16	0	-277
13	2573.08	163,627	1,394	1,225	1,395	0	11	1,214	0	16	0	-7
14	2575.30	166,439	2,812	2,277	1,396	0	11	1,233	0	16	0	377
15	2575.46	166,643	204	2,212	1,396	0	11	3,157	0	16	0	-242
16	2574.52	165,447	-1,196	1,225	739	0	10	2,971	0	16	0	-183
17	2573.68	164,384	-1,063	2,501	1,412	0	11	4,627	0	16	0	-344
18	2573.89	164,649	265	2,699	1,369	0	11	3,864	0	15	0	65
19	2574.43	165,333	684	1,940	1,439	0	11	2,420	0	15	0	-271
20	2573.69	164,396	-937	1,233	1,525	0	11	3,465	0	15	0	-226
21	2575.36	166,515	2,119	610	1,526	0	12	113	1	15	0	100
22	2574.82	165,828	-687	605	1,424	0	12	2,574	0	14	0	-140
23	2573.97	164,750	-1,078	749	1,551	0	11	3,227	0	14	0	-148
24	2575.57	166,783	2,033	2,656	1,563	0	10	2,327	0	14	0	145
25	2573.85	164,599	-2,184	996	1,544	0	10	4,263	0	14	0	-457
26	2574.85	165,866	1,267	912	1,521	0	10	1,195	0	14	0	33
27	2575.20	166,311	445	1	1,489	0	10	881	0	14	0	-160
28	2576.36	167,792	1,481	2,508	1,489	0	9	2,490	0	13	0	-22
29	2576.29	167,703	-89	1,172	1,506	0	9	2,651	0	13	0	-112
30	2576.66	168,177	474	1,152	1,504	0	8	2,013	0	13	0	-164
31	2576.45	167,908	-269	0	1,508	0	9	1,500	0	13	0	-273
<b>Total</b>			<b>4,205</b>	<b>43,951</b>	<b>44,151</b>	<b>0</b>	<b>344</b>	<b>79,325</b>	<b>2</b>	<b>489</b>	<b>0</b>	<b>-4,425</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**September 2011**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Aug 31	2576.45	167,908										
1	2574.92	165,955	-1,953	871	1,512	0	9	4,123	0	12	0	-210
2	2573.55	164,220	-1,735	783	1,511	0	9	3,700	0	12	0	-326
3	2573.84	164,586	366	729	1,462	0	9	1,846	0	12	0	24
4	2576.15	167,524	2,938	1,564	1,410	0	9	98	0	12	0	65
5	2576.56	168,049	525	735	1,412	0	9	1,641	0	12	0	22
6	2575.57	166,783	-1,266	586	1,412	0	9	2,932	0	12	0	-329
7	2575.15	166,248	-535	1,515	1,411	0	9	3,322	0	12	0	-136
8	2574.55	165,485	-763	1,279	1,407	0	9	3,261	0	12	0	-185
9	2572.35	162,709	-2,776	866	1,426	0	9	4,636	0	12	0	-429
10	2573.03	163,564	855	0	1,491	0	11	329	0	12	0	-306
11	2574.01	164,801	1,237	0	1,423	0	12	123	0	12	0	-63
12	2573.52	164,182	-619	706	1,558	0	12	2,573	0	11	0	-311
13	2572.85	163,338	-844	584	1,485	0	12	2,760	0	10	0	-155
14	2573.12	163,677	339	1,081	1,469	0	13	2,045	0	10	0	-169
15	2572.88	163,375	-302	1,018	1,504	0	14	2,694	0	10	0	-134
16	2572.95	163,463	88	988	1,500	0	14	2,272	0	10	0	-132
17	2575.23	166,350	2,887	1,411	1,465	0	13	122	0	10	0	130
18	2575.96	167,281	931	1,443	1,483	0	13	1,342	1	10	0	-655
19	2575.63	166,859	-422	1,145	1,443	0	12	3,466	0	10	0	454
20	2576.11	167,472	613	954	1,473	0	12	1,798	0	10	0	-18
21	2574.82	165,828	-1,644	0	1,465	0	12	2,834	0	10	0	-277
22	2573.98	164,763	-1,065	39	1,476	0	12	2,512	0	10	0	-70
23	2572.35	162,709	-2,054	0	1,491	0	12	3,277	0	10	0	-270
24	2574.53	165,460	2,751	1,264	1,484	0	12	152	0	10	0	153
25	2576.29	167,703	2,243	1,023	1,447	0	13	511	0	10	0	281
26	2575.70	166,949	-754	863	1,473	0	14	2,634	0	10	0	-460
27	2574.99	166,044	-905	0	1,480	0	14	2,163	0	10	0	-226
28	2575.43	166,604	560	0	1,480	0	14	862	0	10	0	-62
29	2574.11	164,928	-1,676	0	1,479	0	13	2,826	0	10	0	-332
30	2573.49	164,144	-784	0	1,465	0	13	2,131	0	10	0	-121
Total			-3,764	21,447	43,997	0	348	64,985	1	323	0	-4,247

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

**October 2011**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Sep 30	2573.49	164,144										
1	2574.27	165,130	986	0	1,444	0	12	459	0	10	0	-1
2	2575.96	167,281	2,151	983	1,449	0	12	273	0	10	0	-10
3	2575.79	167,064	-217	741	307	0	13	1,077	0	10	0	-191
4	2576.37	167,805	741	1,120	0	0	15	450	0	10	0	66
5	2576.19	167,575	-230	817	0	0	19	733	0	10	0	-323
6	2575.88	167,179	-396	0	0	0	19	390	0	10	0	-15
7	2573.00	163,526	-3,653	0	434	0	18	2,711	0	10	0	-1,384
8	2575.43	166,604	3,078	1,130	1,436	0	18	536	0	10	0	1,040
9	2577.58	169,360	2,756	1,524	1,394	0	17	210	0	10	0	41
10	2577.79	169,630	270	0	1,391	0	17	1,134	0	10	0	6
11	2576.62	168,126	-1,504	0	1,414	0	16	2,901	0	10	0	-23
12	2575.63	166,859	-1,267	779	1,439	0	15	2,983	0	10	0	-507
13	2574.75	165,739	-1,120	778	1,258	0	14	2,827	0	10	0	-333
14	2573.92	164,687	-1,052	827	1,234	0	14	2,924	0	10	0	-193
15	2574.82	165,828	1,141	0	1,421	0	14	288	0	10	0	4
16	2576.40	167,844	2,016	1,393	1,266	0	14	739	0	10	0	92
17	2575.84	167,127	-717	971	318	744	14	2,343	0	10	0	-411
18	2575.16	166,260	-867	0	0	1,190	14	1,759	0	10	0	-302
19	2574.64	165,599	-661	632	0	1,050	14	1,392	0	10	0	-955
20	2574.07	164,877	-722	887	0	711	14	2,231	0	10	0	-93
21	2573.01	163,539	-1,338	0	0	595	14	2,210	0	10	0	273
22	2574.20	165,042	1,503	0	0	1,116	14	298	0	10	0	681
23	2574.71	165,688	646	0	0	1,190	15	305	0	10	0	-244
24	2574.77	165,765	77	0	620	1,190	15	980	0	10	0	-758
25	2574.53	165,460	-305	925	1,451	992	16	2,740	0	10	0	-939
26	2575.05	166,120	660	974	1,454	992	16	2,518	0	10	0	-248
27	2574.51	165,435	-685	77	1,443	992	16	2,968	0	10	0	-235
28	2573.87	164,624	-811	0	1,441	496	17	2,445	0	10	0	-310
29	2575.85	167,140	2,516	1,145	1,440	0	17	297	0	11	0	222
30	2576.01	167,345	205	719	1,442	0	18	1,848	0	11	0	-115
31	2576.51	167,985	640	987	1,443	0	18	1,849	0	11	0	52
Total			3,841	17,409	26,939	11,258	479	46,818	0	313	0	-5,113

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**November 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Oct 31	2576.51	167,985										
1	2575.82	167,102	-883	0	1,443	0	18	2,133	0	10	0	-201
2	2575.88	167,179	77	970	1,007	0	18	1,603	0	10	0	-305
3	2572.90	163,389	-3,790	0	1,004	0	18	2,223	0	10	0	-2,579
4	2574.90	165,930	2,541	822	1,005	0	20	1,648	0	12	0	2,354
5	2576.11	167,472	1,542	0	1,452	0	20	105	0	12	0	187
6	2576.95	168,549	1,077	0	1,512	0	20	572	0	21	0	138
7	2576.19	167,575	-974	0	1,357	0	20	2,047	0	21	0	-283
8	2575.23	166,350	-1,225	0	1,415	0	20	2,496	0	21	0	-143
9	2576.01	167,345	995	792	1,439	0	20	1,096	0	21	0	-139
10	2575.19	166,299	-1,046	0	1,443	0	20	2,307	0	21	0	-181
11	2575.18	166,286	-13	0	1,448	0	20	1,495	0	21	0	35
12	2576.41	167,856	1,570	0	1,447	0	30	120	0	21	0	234
13	2577.25	168,935	1,079	0	1,448	0	24	416	0	27	0	50
14	2575.48	166,668	-2,267	0	837	0	22	2,760	0	27	0	-339
15	2575.74	167,000	332	699	845	0	22	1,260	0	26	0	52
16	2572.62	163,048	-3,952	380	967	0	22	4,766	0	26	0	-529
17	2572.10	162,396	-652	0	969	0	22	1,426	1	26	0	-190
18	2575.33	166,477	4,081	1,058	967	0	22	89	0	25	0	2,148
19	2577.16	168,819	2,342	786	725	0	22	131	0	21	20	981
20	2574.19	165,029	-3,790	0	667	0	30	1,885	0	21	40	-2,541
21	2573.71	164,422	-607	0	1,005	0	30	1,456	0	21	60	-105
22	2574.23	165,080	658	0	966	0	26	366	0	21	80	133
23	2574.77	165,765	685	0	970	0	26	668	0	21	94	472
24	2575.77	167,038	1,273	0	871	0	26	200	0	21	115	712
25	2576.73	168,267	1,229	1,021	865	0	26	172	0	21	120	-370
26	2574.44	165,346	-2,921	0	866	0	26	1,233	0	21	120	-2,439
27	2574.74	165,726	380	0	795	0	26	1,147	0	21	120	847
28	2576.31	167,728	2,002	0	852	0	28	136	0	21	120	1,399
29	2575.92	167,230	-498	0	838	0	26	444	0	21	120	-777
30	2576.20	167,588	358	713	993	0	26	152	0	21	120	-1,081
<b>Total</b>			<b>-397</b>	<b>7,241</b>	<b>32,418</b>	<b>0</b>	<b>696</b>	<b>36,552</b>	<b>1</b>	<b>610</b>	<b>1,129</b>	<b>-2,460</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**December 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project		To Piru Creek			
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	Natural	Del. To United W.A.		
Nov 30	2576.20	167,588											
1	2577.00	168,613	1,025	0	970	0	26	1,031	0	28	120	1,208	
2	2575.80	167,076	-1,537	0	972	0	28	1,452	0	28	120	-937	
3	2575.60	166,821	-255	0	726	0	28	1,033	0	28	120	172	
4	2576.20	167,588	767	0	676	0	28	469	0	28	120	680	
5	2575.54	166,745	-843	0	973	0	28	1,173	0	28	120	-523	
6	2575.48	166,668	-77	726	853	0	28	1,550	0	28	120	14	
7	2575.00	166,057	-611	0	1,086	0	28	1,395	0	28	120	-182	
8	2575.18	166,286	229	0	974	0	28	619	0	28	120	-6	
9	2574.64	165,599	-687	0	1,096	0	28	1,533	0	28	120	-130	
10	2574.32	165,194	-405	0	550	0	28	847	0	27	98	-11	
11	2573.46	164,106	-1,088	0	426	0	28	1,369	0	27	78	-68	
12	2573.45	164,093	-13	0	1,091	0	34	1,054	0	25	59	0	
13	2573.54	164,207	114	0	1,088	0	32	992	0	48	37	71	
14	2574.13	164,953	746	0	1,034	0	32	181	0	45	25	-69	
15	2573.93	164,700	-253	0	1,034	0	32	1,241	0	55	14	-9	
16	2574.65	165,612	912	0	1,093	0	32	110	0	58	0	-45	
17	2575.42	166,592	980	843	364	0	32	159	0	30	0	-70	
18	2575.27	166,400	-192	0	546	0	32	713	0	29	0	-28	
19	2576.01	167,345	945	910	1,150	0	32	1,177	0	28	0	58	
20	2576.13	167,498	153	0	1,208	0	32	927	0	28	0	-132	
21	2575.75	167,012	-486	0	1,204	0	32	1,612	0	28	0	-82	
22	2575.69	166,936	-76	0	1,208	0	32	1,386	0	28	0	98	
23	2576.13	167,498	562	0	790	0	30	130	1	28	0	-99	
24	2576.13	167,498	0	0	794	0	31	803	0	28	0	6	
25	2575.86	167,153	-345	0	549	0	32	795	0	28	0	-103	
26	2576.13	167,498	345	783	488	0	32	841	0	27	0	-90	
27	2576.10	167,460	-38	945	491	0	32	1,487	0	26	0	7	
28	2576.04	167,383	-77	0	978	0	32	985	0	25	0	-77	
29	2576.13	167,498	115	0	1,026	0	32	904	0	24	0	-15	
30	2576.78	168,331	833	0	1,034	0	32	175	0	24	0	-34	
31	2577.65	169,441	1,110	0	982	0	32	830	0	24	0	950	
<b>Total</b>			<b>1,853</b>	<b>4,207</b>	<b>27,454</b>	<b>0</b>	<b>945</b>	<b>28,973</b>	<b>1</b>	<b>942</b>	<b>1,391</b>	<b>554</b>	

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**January 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Dec 31	2,578	169,441										
1	2,577	168,485	-956	0	966	0	34	1,020	0	24	0	-912
2	2,577	168,459	-26	0	967	0	34	859	0	24	0	-144
3	2,577	168,100	-359	0	849	0	34	1,225	0	24	0	7
4	2,576	167,767	-333	0	846	0	34	1,195	0	24	0	6
5	2,576	167,652	-115	0	851	0	32	1,059	0	26	0	87
6	2,576	167,319	-333	0	1,451	0	32	1,749	0	30	0	-37
7	2,576	167,076	-243	0	1,452	0	32	1,450	0	34	0	-243
8	2,576	167,600	524	0	1,452	0	32	909	0	40	0	-11
9	2,576	167,281	-319	0	1,450	0	32	1,772	0	42	0	13
10	2,576	166,859	-422	0	1,454	0	32	1,857	0	42	0	-9
11	2,575	165,993	-866	0	1,456	0	32	2,253	1	44	0	-56
12	2,575	165,523	-470	0	1,479	0	32	1,842	0	44	0	-95
13	2,575	165,485	-38	0	1,456	0	32	1,485	0	44	0	3
14	2,576	166,745	1,260	0	1,456	0	29	155	0	44	0	-26
15	2,576	167,345	600	0	1,451	0	29	834	0	44	0	-2
16	2,577	168,793	1,448	0	1,586	0	29	88	0	44	0	-35
17	2,577	168,151	-642	0	1,484	0	29	2,057	0	44	0	-54
18	2,577	168,036	-115	0	1,592	0	31	1,621	0	43	0	-74
19	2,576	166,821	-1,215	0	1,554	0	29	2,777	0	43	0	22
20	2,575	166,515	-306	0	1,493	0	29	1,694	0	43	0	-91
21	2,576	167,460	945	0	1,481	0	31	559	0	43	0	35
22	2,577	168,421	961	0	1,319	0	32	327	0	43	0	-20
23	2,577	168,190	-231	0	1,628	0	34	1,972	0	43	0	122
24	2,576	167,882	-308	0	1,427	0	34	1,851	0	43	0	125
25	2,577	169,038	1,156	0	3,253	0	36	1,928	0	43	0	-162
26	2,577	168,870	-168	0	1,705	0	34	1,773	0	43	0	-91
27	2,576	167,383	-1,487	0	1,523	0	32	2,697	0	43	0	-302
28	2,577	168,344	961	0	1,373	0	31	504	0	42	0	103
29	2,577	168,241	-103	0	670	0	29	591	0	40	0	-171
30	2,576	167,844	-397	0	1,834	0	29	2,281	0	40	0	61
31	2,576	166,923	-921	0	1,684	0	29	2,498	0	38	0	-98
<b>Total</b>			<b>-2,518</b>	<b>0</b>	<b>44,642</b>	<b>0</b>	<b>980</b>	<b>44,882</b>	<b>1</b>	<b>1,208</b>	<b>0</b>	<b>-2,049</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**February 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Jan 31	2,576	166,923										
1	2,576	167,191	268	0	1,746	0	30	1,612	0	38	0	142
2	2,575	165,752	-1,439	0	1,805	0	30	2,972	0	38	0	-264
3	2,573	163,791	-1,961	0	1,741	0	30	3,780	0	34	0	82
4	2,574	165,232	1,441	0	2,045	0	30	522	0	32	0	-80
5	2,576	166,961	1,729	0	2,180	0	30	418	0	30	0	-33
6	2,576	167,242	281	20	588	0	30	292	0	28	0	-37
7	2,576	167,536	294	0	586	0	30	352	0	26	0	56
8	2,576	167,946	410	0	604	0	32	130	0	26	0	-70
9	2,577	168,126	180	0	600	0	32	571	0	26	0	145
10	2,576	167,959	-167	0	575	0	30	589	0	26	0	-157
11	2,577	168,523	564	0	573	0	30	120	0	26	0	107
12	2,577	168,640	117	0	597	0	30	99	0	26	0	-385
13	2,577	168,600	-40	0	599	0	30	826	0	26	0	183
14	2,577	168,755	155	0	594	0	30	412	0	26	0	-31
15	2,577	168,678	-77	0	598	0	30	826	0	26	0	147
16	2,576	167,613	-1,065	0	657	0	30	1,601	0	28	0	-123
17	2,577	168,138	525	0	639	0	30	124	0	28	0	8
18	2,577	168,100	-38	0	595	0	28	617	1	28	0	-15
19	2,577	168,100	0	0	416	0	28	332	0	28	0	-84
20	2,577	168,331	231	0	594	0	28	350	0	28	0	-13
21	2,577	168,755	424	0	596	0	28	176	0	28	0	4
22	2,577	169,218	463	0	600	0	28	206	0	28	0	69
23	2,577	168,472	-746	0	599	0	28	1,206	0	28	0	-139
24	2,577	168,151	-321	0	609	0	27	935	0	28	0	6
25	2,576	167,600	-551	0	301	0	25	343	0	28	0	-506
26	2,576	167,524	-76	0	417	0	25	968	0	28	0	478
27	2,576	167,038	-486	0	963	0	25	1,474	0	29	0	29
28	2,575	166,541	-497	0	823	0	25	1,272	0	29	0	-44
29	2,575	165,955	-586	0	897	0	25	1,599	0	29	0	120
<b>Total</b>			<b>-968</b>	<b>20</b>	<b>24,137</b>	<b>0</b>	<b>834</b>	<b>24,724</b>	<b>1</b>	<b>829</b>	<b>0</b>	<b>-405</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**March 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Feb 29	2,575	165,955										
1	2,574	165,232	-723	0	388	0	28	1,097	0	28	0	-14
2	2,575	166,210	978	0	1,450	0	28	317	0	28	0	-155
3	2,576	167,767	1,557	0	1,642	0	28	164	0	28	0	79
4	2,577	168,870	1,103	0	1,481	0	28	248	0	28	0	-130
5	2,577	168,909	39	0	675	0	28	608	0	28	0	-28
6	2,577	169,141	232	0	613	0	28	719	0	28	0	338
7	2,577	169,179	38	0	825	0	26	508	0	28	0	-277
8	2,577	168,729	-450	0	421	0	26	748	0	28	0	-121
9	2,578	169,334	605	0	631	0	26	132	0	28	0	108
10	2,578	169,566	232	0	515	0	26	164	0	28	0	-117
11	2,577	169,141	-425	0	0	0	26	390	0	28	0	-33
12	2,577	168,948	-193	0	1,297	0	26	1,406	0	28	0	-82
13	2,577	168,935	-13	0	1,882	0	26	1,841	0	28	0	-52
14	2,576	167,882	-1,053	0	1,853	0	26	2,913	0	28	0	9
15	2,576	167,536	-346	25	2,110	0	26	2,436	0	28	0	-43
16	2,576	167,038	-498	0	2,285	0	26	2,766	0	28	0	-15
17	2,576	167,754	716	10	2,227	0	65	1,683	0	99	0	196
18	2,576	167,639	-115	0	1,091	0	123	1,042	0	60	0	-227
19	2,576	166,898	-741	0	2,014	0	65	2,709	0	50	0	-61
20	2,576	167,230	332	0	2,151	0	48	1,743	0	50	0	-74
21	2,576	167,012	-218	0	2,300	0	40	2,450	0	42	0	-66
22	2,576	167,421	409	0	2,172	0	38	1,713	0	40	0	-48
23	2,577	168,331	910	0	2,173	0	38	1,061	0	40	0	-200
24	2,578	169,385	1,054	0	2,176	0	36	1,182	0	40	0	64
25	2,577	168,896	-489	0	1,577	0	71	2,235	0	40	0	138
26	2,577	168,061	-835	0	957	0	93	1,759	0	60	0	-66
27	2,577	168,446	385	0	1,229	0	103	821	0	109	0	-17
28	2,576	167,613	-833	0	1,458	0	83	2,203	0	97	0	-74
29	2,576	166,961	-652	0	1,298	0	73	1,962	0	69	0	8
30	2,576	167,281	320	0	1,299	0	68	809	0	65	0	-173
31	2,577	168,446	1,165	0	1,181	0	66	188	0	60	0	166
<b>Total</b>			<b>2,491</b>	<b>35</b>	<b>43,371</b>	<b>0</b>	<b>1,438</b>	<b>40,017</b>	<b>0</b>	<b>1,369</b>	<b>0</b>	<b>-967</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**April 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Mar 31	2,577	168,446										
1	2,577	168,678	232	0	1,136	0	60	822	0	60	0	-82
2	2,577	168,074	-604	0	1,392	0	56	1,800	0	56	0	-196
3	2,576	167,882	-192	0	1,412	0	47	1,615	0	50	0	14
4	2,576	167,921	39	0	1,344	0	40	1,363	0	50	0	68
5	2,576	166,885	-1,036	0	1,263	0	38	2,270	0	50	0	-17
6	2,574	165,346	-1,539	0	1,312	0	36	2,627	0	50	0	-210
7	2,575	165,599	253	0	1,500	0	33	1,199	0	48	0	-33
8	2,575	166,171	572	0	737	0	31	126	0	44	0	-26
9	2,575	165,917	-254	0	1,730	0	31	1,975	0	42	0	2
10	2,574	165,194	-723	0	1,336	0	29	2,035	0	42	0	-11
11	2,574	164,407	-787	0	1,216	0	35	2,075	0	40	0	77
12	2,572	162,722	-1,685	0	1,304	0	36	2,882	0	40	0	-103
13	2,573	163,614	892	0	1,505	0	63	713	0	48	0	85
14	2,574	164,890	1,276	0	1,433	0	123	210	0	69	0	-1
15	2,575	165,866	976	0	1,189	0	114	150	0	131	0	-46
16	2,575	166,324	458	0	1,489	0	138	947	0	109	0	-113
17	2,574	165,232	-1,092	0	1,477	0	127	2,513	0	119	0	-64
18	2,575	165,599	367	0	1,496	0	115	1,181	0	119	0	56
19	2,573	163,614	-1,985	0	1,953	0	98	3,801	0	119	0	-116
20	2,573	163,199	-415	0	1,925	0	83	2,152	0	99	0	-172
21	2,575	165,574	2,375	0	2,593	0	64	276	0	89	0	83
22	2,576	167,882	2,308	0	2,481	0	53	127	0	69	0	-30
23	2,576	167,319	-563	0	3,281	0	49	3,845	0	60	0	12
24	2,576	167,306	-13	0	3,281	0	43	3,201	0	50	0	-86
25	2,576	167,012	-294	0	3,279	0	40	3,522	0	46	0	-45
26	2,577	168,665	1,653	0	3,279	0	40	1,668	1	46	0	49
27	2,576	167,728	-937	0	3,281	0	38	4,195	0	37	0	-24
28	2,576	167,703	-25	0	3,280	0	36	3,226	0	27	0	-88
29	2,576	167,652	-51	0	3,282	0	33	3,172	0	26	0	-168
30	2,575	166,630	-1,022	0	2,574	0	31	3,458	0	26	0	-143
<b>Total</b>			-1,816	0	58,760	0	1,760	59,146	1	1,861	0	-1,328

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**May 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project		To Piru Creek			
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.		
Apr 30	2,575	166,630											
1	2,576	167,191	561	0	2,526	0	30	2,081	0	30	0	116	
2	2,576	166,719	-472	0	2,589	0	31	2,955	0	30	0	-107	
3	2,575	166,477	-242	0	2,597	0	31	2,770	0	30	0	-70	
4	2,576	167,844	1,367	0	2,599	0	29	1,377	0	30	0	146	
5	2,577	168,613	770	0	2,624	0	28	1,679	0	28	0	-175	
6	2,577	168,755	141	0	2,598	0	27	2,240	0	24	0	-220	
7	2,576	167,792	-962	0	2,473	0	26	3,252	0	24	0	-185	
8	2,576	167,882	90	0	2,293	0	25	2,158	0	24	0	-46	
9	2,576	167,268	-614	0	2,242	0	23	2,574	0	24	0	-281	
10	2,575	166,184	-1,084	400	2,190	0	23	3,623	0	24	0	-50	
11	2,575	165,955	-229	228	2,208	0	22	2,546	0	22	0	-119	
12	2,576	167,652	1,696	3	2,201	0	21	510	0	20	0	1	
13	2,576	167,652	0	0	1,957	0	20	1,935	0	20	0	-22	
14	2,575	165,790	-1,862	146	2,472	0	19	4,343	0	18	0	-138	
15	2,575	165,828	38	0	2,710	0	19	2,668	0	18	0	-5	
16	2,574	164,359	-1,470	0	2,323	0	18	3,453	0	18	0	-340	
17	2,574	164,194	-164	0	2,432	0	17	2,413	0	18	0	-182	
18	2,574	164,258	64	0	2,589	0	16	2,543	0	18	0	20	
19	2,574	164,700	442	0	2,604	0	16	1,980	0	16	0	-182	
20	2,575	165,904	1,204	0	2,660	0	15	1,411	0	13	0	-47	
21	2,574	164,902	-1,002	0	2,595	0	14	3,508	1	12	0	-90	
22	2,574	164,245	-657	0	2,632	0	14	3,203	0	12	0	-88	
23	2,573	163,501	-744	0	2,510	0	13	3,529	0	12	0	274	
24	2,574	164,662	1,161	98	2,569	0	13	1,002	0	12	0	-505	
25	2,574	164,270	-392	418	2,566	0	13	3,377	0	12	0	0	
26	2,575	165,612	1,342	0	2,569	0	15	1,224	0	12	0	-6	
27	2,575	166,248	636	0	2,571	0	15	2,081	0	9	0	140	
28	2,575	165,942	-306	0	2,114	0	14	2,183	0	9	0	-242	
29	2,576	167,524	1,581	0	2,180	0	13	591	0	9	0	-12	
30	2,577	168,600	1,077	0	2,226	0	13	1,218	0	9	0	65	
31	2,577	168,061	-539	0	2,240	0	13	2,493	0	9	0	-290	
<b>Total</b>			<b>1,431</b>		<b>1,293</b>	<b>75,659</b>	<b>0</b>	<b>606</b>	<b>72,920</b>	<b>1</b>	<b>566</b>	<b>0</b>	<b>-2,640</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**June 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
May 31	2,577	168,061										
1	2,575	165,599	-2,462	95	2,239	0	11	4,662	0	10	0	-135
2	2,576	167,767	2,168	0	2,241	0	10	139	0	10	0	66
3	2,577	168,870	1,103	0	2,235	0	10	964	0	10	0	-168
4	2,577	168,562	-308	0	2,188	0	10	2,463	0	10	0	-33
5	2,577	167,985	-577	0	1,964	0	10	2,630	0	10	0	89
6	2,576	167,767	-218	0	2,055	0	11	2,074	0	10	0	-200
7	2,576	167,306	-461	0	2,112	0	11	2,481	0	10	0	-93
8	2,575	165,993	-1,313	0	2,079	0	10	3,399	1	10	0	8
9	2,576	167,946	1,953	0	2,112	0	10	199	0	10	0	40
10	2,578	169,372	1,426	0	2,053	0	10	278	0	10	0	-349
11	2,577	169,012	-360	0	1,341	0	9	1,697	0	10	0	-3
12	2,577	168,369	-643	0	1,325	0	9	1,878	0	10	0	-89
13	2,577	168,600	231	462	1,551	0	8	1,740	0	10	0	-40
14	2,576	167,345	-1,255	0	1,317	0	9	2,554	0	10	0	-17
15	2,576	167,230	-115	0	1,325	0	9	1,421	0	10	0	-18
16	2,576	167,882	652	0	1,301	0	8	554	0	10	0	-93
17	2,577	168,061	179	0	1,295	0	7	1,040	0	10	0	-73
18	2,576	167,818	-243	0	1,370	0	6	1,545	0	10	0	-64
19	2,574	165,105	-2,713	0	1,144	0	6	3,774	0	10	0	-79
20	2,575	165,638	533	0	1,411	0	6	889	0	10	0	15
21	2,574	165,346	-292	0	1,375	0	6	1,661	0	10	0	-2
22	2,574	164,928	-418	0	1,385	0	6	1,767	1	10	0	-31
23	2,575	166,146	1,218	0	1,439	0	6	105	0	10	0	-112
24	2,576	167,281	1,135	0	1,360	0	6	121	0	10	0	-100
25	2,575	166,400	-881	0	1,344	0	6	2,239	0	10	0	18
26	2,575	165,498	-902	76	1,392	0	6	2,280	0	9	0	-87
27	2,575	165,650	152	830	1,469	0	6	2,010	0	9	0	-134
28	2,574	164,814	-836	763	1,631	0	5	3,174	0	9	0	-52
29	2,574	165,308	494	814	1,551	0	5	1,984	0	9	0	117
30	2,575	166,566	1,258	0	1,540	0	5	281	0	9	0	3
<b>Total</b>			-1,495	3,040	49,144	0	237	52,003	2	295	0	-1,616

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**July 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project		To Piru Creek			
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.		
Jun 30	2,575	166,566											
1	2,576	167,767	1,201	653	1,578	0	4	887	0	8	0		-139
2	2,575	166,630	-1,137	0	1,543	0	4	2,608	0	8	0		-68
3	2,574	164,991	-1,639	0	1,555	0	4	3,062	0	8	0		-128
4	2,575	165,790	799	929	1,485	0	4	1,665	0	8	0		54
5	2,575	165,828	38	2	1,472	0	6	1,392	0	8	0		-42
6	2,575	166,120	292	0	1,419	0	6	1,025	0	6	0		-102
7	2,575	166,477	357	0	1,413	0	6	998	0	6	0		-58
8	2,577	168,459	1,982	1,223	1,421	0	4	643	0	6	0		-17
9	2,576	167,946	-513	680	1,398	0	4	2,540	0	6	0		-49
10	2,575	166,541	-1,405	0	1,369	0	4	2,638	0	6	0		-134
11	2,575	166,579	38	0	1,345	0	4	1,300	1	6	0		-4
12	2,574	165,346	-1,233	0	1,305	0	4	2,487	0	6	0		-49
13	2,573	163,866	-1,480	0	1,328	0	6	2,717	0	6	0		-91
14	2,574	164,991	1,125	0	1,313	0	6	140	0	6	0		-48
15	2,575	166,210	1,219	0	1,329	0	6	130	0	6	0		20
16	2,576	166,808	598	0	1,336	0	6	653	0	6	0		-85
17	2,575	166,439	-369	0	1,350	0	6	1,678	0	6	0		-41
18	2,575	165,612	-827	0	1,410	0	6	2,176	0	6	0		-61
19	2,573	162,973	-2,639	0	1,575	0	6	4,096	0	6	0		-118
20	2,574	164,839	1,866	721	1,616	0	6	457	0	6	0		-14
21	2,574	165,080	241	0	1,693	0	6	1,458	0	6	0		6
22	2,575	166,388	1,308	0	1,531	0	6	131	0	5	0		-93
23	2,576	167,076	688	726	2,134	0	5	2,021	0	4	0		-152
24	2,576	167,345	269	0	1,586	0	4	1,708	0	4	0		391
25	2,576	167,792	447	0	2,117	0	4	1,576	0	4	0		-94
26	2,576	167,127	-665	849	2,190	0	4	3,647	0	4	0		-57
27	2,576	167,166	39	0	2,145	0	4	2,104	0	4	0		-2
28	2,577	168,061	895	0	2,148	0	4	1,240	0	4	0		-13
29	2,577	168,549	488	0	2,176	0	4	1,500	0	4	0		-188
30	2,577	168,215	-334	0	2,241	0	4	2,413	0	4	0		-162
31	2,576	167,345	-870	0	2,333	0	4	3,099	0	4	0		-104
<b>Total</b>			<b>779</b>	<b>5,783</b>	<b>50,854</b>	<b>0</b>	<b>151</b>	<b>54,189</b>	<b>1</b>	<b>177</b>	<b>0</b>		<b>-1,642</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**August 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Jul 31	2,576	167,345										
1	2,576	167,051	-294	0	2,370	0	4	2,530	0	4	0	-134
2	2,576	166,808	-243	0	2,413	0	3	2,584	0	4	0	-71
3	2,574	164,347	-2,461	0	2,416	0	4	2,436	0	4	0	-2,441
4	2,575	166,642	2,295	0	2,408	0	4	1,202	0	4	0	1,089
5	2,577	168,870	2,228	0	2,345	0	4	1,166	0	4	0	1,049
6	2,577	168,100	-770	0	2,347	0	4	2,884	0	4	0	-233
7	2,576	167,460	-640	908	1,863	0	4	3,328	0	4	0	-83
8	2,575	166,120	-1,340	1,019	1,131	0	4	3,332	0	4	0	-158
9	2,573	163,791	-2,329	460	1,088	0	3	3,724	0	4	0	-152
10	2,572	162,647	-1,144	968	1,088	0	3	3,111	0	4	0	-88
11	2,573	164,056	1,409	1,711	1,077	0	3	1,305	0	4	0	-73
12	2,574	164,687	631	1,547	998	0	4	1,978	1	3	0	64
13	2,574	165,308	621	3,302	1,059	0	4	3,733	0	3	0	-8
14	2,576	167,127	1,819	3,099	1,179	0	4	2,426	0	3	0	-34
15	2,576	166,961	-166	1,125	1,271	0	4	2,420	0	3	0	-143
16	2,575	165,663	-1,298	0	1,255	0	4	2,492	0	3	0	-62
17	2,574	164,359	-1,304	0	1,180	0	4	2,569	0	3	0	84
18	2,574	165,371	1,012	1,639	805	0	4	1,238	0	3	0	-195
19	2,575	166,159	788	919	1,307	0	4	1,323	0	3	0	-116
20	2,575	166,439	280	1,438	1,687	0	4	2,702	0	3	0	-144
21	2,575	166,362	-77	573	1,674	0	4	2,199	0	3	0	-126
22	2,574	165,156	-1,206	0	1,650	0	4	2,876	0	3	0	19
23	2,574	164,182	-974	0	1,707	0	5	2,598	0	3	0	-85
24	2,574	164,510	328	0	1,707	0	4	1,036	0	3	0	-344
25	2,575	166,095	1,585	0	1,745	0	4	106	0	3	0	-55
26	2,575	165,993	-102	0	1,716	0	4	1,767	0	3	0	-52
27	2,575	165,485	-508	0	2,225	0	4	2,633	0	3	0	-101
28	2,574	165,105	-380	0	2,225	0	4	2,468	0	3	0	-138
29	2,574	164,839	-266	774	2,216	0	4	3,055	0	3	0	-202
30	2,575	165,676	837	978	2,227	0	4	2,433	0	3	0	64
31	2,574	165,156	-520	0	2,198	0	5	2,561	0	3	0	-159
<b>Total</b>			<b>-2,189</b>	<b>20,460</b>	<b>52,577</b>	<b>0</b>	<b>122</b>	<b>72,215</b>	<b>1</b>	<b>104</b>	<b>0</b>	<b>-3,028</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**September 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project		To Piru Creek			
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.		
Aug 31	2,574	165,156											
1	2,576	167,230	2,074	0	2,251	0	5	147	0	3	0		-32
2	2,576	167,908	678	0	2,162	0	5	1,451	0	3	0		-35
3	2,577	168,061	153	0	2,394	0	4	2,142	1	3	0		-99
4	2,576	167,524	-537	0	2,245	0	4	2,701	0	0	0		-85
5	2,576	167,460	-64	0	588	0	5	784	0	0	0		127
6	2,575	166,031	-1,429	0	2,457	0	5	3,726	0	3	0		-162
7	2,574	165,168	-863	0	2,277	0	6	3,072	0	3	0		-71
8	2,575	166,439	1,271	0	2,344	0	5	1,035	0	3	0		-40
9	2,575	166,592	153	25	1,929	0	5	1,637	0	3	0		-166
10	2,576	167,677	1,085	1,222	2,126	0	6	2,362	0	3	0		96
11	2,576	167,613	-64	0	2,165	0	6	2,162	0	3	0		-70
12	2,575	165,968	-1,645	0	2,086	0	6	3,543	0	3	0		-191
13	2,574	164,548	-1,420	0	1,991	0	5	3,426	0	3	0		13
14	2,573	163,955	-593	0	2,067	0	5	2,550	0	3	0		-112
15	2,573	163,904	-51	0	2,076	0	5	2,012	0	3	0		-117
16	2,575	165,765	1,861	65	2,076	0	5	286	0	3	0		4
17	2,576	166,898	1,133	1,256	1,894	0	6	1,991	0	3	0		-29
18	2,575	165,599	-1,299	0	922	0	5	2,216	0	3	0		-7
19	2,574	164,814	-785	0	0	0	4	850	0	3	0		64
20	2,573	164,093	-721	0	0	0	5	590	0	3	0		-133
21	2,574	164,472	379	810	498	0	5	989	1	3	0		59
22	2,575	165,549	1,077	0	1,441	0	6	220	0	3	0		-147
23	2,576	167,421	1,872	1,600	744	0	6	545	0	3	0		70
24	2,575	165,828	-1,593	819	1,836	0	6	4,074	0	2	0		-178
25	2,575	165,638	-190	0	3,217	0	6	3,311	0	2	0		-100
26	2,575	165,752	114	0	2,193	0	6	2,143	0	2	0		60
27	2,574	165,016	-736	0	2,053	0	6	2,752	0	2	0		-41
28	2,574	164,928	-88	0	2,169	0	6	2,113	0	2	0		-148
29	2,576	166,885	1,957	0	2,189	0	6	174	0	2	0		-62
30	2,577	168,819	1,934	0	2,191	0	6	142	0	1	0		-120
<b>Total</b>			<b>3,663</b>		<b>5,797</b>	<b>54,581</b>	<b>0</b>	<b>161</b>	<b>55,146</b>	<b>2</b>	<b>76</b>	<b>0</b>	<b>-1,652</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**October 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Sep 30	2,577	168,819										
1	2,577	168,023	-796	699	73	0	5	1,588	0	2	0	17
2	2,576	167,946	-77	910	0	0	5	917	0	2	0	-73
3	2,577	168,177	231	1,055	0	0	5	741	0	2	0	-86
4	2,575	166,566	-1,611	0	0	0	6	1,784	0	2	0	169
5	2,574	164,890	-1,676	0	0	0	6	1,444	0	2	0	-236
6	2,574	164,662	-228	0	0	0	6	147	0	2	0	-85
7	2,574	164,548	-114	0	0	911	7	788	0	2	0	-242
8	2,575	166,171	1,623	652	2,139	918	7	2,183	0	2	0	92
9	2,576	167,179	1,008	1,173	1,981	0	8	2,112	0	2	0	-40
10	2,575	166,464	-715	0	494	0	8	1,125	0	2	0	-90
11	2,574	164,586	-1,878	0	0	0	12	1,885	0	2	0	-3
12	2,573	163,501	-1,085	0	817	0	11	1,877	0	2	0	-34
13	2,575	165,523	2,022	0	3,194	0	11	1,148	0	2	0	-33
14	2,576	167,767	2,244	0	3,160	0	9	871	0	2	0	-52
15	2,575	166,286	-1,481	0	487	0	9	1,909	0	2	0	-66
16	2,575	166,286	0	1,192	494	0	8	1,743	0	2	0	51
17	2,575	166,286	0	1,110	523	0	8	1,562	0	6	0	-73
18	2,574	164,662	-1,624	0	496	0	8	2,073	0	8	0	-47
19	2,575	165,757	1,095	0	690	0	9	218	1	8	0	623
20	2,575	165,726	-31	0	689	0	9	47	0	8	0	-674
21	2,575	166,095	369	0	1,075	0	9	677	0	8	0	-30
22	2,575	165,790	-305	0	2,661	0	10	2,879	0	8	0	-89
23	2,575	166,324	534	956	2,610	0	10	2,980	0	8	0	-54
24	2,575	165,638	-686	0	2,610	0	9	3,303	0	9	0	7
25	2,574	164,599	-1,039	0	2,610	0	9	3,551	0	9	0	-98
26	2,573	164,106	-493	0	2,610	0	9	2,923	0	9	0	-180
27	2,575	165,942	1,836	0	2,610	0	9	672	0	9	0	-102
28	2,577	168,267	2,325	0	2,610	0	9	217	0	9	0	-68
29	2,576	167,268	-999	0	3,193	0	9	4,082	0	9	0	-110
30	2,574	165,016	-2,252	0	3,193	0	8	5,390	0	9	0	-54
31	2,573	164,030	-986	0	3,193	0	8	3,925	0	8	0	-254
<b>Total</b>			<b>-4,789</b>	<b>7,747</b>	<b>44,212</b>	<b>1,829</b>	<b>256</b>	<b>56,761</b>	<b>1</b>	<b>157</b>	<b>0</b>	<b>-1,914</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**November 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project		To Piru Creek			
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.		
Oct 31	2,573	164,030											
1	2,573	163,363	-667	0	2,906	0	9	3,624	0	14	6	62	
2	2,573	163,866	503	0	2,906	0	9	2,260	0	14	10	-128	
3	2,575	166,592	2,726	0	2,905	0	9	121	0	14	20	-33	
4	2,577	169,205	2,613	0	3,000	0	9	318	0	14	30	-34	
5	2,577	168,755	-450	349	3,137	0	9	3,798	0	14	50	-83	
6	2,576	167,345	-1,410	0	3,142	0	10	4,303	0	14	69	-176	
7	2,575	166,592	-753	0	3,139	0	10	3,791	0	14	89	-8	
8	2,575	166,400	-192	724	3,135	0	10	3,988	0	14	109	50	
9	2,574	165,371	-1,029	0	3,135	0	11	3,838	0	14	119	-204	
10	2,572	162,835	-2,536	0	1,749	0	11	4,153	0	15	159	31	
11	2,574	164,283	1,448	0	1,715	0	11	123	0	15	169	29	
12	2,574	165,409	1,126	0	1,478	0	11	188	0	15	169	9	
13	2,574	164,852	-557	0	1,545	0	12	1,761	0	15	169	-169	
14	2,575	165,790	938	0	1,537	0	12	301	0	15	169	-126	
15	2,574	164,548	-1,242	0	643	0	12	1,676	0	16	169	-36	
16	2,574	165,384	836	0	1,460	0	12	434	0	16	169	-17	
17	2,575	166,502	1,118	0	1,738	0	12	451	0	16	168	3	
18	2,575	166,019	-483	0	1,395	0	12	1,639	0	16	158	-77	
19	2,574	164,245	-1,774	0	2,482	0	13	4,089	0	16	158	-6	
20	2,573	164,005	-240	0	3,145	0	13	3,136	0	16	158	-88	
21	2,573	163,766	-239	0	3,148	0	13	3,278	0	16	158	52	
22	2,574	164,447	681	0	3,145	0	13	2,276	0	16	149	-36	
23	2,573	163,829	-618	0	3,146	0	13	3,524	0	16	129	-108	
24	2,575	165,612	1,783	0	3,149	0	13	1,253	0	16	109	-1	
25	2,577	167,997	2,385	0	3,146	0	13	653	0	16	99	-6	
26	2,578	169,411	1,414	0	3,065	0	13	1,533	0	16	79	-36	
27	2,576	166,770	-2,641	0	3,155	0	13	5,721	0	16	60	-12	
28	2,574	165,156	-1,614	0	3,141	0	13	4,663	0	16	30	-59	
29	2,572	162,873	-2,283	0	3,088	0	13	5,342	0	16	20	-6	
30	2,574	164,283	1,410	0	3,150	825	13	2,630	0	16	0	68	
<b>Total</b>			<b>253</b>		<b>1,073</b>	<b>77,625</b>	<b>825</b>	<b>347</b>	<b>74,865</b>	<b>0</b>	<b>457</b>	<b>3,150</b>	<b>-1,145</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**December 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project		To Piru Creek			
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.		
Nov 30	2,574	164,283											
1	2,576	167,268	2,985	0	3,144	1,387	14	1,719	0	14	0	173	
2	2,576	167,306	38	0	3,147	1,388	14	4,707	0	14	0	210	
3	2,575	166,541	-765	0	3,149	1,388	14	5,334	0	14	0	32	
4	2,576	167,498	957	0	3,142	1,388	14	3,788	0	14	0	215	
5	2,577	168,626	1,128	0	3,146	1,388	14	3,627	0	14	0	221	
6	2,576	167,652	-974	0	2,150	72	14	3,248	1	16	0	55	
7	2,576	167,498	-154	0	2,816	0	15	3,116	0	16	0	147	
8	2,577	168,600	1,102	0	3,174	0	15	1,871	0	16	0	-200	
9	2,576	167,639	-961	0	3,173	0	14	3,882	0	16	0	-250	
10	2,577	168,485	846	0	1,767	0	14	1,011	0	16	0	92	
11	2,577	168,446	-39	0	1,380	0	14	1,300	0	16	0	-117	
12	2,577	168,639	193	0	1,476	0	15	1,326	0	16	0	44	
13	2,577	168,935	296	124	1,598	0	17	1,434	0	16	0	7	
14	2,576	166,770	-2,165	0	1,450	0	16	3,479	0	16	0	-136	
15	2,576	167,844	1,074	0	1,838	0	16	722	0	16	0	-42	
16	2,578	170,134	2,290	0	2,366	0	16	125	0	16	0	49	
17	2,576	166,783	-3,351	0	2,301	0	16	5,685	0	16	0	33	
18	2,576	167,818	1,035	0	3,177	0	15	2,033	1	16	0	-107	
19	2,577	168,716	898	0	3,190	0	16	2,135	0	16	0	-157	
20	2,576	166,808	-1,908	0	792	0	15	2,639	0	16	0	-60	
21	2,575	166,235	-573	0	788	0	15	1,249	0	16	0	-111	
22	2,576	166,770	535	0	657	0	16	223	0	16	0	101	
23	2,576	167,230	460	0	667	0	16	131	0	16	0	-76	
24	2,576	167,613	383	0	596	0	16	182	0	16	0	-31	
25	2,577	168,100	487	0	553	0	16	111	0	16	0	45	
26	2,577	168,369	269	0	583	0	16	244	0	16	0	-70	
27	2,576	167,230	-1,139	0	440	0	15	1,494	0	16	0	-84	
28	2,576	167,268	38	0	523	0	16	435	0	16	0	-50	
29	2,576	167,396	128	0	522	0	16	446	0	17	0	53	
30	2,576	167,805	409	0	420	0	16	163	0	17	0	153	
31	2,576	167,908	103	0	420	0	16	123	0	17	0	-193	
<b>Total</b>			<b>3,625</b>		<b>124</b>	<b>54,545</b>	<b>7,011</b>	<b>472</b>	<b>57,982</b>	<b>2</b>	<b>489</b>	<b>0</b>	<b>-54</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**January 2013**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Dec 31	2,576	167,908										
1	2,576	167,882	-26	0	418	0	15	443	0	16	0	0
2	2,576	167,767	-115	0	430	0	15	670	0	16	0	126
3	2,576	167,613	-154	0	430	0	15	455	0	16	0	-128
4	2,576	167,127	-486	0	433	0	15	828	0	16	0	-90
5	2,576	167,383	256	0	431	0	15	143	0	16	0	-31
6	2,576	167,792	409	0	430	0	16	151	0	16	0	130
7	2,576	167,849	57	0	428	0	17	686	0	16	0	314
8	2,576	167,345	-504	0	431	0	16	514	0	16	0	-421
9	2,576	167,281	-64	0	436	0	16	486	0	16	0	-14
10	2,576	167,153	-128	0	436	0	16	696	1	16	0	133
11	2,576	167,268	115	0	421	0	17	131	0	16	0	-176
12	2,576	167,383	115	0	433	0	16	255	0	16	0	-63
13	2,576	167,639	256	0	661	0	16	323	0	16	0	-82
14	2,576	167,460	-179	0	1,192	0	15	1,417	0	16	0	47
15	2,576	167,357	-103	0	949	0	15	1,140	0	16	0	89
16	2,576	167,421	64	0	1,383	0	16	1,221	0	16	0	-98
17	2,576	167,294	-127	0	1,128	0	17	1,141	0	16	0	-115
18	2,576	167,306	12	0	1,125	0	16	1,093	0	16	0	-20
19	2,577	168,023	717	0	1,066	0	16	313	0	16	0	-36
20	2,577	168,870	847	0	1,064	0	16	204	0	16	0	-13
21	2,577	168,896	26	0	1,413	0	16	1,327	0	16	0	-60
22	2,578	169,321	425	0	1,685	0	16	1,277	0	16	0	17
23	2,576	167,844	-1,477	0	1,370	0	16	2,829	0	16	0	-18
24	2,576	167,051	-793	0	1,278	0	22	2,192	1	16	0	116
25	2,575	166,655	-396	0	1,277	0	24	1,770	0	16	0	89
26	2,576	167,792	1,137	0	1,328	0	24	82	0	16	0	-117
27	2,578	169,282	1,490	0	1,291	0	20	32	0	16	0	227
28	2,576	167,882	-1,400	0	1,513	0	19	2,696	0	16	0	-220
29	2,576	166,808	-1,074	0	1,474	0	19	2,476	0	17	0	-74
30	2,575	166,108	-700	0	1,512	0	18	2,183	0	18	0	-29
31	2,575	166,210	102	0	1,038	0	18	927	0	18	0	-9
<b>Total</b>			<b>-1,698</b>	<b>0</b>	<b>28,904</b>	<b>0</b>	<b>528</b>	<b>30,101</b>	<b>2</b>	<b>501</b>	<b>0</b>	<b>-526</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**February 2013**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Jan 31	2,575	166,210										
1	2,575	166,388	178	0	2,283	0	18	2,035	0	16	0	-72
2	2,576	167,613	1,225	0	2,138	0	18	991	0	16	0	76
3	2,577	169,063	1,450	0	2,124	0	18	684	0	16	0	8
4	2,576	167,600	-1,463	0	1,356	0	17	2,699	0	16	0	-121
5	2,576	167,485	-115	71	1,434	0	17	1,633	0	18	0	14
6	2,576	167,230	-255	0	1,432	0	18	1,684	0	18	0	-3
7	2,576	167,428	198	0	1,471	0	18	1,231	0	18	0	-42
8	2,576	167,383	-45	0	1,459	0	18	1,542	0	18	0	38
9	2,576	166,732	-651	0	1,458	0	18	2,098	0	20	0	-9
10	2,575	166,541	-191	0	1,472	0	18	1,553	0	18	0	-110
11	2,575	166,082	-459	0	1,076	0	18	1,406	0	18	0	-129
12	2,575	166,541	459	0	1,100	0	17	729	0	18	0	89
13	2,576	166,885	344	0	1,182	0	17	758	0	18	0	-79
14	2,576	166,732	-153	0	1,171	0	17	1,281	0	18	0	-42
15	2,576	166,770	38	0	1,174	0	17	1,104	0	18	0	-31
16	2,576	167,818	1,048	0	1,171	0	17	105	0	20	0	-15
17	2,577	168,755	937	0	1,102	0	17	155	0	20	0	-7
18	2,577	168,600	-155	0	1,038	0	17	1,176	1	20	0	-13
19	2,577	167,985	-615	0	1,023	0	17	1,608	0	20	0	-27
20	2,576	167,600	-385	0	1,028	0	17	1,441	0	20	0	31
21	2,576	167,268	-332	0	1,032	0	17	1,357	0	20	0	-4
22	2,576	166,898	-370	0	1,101	0	17	1,392	0	18	0	-78
23	2,576	167,600	702	0	1,099	0	17	347	0	18	0	-49
24	2,577	168,472	872	0	1,119	0	16	177	0	19	0	-67
25	2,577	168,600	128	0	1,452	0	16	1,356	0	20	0	36
26	2,577	168,639	39	0	2,121	0	16	2,037	0	20	0	-41
27	2,576	167,908	-731	0	1,354	0	16	2,036	0	20	0	-45
28	2,576	167,153	-755	0	1,056	0	16	1,809	0	20	0	2
<b>Total</b>			<b>943</b>	<b>71</b>	<b>38,026</b>	<b>0</b>	<b>480</b>	<b>36,424</b>	<b>1</b>	<b>519</b>	<b>0</b>	<b>-690</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**March 2013**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Feb 28	2,576	167,153										
1	2,576	167,127	-26	0	1,415	0	16	1,480	0	20	0	43
2	2,577	168,344	1,217	0	1,472	0	16	188	0	20	0	-63
3	2,578	169,411	1,067	0	1,401	0	16	407	0	20	0	77
4	2,576	167,780	-1,631	0	1,458	0	16	2,925	0	20	0	-160
5	2,576	167,613	-167	0	1,456	0	16	1,650	0	20	0	31
6	2,576	167,728	115	0	1,334	0	16	1,209	0	18	0	-8
7	2,576	167,230	-498	0	1,334	0	17	1,832	0	18	0	1
8	2,577	168,100	870	0	1,361	0	25	565	0	18	0	67
9	2,578	169,321	1,221	0	1,360	0	20	118	0	18	0	-23
10	2,578	169,334	13	0	1,306	0	18	1,267	0	18	0	-26
11	2,577	168,446	-888	0	1,634	0	18	2,489	0	16	0	-35
12	2,576	167,882	-564	0	1,615	0	18	2,180	0	16	0	-1
13	2,576	167,844	-38	0	1,612	0	18	1,684	0	16	0	32
14	2,576	167,498	-346	0	1,644	0	18	1,920	0	16	0	-72
15	2,576	167,127	-371	0	1,633	0	18	2,154	0	16	0	148
16	2,576	167,345	218	0	1,631	0	18	1,264	0	16	0	-151
17	2,576	167,921	576	0	1,642	0	18	1,130	0	16	1	63
18	2,576	167,703	-218	0	1,729	0	18	1,873	0	16	0	-76
19	2,576	166,745	-958	0	1,765	0	19	2,666	0	16	0	-60
20	2,575	165,993	-752	0	2,320	0	18	3,011	0	16	1	-62
21	2,575	166,248	255	0	2,205	0	18	2,059	0	16	0	107
22	2,575	165,523	-725	0	2,226	0	18	2,728	0	16	0	-225
23	2,576	167,421	1,898	0	2,301	0	18	199	0	16	0	-206
24	2,578	169,798	2,377	0	2,155	0	17	1,076	0	16	1	1,298
25	2,576	167,728	-2,070	0	2,151	0	17	2,947	0	16	0	-1,275
26	2,575	166,515	-1,213	0	1,716	0	16	2,923	0	16	0	-6
27	2,575	165,573	-942	0	2,177	0	16	3,072	0	16	1	-46
28	2,574	164,599	-974	0	2,170	0	16	3,112	0	16	0	-32
29	2,573	164,005	-594	0	2,172	0	16	2,752	0	15	0	-15
30	2,575	165,853	1,848	0	2,157	0	15	225	0	15	0	-84
31	2,576	167,153	1,300	0	2,167	0	15	831	0	15	0	-36
<b>Total</b>			<b>0</b>	<b>0</b>	<b>54,719</b>	<b>0</b>	<b>539</b>	<b>53,936</b>	<b>0</b>	<b>523</b>	<b>4</b>	<b>-795</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**April 2013**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Mar 31	2,576	167,153										
1	2,576	167,281	128	0	2,769	0	14	2,791	0	16	0	152
2	2,575	166,171	-1,110	0	2,493	0	14	3,438	0	16	0	-163
3	2,574	165,042	-1,129	0	2,140	0	13	3,028	1	16	0	-237
4	2,574	165,016	-26	0	2,028	0	14	2,135	0	16	0	83
5	2,574	164,776	-240	0	2,752	0	14	2,963	1	16	0	-26
6	2,576	166,732	1,956	0	2,702	0	13	555	0	16	0	-188
7	2,576	167,485	753	0	2,744	0	13	1,779	1	16	0	-208
8	2,576	166,770	-715	0	2,736	0	13	3,593	0	16	0	145
9	2,574	164,662	-2,108	0	1,966	0	13	3,719	1	16	0	-351
10	2,574	164,359	-303	0	2,663	0	13	2,936	0	16	0	-27
11	2,573	163,325	-1,034	0	2,659	0	12	3,655	0	16	0	-34
12	2,572	161,795	-1,530	0	1,574	0	12	2,985	1	16	0	-114
13	2,574	164,814	3,019	0	3,248	0	12	177	0	16	0	-48
14	2,576	167,575	2,761	0	3,230	0	12	412	0	16	0	-53
15	2,577	168,100	525	0	1,923	0	12	1,391	0	16	0	-3
16	2,576	167,191	-909	0	1,459	0	12	2,506	1	16	0	143
17	2,575	165,676	-1,515	0	1,457	0	12	2,804	0	16	0	-164
18	2,575	166,502	826	0	1,465	0	12	439	0	16	0	-196
19	2,575	165,790	-712	0	1,458	0	12	2,178	1	16	0	13
20	2,576	166,808	1,018	0	1,460	0	12	379	0	16	0	-59
21	2,576	167,908	1,100	0	1,459	0	12	276	0	16	0	-79
22	2,575	166,502	-1,406	0	1,458	0	11	2,885	1	15	0	26
23	2,575	165,650	-852	0	1,458	0	11	2,216	0	15	0	-90
24	2,574	164,852	-798	0	1,459	0	11	2,247	1	15	0	-5
25	2,575	165,536	684	0	1,459	0	11	799	0	15	0	28
26	2,573	163,829	-1,707	0	1,455	0	11	3,184	1	14	0	26
27	2,574	165,094	1,265	0	1,457	0	11	157	0	14	0	-32
28	2,575	166,248	1,154	0	1,451	0	10	213	1	14	0	-79
29	2,575	165,612	-636	0	1,454	0	10	2,019	0	14	0	-67
30	2,576	166,847	1,235	0	1,454	0	10	144	0	14	0	-71
<b>Total</b>			<b>-306</b>	<b>0</b>	<b>59,490</b>	<b>0</b>	<b>362</b>	<b>58,003</b>	<b>11</b>	<b>466</b>	<b>0</b>	<b>-1,678</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**May 2013**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Apr 30	2,576	166,847										
1	2,575	166,031	-816	6	1,450	0	10	2,230	0	14	0	-38
2	2,575	166,184	153	1,157	1,448	0	9	2,398	0	14	0	-49
3	2,574	164,637	-1,547	0	1,449	0	9	2,954	1	14	0	-36
4	2,575	166,439	1,802	1,361	1,450	0	9	945	0	12	0	-61
5	2,576	167,586	1,147	0	1,453	0	10	142	1	12	0	-161
6	2,575	165,612	-1,974	0	1,454	0	12	3,572	0	12	0	144
7	2,574	165,270	-342	1,182	1,450	0	13	2,937	0	12	0	-38
8	2,576	166,770	1,500	1,208	1,452	0	12	1,089	0	12	0	-71
9	2,574	165,156	-1,614	0	880	325	12	2,839	0	10	0	18
10	2,575	166,592	1,436	0	425	1,069	11	258	1	10	0	200
11	2,575	165,485	-1,107	0	1,439	190	10	2,455	0	10	0	-281
12	2,575	165,904	419	1,543	1,430	0	9	2,622	0	10	0	69
13	2,575	166,031	127	1,526	1,432	0	8	2,603	1	10	0	-225
14	2,576	167,319	1,288	1,394	1,434	0	8	1,637	0	10	0	99
15	2,576	166,808	-511	80	1,438	0	8	1,825	0	10	0	-202
16	2,576	167,421	613	818	1,445	0	8	1,763	1	10	0	116
17	2,577	168,151	730	0	1,446	0	8	802	0	10	0	88
18	2,576	167,600	-551	0	1,444	0	8	1,718	0	10	0	-275
19	2,576	167,856	256	0	1,441	0	8	1,126	0	10	0	-57
20	2,576	167,012	-844	0	1,449	0	7	2,144	1	10	0	-145
21	2,576	166,706	-306	907	1,445	0	7	2,716	0	10	0	61
22	2,575	166,019	-687	918	1,445	0	7	3,005	0	10	0	-42
23	2,573	163,980	-2,039	114	1,447	0	8	3,564	0	10	0	-34
24	2,574	164,283	303	1,136	1,451	0	8	2,146	1	10	0	-135
25	2,575	165,612	1,329	15	1,446	0	9	145	0	10	0	14
26	2,577	168,408	2,796	1,217	1,446	0	9	105	0	9	0	238
27	2,578	169,360	952	0	1,440	0	9	117	1	9	0	-370
28	2,576	167,908	-1,452	0	1,443	0	8	3,256	0	9	0	362
29	2,575	165,917	-1,991	0	1,437	0	8	2,975	0	9	0	-452
30	2,573	163,942	-1,975	412	1,446	0	8	3,768	1	9	0	-63
31	2,574	164,321	379	1,061	1,441	0	8	1,975	0	9	0	-147
<b>Total</b>			<b>-2,526</b>	<b>16,055</b>	<b>43,196</b>	<b>1,584</b>	<b>278</b>	<b>61,831</b>	<b>9</b>	<b>326</b>	<b>0</b>	<b>-1,473</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**June 2013**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project			To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.		
May 31	2,574	164,321											
1	2,575	165,485	1,164	1,969	1,438	0	5	2,150	0	8	1		-89
2	2,577	168,215	2,730	2,033	1,437	0	4	815	0	8	1		80
3	2,575	165,676	-2,539	0	1,436	0	5	3,940	0	8	0		-32
4	2,574	165,257	-419	1,011	847	0	5	2,249	0	8	0		-25
5	2,575	165,460	203	1,312	1,440	0	5	2,512	0	6	1		-35
6	2,575	166,477	1,017	1,069	1,441	0	5	1,498	0	6	0		6
7	2,574	164,991	-1,486	0	1,080	0	5	2,571	0	6	0		6
8	2,575	165,917	926	0	1,430	0	5	356	0	6	1		-146
9	2,576	167,012	1,095	0	1,387	0	5	299	0	6	0		8
10	2,575	165,777	-1,235	0	962	0	5	2,069	0	6	0		-127
11	2,575	165,866	89	1,337	1,439	0	5	2,687	0	6	1		2
12	2,575	166,477	611	0	1,442	0	5	879	0	6	0		49
13	2,575	166,031	-446	0	1,382	0	5	1,797	0	6	0		-30
14	2,575	165,676	-355	0	1,418	0	5	1,577	0	6	1		-194
15	2,576	166,732	1,056	0	1,504	0	6	429	0	6	1		-18
16	2,575	166,439	-293	0	1,510	0	6	1,889	0	6	0		86
17	2,575	165,828	-611	51	1,475	0	6	2,119	0	6	1		-17
18	2,576	167,012	1,184	1,279	1,215	0	6	1,325	0	6	0		15
19	2,576	167,345	333	0	1,531	0	6	1,257	0	6	0		59
20	2,575	165,612	-1,733	0	1,073	0	5	2,561	0	6	1		-243
21	2,573	163,892	-1,720	0	893	0	4	2,510	0	6	0		-101
22	2,574	164,738	846	0	1,067	0	4	127	0	6	0		-92
23	2,574	165,194	456	0	660	0	5	115	0	5	1		-88
24	2,575	165,574	380	101	494	0	5	123	0	5	0		-92
25	2,575	165,790	216	1,082	362	0	5	1,290	0	5	0		62
26	2,573	163,325	-2,465	0	479	0	5	2,914	0	5	1		-29
27	2,573	163,149	-176	11	3,190	0	4	3,193	0	5	0		-183
28	2,573	163,262	113	553	3,154	0	4	3,555	0	5	0		-38
29	2,574	164,359	1,097	1,230	3,145	0	4	3,190	0	4	1		-87
30	2,576	167,882	3,523	1,368	2,900	0	4	803	0	4	0		58
<b>Total</b>			<b>3,561</b>	<b>14,406</b>	<b>43,231</b>	<b>0</b>	<b>148</b>	<b>52,799</b>	<b>0</b>	<b>178</b>	<b>12</b>		<b>-1,235</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

July 2013

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Jun 30	2,576	167,882										
1	2,576	167,421	-461	926	2,614	0	4	3,900	1	4	0	-100
2	2,575	165,574	-1,847	0	2,621	0	4	4,494	0	4	0	26
3	2,575	165,498	-76	2,200	2,609	0	4	4,844	1	4	0	-40
4	2,575	165,638	140	1,550	3,157	0	4	4,414	0	4	0	-153
5	2,574	164,776	-862	1,358	3,170	0	4	5,459	1	4	0	70
6	2,573	162,986	-1,790	1,708	3,188	0	3	6,217	0	4	0	-468
7	2,574	164,776	1,790	1,785	3,181	0	3	3,256	1	4	0	82
8	2,574	164,738	-38	1,207	3,003	0	3	4,149	1	4	0	-97
9	2,574	164,422	-316	1,227	2,990	0	3	4,449	1	4	0	-82
10	2,574	164,245	-177	1,156	2,831	0	4	4,344	1	4	0	181
11	2,573	162,910	-1,335	796	3,160	0	4	5,121	0	4	0	-170
12	2,573	163,275	365	1,227	3,166	0	4	3,984	1	4	0	-43
13	2,575	165,904	2,629	1,021	3,193	0	3	1,598	1	4	0	15
14	2,575	165,599	-305	0	3,193	0	3	3,406	0	4	0	-91
15	2,575	166,044	445	81	3,193	0	3	2,621	1	4	0	-206
16	2,577	168,023	1,979	1,879	3,193	0	3	3,162	0	4	0	70
17	2,576	167,677	-346	0	3,193	0	3	3,649	1	4	0	112
18	2,576	167,370	-307	0	3,263	0	3	3,491	1	4	0	-77
19	2,576	167,639	269	0	3,265	0	3	2,898	0	4	0	-97
20	2,578	169,321	1,682	0	3,267	0	4	1,592	1	4	0	8
21	2,577	168,562	-759	0	3,268	0	4	3,969	0	4	0	-58
22	2,576	166,732	-1,830	0	3,271	0	4	5,056	1	4	0	-44
23	2,575	166,655	-77	0	3,268	0	4	3,281	0	4	0	-64
24	2,576	166,770	115	0	3,266	0	3	3,066	1	4	0	-83
25	2,575	166,630	-140	0	3,264	0	3	3,407	0	4	0	4
26	2,576	166,898	268	0	3,262	0	3	2,939	1	4	0	-53
27	2,575	165,828	-1,070	0	3,264	0	3	4,166	0	3	0	-168
28	2,575	166,095	267	0	3,271	0	4	2,863	1	3	0	-141
29	2,575	165,596	-499	0	2,225	0	3	2,617	0	3	0	-107
30	2,574	165,333	-263	0	2,119	0	3	2,398	1	3	0	17
31	2,574	164,839	-494	0	2,128	0	3	2,491	0	3	0	-131
<b>Total</b>			<b>-3,043</b>	<b>18,121</b>	<b>94,056</b>	<b>0</b>	<b>106</b>	<b>113,301</b>	<b>18</b>	<b>119</b>	<b>0</b>	<b>-1,888</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**August 2013**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Jul 31	2,574	164,839										
1	2,575	166,400	1,561	0	2,127	0	4	671	0	4	0	105
2	2,574	164,890	-1,510	0	2,130	0	4	3,455	0	4	0	-185
3	2,575	166,173	1,283	0	2,118	0	4	1,067	1	4	0	233
4	2,575	166,515	342	0	2,119	0	4	1,460	0	4	0	-317
5	2,575	165,460	-1,055	0	1,721	0	4	2,587	0	4	0	-189
6	2,574	165,232	-228	358	1,724	0	4	2,228	1	4	0	-81
7	2,573	164,144	-1,088	0	1,723	0	4	2,791	0	4	0	-20
8	2,573	163,539	-605	0	1,723	0	4	2,138	0	4	0	-190
9	2,574	165,308	1,769	0	1,720	0	4	0	1	4	0	50
10	2,576	167,051	1,743	0	1,799	0	4	220	0	4	0	164
11	2,575	166,515	-536	0	1,721	0	4	1,363	0	4	0	-894
12	2,576	167,140	625	1,324	1,611	0	4	2,915	1	4	0	606
13	2,576	167,153	13	1,187	1,683	0	4	2,804	0	4	0	-53
14	2,576	167,485	332	1,329	1,640	0	4	2,581	0	4	0	-56
15	2,575	166,159	-1,326	0	1,617	0	4	2,922	1	4	0	-20
16	2,574	165,105	-1,054	0	1,611	0	4	2,586	0	4	0	-79
17	2,575	165,752	647	0	1,606	0	4	1,009	0	4	0	50
18	2,576	167,716	1,964	1,944	1,607	0	4	1,467	1	4	0	-119
19	2,576	167,767	51	1,101	1,533	0	4	2,375	0	4	0	-208
20	2,576	167,230	-537	0	1,604	0	4	2,105	0	4	0	-36
21	2,576	167,038	-192	1,349	1,636	0	4	3,065	1	4	0	-111
22	2,574	164,788	-2,250	0	1,606	0	4	3,786	0	4	0	-70
23	2,573	163,463	-1,325	1,144	1,606	0	4	4,034	0	3	0	-42
24	2,576	167,166	3,703	2,205	1,616	0	4	120	1	3	0	2
25	2,576	167,844	678	0	1,606	0	4	820	0	3	0	-109
26	2,575	165,942	-1,902	0	1,606	0	4	3,458	0	3	0	-51
27	2,575	165,638	-304	1,231	1,606	0	4	3,175	0	3	0	33
28	2,573	163,829	-1,809	1,246	1,605	0	3	4,541	0	3	0	-119
29	2,572	162,095	-1,734	1,356	1,803	0	3	4,833	0	3	0	-60
30	2,574	164,245	2,150	1,192	1,474	0	3	518	0	3	0	2
31	2,575	165,676	1,431	0	1,474	0	3	0	0	3	0	-43
<b>Total</b>			<b>837</b>	<b>16,966</b>	<b>52,775</b>	<b>0</b>	<b>120</b>	<b>67,094</b>	<b>8</b>	<b>115</b>	<b>0</b>	<b>-1,807</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**September 2013**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Aug 31	2,575	165,676										
1	2,576	166,706	1,030	1,212	825	0	4	946	0	4	0	-61
2	2,576	167,728	1,022	1,383	829	0	4	1,108	0	4	0	-82
3	2,575	165,447	-2,281	660	1,474	0	3	4,152	1	4	0	-261
4	2,574	164,485	-962	1,410	1,474	0	2	3,765	0	4	0	-79
5	2,575	165,523	1,038	1,949	2,692	0	2	3,560	1	4	0	-40
6	2,575	165,815	292	576	3,193	0	2	3,336	1	4	0	-138
7	2,575	165,714	-101	1,644	552	0	2	2,386	1	4	0	92
8	2,576	167,127	1,413	1,748	665	0	2	942	0	4	0	-56
9	2,577	168,870	1,743	1,635	2,562	0	2	2,345	1	4	0	-106
10	2,577	168,472	-398	0	2,263	0	3	2,616	0	4	0	-44
11	2,576	167,639	-833	0	2,140	0	3	2,961	0	4	0	-11
12	2,575	166,082	-1,557	0	2,190	0	3	3,649	1	4	0	-96
13	2,574	165,194	-888	0	2,190	0	3	3,010	0	4	0	-67
14	2,575	166,579	1,385	0	2,119	0	3	796	1	4	0	64
15	2,577	168,292	1,713	1,525	2,119	0	3	1,743	1	4	0	-186
16	2,576	167,946	-346	640	1,832	0	3	2,749	0	4	0	-68
17	2,577	168,369	423	755	1,644	0	3	1,959	1	4	0	-15
18	2,576	167,012	-1,357	0	1,779	0	4	3,214	1	4	0	79
19	2,574	164,422	-2,590	0	1,779	0	4	4,144	0	4	0	-225
20	2,575	166,286	1,864	0	1,824	0	4	0	0	4	0	40
21	2,577	168,151	1,865	0	1,825	0	5	0	1	4	0	40
22	2,577	168,138	-13	0	1,779	0	5	1,674	0	4	0	-119
23	2,576	167,524	-614	779	2,035	0	4	3,236	0	4	0	-192
24	2,576	166,859	-665	0	2,218	0	4	2,751	1	4	0	-131
25	2,576	167,613	754	0	2,225	0	4	1,521	0	4	0	50
26	2,576	166,898	-715	0	2,219	0	4	2,853	1	4	0	-80
27	2,576	166,821	-77	0	2,190	0	4	2,121	1	4	0	-145
28	2,576	167,767	946	0	2,190	0	4	1,182	1	4	0	-61
29	2,576	167,767	0	0	2,190	0	4	2,115	0	4	0	-75
30	2,576	166,961	-806	42	2,190	0	5	2,985	1	4	0	-53
<b>Total</b>			<b>1,285</b>	<b>15,958</b>	<b>57,206</b>	<b>0</b>	<b>102</b>	<b>69,819</b>	<b>16</b>	<b>120</b>	<b>0</b>	<b>-2,026</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**October 2013**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Sep 30	2,576	166,961										
1	2,575	166,617	-344	0	2,190	0	4	2,469	0	4	0	-65
2	2,575	165,866	-751	0	2,075	0	4	3,048	0	4	0	222
3	2,575	165,790	-76	1,080	2,075	0	4	2,910	0	4	0	-321
4	2,575	166,362	572	0	2,099	0	4	1,414	1	4	0	-112
5	2,576	166,885	523	0	2,094	0	4	1,379	0	5	0	-191
6	2,577	168,986	2,101	0	2,087	0	4	0	0	4	0	14
7	2,577	168,485	-501	0	1,837	0	4	2,180	1	4	0	-157
8	2,576	167,639	-846	0	746	0	4	1,592	0	4	0	0
9	2,575	165,942	-1,697	0	554	0	5	2,294	0	5	0	43
10	2,575	166,630	688	0	836	0	5	0	1	4	0	-148
11	2,574	165,092	-1,538	0	959	0	5	2,421	0	4	0	-77
12	2,575	165,866	774	0	1,236	0	5	310	0	4	0	-153
13	2,576	167,908	2,042	2	2,071	0	6	0	0	4	0	-33
14	2,577	168,639	731	0	700	0	6	0	0	5	0	30
15	2,577	168,151	-488	0	701	0	6	953	1	4	0	-237
16	2,576	167,268	-883	0	828	0	6	1,605	0	4	0	-108
17	2,576	167,000	-268	0	825	0	6	987	0	4	0	-108
18	2,576	167,076	76	439	313	0	6	662	0	4	0	-16
19	2,575	166,515	-561	0	1,107	0	6	1,715	0	5	0	46
20	2,576	167,460	945	0	1,110	0	7	0	1	4	0	-167
21	2,577	168,177	717	967	1,771	0	7	1,986	0	4	0	-38
22	2,577	167,997	-180	953	1,755	0	7	2,869	0	4	0	-22
23	2,575	166,439	-1,558	0	1,753	0	8	3,042	0	4	0	-273
24	2,575	166,439	0	0	921	0	8	983	0	5	0	59
25	2,574	164,814	-1,625	0	1,894	0	8	3,353	0	4	0	-170
26	2,575	166,057	1,243	0	1,951	0	9	579	1	4	0	-133
27	2,575	166,019	-38	0	2,456	0	9	2,354	0	4	0	-145
28	2,574	164,776	-1,243	0	1,923	0	10	2,956	0	5	0	-215
29	2,574	164,270	-506	0	1,924	0	10	2,309	0	4	0	-127
30	2,574	164,890	620	0	1,900	0	11	1,234	0	4	0	-53
31	2,573	163,866	-1,024	0	1,111	0	11	2,062	0	4	0	-80
<b>Total</b>			<b>-3,095</b>	<b>3,441</b>	<b>45,802</b>	<b>0</b>	<b>199</b>	<b>49,666</b>	<b>6</b>	<b>130</b>	<b>0</b>	<b>-2,735</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**November 2013**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project		To Piru Creek			
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.		
Oct 31	2,573	163,866											
1	2,572	161,820	-2,046	0	2,025	0	12	3,918	0	2	0		-163
2	2,573	163,993	2,173	0	2,147	0	12	0	0	2	0		16
3	2,574	164,969	976	0	1,735	0	12	364	0	2	0		-405
4	2,574	164,182	-787	0	1,907	0	11	2,958	0	2	0		255
5	2,573	163,866	-316	0	1,917	0	10	2,224	0	3	15		-1
6	2,573	163,086	-780	0	1,972	0	10	2,632	0	3	22		-105
7	2,572	162,672	-414	0	1,986	0	10	2,268	0	3	42		-97
8	2,572	161,845	-827	0	1,969	0	10	2,523	0	4	62		-217
9	2,573	163,791	1,946	0	2,060	0	10	0	0	4	95		-25
10	2,574	165,333	1,542	0	2,066	0	10	441	0	4	103		14
11	2,574	164,991	-342	0	2,038	0	10	2,238	0	4	103		-45
12	2,574	165,409	418	0	1,876	0	10	1,281	0	4	103		-80
13	2,574	165,232	-177	0	2,010	0	10	2,056	0	4	103		-34
14	2,574	165,080	-152	0	2,034	0	10	2,012	0	4	103		-77
15	2,574	165,371	291	0	1,937	0	10	1,405	0	4	103		-144
16	2,575	166,057	686	0	2,009	0	10	1,222	0	4	103		-4
17	2,575	165,599	-458	0	1,025	0	10	1,361	0	4	103		-25
18	2,574	165,308	-291	323	1,744	0	10	2,192	0	4	103		-69
19	2,575	165,574	266	270	1,743	0	10	1,404	0	4	103		-246
20	2,575	166,617	1,043	0	1,844	0	10	999	0	4	103		295
21	2,575	165,752	-865	240	1,785	0	12	2,553	0	4	103		-242
22	2,575	166,095	343	0	1,855	0	12	1,646	0	4	103		229
23	2,576	167,421	1,326	0	1,978	0	11	434	0	4	103		-122
24	2,577	168,369	948	0	1,981	0	11	817	0	4	103		-120
25	2,575	166,630	-1,739	0	1,927	0	11	3,693	0	4	103		123
26	2,574	164,662	-1,968	0	1,959	0	11	3,696	0	4	103		-135
27	2,575	165,523	861	0	1,985	0	10	963	0	4	95		-72
28	2,576	167,421	1,898	0	2,020	0	10	0	0	4	60		-68
29	2,575	166,477	-944	0	1,841	0	10	2,717	0	4	60		-14
30	2,577	168,138	1,661	0	1,841	0	10	0	0	4	40		-146
<b>Total</b>			<b>4,272</b>	<b>833</b>	<b>57,216</b>	<b>0</b>	<b>315</b>	<b>50,017</b>	<b>0</b>	<b>109</b>	<b>2,242</b>		<b>-1,724</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 25. Pyramid Lake**  
Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**December 2013**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Nov 30	2,577	168,138										
1	2,576	166,808	-1,330	1,026	2,025	0	10	3,304	0	20	0	-1,067
2	2,575	166,057	-751	597	1,411	0	10	3,062	0	20	0	313
3	2,574	165,080	-977	0	1,235	0	10	3,029	0	10	0	817
4	2,573	163,967	-1,113	0	1,805	0	10	2,674	0	10	0	-244
5	2,572	162,496	-1,471	0	1,839	0	10	3,007	0	10	0	-303
6	2,572	162,521	25	0	1,892	0	11	1,793	0	10	0	-75
7	2,573	163,803	1,282	0	2,554	0	11	1,396	0	10	0	123
8	2,574	164,991	1,188	0	1,957	0	11	547	0	10	0	-223
9	2,573	163,690	-1,301	0	3,214	0	11	4,478	1	10	0	-37
10	2,573	163,476	-214	62	3,207	0	10	3,243	0	10	0	-240
11	2,573	163,514	38	0	3,252	0	11	3,199	0	10	0	-16
12	2,573	164,030	516	0	3,306	0	11	2,873	0	10	0	82
13	2,574	164,396	366	0	3,266	0	11	2,824	0	10	0	-77
14	2,576	167,754	3,358	0	3,260	0	11	0	0	10	0	97
15	2,576	167,792	38	0	2,922	0	11	2,840	0	10	0	-45
16	2,576	167,370	-422	0	3,193	0	11	3,364	0	51	0	-211
17	2,575	166,541	-829	0	3,221	0	11	3,873	0	52	0	-136
18	2,575	165,676	-865	0	3,185	0	11	3,984	0	52	0	-25
19	2,573	163,829	-1,847	0	3,084	0	11	5,130	0	52	0	240
20	2,574	164,510	681	0	3,261	0	11	2,411	0	13	0	-167
21	2,574	165,042	532	0	3,084	0	11	2,653	0	12	0	102
22	2,576	167,421	2,379	0	3,263	0	11	880	0	12	0	-3
23	2,576	167,639	218	0	881	0	11	669	0	12	0	7
24	2,576	167,728	89	0	865	0	11	634	1	12	0	-140
25	2,577	168,600	872	0	856	0	11	0	0	12	0	17
26	2,575	166,171	-2,429	0	859	0	11	3,222	0	12	0	-65
27	2,574	164,978	-1,193	0	878	0	11	1,984	0	12	0	-86
28	2,575	165,866	888	0	917	0	11	0	0	12	0	-28
29	2,576	166,770	904	0	873	0	11	3	0	12	0	35
30	2,575	166,630	-140	0	859	0	11	1,000	0	12	0	2
31	2,576	167,383	753	0	898	0	11	0	0	12	0	-144
<b>Total</b>			<b>-755</b>	<b>1,685</b>	<b>67,322</b>	<b>0</b>	<b>335</b>	<b>68,076</b>	<b>2</b>	<b>522</b>	<b>0</b>	<b>-1,497</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**January 2014**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Dec 31	2,576	167,383										
1	2,576	167,102	-281	0	900	0	12	1,215	0	12	0	34
2	2,576	166,706	-396	0	857	0	12	1,334	1	12	0	82
3	2,575	166,019	-687	0	1,484	0	12	2,034	0	12	0	-137
4	2,576	167,524	1,505	0	1,476	0	12	0	0	12	0	29
5	2,576	167,179	-345	0	1,444	0	12	1,750	0	12	0	-39
6	2,576	166,732	-447	824	1,249	0	12	2,625	1	12	0	106
7	2,575	165,904	-828	0	1,122	0	12	1,858	0	12	0	-92
8	2,575	166,235	331	777	996	0	12	1,574	0	12	0	132
9	2,576	166,770	535	0	1,410	0	12	1,093	0	12	0	218
10	2,573	163,526	-3,244	0	1,479	0	12	4,483	0	12	0	-240
11	2,574	165,295	1,769	0	1,791	0	12	91	0	12	0	69
12	2,577	168,318	3,023	1,153	1,927	0	12	0	1	12	0	-56
13	2,577	168,074	-244	654	1,595	0	12	2,504	0	12	0	11
14	2,576	167,575	-499	0	1,374	0	12	1,725	0	12	0	-148
15	2,576	166,808	-767	0	1,279	0	12	1,890	0	12	0	-156
16	2,576	167,076	268	0	1,344	0	12	1,018	1	12	0	-57
17	2,576	167,600	524	0	1,345	0	12	780	0	12	0	-41
18	2,576	167,524	-76	0	1,113	0	12	1,111	0	12	0	-78
19	2,577	168,036	512	0	1,095	0	12	592	0	12	0	9
20	2,577	168,100	64	0	1,233	0	12	1,139	1	12	0	-29
21	2,576	167,575	-525	0	1,233	0	12	1,768	0	12	0	10
22	2,576	167,268	-307	0	1,234	0	12	1,467	0	12	0	-74
23	2,577	168,203	935	0	1,014	0	12	0	0	12	0	-79
24	2,575	166,439	-1,764	0	1,213	0	12	2,974	1	12	0	-2
25	2,576	167,230	791	0	1,213	0	12	486	0	12	0	64
26	2,577	168,600	1,370	768	1,232	0	12	679	0	12	0	49
27	2,577	168,896	296	953	1,193	0	12	1,741	0	12	0	-109
28	2,577	168,472	-424	0	1,210	0	13	1,593	0	13	0	-41
29	2,577	168,215	-257	0	1,234	0	13	1,403	0	13	0	-88
30	2,577	168,061	-154	0	1,458	0	13	1,713	0	13	0	101
31	2,577	168,267	206	0	1,489	0	13	1,216	0	13	0	-67
<b>Total</b>			<b>884</b>	<b>5,129</b>	<b>40,236</b>	<b>0</b>	<b>376</b>	<b>43,856</b>	<b>6</b>	<b>376</b>	<b>0</b>	<b>-619</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

**Daily Operation**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**February 2014**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Jan 31	2,577	168,267										
1	2,577	168,023	-244	0	1,146	0	13	1,290	0	12	0	-101
2	2,576	167,613	-410	0	592	0	13	1,090	0	12	0	87
3	2,576	167,038	-575	0	900	0	14	1,492	0	13	0	16
4	2,576	166,923	-115	134	945	0	14	1,139	0	14	0	-55
5	2,575	166,464	-459	0	975	0	14	1,412	0	14	0	-22
6	2,573	164,131	-2,333	0	938	0	14	3,241	0	14	0	-30
7	2,574	164,207	76	0	1,075	0	14	944	1	14	0	-54
8	2,574	165,257	1,050	0	1,079	0	14	0	0	14	0	-29
9	2,575	166,362	1,105	0	1,093	0	14	0	1	14	0	13
10	2,576	167,638	1,276	0	1,212	0	14	0	0	14	0	64
11	2,577	168,600	962	0	966	71	13	0	0	14	0	-74
12	2,577	168,793	193	0	974	0	13	711	0	14	0	-69
13	2,577	168,023	-770	0	933	0	13	1,641	1	14	0	-60
14	2,576	167,921	-102	0	934	0	13	1,027	0	14	0	-8
15	2,577	168,215	294	0	697	0	13	349	0	14	0	-53
16	2,577	168,986	771	0	765	0	12	0	0	14	0	8
17	2,577	168,780	-206	0	960	0	12	1,131	0	14	0	-33
18	2,577	168,228	-552	0	966	0	12	1,526	0	14	0	10
19	2,577	168,151	-77	0	969	0	13	1,480	1	14	0	436
20	2,577	168,151	0	0	1,028	0	13	566	0	14	0	-461
21	2,577	168,292	141	0	951	0	13	737	0	14	0	-72
22	2,576	167,844	-448	0	953	0	13	1,412	0	14	0	12
23	2,577	168,061	217	0	893	0	13	644	0	14	0	-31
24	2,576	167,600	-461	0	981	0	14	1,311	0	14	0	-131
25	2,576	167,370	-230	0	916	0	14	1,184	0	14	0	38
26	2,576	167,485	115	0	976	0	14	934	0	14	0	73
27	2,576	166,732	-753	0	1,096	0	20	1,807	0	14	0	-48
28	2,577	168,780	2,048	0	957	0	437	0	0	14	0	668
<b>Total</b>			<b>513</b>	<b>134</b>	<b>26,870</b>	<b>71</b>	<b>803</b>	<b>27,068</b>	<b>4</b>	<b>387</b>	<b>0</b>	<b>94</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

**Daily Operation**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**March 2014**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	Natural	Del. To United W.A.	
Feb 28	2,577	168,780										
1	2,578	169,360	580	0	1,912	0	776	1,958	0	397	0	247
2	2,577	167,997	-1,363	0	1,321	0	467	2,901	0	198	0	-52
3	2,576	167,946	-51	0	2,965	0	208	3,030	0	139	0	-55
4	2,575	166,541	-1,405	0	676	0	144	2,045	0	109	0	-71
5	2,575	166,655	114	0	1,946	0	121	1,701	0	168	0	-84
6	2,576	167,345	690	0	2,132	0	99	1,480	0	169	0	108
7	2,575	166,681	-664	0	1,247	0	108	1,762	1	169	0	-87
8	2,576	166,847	166	0	821	0	77	423	0	149	0	-160
9	2,576	166,732	-115	0	645	0	52	652	0	109	0	-51
10	2,575	165,942	-790	0	1,329	0	41	2,248	0	60	0	148
11	2,574	164,801	-1,141	0	1,749	0	35	2,734	0	50	0	-141
12	2,574	164,928	127	0	1,723	0	33	1,595	0	40	0	6
13	2,574	164,283	-645	0	1,540	0	30	1,990	0	38	0	-187
14	2,573	163,124	-1,159	0	1,442	0	28	2,798	1	30	0	200
15	2,574	164,169	1,045	0	1,268	0	26	0	0	30	0	-219
16	2,575	165,612	1,443	0	1,443	0	25	0	0	30	0	5
17	2,575	165,942	330	0	1,098	0	25	762	0	20	0	-11
18	2,575	166,197	255	0	574	0	24	249	0	20	0	-74
19	2,575	166,477	280	0	354	0	23	11	0	20	0	-66
20	2,575	166,095	-382	0	498	0	23	881	0	20	0	-2
21	2,576	166,706	611	0	564	0	22	0	0	20	0	45
22	2,576	167,179	473	0	491	0	22	0	0	20	0	-20
23	2,576	167,000	-179	0	487	0	21	567	0	20	0	-100
24	2,576	167,754	754	0	769	0	20	16	1	20	0	2
25	2,577	168,663	909	0	1,192	0	20	232	0	20	0	-51
26	2,578	169,514	851	0	1,089	0	20	238	0	19	0	-1
27	2,578	169,360	-154	0	1,294	0	20	1,383	0	19	0	-66
28	2,577	168,408	-952	0	664	0	19	1,661	0	19	0	45
29	2,577	168,331	-77	0	958	0	19	977	0	19	0	-58
30	2,577	169,012	681	0	790	0	17	88	0	19	0	-19
31	2,577	168,408	-604	0	739	0	17	1,351	0	19	0	10
<b>Total</b>			<b>-372</b>	<b>0</b>	<b>35,720</b>	<b>0</b>	<b>2,582</b>	<b>35,733</b>	<b>3</b>	<b>2,179</b>	<b>0</b>	<b>-759</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**April 2014**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	Natural	Del. To United W.A.	
Mar 31	2,577	168,408										
1	2,577	168,935	527	0	767	0	17	275	0	20	0	38
2	2,578	169,360	425	0	793	0	17	450	0	20	0	85
3	2,577	169,089	-271	0	836	0	17	968	0	20	0	-136
4	2,577	169,089	0	0	825	0	17	790	1	20	0	-31
5	2,578	169,514	425	0	820	0	17	465	0	20	0	73
6	2,578	169,416	-98	0	1,082	0	16	1,464	0	20	0	288
7	2,576	167,230	-2,186	0	799	0	16	2,356	0	20	0	-625
8	2,576	167,306	76	0	1,516	0	15	1,344	1	20	0	-90
9	2,576	167,485	179	0	1,289	0	15	1,038	0	20	0	-67
10	2,576	167,562	77	0	932	0	15	894	0	20	0	44
11	2,576	167,127	-435	0	695	0	14	1,083	1	20	0	-40
12	2,576	167,639	512	0	518	0	14	23	0	20	0	23
13	2,577	168,369	730	0	817	0	14	0	0	20	0	-81
14	2,576	167,089	-1,280	0	621	0	14	1,857	0	20	0	-38
15	2,575	166,019	-1,070	0	543	0	13	1,669	1	20	0	64
16	2,574	164,890	-1,129	0	480	0	13	1,479	0	20	0	-123
17	2,574	165,232	342	0	598	0	13	201	0	20	0	-48
18	2,575	165,993	761	0	774	0	13	0	0	20	0	-6
19	2,575	165,993	0	0	338	0	13	478	1	20	0	148
20	2,575	165,777	-216	0	0	0	12	2	0	19	0	-207
21	2,575	165,714	-63	0	0	0	12	0	0	19	0	-56
22	2,575	165,815	101	0	0	0	12	0	0	19	0	108
23	2,575	165,714	-101	0	0	0	12	1	0	19	0	-93
24	2,575	165,650	-64	0	0	0	12	0	0	19	0	-57
25	2,575	165,638	-12	0	0	0	13	0	0	19	0	-6
26	2,575	165,599	-39	0	0	0	14	0	0	19	0	-34
27	2,575	165,523	-76	0	0	0	13	39	0	19	0	-31
28	2,575	165,523	0	0	0	0	14	0	0	19	0	5
29	2,574	165,219	-304	0	0	0	13	164	0	19	0	-134
30	2,574	165,181	-38	0	0	0	12	0	0	19	0	-31
<b>Total</b>			<b>-3,227</b>	<b>0</b>	<b>15,043</b>	<b>0</b>	<b>422</b>	<b>17,040</b>	<b>5</b>	<b>589</b>	<b>0</b>	<b>-1,058</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**May 2014**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project		To Piru Creek			
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.		
Apr 30	2,574	165,181											
1	2,574	165,333	152	0	0	0	11	0	0	20	0		161
2	2,574	165,194	-139	0	0	0	10	0	0	20	0		-129
3	2,574	165,333	139	0	235	0	10	0	0	20	0		-86
4	2,575	165,612	279	0	288	0	10	0	0	20	0		1
5	2,575	165,942	330	0	307	0	10	0	0	20	0		33
6	2,575	165,930	-12	61	0	0	11	0	1	18	0		-65
7	2,575	165,790	-140	0	0	0	11	118	0	16	0		-17
8	2,575	165,942	152	0	0	0	11	6	0	16	0		163
9	2,575	165,828	-114	0	0	0	10	0	0	16	0		-108
10	2,575	166,120	292	0	329	0	10	0	1	16	0		-30
11	2,575	165,917	-203	0	0	0	9	0	0	15	0		-197
12	2,575	165,904	-13	0	0	0	9	0	0	15	0		-7
13	2,575	165,866	-38	0	0	0	8	3	0	15	0		-28
14	2,574	164,283	-1,583	0	0	0	7	1,551	1	15	0		-23
15	2,575	165,815	1,532	1,564	0	0	7	0	0	14	0		-25
16	2,574	164,890	-925	0	0	0	6	1,016	0	14	0		99
17	2,574	165,219	329	1,159	0	0	5	815	0	14	0		-6
18	2,574	165,118	-101	0	0	0	5	11	1	14	0		-80
19	2,574	165,016	-102	0	0	0	6	0	0	14	0		-94
20	2,574	164,839	-177	0	0	0	6	34	0	14	0		-135
21	2,574	164,814	-25	0	0	0	6	0	0	14	0		-17
22	2,574	164,637	-177	0	0	0	8	234	0	14	0		63
23	2,574	164,510	-127	0	0	0	7	0	1	14	0		-119
24	2,574	164,472	-38	0	0	0	8	0	0	14	0		-32
25	2,574	164,472	0	0	0	0	6	0	0	14	0		8
26	2,574	164,396	-76	0	0	0	5	0	0	14	0		-67
27	2,574	164,359	-37	0	0	0	5	6	0	14	0		-22
28	2,574	164,422	63	0	0	0	4	0	1	14	0		74
29	2,574	164,283	-139	0	0	0	4	0	0	14	0		-129
30	2,574	164,599	316	1,164	0	0	4	794	0	14	0		-44
31	2,574	164,624	25	0	0	0	4	0	0	14	0		35
<b>Total</b>			<b>-557</b>	<b>3,948</b>	<b>1,159</b>	<b>0</b>	<b>233</b>	<b>4,588</b>	<b>6</b>	<b>480</b>	<b>0</b>		<b>-823</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

**Daily Operation**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**June 2014**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)	
				Project			Natural	Project		To Piru Creek			
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	Natural	Del. To United W.A.		
May 31	2,574	164,624											
1	2,574	164,510	-114	1,075	0	0	5	1,086	0	14	0		-94
2	2,574	165,118	608	1,011	0	0	5	329	0	14	0		-65
3	2,572	162,509	-2,609	130	0	0	5	2,690	0	14	0		-40
4	2,572	162,722	213	1,847	0	0	5	1,709	1	14	0		85
5	2,572	161,933	-789	1,762	0	0	5	2,422	0	14	0		-120
6	2,573	163,426	1,493	2,586	0	0	5	1,219	0	14	0		135
7	2,574	164,207	781	780	0	0	4	0	0	14	0		11
8	2,573	164,030	-177	0	0	0	4	0	0	14	0		-167
9	2,573	162,998	-1,032	1,235	0	0	4	2,256	1	14	0		0
10	2,572	162,231	-767	1,220	2	0	4	1,958	0	14	0		-21
11	2,573	163,501	1,270	1,274	0	0	4	0	0	14	0		6
12	2,572	162,120	-1,381	46	0	0	4	1,327	0	14	0		-90
13	2,572	162,271	151	1,209	0	0	4	1,008	1	14	0		-39
14	2,572	161,970	-301	1,785	0	0	3	2,093	0	14	0		18
15	2,573	163,766	1,796	1,880	0	0	3	161	0	14	0		88
16	2,573	163,426	-340	1,280	0	0	3	1,533	0	14	0		-76
17	2,574	164,814	1,388	1,453	0	0	3	0	1	14	0		-53
18	2,573	163,199	-1,615	65	369	0	3	2,023	0	14	0		-15
19	2,573	163,199	0	1,266	0	0	3	1,215	0	14	0		-40
20	2,573	163,614	415	1,008	0	0	3	575	0	14	0		-7
21	2,571	161,308	-2,306	0	0	0	3	2,177	1	13	0		-118
22	2,573	163,275	1,967	1,990	0	0	3	0	0	12	0		-14
23	2,573	163,325	50	1,310	0	0	3	1,350	0	10	0		97
24	2,573	163,980	655	1,323	0	0	3	659	0	10	0		-2
25	2,573	163,011	-969	1,115	0	0	2	2,114	1	10	0		39
26	2,572	161,995	-1,016	1,308	0	0	2	2,202	0	9	0		-115
27	2,572	161,670	-325	1,211	0	0	2	1,459	0	9	0		-70
28	2,573	163,942	2,272	3,067	0	0	2	726	1	9	0		-61
29	2,573	163,463	-479	0	0	0	2	305	0	9	0		-167
30	2,572	162,747	-716	970	553	0	3	2,183	0	9	0		-50
<b>Total</b>			<b>-1,877</b>	<b>35,206</b>	<b>924</b>	<b>0</b>	<b>104</b>	<b>36,779</b>	<b>7</b>	<b>380</b>	<b>0</b>		<b>-945</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

## Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

July 2014

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Jun 30	2,572	162,747										
1	2,571	161,458	-1,289	970	430	0	3	2,559	0	8	0	-125
2	2,571	161,121	-337	866	553	0	3	1,646	0	8	0	-105
3	2,572	162,208	1,087	0	1,102	0	3	0	0	8	0	-10
4	2,575	165,460	3,252	1,083	2,024	0	3	0	0	8	0	150
5	2,577	168,228	2,768	1,988	1,989	0	3	1,102	1	8	0	-101
6	2,577	168,665	437	892	2,681	0	3	3,036	0	8	0	-95
7	2,575	166,655	-2,010	0	1,090	0	3	3,109	0	8	0	14
8	2,575	166,171	-484	902	1,157	0	3	2,506	0	8	0	-32
9	2,575	165,777	-394	933	961	0	3	2,300	0	8	0	17
10	2,576	166,745	968	1,079	1,241	0	3	1,360	1	8	0	14
11	2,575	165,549	-1,196	0	1,264	0	3	2,331	0	8	0	-124
12	2,574	164,447	-1,102	0	1,282	0	4	2,416	0	8	0	36
13	2,576	167,524	3,077	1,207	2,011	0	3	0	0	8	0	-136
14	2,575	166,617	-907	0	1,464	0	3	2,319	0	8	0	-47
15	2,575	166,019	-598	0	1,488	0	4	2,055	1	8	0	-26
16	2,575	165,930	-89	0	1,542	0	4	1,647	0	8	0	20
17	2,576	166,847	917	1,106	916	0	4	1,537	0	8	0	436
18	2,575	166,515	-332	0	1,397	0	4	1,683	0	8	0	-42
19	2,576	167,230	715	0	1,497	0	4	643	0	8	0	-135
20	2,576	167,383	153	1,703	1,474	0	4	3,084	1	8	0	65
21	2,575	166,655	-728	1,167	1,544	0	4	3,329	0	8	0	-106
22	2,574	165,308	-1,347	930	1,508	0	4	3,827	0	8	0	46
23	2,575	165,498	190	1,126	1,508	0	4	2,382	0	8	0	-58
24	2,573	163,993	-1,505	887	1,508	0	4	3,716	0	6	0	-182
25	2,573	163,149	-844	1,081	1,508	0	3	3,334	1	6	0	-95
26	2,574	165,209	2,060	1,284	1,510	0	2	760	0	6	0	30
27	2,576	167,946	2,737	1,237	1,514	0	2	0	0	6	0	-10
28	2,576	167,524	-422	786	1,508	0	2	2,669	0	6	0	-43
29	2,576	167,575	51	934	1,456	0	2	2,333	0	6	0	-2
30	2,576	166,706	-869	940	1,628	0	2	3,403	0	5	0	-31
31	2,575	166,120	-586	683	1,528	0	2	2,667	0	5	0	-127
<b>Total</b>			<b>3,373</b>	<b>23,784</b>	<b>44,283</b>	<b>0</b>	<b>98</b>	<b>63,753</b>	<b>5</b>	<b>230</b>	<b>0</b>	<b>-804</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 25. Pyramid Lake**

**Daily Operation**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**August 2014**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Jul 31	2,575	166,120										
1	2,574	165,080	-1,040	0	1,546	0	3	2,538	0	6	0	-45
2	2,575	166,350	1,270	994	1,526	0	3	1,247	0	6	0	0
3	2,577	168,100	1,750	1,189	1,601	0	4	1,107	0	6	0	69
4	2,575	166,592	-1,508	0	928	0	4	2,293	0	6	0	-141
5	2,576	166,859	267	1,235	675	0	4	1,628	0	6	0	-13
6	2,576	166,769	-90	1,089	954	0	3	2,054	0	6	0	-76
7	2,576	167,064	295	1,169	1,012	0	4	1,881	0	6	0	-3
8	2,575	165,942	-1,122	0	1,169	0	3	2,246	1	6	0	-41
9	2,576	167,230	1,288	1,260	1,177	0	4	1,087	0	6	0	-60
10	2,577	168,023	793	1,229	949	0	4	1,292	0	6	0	-91
11	2,577	168,100	77	1,005	413	0	4	1,287	0	6	0	-52
12	2,577	168,241	141	848	341	0	5	1,033	0	6	0	-14
13	2,577	168,549	308	1,014	338	0	5	957	0	6	0	-86
14	2,576	167,664	-885	0	331	0	4	1,149	0	6	0	-65
15	2,575	166,502	-1,162	1,013	333	0	4	2,471	0	6	0	-35
16	2,577	168,215	1,713	1,370	338	0	4	0	0	6	0	7
17	2,577	168,575	360	0	450	0	4	0	0	6	0	-88
18	2,577	168,768	193	827	389	0	4	997	1	6	0	-23
19	2,577	168,960	192	0	192	0	4	0	0	6	0	2
20	2,577	168,023	-937	0	208	0	4	1,041	0	6	0	-102
21	2,577	168,280	257	1,081	199	0	4	1,133	0	6	0	112
22	2,576	167,933	-347	1,042	197	0	4	1,491	0	6	0	-93
23	2,577	168,511	578	1,370	201	0	4	966	0	6	0	-25
24	2,577	168,845	334	1,049	7	0	4	653	0	6	0	-67
25	2,577	168,960	115	0	204	0	4	2	0	6	0	-85
26	2,577	168,049	-911	0	199	0	4	1,027	0	6	0	-81
27	2,576	166,949	-1,100	0	203	0	4	1,332	0	6	0	31
28	2,575	166,566	-383	985	208	0	4	1,361	0	6	0	-213
29	2,575	165,841	-725	228	211	0	4	1,214	0	6	0	52
30	2,575	165,511	-330	1,317	197	0	4	1,757	0	5	0	-86
31	2,576	166,949	1,438	1,306	199	0	4	0	0	5	0	-66
<b>Total</b>			<b>829</b>	<b>22,620</b>	<b>16,895</b>	<b>0</b>	<b>122</b>	<b>37,244</b>	<b>2</b>	<b>184</b>	<b>0</b>	<b>-1,378</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

## Daily Operation

September 2014

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Aug 31	2,576	166,949										
1	2,576	167,025	76	0	198	0	5	19	0	6	0	-102
2	2,576	167,217	192	0	198	0	4	0	0	6	0	-4
3	2,576	167,153	-64	865	210	0	3	1,031	0	6	0	-105
4	2,575	166,260	-893	0	197	0	3	1,069	0	6	0	-18
5	2,575	165,853	-407	0	201	0	3	493	1	5	0	-112
6	2,576	167,012	1,159	961	200	0	3	3	0	6	0	4
7	2,577	168,292	1,280	1,110	198	0	4	0	0	5	0	-27
8	2,577	168,472	180	0	196	0	4	0	0	6	0	-14
9	2,577	168,639	167	0	227	0	4	0	0	6	0	-58
10	2,577	168,806	167	0	199	0	4	0	0	5	0	-31
11	2,577	169,051	245	0	197	0	4	0	0	6	0	50
12	2,577	168,023	-1,028	0	203	0	4	1,146	0	6	0	-83
13	2,576	166,834	-1,189	0	192	0	4	1,250	0	5	0	-130
14	2,575	166,108	-726	1,077	198	0	4	2,073	0	6	0	74
15	2,576	167,549	1,441	2,573	343	0	4	1,511	0	6	0	38
16	2,577	168,087	538	1,553	297	0	4	1,307	0	5	0	-4
17	2,577	168,267	180	1,109	310	0	4	1,151	0	6	0	-86
18	2,577	168,511	244	0	311	0	4	117	0	6	0	52
19	2,577	168,780	269	0	287	0	4	0	0	5	0	-17
20	2,577	168,768	-12	0	255	0	4	212	1	6	0	-52
21	2,577	169,102	334	0	307	0	4	0	0	6	0	29
22	2,577	168,125	-977	0	307	0	3	1,066	0	6	0	-215
23	2,577	168,151	26	1,045	297	0	4	1,276	0	5	0	-39
24	2,577	168,472	321	1,003	201	0	4	854	0	6	0	-27
25	2,577	168,126	-346	0	656	0	4	976	0	6	0	-24
26	2,577	169,115	989	763	296	0	4	0	1	6	0	-67
27	2,578	169,347	232	0	285	0	4	0	0	5	0	-52
28	2,577	168,177	-1,170	0	1	0	4	1,130	0	6	0	-39
29	2,578	169,411	1,234	975	297	0	3	0	0	6	0	-35
30	2,577	168,036	-1,375	0	308	0	4	1,727	0	5	0	45
<b>Total</b>			<b>1,087</b>	<b>13,034</b>	<b>7,572</b>	<b>0</b>	<b>115</b>	<b>18,411</b>	<b>3</b>	<b>171</b>	<b>0</b>	<b>-1,049</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake**

Daily Operation

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

**October 2014**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Sep 30	2,577	168,036										
1	2,576	167,933	-103	1,150	307	0	3	1,494	0	6	0	-63
2	2,576	167,549	-384	1,061	304	0	3	1,647	0	6	0	-99
3	2,576	167,306	-243	912	306	0	3	1,498	0	6	0	40
4	2,576	167,741	435	1,466	315	0	3	1,353	0	6	0	10
5	2,577	169,231	1,490	1,163	336	0	3	0	0	6	0	-6
6	2,577	168,549	-682	0	316	0	3	898	0	6	0	-97
7	2,577	168,010	-539	0	310	0	3	862	1	6	0	17
8	2,576	167,728	-282	0	264	0	3	649	0	6	0	106
9	2,576	167,064	-664	0	326	0	2	770	0	6	0	-216
10	2,576	167,268	204	0	238	0	3	0	0	6	0	-31
11	2,576	167,434	166	0	239	0	3	0	0	6	0	-70
12	2,576	167,549	115	0	239	0	3	0	0	5	0	-122
13	2,575	166,566	-983	0	1,343	0	3	2,246	0	5	0	-78
14	2,575	165,968	-598	0	1,374	0	3	1,935	0	5	0	-35
15	2,575	165,625	-343	0	1,373	0	3	1,527	0	5	0	-187
16	2,575	165,536	-89	0	1,354	0	4	1,417	0	5	0	-25
17	2,575	166,299	763	0	1,083	0	4	275	0	5	0	-44
18	2,576	167,076	777	0	1,349	0	4	499	0	5	0	-72
19	2,577	168,395	1,319	0	1,337	0	4	0	0	5	0	-17
20	2,576	167,703	-692	0	1,335	0	4	2,042	0	5	0	16
21	2,576	167,895	192	380	924	0	4	1,105	0	5	0	-6
22	2,576	166,872	-1,023	0	1,338	0	4	2,259	0	5	0	-101
23	2,574	165,308	-1,564	0	1,369	0	4	2,909	0	5	0	-23
24	2,574	164,940	-368	0	1,454	0	4	1,887	0	5	0	66
25	2,575	166,260	1,320	0	1,448	0	4	0	0	5	0	-127
26	2,576	167,703	1,443	0	1,443	0	4	0	0	5	0	1
27	2,576	166,961	-742	0	1,450	0	4	2,095	0	5	0	-96
28	2,575	166,515	-446	0	1,451	0	4	1,857	0	5	0	-39
29	2,575	166,070	-445	0	1,116	0	4	1,489	0	5	0	-71
30	2,574	165,232	-838	0	1,069	0	4	1,943	0	5	0	37
31	2,575	166,604	1,372	0	1,451	0	4	45	0	5	0	-33
<b>Total</b>			<b>-1,432</b>	<b>6,132</b>	<b>28,561</b>	<b>0</b>	<b>108</b>	<b>34,701</b>	<b>1</b>	<b>166</b>	<b>0</b>	<b>-1,365</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake****Daily Operation****November 2014**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Powerplant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recreation Deliveries	Natural	Del. To United W.A.	
Oct 31	2,575	166,604										
1	2,577	168,164	1,560	0	1,539	0	7	0	0	5	0	19
2	2,578	169,746	1,582	0	1,741	0	5	142	0	5	0	-17
3	2,577	168,639	-1,107	0	1,503	0	5	2,578	0	5	0	-32
4	2,577	168,010	-629	0	1,366	0	5	1,909	0	5	0	-86
5	2,576	167,409	-601	0	1,469	0	5	1,884	0	5	0	-186
6	2,575	166,400	-1,009	0	1,609	0	5	2,541	0	5	0	-77
7	2,575	166,426	26	0	1,431	0	5	1,377	0	5	0	-28
8	2,576	167,434	1,008	0	1,257	0	5	176	0	5	0	-73
9	2,577	168,177	743	0	860	0	5	0	1	5	0	-116
10	2,577	168,960	783	956	864	0	5	962	0	5	0	-75
11	2,577	168,126	-834	0	771	0	5	1,658	0	5	0	53
12	2,577	168,215	89	0	831	0	5	682	0	5	0	-60
13	2,576	167,741	-474	0	1,076	0	5	1,589	0	5	0	39
14	2,576	167,524	-217	0	1,432	0	5	1,469	0	5	0	-180
15	2,577	168,575	1,051	0	1,070	0	5	61	0	5	0	42
16	2,577	169,076	501	0	1,130	0	5	617	0	5	0	-12
17	2,577	168,241	-835	0	1,071	0	5	1,903	0	5	0	-3
18	2,576	167,792	-449	0	1,071	0	6	1,333	0	5	0	-188
19	2,576	167,818	26	0	1,427	0	6	1,361	0	5	0	-41
20	2,576	166,796	-1,022	0	1,427	0	6	2,401	0	5	0	-49
21	2,576	167,780	984	0	1,430	0	7	560	0	5	0	112
22	2,575	166,528	-1,252	0	1,432	0	6	2,810	0	5	0	125
23	2,577	168,203	1,675	1,726	1,437	0	6	1,182	0	5	0	-307
24	2,576	167,472	-731	0	1,264	0	7	1,969	0	5	0	-28
25	2,576	166,949	-523	0	1,007	0	7	1,488	0	5	0	-44
26	2,575	166,350	-599	0	1,445	0	7	1,900	0	5	0	-146
27	2,575	166,541	191	0	1,174	0	7	904	0	5	0	-81
28	2,575	166,681	140	0	1,444	0	6	1,232	0	5	0	-73
29	2,576	166,949	268	0	1,438	0	6	1,202	0	5	0	31
30	2,576	167,396	447	0	1,436	0	6	1,043	0	4	0	52
<b>Total</b>			<b>792</b>	<b>2,682</b>	<b>38,452</b>	<b>0</b>	<b>170</b>	<b>38,933</b>	<b>1</b>	<b>149</b>	<b>0</b>	<b>-1,429</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 25. Pyramid Lake****Daily Operation****December 2014**

Capacity: 171,200 ac-ft

(in acre-feet except as noted)

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow				Outflow				Computed Losses (-) And Gains (+)
				Project			Natural	Project		To Piru Creek		
				Castaic Powerplant Pumpback 1/	Warne Power-plant	Gorman Creek Improv. Channel	Stream Flow	Castaic Powerplant Generation 1/	Recrea-tion Deliveries	Natural	Del. To United W.A.	
Nov 30	2,576	167,396										
1	2,576	166,949	-447	0	1,436	0	8	1,787	0	5	0	-99
2	2,576	167,102	153	0	1,435	0	29	1,510	0	5	0	204
3	2,576	166,783	-319	0	1,438	0	32	1,877	0	5	0	93
4	2,576	166,910	127	0	1,434	0	16	1,289	0	10	0	-24
5	2,576	167,396	486	0	1,431	186	14	569	0	12	0	-564
6	2,577	168,382	986	0	1,428	298	12	695	0	12	0	-45
7	2,577	168,424	42	0	1,433	298	11	1,948	0	12	0	260
8	2,577	168,768	344	0	1,434	703	11	1,392	0	12	0	-400
9	2,576	167,754	-1,014	0	1,433	992	11	3,433	0	12	0	-5
10	2,576	167,588	-166	0	1,437	1,240	11	2,634	0	12	0	-208
11	2,576	167,242	-346	0	2,119	1,388	11	3,884	0	12	0	32
12	2,577	168,357	1,115	0	3,310	421	191	3,004	0	115	0	312
13	2,576	167,664	-693	0	2,420	1,240	181	2,936	0	198	0	-1,400
14	2,577	168,883	1,219	0	1,644	0	52	337	0	67	0	-73
15	2,576	167,281	-1,602	0	1,992	0	27	3,575	0	28	0	-18
16	2,576	167,127	-154	0	1,766	0	23	1,858	0	26	0	-59
17	2,576	167,460	333	0	1,826	0	22	1,461	0	26	0	-28
18	2,576	167,549	89	0	1,194	0	20	1,058	0	26	0	-41
19	2,576	167,319	-230	0	1,312	0	21	1,526	1	26	0	-10
20	2,577	168,113	794	0	1,226	0	19	472	0	20	0	41
21	2,577	168,755	642	0	1,335	0	18	749	0	20	0	58
22	2,577	168,138	-617	0	1,492	0	17	1,831	0	20	0	-275
23	2,576	167,127	-1,011	0	1,487	0	16	2,397	0	16	0	-101
24	2,577	168,241	1,114	0	1,434	0	16	387	0	16	0	67
25	2,577	168,870	629	0	1,464	0	15	770	0	16	0	-64
26	2,576	167,805	-1,065	0	1,433	0	14	2,519	0	16	0	23
27	2,576	167,818	13	0	1,510	0	14	1,379	0	14	0	-118
28	2,576	167,510	-308	0	1,515	0	20	1,195	0	14	0	-634
29	2,576	167,511	1	0	1,501	0	13	2,030	0	13	0	530
30	2,576	167,166	-345	0	1,559	0	12	1,797	0	13	0	-106
31	2,576	167,869	703	0	1,453	0	12	723	0	13	0	-26
<b>Total</b>			<b>473</b>	<b>0</b>	<b>49,331</b>	<b>6,766</b>	<b>889</b>	<b>53,022</b>	<b>1</b>	<b>812</b>	<b>0</b>	<b>-2,678</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**January 2000**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Dec 31	1520.88	23,617							
1	1518.63	22,660	-957	4,075	0	2,190	0	2,842	0
2	1516.86	21,922	-738	2,413	1	3,151	1	0	0
3	1516.49	21,769	-153	5,573	1	2,185	1	3,540	-1
4	1519.69	23,109	1,340	4,872	1	746	1	2,785	-1
5	1523.92	24,938	1,829	3,944	1	0	1	2,115	0
6	1531.50	28,380	3,442	4,174	1	1,160	1	0	428
7	1522.96	24,518	-3,862	1,372	1	1,927	1	3,322	15
8	1522.37	24,261	-257	716	1	933	1	0	-40
9	1516.71	21,860	-2,401	569	1	2,979	1	0	9
10	1515.86	21,511	-349	4,532	1	3,083	1	1,797	-1
11	1507.53	18,246	-3,265	1,387	1	2,689	1	1,951	-12
12	1510.95	19,552	1,306	4,090	1	739	1	2,044	-1
13	1516.55	21,794	2,242	2,693	1	488	1	0	37
14	1509.29	18,912	-2,882	2,579	1	1,745	1	3,714	-2
15	1509.99	19,180	268	288	1	0	1	0	-20
16	1507.25	18,141	-1,039	617	1	1,651	1	0	-5
17	1509.48	18,985	844	3,044	2	2,267	2	0	67
18	1506.01	17,681	-1,304	3,437	2	1,716	2	3,020	-5
19	1509.78	19,100	1,419	5,288	2	1,814	2	2,053	-2
20	1513.87	20,704	1,604	4,726	2	1,329	2	1,791	-2
21	1516.27	21,679	975	5,188	2	1,428	2	2,782	-3
22	1512.23	20,052	-1,627	767	2	2,373	2	0	-21
23	1508.17	18,487	-1,565	2,910	2	2,759	2	1,712	-4
24	1516.55	21,794	3,307	5,404	2	2,118	2	0	21
25	1515.22	21,250	-544	3,738	2	2,025	2	2,254	-3
26	1515.54	21,380	130	4,364	2	2,223	2	2,009	-2
27	1519.38	22,977	1,597	5,668	2	2,134	2	1,934	-3
28	1522.86	24,474	1,497	3,777	2	771	2	1,507	-2
29	1522.08	24,135	-339	570	3	877	3	0	-32
30	1517.55	22,208	-1,927	552	3	2,447	3	0	-32
31	1509.56	19,015	-3,193	1,512	3	3,479	3	1,217	-9
<b>Total</b>			<b>-4,602</b>	<b>94,839</b>	<b>48</b>	<b>55,426</b>	<b>48</b>	<b>44,389</b>	<b>374</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**February 2000**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Jan 31	1509.56	19,015							
1	1511.72	19,852	837	2,670	2	0	2	1,832	-1
2	1513.02	20,365	513	2,727	2	832	2	1,379	-3
3	1514.90	21,120	755	3,742	2	1,581	2	1,405	-1
4	1513.16	20,421	-699	1,441	2	790	2	1,341	-9
5	1512.90	20,317	-104	84	2	178	2	0	-10
6	1503.79	16,870	-3,447	115	2	3,607	2	0	45
7	1512.87	20,305	3,435	5,082	2	1,690	2	0	43
8	1514.69	21,035	730	4,605	3	2,285	3	1,580	-10
9	1519.26	22,926	1,891	3,099	3	1,220	3	0	12
10	1526.62	26,139	3,213	3,791	5	628	5	0	50
11	1518.28	22,513	-3,626	307	11	0	11	3,875	-58
12	1519.12	22,867	354	368	29	0	29	0	-14
13	1512.32	20,088	-2,779	304	11	3,129	11	0	46
14	1517.18	22,055	1,967	2,880	11	913	11	0	0
15	1510.01	19,188	-2,867	255	8	702	8	2,420	0
16	1514.97	21,148	1,960	5,504	11	1,592	11	1,939	-13
17	1518.11	22,442	1,294	3,359	10	0	10	2,065	0
18	1512.41	20,123	-2,319	465	8	0	8	2,781	-3
19	1512.54	20,175	52	47	7	0	7	0	5
20	1510.06	19,207	-968	521	96	1,539	96	0	50
21	1511.06	19,594	387	1,742	226	1,623	226	0	268
22	1504.98	17,302	-2,292	162	96	0	96	2,119	-335
23	1508.38	18,566	1,264	1,334	378	467	378	0	397
24	1506.75	17,955	-611	1,600	125	0	125	1,858	-353
25	1503.26	16,679	-1,276	482	72	0	72	1,738	-20
26	1502.56	16,429	-250	287	55	0	55	767	230
27	1504.36	17,077	648	573	61	0	61	30	105
28	1508.68	18,680	1,603	1,567	55	0	55	0	36
29	1506.14	17,729	-951	1,322	54	0	54	2,196	-77
<b>Total</b>			-1,286	50,435	1,349	22,776	1,349	29,325	380

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**March 2000**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Feb 29	1506.14	17,729							
1	1508.93	18,775	1,046	1,169	33	0	33	0	-123
2	1506.52	17,869	-906	1,665	18	0	18	2,530	-41
3	1502.15	16,283	-1,586	549	21	0	21	1,739	-396
4	1505.44	17,471	1,188	1,383	27	200	27	0	5
5	1508.86	18,748	1,277	1,065	186	0	186	0	212
6	1516.90	21,939	3,191	3,050	168	0	168	0	141
7	1510.99	19,567	-2,372	631	161	12	161	2,349	-642
8	1512.50	20,159	592	994	571	905	571	0	503
9	1504.69	17,197	-2,962	545	271	669	271	2,635	-203
10	1506.35	17,806	609	2,668	159	0	159	1,689	-370
11	1506.90	18,011	205	105	114	49	114	0	149
12	1504.32	17,062	-949	376	88	1,375	88	0	50
13	1507.76	18,332	1,270	1,193	68	0	68	0	77
14	1506.80	17,973	-359	1,818	54	0	54	2,202	25
15	1505.40	17,456	-517	3,015	46	535	46	2,966	-31
16	1511.62	19,813	2,357	2,779	40	483	40	0	61
17	1504.58	17,157	-2,656	325	35	0	35	2,860	-121
18	1505.73	17,577	420	900	32	535	32	0	55
19	1507.45	18,216	639	2,420	30	1,811	30	0	30
20	1512.51	20,163	1,947	3,455	28	1,478	28	0	-30
21	1517.82	22,321	2,158	2,170	24	0	24	0	-12
22	1512.56	20,183	-2,138	692	22	0	22	2,801	-29
23	1515.32	21,290	1,107	1,588	21	511	21	0	30
24	1513.28	20,468	-822	3,150	20	698	20	3,279	5
25	1511.13	19,622	-846	2,039	19	0	19	2,848	-37
26	1510.74	19,470	-152	1,091	18	1,362	18	0	119
27	1520.07	23,270	3,800	4,703	16	820	16	0	-83
28	1516.94	21,955	-1,315	3,556	16	801	16	4,073	3
29	1512.08	19,993	-1,962	3,842	15	2,084	15	3,726	6
30	1508.16	18,483	-1,510	4,862	15	2,136	15	4,241	5
31	1508.52	18,619	136	5,202	12	1,369	12	3,694	-3
<b>Total</b>			<b>890</b>	<b>63,000</b>	<b>2,348</b>	<b>17,833</b>	<b>2,348</b>	<b>43,632</b>	<b>-645</b>



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**April 2000**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Mar 31	1508.52	18,619							
1	1509.39	18,950	331	754	13	0	13	398	-25
2	1510.43	19,350	400	384	12	0	12	0	16
3	1510.42	19,346	-4	4,196	11	0	11	4,199	-1
4	1507.38	18,190	-1,156	3,333	10	0	10	4,486	-3
5	1511.75	19,864	1,674	5,872	10	1,562	10	2,632	-4
6	1520.48	23,445	3,581	4,417	10	898	10	0	62
7	1512.73	20,250	-3,195	3,259	9	2,399	9	4,041	-14
8	1507.51	18,239	-2,011	2,255	8	1,892	8	2,372	-2
9	1514.14	20,813	2,574	3,614	8	22	8	1,016	-2
10	1521.01	23,673	2,860	4,995	7	2,096	7	0	-39
11	1520.80	23,583	-90	5,408	7	1,471	7	4,018	-9
12	1521.84	24,031	448	6,132	6	1,829	6	3,856	1
13	1523.24	24,640	609	7,731	6	3,021	6	4,098	-3
14	1521.62	23,936	-704	5,784	8	2,100	8	4,386	-2
15	1510.57	19,404	-4,532	1,175	9	2,075	9	3,525	-107
16	1508.05	18,442	-962	643	10	1,634	10	0	29
17	1516.38	21,724	3,282	4,993	92	1,764	92	0	53
18	1517.81	22,317	593	6,892	59	2,391	59	3,961	53
19	1517.90	22,354	37	6,451	28	2,608	28	3,835	29
20	1520.57	23,484	1,130	8,058	21	2,803	21	4,123	-2
21	1521.79	24,009	525	8,432	18	4,004	18	3,896	-7
22	1516.13	21,621	-2,388	4,863	15	3,710	15	3,523	-18
23	1507.23	18,134	-3,487	248	13	3,769	13	0	34
24	1520.95	23,647	5,513	7,963	12	841	12	1,606	-3
25	1524.24	25,079	1,432	8,997	11	2,908	11	4,658	1
26	1533.31	29,233	4,154	7,493	11	2,692	11	645	-2
27	1527.82	26,681	-2,552	5,394	10	3,188	10	4,759	1
28	1526.69	26,170	-511	3,412	9	1,086	9	2,837	0
29	1516.41	21,736	-4,434	0	9	2,019	9	2,407	-8
30	1517.33	22,117	381	1,373	8	1,040	8	0	48
<b>Total</b>			<b>3,498</b>	<b>134,521</b>	<b>460</b>	<b>55,822</b>	<b>460</b>	<b>75,277</b>	<b>76</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**May 2000**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Apr 30	1517.33	22,117							
1	1526.42	26,049	3,932	6,394	7	2,648	7	0	186
2	1529.12	27,275	1,226	6,529	6	2,559	6	2,735	-9
3	1530.79	28,048	773	6,600	5	2,733	5	3,094	0
4	1525.70	25,727	-2,321	5,633	5	4,055	5	3,900	1
5	1528.29	26,895	1,168	5,858	6	1,335	6	3,354	-1
6	1520.34	23,386	-3,509	3,050	6	2,636	6	3,904	-19
7	1514.99	21,156	-2,230	44	5	2,349	5	0	75
8	1516.64	21,831	675	3,222	5	2,624	5	0	77
9	1524.33	25,119	3,288	4,224	4	997	4	0	61
10	1527.73	26,640	1,521	2,119	4	582	4	0	-16
11	1518.66	22,673	-3,967	363	4	1,148	4	3,182	0
12	1516.23	21,662	-1,011	2,560	4	1,867	4	1,690	-14
13	1508.30	18,536	-3,126	421	3	3,577	3	0	30
14	1507.52	18,242	-294	2,142	3	2,462	3	0	26
15	1513.35	20,496	2,254	3,743	3	1,453	3	0	-36
16	1515.69	21,441	945	958	4	0	4	0	-13
17	1517.03	21,992	551	556	3	0	3	0	-5
18	1519.61	23,075	1,083	3,916	3	738	3	2,098	3
19	1525.82	25,780	2,705	4,557	2	1,793	2	0	-59
20	1524.52	25,203	-577	3,819	2	1,786	2	3,108	498
21	1524.64	25,256	53	5,053	1	4,959	1	0	-41
22	1513.58	20,588	-4,668	3,526	1	5,233	1	2,963	2
23	1517.28	22,096	1,508	4,559	1	0	1	3,052	1
24	1523.30	24,666	2,570	3,226	1	603	1	0	-53
25	1522.72	24,413	-253	3,654	2	869	2	3,039	1
26	1522.52	24,326	-87	4,505	2	1,570	2	3,020	-2
27	1521.25	23,776	-550	3,443	2	4,062	2	0	69
28	1521.82	24,022	246	5,573	1	5,541	1	0	214
29	1519.54	23,045	-977	3,993	0	5,031	0	0	61
30	1529.17	27,298	4,253	5,487	0	1,435	0	0	201
31	1523.54	24,771	-2,527	5,145	0	1,955	0	5,721	4
<b>Total</b>			<b>2,654</b>	<b>114,872</b>	<b>95</b>	<b>68,600</b>	<b>95</b>	<b>44,860</b>	<b>1,242</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**June 2000**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
May 31	1523.54	24,771							
1	1523.31	24,671	-100	5,741	0	2,706	0	3,138	3
2	1523.53	24,767	96	4,792	0	2,007	0	2,689	0
3	1529.07	27,252	2,485	5,230	0	2,709	0	0	-36
4	1526.14	25,923	-1,329	3,191	0	4,580	0	0	60
5	1526.40	26,040	117	3,898	0	3,723	0	0	-58
6	1527.78	26,663	623	4,894	2	1,827	0	2,898	452
7	1523.16	24,605	-2,058	3,368	0	868	0	4,126	-432
8	1515.75	21,466	-3,139	2,362	0	1,279	1	4,223	2
9	1512.00	19,962	-1,504	4,596	0	3,426	0	2,675	1
10	1508.78	18,718	-1,244	329	0	1,516	0	0	-57
11	1502.19	16,297	-2,421	864	0	3,299	0	0	14
12	1508.69	18,687	2,390	4,303	0	1,985	0	0	72
13	1516.84	21,914	3,227	5,769	0	2,626	0	0	84
14	1521.92	24,065	2,151	7,108	0	1,898	0	3,060	1
15	1526.06	25,888	1,823	6,463	0	1,462	0	3,179	1
16	1529.16	27,294	1,406	5,970	0	1,680	0	2,883	-1
17	1526.89	26,260	-1,034	691	0	1,722	0	0	-3
18	1522.50	24,317	-1,943	109	0	2,142	0	0	90
19	1519.49	23,024	-1,293	3,955	0	1,905	0	3,344	1
20	1524.79	25,322	2,298	4,471	0	2,122	0	0	-51
21	1525.32	25,558	236	5,438	0	1,663	0	3,540	1
22	1525.08	25,451	-107	4,850	0	1,352	0	3,604	-1
23	1523.89	24,925	-526	4,792	0	1,984	0	3,336	2
24	1521.42	23,849	-1,076	807	0	1,860	0	0	-23
25	1519.82	23,164	-685	1,979	0	2,615	0	0	-49
26	1527.68	26,618	3,454	8,048	0	2,117	0	2,477	0
27	1526.26	25,977	-641	7,866	0	5,444	0	3,063	0
28	1532.40	28,803	2,826	9,072	0	6,489	0	0	243
29	1519.00	22,816	-5,987	5,197	0	7,882	0	3,301	-1
30	1524.78	25,318	2,502	3,271	0	750	0	0	-19
<b>Total</b>			<b>547</b>	<b>129,424</b>	<b>2</b>	<b>77,638</b>	<b>1</b>	<b>51,536</b>	<b>296</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**July 2000**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Jun 30	1524.78	25,318							
1	1521.48	23,875	-1,443	422	0	1,876	0	0	11
2	1517.50	22,188	-1,688	512	0	2,289	0	0	89
3	1508.07	18,449	-3,738	2,198	0	2,559	0	3,378	1
4	1507.69	18,306	-143	2,811	0	3,002	0	0	48
5	1513.51	20,560	2,254	6,043	0	352	0	3,437	0
6	1517.40	22,146	1,586	6,294	0	1,075	0	3,637	4
7	1517.88	22,346	200	4,306	0	657	0	3,446	-3
8	1515.16	21,225	-1,121	4	0	1,098	0	0	-27
9	1513.85	20,696	-529	393	0	904	0	0	-18
10	1517.32	22,113	1,416	6,242	0	1,340	0	3,484	-2
11	1520.22	23,334	1,222	2,200	0	1,012	0	0	34
12	1515.74	21,462	-1,873	4,438	0	2,505	0	3,807	1
13	1523.93	24,943	3,481	5,437	0	1,949	0	0	-7
14	1529.82	27,598	2,655	7,300	0	1,173	0	3,471	-1
15	1521.07	23,699	-3,899	452	0	4,290	0	0	-61
16	1514.23	20,849	-2,850	515	0	3,345	0	0	-20
17	1512.13	20,013	-836	4,701	0	2,937	0	2,599	-1
18	1524.42	25,159	5,146	7,179	0	2,192	0	0	159
19	1525.00	25,416	257	7,249	0	3,669	0	3,322	-1
20	1517.58	22,221	-3,195	4,729	0	4,012	0	3,912	0
21	1518.46	22,589	368	7,602	0	4,119	0	3,119	4
22	1517.03	21,992	-597	4,135	0	4,710	0	0	-22
23	1510.41	19,342	-2,650	2,079	0	4,738	0	0	9
24	1519.34	22,960	3,618	5,143	0	1,677	0	0	152
25	1514.76	21,063	-1,897	5,817	0	3,960	0	3,758	4
26	1522.31	24,235	3,172	6,871	0	4,138	0	0	439
27	1523.22	24,631	397	6,174	0	3,662	0	2,114	-1
28	1522.55	24,339	-292	7,130	0	3,661	0	3,762	1
29	1517.81	22,317	-2,022	2,892	0	4,984	0	0	70
30	1506.68	17,929	-4,388	1,527	0	5,906	0	0	-9
31	1515.01	21,165	3,236	6,545	0	3,336	0	0	27
<b>Total</b>			<b>-4,153</b>	<b>129,340</b>	<b>0</b>	<b>87,127</b>	<b>0</b>	<b>47,246</b>	<b>880</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**August 2000**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Jul 31	1515.01	21,165							
1	1526.50	26,085	4,920	9,330	0	4,293	0	0	-117
2	1515.52	21,372	-4,713	5,168	0	6,101	0	3,781	1
3	1512.29	20,076	-1,296	5,463	0	3,489	0	3,270	0
4	1523.38	24,701	4,625	7,390	0	2,969	0	0	204
5	1528.14	26,827	2,126	5,951	0	4,035	0	0	210
6	1514.76	21,063	-5,764	140	0	5,875	0	0	-29
7	1519.31	22,947	1,884	5,565	0	3,881	0	0	200
8	1521.00	23,668	721	6,315	0	974	0	4,619	-1
9	1517.15	22,042	-1,626	7,121	0	4,093	0	4,655	1
10	1523.89	24,925	2,883	7,521	0	4,564	0	0	-74
11	1535.82	30,434	5,509	7,574	0	1,953	0	0	-112
12	1527.32	26,454	-3,980	1,028	0	5,064	0	0	56
13	1510.41	19,342	-7,112	149	0	7,340	0	0	79
14	1516.59	21,811	2,469	7,750	0	2,145	0	3,136	0
15	1532.66	28,925	7,114	11,021	0	3,817	0	0	-90
16	1530.60	27,960	-965	8,398	0	4,895	0	4,469	1
17	1528.13	26,822	-1,138	8,030	0	5,642	0	3,526	0
18	1522.99	24,531	-2,291	6,643	0	5,252	0	3,681	-1
19	1517.47	22,175	-2,356	2,112	0	4,495	0	0	27
20	1506.67	17,925	-4,250	850	0	5,117	0	0	17
21	1509.50	18,992	1,067	5,592	0	1,978	0	2,547	0
22	1517.67	22,258	3,266	6,016	0	2,676	0	0	-74
23	1521.21	23,759	1,501	7,066	0	2,322	0	3,242	-1
24	1525.05	25,438	1,679	7,540	0	2,305	0	3,557	1
25	1527.69	26,622	1,184	6,963	0	2,520	0	3,259	0
26	1525.97	25,847	-775	4,803	0	5,602	0	0	24
27	1511.16	19,633	-6,214	729	0	6,969	0	0	26
28	1511.36	19,711	78	5,976	0	2,992	0	2,906	0
29	1510.01	19,188	-523	3,838	0	1,727	0	2,636	2
30	1503.87	16,899	-2,289	3,966	0	2,763	0	3,492	0
31	1516.05	21,589	4,690	8,766	0	931	0	3,145	0
<b>Total</b>			424	174,774	0	118,779	0	55,921	350

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**September 2000**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Aug 31	1516.05	21,589							
1	1520.44	23,428	1,839	6,535	0	203	0	4,491	-2
2	1511.71	19,848	-3,580	723	0	4,222	0	0	-81
3	1508.20	18,498	-1,350	1,449	0	2,774	0	0	-25
4	1512.43	20,131	1,633	3,908	0	2,250	0	0	-25
5	1516.69	21,852	1,721	6,846	0	1,507	0	3,618	0
6	1519.68	23,104	1,252	6,701	0	1,546	0	3,903	0
7	1518.35	22,543	-561	6,921	0	1,790	0	5,693	1
8	1523.71	24,846	2,303	8,326	0	2,571	0	3,452	0
9	1516.28	21,683	-3,163	499	0	3,721	0	0	59
10	1510.58	19,408	-2,275	246	0	2,457	0	0	-64
11	1520.32	23,377	3,969	7,090	0	3,455	0	0	334
12	1531.26	28,267	4,890	8,577	0	4,239	0	0	552
13	1528.66	27,064	-1,203	5,743	0	5,301	0	1,645	0
14	1530.23	27,788	724	5,863	0	5,646	0	0	507
15	1531.12	28,202	414	5,973	0	5,925	0	0	366
16	1522.52	24,326	-3,876	6,799	0	6,681	0	3,995	1
17	1505.26	17,405	-6,921	1,931	0	9,105	0	0	253
18	1511.62	19,813	2,408	8,487	0	2,889	0	3,190	0
19	1512.63	20,210	397	4,880	0	4,612	0	0	129
20	1512.89	20,313	103	7,283	0	2,995	0	4,185	0
21	1518.50	22,606	2,293	7,211	0	816	0	4,103	1
22	1523.46	24,736	2,130	7,540	0	1,788	0	3,621	-1
23	1519.32	22,952	-1,784	1,118	0	2,971	0	0	69
24	1506.58	17,892	-5,060	821	0	5,932	0	0	51
25	1516.19	21,646	3,754	6,291	0	2,474	0	0	-63
26	1520.32	23,377	1,731	6,816	0	1,596	0	3,488	-1
27	1530.25	27,797	4,420	5,713	0	1,214	0	0	-79
28	1527.19	26,396	-1,401	6,475	0	4,220	0	3,655	-1
29	1526.76	26,202	-194	5,993	0	3,231	0	2,956	0
30	1519.38	22,977	-3,225	393	0	3,728	0	0	110
<b>Total</b>			<b>1,388</b>	<b>153,151</b>	<b>0</b>	<b>101,859</b>	<b>0</b>	<b>51,995</b>	<b>2,091</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**October 2000**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Sep 30	1519.38	22,977							
1	1510.92	19,540	-3,437	338	0	3,728	0	0	-47
2	1518.35	22,543	3,003	7,328	0	508	0	3,818	1
3	1521.36	23,823	1,280	5,189	0	137	0	3,771	-1
4	1519.46	23,011	-812	2,675	0	1,094	0	2,393	0
5	1521.99	24,096	1,085	3,552	0	328	0	2,141	2
6	1518.38	22,555	-1,541	2,781	0	1,851	0	2,470	-1
7	1516.30	21,691	-864	490	0	1,350	0	0	-4
8	1510.93	19,544	-2,147	366	0	2,409	0	0	-104
9	1514.16	20,821	1,277	6,477	0	1,495	0	3,707	2
10	1514.80	21,079	258	5,256	0	0	0	4,996	-2
11	1514.99	21,156	77	5,032	0	0	0	4,955	0
12	1514.77	21,067	-89	5,030	0	0	0	5,119	0
13	1517.06	22,005	938	4,957	0	0	0	4,019	0
14	1518.24	22,497	492	494	0	0	0	0	-2
15	1520.24	23,343	846	882	0	0	0	0	-36
16	1527.07	26,341	2,998	3,120	0	196	0	0	74
17	1528.40	26,946	605	5,799	0	1,870	0	3,326	2
18	1523.97	24,960	-1,986	2,798	0	0	0	4,785	1
19	1529.32	27,367	2,407	3,772	0	1,395	0	0	30
20	1528.57	27,023	-344	2,400	0	2,614	0	0	-130
21	1523.81	24,890	-2,133	484	0	2,540	0	0	-77
22	1508.05	18,442	-6,448	902	0	7,298	0	0	-52
23	1511.16	19,633	1,191	4,182	0	2,953	0	0	-38
24	1522.81	24,452	4,819	7,033	0	2,254	0	0	40
25	1521.56	23,910	-542	6,016	0	2,454	0	4,105	1
26	1522.91	24,496	586	7,036	0	2,396	0	4,053	-1
27	1524.70	25,282	786	7,001	0	2,146	0	4,069	0
28	1521.43	23,854	-1,428	1,850	0	3,279	0	0	1
29	1512.59	20,195	-3,659	1,522	0	5,202	0	0	21
30	1514.10	20,797	602	6,281	0	1,733	0	3,947	1
31	1511.23	19,661	-1,136	4,497	0	1,517	0	4,115	-1
<b>Total</b>			<b>-3,316</b>	<b>115,540</b>	<b>0</b>	<b>52,747</b>	<b>0</b>	<b>65,789</b>	<b>-320</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**November 2000**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Oct 31	1511.23	19,661							
1	1517.38	22,138	2,477	7,601	0	1,280	0	3,844	0
2	1521.92	24,065	1,927	7,266	0	1,283	0	4,056	0
3	1534.59	29,843	5,778	7,223	0	1,555	0	0	110
4	1524.35	25,128	-4,715	969	0	1,467	0	4,219	2
5	1517.68	22,263	-2,865	1,177	0	3,887	0	0	-155
6	1524.92	25,380	3,117	7,035	0	1,475	0	2,314	-129
7	1530.13	27,741	2,361	7,363	0	203	0	4,799	0
8	1529.96	27,663	-78	6,102	0	2,280	0	3,901	1
9	1523.49	24,750	-2,913	3,909	0	2,863	0	3,958	-1
10	1524.28	25,097	347	2,499	0	2,066	0	0	-86
11	1518.60	22,648	-2,449	2,570	0	1,827	0	3,191	-1
12	1509.34	18,931	-3,717	3,965	0	3,741	0	3,940	-1
13	1524.62	25,247	6,316	7,751	0	1,574	0	0	139
14	1523.97	24,960	-287	5,748	0	2,029	0	4,007	1
15	1520.82	23,591	-1,369	4,545	0	1,890	0	4,022	-2
16	1522.94	24,509	918	7,246	0	1,612	0	4,717	1
17	1531.45	28,356	3,847	5,510	0	1,665	0	0	2
18	1516.53	21,786	-6,570	1,969	0	4,180	0	4,360	1
19	1515.53	21,376	-410	3,235	0	3,631	0	0	-14
20	1521.97	24,087	2,711	8,164	0	1,479	0	3,975	1
21	1521.34	23,815	-272	7,025	0	2,991	0	4,304	-2
22	1520.14	23,300	-515	5,377	0	1,555	0	4,338	1
23	1507.99	18,419	-4,881	872	0	1,518	0	4,236	1
24	1515.37	21,311	2,892	4,248	0	1,348	0	0	-8
25	1513.28	20,468	-843	4,141	0	0	0	4,983	-1
26	1521.78	24,005	3,537	5,082	0	1,614	0	0	69
27	1513.70	20,636	-3,369	3,443	0	2,153	0	4,659	0
28	1519.49	23,024	2,388	8,422	0	1,882	0	4,152	0
29	1515.49	21,360	-1,664	5,456	0	2,042	0	5,078	0
30	1523.28	24,658	3,298	5,418	0	2,160	0	0	40
<b>Total</b>			<b>4,997</b>	<b>151,331</b>	<b>0</b>	<b>59,250</b>	<b>0</b>	<b>87,053</b>	<b>-31</b>



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**December 2000**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Nov 30	1523.28	24,658							
1	1524.52	25,203	545	5,613	0	1,550	0	3,518	0
2	1519.34	22,960	-2,243	2,337	0	580	0	3,999	-1
3	1516.82	21,906	-1,054	441	0	1,485	0	0	-10
4	1521.29	23,793	1,887	6,510	0	1,310	0	3,312	-1
5	1528.32	26,909	3,116	8,414	0	1,745	0	3,554	1
6	1530.21	27,779	870	6,403	0	2,894	0	2,640	1
7	1528.72	27,092	-687	3,072	0	3,937	0	0	178
8	1521.85	24,035	-3,057	1,542	0	1,660	0	2,939	0
9	1510.36	19,323	-4,712	869	0	3,702	0	1,879	0
10	1506.56	17,884	-1,439	3,307	0	4,841	0	0	95
11	1515.76	21,470	3,586	5,875	0	2,393	0	0	104
12	1518.69	22,686	1,216	6,232	0	2,168	0	2,848	0
13	1513.45	20,536	-2,150	4,674	0	2,343	0	4,480	-1
14	1518.08	22,430	1,894	4,150	0	2,328	0	0	72
15	1519.54	23,045	615	7,169	0	2,281	0	4,272	-1
16	1519.59	23,066	21	2,455	0	2,424	0	0	-10
17	1504.86	17,259	-5,807	1,191	0	3,578	0	3,421	1
18	1517.30	22,104	4,845	6,576	0	1,642	0	0	-89
19	1518.54	22,623	519	5,149	0	636	0	3,869	-125
20	1513.93	20,728	-1,895	3,477	0	897	0	4,602	127
21	1511.73	19,856	-872	4,775	0	1,700	0	3,946	-1
22	1520.17	23,313	3,457	5,403	0	1,887	0	0	-59
23	1506.62	17,906	-5,407	2,365	0	3,448	0	4,323	-1
24	1509.04	18,817	911	2,291	0	1,383	0	0	3
25	1515.19	21,238	2,421	3,551	0	1,085	0	0	-45
26	1518.11	22,442	1,204	5,971	0	454	0	4,314	1
27	1523.69	24,837	2,395	7,884	0	1,243	0	4,245	-1
28	1535.94	30,492	5,655	6,477	0	661	0	0	-161
29	1528.13	26,822	-3,670	2,545	0	1,749	0	4,466	0
30	1518.05	22,417	-4,405	1,446	0	2,506	0	3,346	1
31	1514.51	20,962	-1,455	2,580	0	4,030	0	0	-5
<b>Total</b>			<b>-3,696</b>	<b>130,744</b>	<b>0</b>	<b>64,540</b>	<b>0</b>	<b>69,973</b>	<b>73</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**January 2001**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Dec 31	1514.51	20,962							
1	1509.37	18,943	-2,019	2,003	0	957	0	3,064	-1
2	1515.42	21,331	2,388	5,375	0	0	0	2,987	0
3	1517.17	22,050	719	5,222	0	1,554	0	2,949	0
4	1523.76	24,868	2,818	4,547	0	1,669	0	0	-60
5	1520.28	23,360	-1,508	3,003	0	1,472	0	3,038	-1
6	1514.14	20,813	-2,547	3,247	0	3,032	0	2,743	-19
7	1509.48	18,985	-1,828	2,075	0	3,975	0	0	72
8	1525.55	25,660	6,675	8,843	0	2,076	0	0	-92
9	1516.94	21,955	-3,705	3,267	0	3,756	0	3,207	-9
10	1524.18	25,053	3,098	4,606	0	1,539	0	0	31
11	1518.24	22,497	-2,556	4,457	0	1,403	0	5,549	-61
12	1525.18	25,495	2,998	5,288	0	2,291	0	0	1
13	1522.62	24,369	-1,126	3,804	0	2,882	0	2,041	-7
14	1516.85	21,918	-2,451	2,177	0	4,638	0	0	10
15	1523.02	24,544	2,626	7,870	0	2,687	0	2,551	-6
16	1528.68	27,074	2,530	8,498	0	3,285	0	2,680	-3
17	1523.71	24,846	-2,228	5,491	0	3,539	0	4,181	1
18	1519.42	22,994	-1,852	5,589	0	4,632	0	2,809	0
19	1516.38	21,724	-1,270	2,686	0	3,957	0	0	1
20	1509.60	19,031	-2,693	2,135	0	1,306	0	3,514	-8
21	1504.92	17,280	-1,751	1,444	0	3,375	0	0	180
22	1507.30	18,160	880	900	0	0	0	0	-20
23	1511.85	19,903	1,743	5,623	0	99	0	3,777	-4
24	1511.77	19,872	-31	5,494	0	1,704	0	3,822	1
25	1520.99	23,664	3,792	7,498	0	910	0	2,793	-3
26	1523.85	24,908	1,244	3,084	0	1,809	0	0	-31
27	1523.01	24,540	-368	2,782	0	3,173	0	0	23
28	1509.79	19,104	-5,436	287	0	5,790	0	0	67
29	1513.25	20,457	1,353	4,614	0	3,286	0	0	25
30	1515.89	21,523	1,066	3,792	0	2,702	0	0	-24
31	1524.80	25,327	3,804	9,146	0	2,906	0	2,400	-36
<b>Total</b>			<b>4,365</b>	<b>134,847</b>	<b>0</b>	<b>76,404</b>	<b>0</b>	<b>54,105</b>	<b>27</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**February 2001**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Jan 31	1524.80	25,327							
1	1522.95	24,513	-814	2,325	5	3,137	5	0	-2
2	1515.17	21,229	-3,284	2,796	5	3,396	5	2,674	-10
3	1507.19	18,119	-3,110	374	5	3,545	5	0	61
4	1508.32	18,543	424	2,652	5	187	5	2,031	-10
5	1510.28	19,292	749	2,899	5	2,147	5	0	-3
6	1517.01	21,984	2,692	5,416	6	2,675	6	0	-49
7	1515.88	21,519	-465	4,999	6	3,621	6	0	-1,843
8	1523.16	24,605	3,086	5,589	6	2,062	6	0	-441
9	1525.60	25,682	1,077	5,495	8	1,890	8	2,855	327
10	1521.26	23,780	-1,902	2,015	29	4,106	29	0	189
11	1509.63	19,042	-4,738	754	81	5,702	81	0	210
12	1511.97	19,950	908	3,187	390	8	390	0	-2,271
13	1526.68	26,166	6,216	8,413	614	1,233	614	728	-236
14	1517.58	22,221	-3,945	2,199	274	3,780	274	2,491	127
15	1524.24	25,079	2,858	8,426	152	5,919	152	3,226	3,577
16	1516.78	21,889	-3,190	2,732	108	4,369	108	4,896	3,343
17	1515.30	21,282	-607	0	85	740	85	0	133
18	1507.14	18,100	-3,182	108	74	3,442	74	3,446	3,598
19	1513.01	20,361	2,261	3,028	117	952	117	0	185
20	1513.45	20,536	175	3,712	268	2,219	268	1,150	-168
21	1517.06	22,005	1,469	5,257	134	880	134	2,959	51
22	1525.21	25,509	3,504	4,939	102	1,485	102	0	50
23	1521.89	24,052	-1,457	246	89	765	89	853	-85
24	1518.68	22,681	-1,371	0	84	1,526	84	0	155
25	1510.20	19,261	-3,420	1,173	148	4,873	148	0	280
26	1510.41	19,342	81	4,363	352	2,282	352	1,108	-892
27	1522.95	24,513	5,171	7,238	222	2,201	222	0	134
28	1522.95	24,513	0	2,613	166	2,685	166	0	72
<b>Total</b>			-814	92,948	3,540	71,827	3,540	28,417	6,482

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**March 2001**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Feb 28	1522.95	24,513							
1	1518.12	22,446	-2,067	1,352	142	3,792	142	0	373
2	1512.92	20,325	-2,121	105	126	2,325	126	0	99
3	1513.21	20,441	116	0	118	17	118	0	133
4	1510.04	19,200	-1,241	634	293	2,065	293	0	190
5	1511.13	19,622	422	4,517	709	639	709	2,516	-940
6	1514.51	20,962	1,340	2,268	664	1,759	664	0	831
7	1511.13	19,622	-1,340	1,434	391	3,226	391	0	452
8	1516.34	21,708	2,086	4,651	277	2,854	277	0	289
9	1520.83	23,595	1,887	3,199	210	1,487	210	0	175
10	1514.30	20,877	-2,718	326	168	3,285	168	0	241
11	1509.73	19,080	-1,797	285	145	2,263	145	0	181
12	1509.74	19,084	4	1,717	125	1,851	125	0	138
13	1512.25	20,060	976	2,442	119	1,570	119	0	104
14	1512.61	20,202	142	999	106	967	106	0	110
15	1514.73	21,051	849	3,393	96	2,652	96	0	108
16	1508.97	18,790	-2,261	2,084	84	4,488	84	0	143
17	1508.93	18,775	-15	1,494	76	1,537	76	0	28
18	1513.10	20,397	1,622	3,557	64	1,993	64	0	58
19	1525.14	25,478	5,081	11,687	59	2,901	59	3,796	91
20	1523.64	24,815	-663	6,618	53	4,948	53	2,365	32
21	1514.33	20,889	-3,926	5,002	50	6,441	50	2,517	30
22	1511.79	19,879	-1,010	3,971	47	5,078	47	0	97
23	1520.99	23,664	3,785	5,841	44	2,012	44	0	-44
24	1511.80	19,883	-3,781	467	42	4,305	42	0	57
25	1506.85	17,992	-1,891	1,885	39	1,444	39	2,174	-158
26	1504.08	16,975	-1,017	3,230	39	1,811	39	2,404	-32
27	1514.75	21,059	4,084	5,634	40	1,526	40	0	-24
28	1518.56	22,631	1,572	5,113	37	1,505	37	1,966	-70
29	1512.29	20,076	-2,555	3,603	34	3,549	34	2,575	-34
30	1520.20	23,326	3,250	6,558	31	3,267	31	0	-41
31	1508.06	18,445	-4,881	2,802	30	5,188	30	2,434	-61
<b>Total</b>			<b>-6,068</b>	<b>96,868</b>	<b>4,458</b>	<b>82,745</b>	<b>4,458</b>	<b>22,747</b>	<b>2,556</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**April 2001**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Mar 31	1508.06	18,445							
1	1507.11	18,089	-356	3,555	29	1,159	29	2,724	-28
2	1505.61	17,533	-556	2,871	29	1,165	29	2,236	-26
3	1514.82	21,087	3,554	5,176	28	1,618	28	0	-4
4	1513.79	20,672	-415	4,662	25	1,747	25	3,307	-23
5	1514.10	20,797	125	3,835	23	1,758	23	1,955	3
6	1523.13	24,592	3,795	4,633	70	801	70	0	-37
7	1515.94	21,543	-3,049	305	61	1,318	61	2,095	59
8	1512.11	20,005	-1,538	1,621	42	3,254	42	0	95
9	1513.27	20,464	459	5,142	35	1,754	35	2,851	-78
10	1512.07	19,989	-475	835	33	1,325	33	0	15
11	1512.25	20,060	71	583	31	527	31	0	15
12	1517.51	22,192	2,132	3,104	29	977	29	0	5
13	1505.64	17,544	-4,648	1,923	27	1,913	27	4,573	-85
14	1507.74	18,325	781	3,166	25	2,417	25	0	32
15	1507.88	18,378	53	2,564	23	2,548	23	0	37
16	1527.02	26,319	7,941	9,367	22	1,403	22	0	-23
17	1525.04	25,433	-886	7,502	22	6,255	22	2,046	-87
18	1524.07	25,004	-429	4,960	22	5,416	22	0	27
19	1526.00	25,861	857	3,526	24	2,622	24	0	-47
20	1527.26	26,427	566	1,987	34	1,428	34	0	7
21	1518.90	22,774	-3,653	135	25	4,005	25	0	217
22	1512.51	20,163	-2,611	2,554	21	5,131	21	0	-34
23	1515.50	21,364	1,201	6,091	19	2,216	19	2,539	-135
24	1525.53	25,651	4,287	9,444	17	5,092	17	0	-65
25	1531.51	28,384	2,733	9,220	16	6,437	16	0	-50
26	1531.85	28,544	160	6,406	15	6,208	15	0	-38
27	1532.41	28,807	263	7,559	14	4,182	14	3,025	-89
28	1519.60	23,070	-5,737	105	14	5,812	14	0	-30
29	1511.77	19,872	-3,198	3,086	14	6,318	14	0	34
30	1518.43	22,576	2,704	6,591	13	3,819	13	0	-68
<b>Total</b>			<b>4,131</b>	<b>122,508</b>	<b>802</b>	<b>90,625</b>	<b>802</b>	<b>27,351</b>	<b>-401</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**May 2001**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Apr 30	1518.43	22,576							
1	1517.73	22,283	-293	5,844	13	2,473	13	3,661	-3
2	1515.56	21,388	-895	3,609	12	2,415	12	2,087	-2
3	1518.04	22,413	1,025	4,202	11	3,096	11	0	-81
4	1521.23	23,767	1,354	5,048	10	3,657	10	0	-37
5	1504.05	16,964	-6,803	2,704	10	3,875	10	5,609	-23
6	1512.92	20,325	3,361	3,400	8	0	8	0	-39
7	1519.55	23,049	2,724	9,571	8	1,774	8	5,058	-15
8	1522.99	24,531	1,482	10,896	7	5,864	7	3,553	3
9	1520.35	23,390	-1,141	9,779	6	7,324	6	3,594	-2
10	1529.42	27,413	4,023	9,711	6	5,604	6	0	-84
11	1522.75	24,426	-2,987	7,447	6	6,893	6	3,540	-1
12	1513.41	20,520	-3,906	5,213	6	6,453	6	2,665	-1
13	1512.10	20,001	-519	3,861	6	4,386	6	0	6
14	1513.76	20,660	659	6,066	6	1,958	6	3,447	-2
15	1509.42	18,962	-1,698	4,170	5	2,950	5	2,917	-1
16	1516.29	21,687	2,725	8,666	5	2,814	5	3,123	-4
17	1516.81	21,901	214	7,110	5	4,034	5	2,861	-1
18	1517.52	22,196	295	7,439	5	4,021	5	3,111	-12
19	1510.58	19,408	-2,788	1,250	5	4,114	5	0	76
20	1515.53	21,376	1,968	5,266	4	3,353	4	0	55
21	1520.92	23,634	2,258	6,552	4	4,467	4	0	173
22	1524.09	25,013	1,379	10,550	3	5,299	3	3,945	73
23	1527.09	26,351	1,338	11,241	2	6,353	2	3,747	197
24	1528.86	27,152	801	6,105	2	6,068	2	0	764
25	1527.77	26,659	-493	9,020	2	2,787	2	5,769	-957
26	1522.37	24,261	-2,398	3,433	2	5,384	2	0	-447
27	1510.22	19,269	-4,992	723	2	5,742	2	0	27
28	1512.77	20,266	997	2,759	2	1,667	2	0	-95
29	1516.51	21,778	1,512	5,085	1	123	1	3,446	-4
30	1519.00	22,816	1,038	7,620	0	3,263	0	3,320	1
31	1524.65	25,260	2,444	11,527	0	4,852	0	4,233	2
<b>Total</b>			<b>2,684</b>	<b>195,867</b>	<b>164</b>	<b>123,063</b>	<b>164</b>	<b>69,686</b>	<b>-434</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**June 2001**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
May 31	1524.65	25,260							
1	1521.04	23,686	-1,574	6,523	1	5,416	1	2,681	0
2	1514.75	21,059	-2,627	345	2	2,999	2	0	27
3	1505.08	17,339	-3,720	1,947	1	5,742	1	0	75
4	1510.33	19,311	1,972	2,964	1	973	1	0	-19
5	1509.26	18,901	-410	3,840	1	1,915	1	2,334	-1
6	1512.28	20,072	1,171	5,935	1	2,243	1	2,520	-1
7	1528.08	26,800	6,728	9,324	1	1,083	1	1,514	1
8	1534.08	29,599	2,799	5,608	1	2,679	1	0	-130
9	1526.27	25,982	-3,617	1,038	0	4,717	0	0	62
10	1517.96	22,379	-3,603	2,353	0	5,955	0	0	-1
11	1510.62	19,424	-2,955	2,702	0	5,739	0	0	82
12	1516.21	21,654	2,230	6,135	0	1,860	0	2,044	-1
13	1509.77	19,096	-2,558	1,733	0	2,205	0	2,085	-1
14	1518.24	22,497	3,401	7,679	0	2,951	0	1,328	1
15	1523.07	24,566	2,069	9,385	0	3,930	0	3,384	-2
16	1524.00	24,974	408	3,140	0	2,711	0	0	-21
17	1517.74	22,288	-2,686	2,905	0	5,663	0	0	72
18	1527.57	26,568	4,280	9,798	0	5,474	0	0	-44
19	1522.53	24,330	-2,238	6,020	0	6,265	0	1,992	-1
20	1521.40	23,841	-489	6,396	0	4,773	0	2,113	1
21	1529.30	27,358	3,517	7,588	0	1,364	0	2,707	0
22	1534.40	29,752	2,394	7,456	0	2,587	0	2,476	1
23	1525.78	25,762	-3,990	1,460	0	5,517	0	0	67
24	1508.52	18,619	-7,143	345	0	7,534	0	0	46
25	1513.02	20,365	1,746	3,520	0	1,738	0	0	-36
26	1524.63	25,251	4,886	7,983	0	652	0	2,445	0
27	1525.98	25,852	601	5,016	0	2,349	0	2,068	2
28	1526.90	26,265	413	7,190	0	4,834	0	1,941	-2
29	1533.65	29,394	3,129	7,699	0	2,984	0	1,587	1
30	1533.70	29,418	24	4,084	0	4,113	0	0	53
<b>Total</b>			<b>4,158</b>	<b>148,111</b>	<b>9</b>	<b>108,965</b>	<b>9</b>	<b>35,219</b>	<b>231</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**July 2001**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Jun 30	1533.70	29,418							
1	1519.20	22,901	-6,517	115	0	6,654	0	0	22
2	1524.02	24,982	2,081	9,198	0	5,268	0	1,851	2
3	1525.80	25,771	789	9,568	0	6,662	0	2,116	-1
4	1509.88	19,138	-6,633	152	0	6,812	0	0	27
5	1507.00	18,048	-1,090	4,574	0	3,542	0	2,120	-2
6	1517.06	22,005	3,957	4,387	0	411	0	0	-19
7	1515.83	21,498	-507	4,193	0	4,723	0	0	23
8	1517.68	22,263	765	5,226	0	4,519	0	0	58
9	1509.67	19,057	-3,206	4,373	0	4,998	0	2,580	-1
10	1504.80	17,237	-1,820	1,870	0	3,686	0	0	-4
11	1506.19	17,747	510	4,999	0	696	0	3,793	0
12	1522.91	24,496	6,749	7,957	0	1,344	0	0	136
13	1525.43	25,606	1,110	5,574	0	834	0	3,630	0
14	1520.73	23,553	-2,053	231	0	2,271	0	0	-13
15	1507.65	18,291	-5,262	316	0	5,531	0	0	-47
16	1506.90	18,011	-280	2,268	0	2,426	0	0	-122
17	1517.21	22,067	4,056	8,503	0	42	0	4,405	0
18	1522.74	24,422	2,355	5,153	0	3,383	0	0	585
19	1521.71	23,975	-447	7,070	0	3,591	0	3,887	-39
20	1532.46	28,831	4,856	6,456	0	1,713	0	0	113
21	1527.37	26,477	-2,354	373	0	2,581	0	0	-146
22	1517.19	22,059	-4,418	1,486	0	5,916	0	0	12
23	1513.91	20,720	-1,339	5,880	0	4,219	0	3,002	2
24	1523.97	24,960	4,240	8,143	0	4,167	0	0	264
25	1518.75	22,711	-2,249	5,766	0	3,887	0	4,126	-2
26	1532.00	28,614	5,903	8,894	0	3,349	0	0	358
27	1532.92	29,048	434	8,029	0	3,357	0	4,236	-2
28	1524.94	25,389	-3,659	495	0	4,048	0	0	-106
29	1513.40	20,516	-4,873	91	0	4,990	0	0	26
30	1516.62	21,823	1,307	6,521	0	5,341	0	0	127
31	1522.75	24,426	2,603	9,140	0	3,713	0	2,824	0
<b>Total</b>			-4,992	147,001	0	114,674	0	38,570	1,251



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**August 2001**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Jul 31	1522.75	24,426							
1	1518.95	22,795	-1,631	2,377	0	1,877	0	2,131	0
2	1514.72	21,047	-1,748	3,594	0	3,422	0	1,921	1
3	1528.27	26,886	5,839	7,289	0	1,473	0	0	23
4	1515.08	21,193	-5,693	626	0	3,357	0	2,962	0
5	1518.88	22,766	1,573	6,467	0	5,167	0	0	273
6	1519.34	22,960	194	5,806	0	5,756	0	0	144
7	1526.00	25,861	2,901	5,968	0	3,167	0	0	100
8	1522.02	24,109	-1,752	1,576	0	3,289	0	0	-39
9	1522.99	24,531	422	4,736	0	4,336	0	0	22
10	1523.61	24,802	271	7,581	0	4,750	0	2,561	1
11	1526.66	26,157	1,355	7,431	0	3,339	0	2,736	-1
12	1516.08	21,601	-4,556	719	0	5,278	0	0	3
13	1520.30	23,369	1,768	5,877	0	4,175	0	0	66
14	1510.60	19,416	-3,953	3,074	0	4,348	0	2,679	0
15	1520.72	23,548	4,132	9,531	0	2,835	0	2,562	-2
16	1526.90	26,265	2,717	7,441	0	2,565	0	2,160	1
17	1532.21	28,713	2,448	9,228	0	3,786	0	2,995	1
18	1531.56	28,408	-305	465	0	706	0	0	-64
19	1517.51	22,192	-6,216	356	0	6,434	0	0	-138
20	1514.72	21,047	-1,145	5,108	0	6,223	0	0	-30
21	1510.34	19,315	-1,732	5,025	0	3,419	0	3,338	0
22	1507.34	18,175	-1,140	4,032	0	4,409	0	762	-1
23	1515.76	21,470	3,295	7,867	0	2,023	0	2,550	1
24	1521.17	23,742	2,272	7,954	0	2,886	0	2,795	-1
25	1517.38	22,138	-1,604	1,296	0	2,872	0	0	-28
26	1509.15	18,859	-3,279	1,444	0	4,789	0	0	66
27	1516.56	21,798	2,939	6,468	0	3,450	0	0	-79
28	1517.32	22,113	315	6,706	0	3,568	0	2,824	1
29	1518.94	22,791	678	6,032	0	2,877	0	2,476	-1
30	1519.54	23,045	254	5,576	0	2,700	0	2,623	1
31	1531.27	28,272	5,227	9,250		2,868	0	0	-1,155
<b>Total</b>			<b>3,846</b>	<b>156,900</b>	<b>0</b>	<b>112,144</b>	<b>0</b>	<b>40,075</b>	<b>-835</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**September 2001**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Aug 31	1531.27	28,272							
1	1528.25	26,877	-1,395	6,207	0	6,260	0	1,343	1
2	1524.99	25,411	-1,466	4,859	0	6,396	0	0	71
3	1516.12	21,617	-3,794	1,986	0	5,828	0	0	48
4	1513.21	20,441	-1,176	5,594	0	3,890	0	2,880	0
5	1505.89	17,636	-2,805	2,600	0	2,285	0	3,120	0
6	1517.03	21,992	4,356	5,393	0	1,161	0	0	124
7	1507.27	18,149	-3,843	730	0	618	0	3,955	0
8	1506.39	17,821	-328	4,677	0	2,131	0	2,875	1
9	1508.26	18,521	700	3,171	0	2,493	0	0	22
10	1513.99	20,752	2,231	4,184	0	1,894	0	0	-59
11	1513.68	20,628	-124	3,236	0	0	0	3,359	-1
12	1519.33	22,956	2,328	6,565	0	950	0	3,286	-1
13	1532.54	28,869	5,913	6,992	0	952	0	0	-127
14	1529.69	27,538	-1,331	6,825	0	3,966	0	4,190	0
15	1508.53	18,623	-8,915	0	0	4,995	0	3,919	-1
16	1512.85	20,298	1,675	5,310	0	3,629	0	0	-6
17	1517.20	22,063	1,765	6,138	0	4,469	0	0	96
18	1515.35	21,303	-760	6,618	0	4,491	0	2,888	1
19	1513.51	20,560	-743	6,463	0	4,208	0	2,998	0
20	1525.63	25,696	5,136	8,622	0	3,362	0	0	-124
21	1527.18	26,391	695	7,957	0	4,139	0	3,122	-1
22	1515.02	21,169	-5,222	1,518	0	3,445	0	3,296	1
23	1512.08	19,993	-1,176	5,084	0	4,317	0	1,943	0
24	1516.36	21,716	1,723	7,532	0	2,488	0	3,312	-9
25	1523.70	24,842	3,126	6,150	0	2,934	0	0	-90
26	1517.85	22,333	-2,509	6,364	0	4,304	0	4,568	-1
27	1527.97	26,749	4,416	7,024	0	3,178	0	0	570
28	1527.61	26,586	-163	6,110	0	3,063	0	3,209	-1
29	1512.58	20,191	-6,395	1,141	0	4,533	0	3,003	0
30	1511.93	19,934	-257	3,794	0	4,040	0	0	-11
<b>Total</b>			<b>-8,338</b>	<b>148,844</b>	<b>0</b>	<b>100,419</b>	<b>0</b>	<b>57,266</b>	<b>503</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**October 2001**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Sep 30	1511.93	19,934							
1	1522.55	24,339	4,405	7,487	0	3,007	0	0	-75
2	1525.29	25,544	1,205	6,960	0	3,958	0	1,796	-1
3	1532.08	28,652	3,108	5,479	0	2,286	0	0	-85
4	1526.27	25,982	-2,670	4,983	0	3,574	0	4,078	-1
5	1526.60	26,130	148	3,008	0	2,863	0	0	3
6	1515.87	21,515	-4,615	3,161	0	4,695	0	3,083	2
7	1510.25	19,281	-2,234	3,651	0	5,926	0	0	41
8	1517.50	22,188	2,907	6,378	0	3,565	0	0	94
9	1527.21	26,405	4,217	5,204	0	937	0	0	-50
10	1529.08	27,257	852	6,624	0	2,130	0	3,642	0
11	1518.03	22,409	-4,848	1,618	0	2,781	0	3,687	2
12	1519.99	23,236	827	1,473	0	616	0	0	-30
13	1509.67	19,057	-4,179	1,236	0	1,163	0	4,251	-1
14	1510.68	19,447	390	1,664	0	1,259	0	0	-15
15	1517.95	22,375	2,928	6,221	0	443	0	2,852	2
16	1518.66	22,673	298	4,563	0	1,086	0	3,177	-2
17	1521.61	23,931	1,258	6,153	0	1,852	0	3,043	0
18	1530.67	27,992	4,061	4,528	0	373	0	0	-94
19	1524.13	25,031	-2,961	4,650	0	4,552	0	3,061	2
20	1514.28	20,869	-4,162	924	0	1,729	0	3,356	-1
21	1507.77	18,336	-2,533	1,129	0	3,726	0	0	64
22	1516.89	21,934	3,598	4,993	0	1,355	0	0	-40
23	1518.91	22,778	844	5,325	0	663	0	3,818	0
24	1518.44	22,581	-197	5,503	0	803	0	4,898	1
25	1528.74	27,101	4,520	5,085	0	430	0	0	-135
26	1536.25	30,642	3,541	7,017	0	0	0	3,476	0
27	1525.93	25,829	-4,813	36	0	1,603	0	3,247	1
28	1521.59	23,923	-1,906	126	0	2,014	0	0	-18
29	1528.05	26,786	2,863	5,217	0	2,213	0	0	-141
30	1523.86	24,912	-1,874	2,922	0	758	0	4,038	0
31	1517.47	22,175	-2,737	2,716		1,830	0	3,621	-2
<b>Total</b>			<b>2,241</b>	<b>126,034</b>	<b>0</b>	<b>64,190</b>	<b>0</b>	<b>59,124</b>	<b>-479</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**November 2001**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Oct 31	1517.47	22,175							
1	1520.42	23,420	1,245	4,308	0	3,040	0	0	-23
2	1513.89	20,712	-2,708	2,308	0	1,160	0	3,858	2
3	1514.52	20,966	254	1,748	0	0	0	1,493	-1
4	1511.73	19,856	-1,110	771	0	1,842	0	0	-39
5	1510.89	19,528	-328	5,409	0	1,893	0	3,843	-1
6	1522.43	24,287	4,759	6,562	0	1,685	0	0	-118
7	1521.00	23,668	-619	4,333	0	563	0	4,387	-2
8	1522.68	24,396	728	6,012	0	764	0	4,522	2
9	1530.56	27,941	3,545	4,413	0	759	0	0	-109
10	1523.46	24,736	-3,205	391	0	2,045	0	1,551	0
11	1501.76	16,145	-8,591	279	0	4,861	0	4,010	1
12	1516.50	21,773	5,628	5,911	0	0	0	0	-283
13	1522.44	24,291	2,518	6,113	0	819	0	2,777	1
14	1521.90	24,057	-234	5,835	0	1,727	0	4,343	1
15	1531.54	28,398	4,341	6,183	0	1,708	0	0	-134
16	1531.56	28,408	10	5,251	0	1,682	0	3,560	1
17	1515.36	21,307	-7,101	484	0	3,318	0	4,267	0
18	1505.40	17,456	-3,851	1,135	0	5,065	0	0	79
19	1518.06	22,421	4,965	6,151	0	1,096	0	0	-90
20	1521.07	23,699	1,278	7,763	0	1,794	0	4,689	-2
21	1525.29	25,544	1,845	6,844	0	2,233	0	2,766	0
22	1521.14	23,729	-1,815	562	0	2,392	0	0	15
23	1511.34	19,703	-4,026	1,187	0	1,292	0	3,921	0
24	1510.45	19,358	-345	4,138	0	1,457	0	3,067	41
25	1514.15	20,817	1,459	4,751	0	3,304	0	0	12
26	1518.68	22,681	1,864	3,370	0	1,451	0	0	-55
27	1521.42	23,849	1,168	5,212	0	762	0	3,282	0
28	1524.24	25,079	1,230	5,110	0	729	0	3,152	1
29	1524.96	25,397	318	3,029	0	2,739	0	0	28
30	1529.01	27,225	1,828	7,003	0	1,862	0	3,318	5
<b>Total</b>			<b>5,050</b>	<b>122,566</b>	<b>0</b>	<b>54,042</b>	<b>0</b>	<b>62,806</b>	<b>-668</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,746 ac-ft

**December 2001**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Nov 30	1529.01	27,225							
1	1532.99	29,081	1,856	1,926	0	17	0	0	-53
2	1524.70	25,282	-3,799	0	0	3,860	0	0	61
3	1515.01	21,165	-4,117	2,346	0	3,434	0	3,063	34
4	1523.23	24,636	3,471	7,310	0	3,894	0	0	55
5	1521.00	23,668	-968	2,655	1	0	1	3,621	-2
6	1525.90	25,816	2,148	3,071	1	873	1	0	-50
7	1526.12	25,914	98	4,498	1	1,244	1	3,156	0
8	1524.84	25,344	-570	315	1	851	1	0	-34
9	1522.36	24,256	-1,088	108	0	1,220	0	0	24
10	1510.09	19,219	-5,037	378	0	2,383	0	3,032	0
11	1515.84	21,503	2,284	3,163	0	840	0	0	-39
12	1513.88	20,708	-795	1,193	0	1,976	0	0	-12
13	1513.77	20,664	-44	1,133	0	1,186	0	0	9
14	1515.13	21,213	549	1,852	0	1,253	0	0	-50
15	1515.91	21,531	318	380	0	0	0	0	-62
16	1514.64	21,014	-517	216	0	734	0	0	1
17	1514.84	21,095	81	4,614	0	1,398	0	3,135	0
18	1523.88	24,921	3,826	3,928	0	0	0	0	-102
19	1522.63	24,374	-547	3,813	0	1,424	0	2,935	-1
20	1524.41	25,154	780	4,849	1	1,630	1	2,439	0
21	1532.41	28,807	3,653	6,620	1	1,175	1	1,792	0
22	1528.04	26,781	-2,026	973	1	2,855	1	0	-144
23	1526.74	26,193	-588	1,425	1	2,015	1	0	2
24	1516.55	21,794	-4,399	634	1	3,084	1	1,949	0
25	1519.68	23,104	1,310	2,662	1	1,305	1	0	-47
26	1520.25	23,347	243	5,715	1	2,416	1	3,056	0
27	1529.85	27,612	4,265	5,791	0	1,422	0	0	-104
28	1529.45	27,427	-185	6,320	0	1,504	0	4,999	-2
29	1529.73	27,556	129	2,097	0	1,963	0	0	-5
30	1525.50	25,638	-1,918	1,307	0	3,229	0	0	4
31	1516.54	21,790	-3,848	2,492		3,240	0	3,089	-11
<b>Total</b>			<b>-5,435</b>	<b>83,784</b>	<b>11</b>	<b>52,425</b>	<b>11</b>	<b>36,266</b>	<b>-528</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**January 2002**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Dec 31	1516.54	21,790							
1	1516.99	21,976	186	1,957	1	1,709	1	0	-62
2	1512.17	20,029	-1,947	3,846	1	2,237	1	3,556	0
3	1519.91	23,202	3,173	4,819	1	1,575	1	0	-71
4	1523.26	24,649	1,447	5,707	1	1,670	1	2,588	-2
5	1520.23	23,339	-1,310	387	1	0	1	1,696	-1
6	1513.23	20,449	-2,890	445	1	3,402	1	0	67
7	1507.65	18,291	-2,158	3,939	1	2,638	1	3,457	-2
8	1518.30	22,522	4,231	4,292	1	11	1	0	-50
9	1517.62	22,238	-284	4,439	1	1,824	1	2,897	-2
10	1524.64	25,256	3,018	5,445	1	2,337	1	0	-90
11	1524.94	25,389	133	4,115	1	863	1	3,117	-2
12	1521.51	23,888	-1,501	131	1	1,670	1	0	38
13	1512.26	20,064	-3,824	176	1	4,089	1	0	89
14	1515.74	21,462	1,398	3,322	1	1,999	1	0	75
15	1520.84	23,600	2,138	3,804	1	1,690	1	0	24
16	1517.95	22,375	-1,225	3,159	1	1,323	1	3,058	-3
17	1516.23	21,662	-713	2,717	1	1,416	1	2,012	-2
18	1518.46	22,589	927	3,545	1	7	1	2,610	-1
19	1519.42	22,994	405	440	1	0	1	0	-35
20	1512.44	20,135	-2,859	97	1	3,076	1	0	120
21	1511.58	19,797	-338	1,079	1	1,393	1	0	-24
22	1506.50	17,862	-1,935	2,100	1	1,551	1	2,480	-4
23	1514.39	20,913	3,051	3,076	1	12	1	0	-13
24	1509.81	19,111	-1,802	2,222	1	5	1	4,018	-1
25	1512.39	20,116	1,005	1,620	1	729	1	0	114
26	1513.05	20,377	261	311	2	21	2	0	-29
27	1513.54	20,572	195	2,814	3	2,672	3	0	53
28	1510.87	19,520	-1,052	4,070	3	2,685	3	2,427	-10
29	1517.54	22,204	2,684	4,293	3	1,651	3	0	42
30	1514.62	21,006	-1,198	3,119	3	1,544	3	2,763	-10
31	1517.87	22,342	1,336	1,371	4	0	4	0	-35
<b>Total</b>			<b>552</b>	<b>82,857</b>	<b>43</b>	<b>45,799</b>	<b>43</b>	<b>36,679</b>	<b>173</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**February 2002**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Jan 31	1517.87	22,342							
1	1515.86	21,511	-831	2,158	3	717	3	2,264	-8
2	1514.67	21,027	-484	250	3	719	3	0	-15
3	1515.44	21,339	312	350	2	23	2	0	-15
4	1509.02	18,809	-2,530	2,535	2	1,246	2	3,814	-5
5	1511.62	19,813	1,004	1,590	2	606	2	0	20
6	1506.28	17,780	-2,033	1,693	2	361	2	3,361	-4
7	1509.99	19,180	1,400	2,085	2	744	2	0	59
8	1504.04	16,961	-2,219	2,728	2	1,413	2	3,526	-8
9	1505.24	17,397	436	433	2	0	2	0	3
10	1505.79	17,599	202	441	2	244	2	0	5
11	1509.81	19,111	1,512	2,736	2	1,260	2	0	36
12	1503.03	16,597	-2,514	1,579	2	536	2	3,552	-5
13	1510.19	19,257	2,660	2,658	2	0	2	0	2
14	1509.46	18,977	-280	3,093	2	504	2	2,866	-3
15	1504.41	17,095	-1,882	1,192	2	0	2	3,067	-7
16	1505.51	17,496	401	345	2	0	2	0	56
17	1505.51	17,496	0	83	2	116	2	0	33
18	1508.02	18,430	934	2,236	2	1,318	2	0	16
19	1507.99	18,419	-11	3,867	2	341	2	3,534	-3
20	1514.87	21,107	2,688	2,755	2	0	2	0	-67
21	1514.90	21,120	13	3,522	2	33	2	3,474	-2
22	1509.14	18,855	-2,265	2,673	2	1,832	2	3,098	-8
23	1507.27	18,149	-706	458	2	1,180	2	0	16
24	1506.67	17,925	-224	1,705	2	1,944	2	0	15
25	1508.57	18,638	713	3,760	2	2,991	2	0	-56
26	1511.53	19,778	1,140	5,317	1	671	1	3,505	-1
27	1516.87	21,926	2,148	3,319	1	1,102	1	0	-69
28	1510.57	19,404	-2,522	2,463	1	1,501	1	3,483	-1
<b>Total</b>			<b>-2,938</b>	<b>58,024</b>	<b>55</b>	<b>21,402</b>	<b>55</b>	<b>39,544</b>	<b>-16</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**March 2002**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Feb 28	1510.57	19,404							
1	1507.04	18,063	-1,341	3,401	2	1,614	2	3,126	-2
2	1511.97	19,950	1,887	1,922	2	0	2	0	-35
3	1512.75	20,258	308	348	2	0	2	0	-40
4	1520.20	23,326	3,068	3,149	2	0	2	0	-81
5	1514.85	21,099	-2,227	3,088	2	0	2	4,597	-718
6	1521.32	23,806	2,707	2,795	2	709	2	0	621
7	1515.95	21,548	-2,258	1,981	2	0	2	4,237	-2
8	1519.90	23,198	1,650	2,462	2	0	2	0	-812
9	1513.64	20,612	-2,586	253	2	712	2	2,835	708
10	1513.48	20,548	-64	337	2	367	2	0	-34
11	1518.78	22,724	2,176	2,809	2	562	1	0	-72
12	1512.77	20,266	-2,458	2,432	1	0	1	4,884	-6
13	1502.88	16,543	-3,723	3,114	1	1,961	1	4,875	-1
14	1513.39	20,512	3,969	4,050	1	0	1	0	-81
15	1505.41	17,460	-3,052	1,799	1	0	1	4,850	-1
16	1508.35	18,555	1,095	1,120	1	0	1	0	-25
17	1513.12	20,405	1,850	1,885	1	8	2	0	-26
18	1504.10	16,982	-3,423	2,596	2	737	2	5,312	30
19	1513.95	20,736	3,754	3,860	2	0	2	0	-106
20	1505.84	17,618	-3,118	3,290	2	0	2	6,404	-4
21	1513.41	20,520	2,902	2,951	2	0	1	0	-50
22	1521.25	23,776	3,256	3,288	1	0	1	0	-32
23	1520.03	23,253	-523	6	1	533	2	0	5
24	1512.10	20,001	-3,252	0	2	699	2	2,547	-6
25	1511.90	19,923	-78	4,635	2	816	2	3,896	-1
26	1511.58	19,797	-126	3,595	2	0	2	3,717	-4
27	1512.70	20,238	441	3,475	1	0	1	3,033	-1
28	1511.15	19,629	-609	2,458	1	0	1	3,066	-1
29	1509.84	19,123	-506	3,116	1	746	1	2,877	1
30	1509.52	19,000	-123	3,358	1	547	1	2,930	-4
31	1511.32	19,696	696	2,295	1	1,574	1	0	-25
<b>Total</b>			292	75,868	49	11,585	49	63,186	-805



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**April 2002**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Mar 31	1511.32	19,696							
1	1512.57	20,187	491	5,406	1	1,597	1	3,317	-1
2	1511.49	19,762	-425	4,646	1	1,606	1	3,463	-2
3	1511.75	19,864	102	5,538	1	757	1	4,679	0
4	1513.91	20,720	856	5,447	1	548	1	4,043	0
5	1516.36	21,716	996	4,833	1	877	1	2,954	-6
6	1507.02	18,055	-3,661	348	1	1,543	1	2,468	2
7	1509.22	18,885	830	2,963	2	2,141	2	0	8
8	1510.90	19,532	647	5,353	1	1,814	1	2,888	-4
9	1506.21	17,755	-1,777	3,863	1	2,281	1	3,360	1
10	1509.87	19,134	1,379	5,172	1	702	1	3,089	-2
11	1511.69	19,840	706	4,402	1	741	1	2,953	-2
12	1515.82	21,494	1,654	3,021	1	1,316	1	0	-51
13	1519.14	22,876	1,382	1,386	0	0	0	0	-4
14	1510.87	19,521	-3,355	675	0	4,019	0	0	-11
15	1508.89	18,760	-761	4,266	1	1,770	1	3,253	-4
16	1506.58	17,892	-868	4,224	1	1,949	1	3,143	0
17	1512.54	20,175	2,283	5,541	1	0	1	3,258	0
18	1511.82	19,891	-284	3,511	1	1,745	1	2,049	-1
19	1519.83	23,168	3,277	6,149	1	1,070	1	1,801	-1
20	1518.01	22,400	-768	2,133	1	2,837	1	0	-64
21	1508.22	18,506	-3,894	1,904	1	4,157	1	1,638	-3
22	1518.34	22,539	4,033	8,871	0	1,974	0	2,865	1
23	1521.31	23,802	1,263	5,731	0	1,431	0	3,035	-2
24	1522.89	24,487	685	5,437	0	1,695	0	3,057	0
25	1526.79	26,215	1,728	6,598	0	1,820	0	3,051	1
26	1530.00	27,681	1,466	6,905	0	2,349	0	3,093	3
27	1524.70	25,282	-2,399	365	1	2,738	1	0	-26
28	1518.77	22,719	-2,563	2,245	0	4,834	0	0	26
29	1518.99	22,812	93	6,438	0	2,139	0	4,206	0
30	1521.72	23,979	1,167	7,471	0	2,239	0	4,066	1
<b>Total</b>			<b>4,283</b>	<b>130,842</b>	<b>21</b>	<b>54,689</b>	<b>21</b>	<b>71,729</b>	<b>-141</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**May 2002**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Apr 30	1521.72	23,979							
1	1521.69	23,966	-13	6,093	0	2,128	0	3,978	0
2	1528.95	27,197	3,231	7,332	0	0	0	4,100	-1
3	1530.62	27,969	772	4,677	0	407	0	3,498	0
4	1521.24	23,772	-4,197	168	0	1,322	0	3,043	0
5	1516.60	21,815	-1,957	480	0	2,417	0	0	-20
6	1520.02	23,249	1,434	7,302	1	1,839	1	4,028	-1
7	1524.61	25,243	1,994	6,592	0	1,052	0	3,546	0
8	1525.49	25,633	390	7,114	0	3,135	0	3,588	-1
9	1529.74	27,561	1,928	8,379	0	2,867	0	3,585	1
10	1530.42	27,876	315	7,180	0	2,743	0	4,122	0
11	1522.57	24,348	-3,528	3,510	0	3,927	0	3,111	0
12	1514.47	20,946	-3,402	561	0	3,998	0	0	35
13	1517.24	22,079	1,133	7,891	0	3,368	0	3,389	-1
14	1517.71	22,275	196	7,127	0	3,337	0	3,595	1
15	1516.84	21,914	-361	6,069	0	2,996	0	3,433	-1
16	1527.57	26,568	4,654	10,391	0	2,028	0	3,710	1
17	1531.91	28,572	2,004	7,964	0	2,133	0	3,828	1
18	1514.85	21,099	-7,473	102	0	4,072	0	3,501	-2
19	1510.42	19,346	-1,753	889	0	2,677	0	0	35
20	1512.64	20,214	868	3,206	0	2,333	0	0	-5
21	1511.38	19,719	-495	3,188	0	1,124	0	2,559	0
22	1522.85	24,470	4,751	7,805	1	0	1	3,054	0
23	1529.70	27,543	3,073	7,791	0	1,807	0	2,912	1
24	1533.14	29,152	1,609	7,201	0	2,981	0	2,609	-2
25	1523.81	24,890	-4,262	2,903	0	4,133	0	3,034	2
26	1517.16	22,046	-2,844	2,266	0	5,113	0	0	3
27	1508.93	18,775	-3,271	4,656	0	4,480	0	3,447	0
28	1518.06	22,421	3,646	8,600	0	950	0	4,006	2
29	1520.97	23,656	1,235	6,993	0	2,687	0	3,069	-2
30	1521.49	23,879	223	7,938	0	4,163	0	3,552	0
31	1522.93	24,505	626	8,589	0	4,363	0	3,601	1
<b>Total</b>			<b>526</b>	<b>170,957</b>	<b>2</b>	<b>80,580</b>	<b>2</b>	<b>89,898</b>	<b>47</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**June 2002**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
May 31	1522.93	24,505							
1	1516.76	21,881	-2,624	3,595	0	2,786	0	3,432	-1
2	1516.34	21,708	-173	4,708	0	4,902	0	0	21
3	1514.91	21,124	-584	6,585	0	4,134	0	3,035	0
4	1511.77	19,872	-1,252	6,561	0	4,658	0	3,155	0
5	1510.26	19,284	-588	5,048	0	2,625	0	2,989	-22
6	1516.99	21,976	2,692	7,476	0	1,759	0	3,024	-1
7	1523.36	24,693	2,717	7,909	0	2,086	0	3,107	1
8	1509.05	18,821	-5,872	746	0	3,912	0	2,705	-1
9	1508.66	18,672	-149	1,305	0	1,425	0	0	-29
10	1513.71	20,640	1,968	7,005	0	2,497	0	2,541	1
11	1517.82	22,321	1,681	7,221	0	2,943	0	2,598	1
12	1517.60	22,229	-92	7,120	0	4,468	0	2,743	-1
13	1521.47	23,871	1,642	8,528	0	4,378	0	2,507	-1
14	1525.43	25,606	1,735	9,044	0	4,600	0	2,709	0
15	1531.86	28,548	2,942	7,623	0	4,639	0	0	-42
16	1523.43	24,723	-3,825	3,009	0	6,875	0	0	41
17	1521.00	23,668	-1,055	6,559	0	4,381	0	3,231	-2
18	1517.91	22,359	-1,309	6,827	0	4,882	0	3,257	3
19	1522.51	24,322	1,963	9,611	0	4,427	0	3,220	-1
20	1525.41	25,598	1,276	8,335	0	3,716	0	3,343	0
21	1519.99	23,236	-2,362	4,976	0	4,194	0	3,144	0
22	1513.96	20,740	-2,496	2,247	0	4,804	0	0	61
23	1514.70	21,039	299	3,080	0	2,752	0	0	-29
24	1514.90	21,120	81	6,227	0	3,174	0	2,972	0
25	1517.95	22,375	1,255	9,329	0	4,270	0	3,805	1
26	1521.53	23,897	1,522	7,824	0	2,823	0	3,478	-1
27	1518.34	22,539	-1,358	4,651	0	2,615	0	3,395	1
28	1520.78	23,574	1,035	5,709	0	1,347	0	3,325	-2
29	1532.89	29,034	5,460	10,256	0	1,341	0	3,455	0
30	1522.40	24,274	-4,760	471	0	5,279	0	0	48
<b>Total</b>			-231	179,585	0	108,692	0	71,170	46

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**July 2002**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Jun 30	1522.40	24,274							
1	1520.17	23,313	-961	6,701	0	4,679	0	2,983	0
2	1519.85	23,177	-136	7,374	0	3,562	0	3,948	0
3	1522.53	24,330	1,153	7,267	0	2,814	0	3,299	-1
4	1506.88	18,003	-6,327	112	0	5,081	0	1,358	0
5	1516.06	21,593	3,590	8,533	0	1	0	4,944	2
6	1513.43	20,528	-1,065	5,458	0	2,758	0	3,763	-2
7	1512.67	20,226	-302	2,725	0	3,030	0	0	3
8	1517.40	22,146	1,920	6,640	0	4,691	0	0	-29
9	1518.47	22,593	447	8,184	0	3,831	0	3,907	1
10	1526.02	25,870	3,277	9,192	0	1,993	0	3,923	1
11	1528.93	27,188	1,318	7,823	0	2,493	0	4,010	-2
12	1531.42	28,342	1,154	9,129	0	3,729	0	4,246	0
13	1520.79	23,578	-4,764	2,320	0	3,712	0	3,371	-1
14	1511.26	19,672	-3,906	539	0	4,387	0	0	-58
15	1522.58	24,352	4,680	7,729	0	3,140	0	0	91
16	1525.11	25,464	1,112	9,495	0	4,527	0	3,855	-1
17	1520.92	23,634	-1,830	4,752	0	2,824	0	3,757	-1
18	1525.29	25,544	1,910	9,245	0	3,508	0	3,828	1
19	1527.59	26,577	1,033	9,153	0	4,018	0	4,103	1
20	1514.02	20,765	-5,812	1,560	0	3,863	0	3,511	2
21	1510.40	19,338	-1,427	2,771	0	4,193	0	0	-5
22	1519.35	22,964	3,626	6,877	0	3,234	0	0	-17
23	1521.08	23,703	739	7,843	0	3,273	0	3,831	0
24	1523.16	24,605	902	6,895	0	2,137	0	3,856	0
25	1524.03	24,987	382	6,979	0	2,881	0	3,719	3
26	1532.06	28,642	3,655	8,312	0	798	0	3,858	-1
27	1518.50	22,606	-6,036	712	0	2,947	0	3,800	-1
28	1511.35	19,707	-2,899	111	0	3,019	0	0	9
29	1517.18	22,055	2,348	6,697	0	4,337	0	0	-12
30	1523.45	24,732	2,677	5,195	0	0	0	2,519	1
31	1525.21	25,509	777	5,235		2,044	0	2,414	0
<b>Total</b>			<b>1,235</b>	<b>181,558</b>	<b>0</b>	<b>97,504</b>	<b>0</b>	<b>82,803</b>	<b>-16</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**August 2002**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Jul 31	1525.21	25,509							
1	1525.71	25,731	222	5,881	0	3,213	0	2,446	0
2	1526.77	26,206	475	6,169	0	3,030	0	2,663	-1
3	1517.00	21,980	-4,226	1,070	0	2,783	0	2,513	0
4	1511.20	19,649	-2,331	1,954	0	4,344	0	0	59
5	1513.86	20,700	1,051	5,086	0	4,128	0	0	93
6	1516.27	21,679	979	6,034	0	2,678	0	2,376	-1
7	1517.24	22,079	400	6,429	0	2,987	0	3,041	-1
8	1519.66	23,096	1,017	6,356	0	2,690	0	2,650	1
9	1529.93	27,649	4,553	8,568	0	1,288	0	2,728	1
10	1522.55	24,339	-3,310	3,100	0	3,572	0	2,837	-1
11	1512.19	20,037	-4,302	678	0	5,056	0	0	76
12	1518.09	22,434	2,397	5,902	0	3,532	0	0	27
13	1522.05	24,122	1,688	5,951	0	1,392	0	2,871	0
14	1523.74	24,859	737	6,146	0	2,467	0	2,941	-1
15	1526.68	26,166	1,307	4,383	0	623	0	2,452	-1
16	1525.90	25,816	-350	4,389	0	1,757	0	2,983	1
17	1516.35	21,712	-4,104	2,246	0	3,585	0	2,765	0
18	1513.01	20,361	-1,351	242	0	1,852	0	0	259
19	1517.32	22,113	1,752	4,993	0	3,033	0	0	-208
20	1516.89	21,934	-179	4,265	0	3,056	0	1,387	-1
21	1512.96	20,341	-1,593	2,746	0	2,791	0	1,584	36
22	1518.65	22,669	2,328	6,673	0	1,353	0	2,993	1
23	1527.59	26,577	3,908	7,194	0	1,056	0	2,230	0
24	1521.56	23,910	-2,667	261	0	2,970	0	0	42
25	1510.78	19,486	-4,424	350	0	4,853	0	0	79
26	1512.07	19,989	503	5,251	0	1,935	0	2,813	0
27	1518.36	22,547	2,558	6,834	0	1,307	0	2,969	0
28	1526.77	26,206	3,659	5,594	0	1,838	0	0	-97
29	1528.21	26,859	653	5,514	0	1,839	0	3,024	2
30	1527.48	26,527	-332	4,527	0	1,819	0	3,039	-1
31	1519.86	23,181	-3,346	2,974		3,353	0	2,967	0
<b>Total</b>			<b>-2,328</b>	<b>137,760</b>	<b>0</b>	<b>82,180</b>	<b>0</b>	<b>58,272</b>	<b>364</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**September 2002**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Aug 31	1519.86	23,181							
1	1526.05	25,883	2,702	5,708	0	2,973	0	0	-33
2	1522.66	24,387	-1,496	4,139	0	2,202	0	3,433	0
3	1531.00	28,146	3,759	4,761	0	923	0	0	-79
4	1527.66	26,609	-1,537	3,553	0	1,917	0	3,174	1
5	1529.54	27,469	860	4,455	0	3,537	0	0	-58
6	1529.38	27,395	-74	4,245	0	749	0	3,570	0
7	1520.65	23,518	-3,877	272	0	1,291	0	2,856	-2
8	1510.23	19,273	-4,245	328	0	4,677	0	0	104
9	1514.23	20,849	1,576	4,584	0	2,964	0	0	-44
10	1514.74	21,055	206	4,797	0	1,574	0	3,016	-1
11	1514.35	20,897	-158	3,719	0	858	0	3,019	0
12	1521.26	23,780	2,883	4,809	0	1,861	0	0	-65
13	1525.43	25,606	1,826	5,898	0	1,522	0	2,551	1
14	1515.16	21,225	-4,381	2,048	0	3,406	0	3,023	0
15	1514.34	20,893	-332	3,584	0	3,950	0	0	34
16	1515.90	21,527	634	3,984	0	3,344	0	0	-6
17	1515.34	21,299	-228	4,557	0	1,672	0	3,112	-1
18	1517.80	22,313	1,014	1,834	0	780	0	0	-40
19	1515.08	21,193	-1,120	3,855	0	2,006	0	2,968	-1
20	1514.69	21,035	-158	4,554	0	1,807	0	2,905	0
21	1509.99	19,180	-1,855	3,000	0	1,843	0	3,013	1
22	1513.53	20,568	1,388	4,450	0	3,294	0	0	232
23	1521.74	23,987	3,419	5,108	0	1,622	0	0	-67
24	1520.51	23,458	-529	4,551	0	1,749	0	3,330	-1
25	1527.38	26,482	3,024	4,739	0	1,654	0	0	-61
26	1525.86	25,798	-684	3,956	0	687	0	3,953	0
27	1523.14	24,596	-1,202	3,741	0	1,760	0	3,182	-1
28	1514.53	20,970	-3,626	1,246	0	1,365	0	3,508	1
29	1510.85	19,513	-1,457	1,625	0	3,144	0	0	62
30	1516.64	21,831	2,318	5,574	0	3,247	0	0	-9
<b>Total</b>			<b>-1,350</b>	<b>113,674</b>	<b>0</b>	<b>64,378</b>	<b>0</b>	<b>50,613</b>	<b>-33</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**October 2002**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Sep 30	1516.64	21,831							
1	1517.25	22,084	253	6,095	0	2,496	0	3,346	0
2	1526.41	26,044	3,960	6,645	0	2,699	0	0	14
3	1524.20	25,062	-982	4,535	0	1,953	0	3,566	2
4	1519.21	22,905	-2,157	1,805	0	702	0	3,258	-2
5	1512.51	20,163	-2,742	374	0	0	0	3,117	1
6	1510.39	19,335	-828	490	0	1,313	0	0	-5
7	1518.67	22,677	3,342	4,167	0	772	0	0	-53
8	1519.18	22,892	215	3,976	0	677	0	3,084	0
9	1525.00	25,416	2,524	4,081	0	1,502	0	0	-55
10	1523.53	24,767	-649	4,051	0	1,571	0	3,129	0
11	1523.58	24,789	22	4,752	0	1,641	0	3,089	0
12	1520.19	23,322	-1,467	368	0	1,852	0	0	17
13	1515.23	21,254	-2,068	407	0	2,502	0	0	27
14	1515.06	21,185	-69	1,166	0	1,243	0	0	8
15	1515.22	21,250	65	1,290	0	1,228	0	0	3
16	1515.61	21,409	159	3,767	0	3,565	0	0	-43
17	1519.98	23,232	1,823	3,266	0	1,447	0	0	4
18	1523.99	24,969	1,737	5,369	0	3,578	0	0	-54
19	1521.70	23,970	-999	905	0	1,891	0	0	-13
20	1513.42	20,524	-3,446	3,171	0	4,590	0	2,026	-1
21	1517.43	22,158	1,634	3,402	0	1,747	0	0	-21
22	1515.67	21,433	-725	3,387	0	1,003	0	3,110	1
23	1515.06	21,185	-248	3,332	0	1,130	0	2,450	0
24	1520.39	23,407	2,222	3,098	0	807	0	0	-69
25	1519.74	23,130	-277	3,053	0	672	0	2,659	1
26	1512.22	20,049	-3,081	298	0	698	0	2,682	1
27	1503.41	16,733	-3,316	1,207	0	4,599	0	0	76
28	1508.51	18,615	1,882	3,559	0	1,636	0	0	-41
29	1507.26	18,145	-470	2,821	0	529	0	2,762	0
30	1514.21	20,841	2,696	3,121	0	380	0	0	-45
31	1514.86	21,103	262	2,940	0	0	0	2,276	-402
<b>Total</b>			<b>-728</b>	<b>90,898</b>	<b>0</b>	<b>50,423</b>	<b>0</b>	<b>40,554</b>	<b>-649</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**November 2002**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Oct 31	1514.86	21,103							
1	1521.51	23,888	2,785	2,885	0	0	0	0	-100
2	1515.57	21,392	-2,496	450	0	0	0	2,947	1
3	1515.73	21,458	66	607	0	506	0	0	-35
4	1515.09	21,197	-261	3,430	0	572	0	3,117	-2
5	1515.40	21,323	126	4,172	0	1,071	0	2,976	1
6	1517.00	21,980	657	4,167	0	565	0	2,944	-1
7	1518.78	22,724	744	4,555	0	615	0	3,197	1
8	1522.18	24,178	1,454	5,477	0	1,196	0	2,827	0
9	1512.43	20,131	-4,047	858	0	1,981	0	2,923	-1
10	1504.23	17,029	-3,102	2,826	0	3,661	0	2,268	1
11	1508.67	18,676	1,647	4,963	0	0	0	3,315	-1
12	1520.68	23,531	4,855	4,963	0	0	0	0	-108
13	1521.49	23,879	348	4,263	0	465	0	3,450	0
14	1523.45	24,732	853	5,615	0	1,444	0	3,319	1
15	1525.22	25,513	781	4,836	0	1,188	0	2,866	-1
16	1516.16	21,634	-3,879	453	0	1,171	0	3,163	2
17	1511.89	19,919	-1,715	2,058	0	3,791	0	0	18
18	1520.36	23,394	3,475	5,973	0	2,420	0	0	-78
19	1514.54	20,974	-2,420	3,345	0	1,995	0	3,771	1
20	1516.87	21,926	952	4,868	0	0	0	3,915	-1
21	1519.30	22,943	1,017	5,798	0	883	0	3,898	0
22	1525.65	25,704	2,761	8,000	0	706	0	4,533	0
23	1519.98	23,232	-2,472	973	0	512	0	2,934	1
24	1515.81	21,490	-1,742	727	0	2,503	0	0	34
25	1521.09	23,707	2,217	7,129	0	1,506	0	3,404	-2
26	1530.96	28,127	4,420	7,293	0	0	0	2,874	1
27	1533.39	29,271	1,144	6,619	0	1,289	0	4,187	1
28	1525.73	25,740	-3,531	1,304	0	1,357	0	3,478	0
29	1528.04	26,781	1,041	2,133	0	1,064	0	0	-28
30	1516.50	21,773	-5,008	0	0	1,439	0	3,567	-2
<b>Total</b>			<b>670</b>	<b>110,740</b>	<b>0</b>	<b>33,900</b>	<b>0</b>	<b>75,873</b>	<b>-297</b>



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**December 2002**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Nov 30	1516.50	21,773							
1	1513.75	20,656	-1,117	1,444	0	2,521	0	0	-40
2	1519.65	23,092	2,436	6,111	0	0	0	3,675	0
3	1519.55	23,049	-43	4,267	0	796	0	3,513	-1
4	1519.36	22,969	-80	4,785	0	1,491	0	3,375	1
5	1517.42	22,154	-815	3,284	0	613	0	3,485	-1
6	1522.20	24,187	2,033	5,695	0	0	0	3,664	2
7	1516.99	21,976	-2,211	1,002	0	0	0	3,211	-2
8	1513.91	20,720	-1,256	568	0	1,860	0	0	36
9	1511.27	19,676	-1,044	4,971	0	2,130	0	3,883	-2
10	1515.78	21,478	1,802	5,124	0	492	0	2,831	1
11	1518.41	22,568	1,090	5,764	0	1,499	0	3,175	0
12	1517.37	22,133	-435	4,926	0	0	0	4,671	-690
13	1517.86	22,338	205	5,568	0	1,291	0	4,074	2
14	1513.81	20,680	-1,658	1,472	0	1,559	0	1,570	-1
15	1510.43	19,350	-1,330	376	0	1,751	0	0	45
16	1507.02	18,055	-1,295	3,000	0	2,177	0	2,117	-1
17	1518.19	22,476	4,421	5,638	0	1,149	0	0	-68
18	1519.99	23,236	760	5,968	0	2,161	0	3,046	-1
19	1529.99	27,677	4,441	5,594	0	1,085	0	0	-68
20	1522.45	24,295	-3,382	137	0	0	0	3,516	-3
21	1514.31	20,881	-3,414	83	0	0	0	3,498	1
22	1511.03	19,583	-1,298	684	0	2,010	0	0	28
23	1513.53	20,568	985	4,736	0	822	0	2,930	1
24	1518.08	22,430	1,862	4,873	0	0	0	3,012	1
25	1516.21	21,654	-776	2,831	0	673	0	2,933	-1
26	1518.93	22,787	1,133	4,876	0	668	0	3,075	0
27	1518.46	22,589	-198	2,130	0	0	0	2,328	0
28	1512.76	20,262	-2,327	2,171	1	1,307	1	3,189	-2
29	1509.89	19,142	-1,120	1,788	0	2,828	0	82	2
30	1515.09	21,197	2,055	6,489	0	1,934	0	2,498	-2
31	1515.58	21,396	199	4,551		1,481	0	2,872	1
<b>Total</b>			<b>-377</b>	<b>110,906</b>	<b>1</b>	<b>34,298</b>	<b>1</b>	<b>76,223</b>	<b>-762</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**January 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Dec 31	1515.58	21,396							
1	1519.76	23,138	1,742	3,692	0	1,425	0	525	0
2	1522.85	24,470	1,332	6,110	0	597	0	4,181	0
3	1521.11	23,716	-754	5,911	0	2,479	0	4,185	-1
4	1512.73	20,250	-3,466	1,381	0	4,899	0	0	52
5	1509.82	19,115	-1,135	3,211	0	4,420	0	0	74
6	1510.02	19,192	77	2,461	0	2,376	0	0	-8
7	1512.52	20,167	975	2,878	0	1,898	0	0	-5
8	1516.73	21,868	1,701	4,251	0	2,493	0	0	-57
9	1519.08	22,850	982	2,519	0	1,559	0	0	22
10	1520.00	23,241	391	3,039	0	2,591	0	0	-57
11	1518.38	22,555	-686	1,397	0	2,123	0	0	40
12	1518.75	22,711	156	2,681	0	2,528	0	0	3
13	1515.67	21,433	-1,278	1,363	0	2,653	0	0	12
14	1515.49	21,360	-73	2,896	0	2,980	0	0	11
15	1515.50	21,364	4	2,560	0	2,547	0	0	-9
16	1516.44	21,749	385	2,007	1	1,629	1	0	7
17	1517.66	22,254	505	2,204	1	1,638	1	0	-61
18	1517.58	22,221	-33	339	1	388	1	0	16
19	1514.46	20,942	-1,279	510	1	1,802	1	0	13
20	1514.02	20,765	-177	1,793	1	2,000	1	0	30
21	1512.60	20,199	-566	1,400	1	2,016	1	0	50
22	1514.24	20,853	654	2,109	1	1,429	1	0	-26
23	1516.25	21,671	818	2,037	1	1,212	1	0	-7
24	1516.97	21,968	297	3,232	1	2,948	1	0	13
25	1513.19	20,433	-1,535	1,633	1	3,181	1	0	13
26	1509.78	19,100	-1,333	347	1	1,728	1	0	48
27	1507.56	18,257	-843	2,501	1	3,350	1	0	6
28	1509.27	18,904	647	3,135	0	2,484	0	0	-4
29	1511.40	19,727	823	3,195	0	2,363	0	0	-9
30	1514.01	20,760	1,033	3,230	0	2,179	0	0	-18
31	1516.04	21,584	824	4,248	0	2,229	0	1,182	-13
<b>Total</b>			<b>188</b>	<b>80,270</b>	<b>12</b>	<b>70,144</b>	<b>12</b>	<b>10,073</b>	<b>135</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**February 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Jan 31	1516.04	21,584							
1	1512.34	20,096	-1,488	1,711	0	3,230	0	0	31
2	1506.23	17,762	-2,334	624	0	2,701	0	0	-257
3	1506.21	17,754	-8	1,610	0	1,913	0	0	295
4	1505.70	17,566	-188	1,456	0	1,553	0	0	-91
5	1504.90	17,273	-293	336	0	589	0	0	-40
6	1505.96	17,662	389	309	0	0	0	0	80
7	1505.21	17,386	-276	916	0	1,227	0	0	35
8	1505.76	17,588	202	219	0	0	0	0	-17
9	1506.56	17,884	296	262	0	0	0	0	34
10	1508.88	18,756	872	886	0	0	0	0	-14
11	1510.10	19,223	467	457	3	0	2	0	9
12	1511.85	19,903	680	480	129	0	129	0	200
13	1506.41	17,829	-2,074	903	119	0	119	2,806	-171
14	1512.61	20,202	2,373	3,099	38	717	38	0	-9
15	1513.51	20,560	358	366	25	0	25	0	-8
16	1514.20	20,837	277	273	19	0	19	0	4
17	1509.06	18,824	-2,013	60	16	1,902	16	0	-171
18	1508.85	18,744	-80	2,716	13	1,503	13	1,182	-111
19	1510.18	19,254	510	1,743	12	1,253	12	0	20
20	1512.91	20,321	1,067	1,140	11	0	11	0	-73
21	1515.48	21,356	1,035	1,646	10	581	11	0	-29
22	1512.09	19,997	-1,359	481	10	1,872	9	0	31
23	1511.81	19,887	-110	2,243	9	2,355	9	0	2
24	1513.30	20,476	589	1,092	9	523	9	0	20
25	1511.36	19,711	-765	1,353	30	0	30	2,087	-31
26	1515.25	21,262	1,551	1,928	19	371	19	0	-6
27	1514.80	21,079	-183	2,898	14	0	14	3,060	-21
28	1511.79	19,879	-1,200	2,835	13	931	14	3,106	3
<b>Total</b>			<b>-1,705</b>	<b>34,042</b>	<b>499</b>	<b>23,221</b>	<b>499</b>	<b>12,241</b>	<b>-285</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**March 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Feb 28	1511.79	19,879							
1	1507.00	18,048	-1,831	1,069	12	0	12	2,902	2
2	1506.05	17,695	-353	117	12	0	12	474	4
3	1509.67	19,057	1,362	4,967	11	0	11	3,004	-601
4	1508.92	18,771	-286	3,424	11	0	11	3,708	-2
5	1510.56	19,400	629	4,056	10	0	10	3,432	5
6	1510.35	19,319	-81	3,720	9	0	9	3,803	2
7	1511.73	19,856	537	3,682	8	0	8	3,137	-8
8	1502.36	16,358	-3,498	327	8	0	8	3,817	-8
9	1503.71	16,841	483	504	7	0	7	0	-21
10	1512.79	20,274	3,433	3,597	6	0	6	0	-164
11	1515.00	21,161	887	3,808	5	0	5	2,911	-10
12	1515.20	21,242	81	4,046	5	889	5	3,071	-5
13	1514.71	21,043	-199	3,604	5	686	5	3,117	0
14	1521.51	23,888	2,845	5,928	5	0	5	3,082	-1
15	1518.05	22,417	-1,471	1,414	124	0	124	2,788	-97
16	1516.43	21,745	-672	194	110	986	110	0	120
17	1517.88	22,346	601	4,039	55	941	55	2,397	-100
18	1518.41	22,568	222	2,796	38	0	38	2,573	-1
19	1516.51	21,778	-790	1,849	30	0	30	2,638	-1
20	1517.81	22,317	539	3,771	24	0	24	3,209	-23
21	1518.07	22,425	108	3,841	20	0	20	3,731	-2
22	1518.59	22,644	219	3,851	17	0	17	3,620	-12
23	1521.68	23,962	1,318	1,369	15	9	15	0	-42
24	1517.09	22,017	-1,945	3,080	13	1,970	13	3,042	-13
25	1516.00	21,568	-449	4,417	12	2,166	12	2,707	7
26	1514.75	21,059	-509	4,934	11	2,359	11	3,086	2
27	1515.89	21,523	464	4,699	10	1,152	10	3,090	7
28	1520.31	23,373	1,850	5,261	9	545	9	2,865	-1
29	1513.25	20,457	-2,916	869	8	575	8	3,211	1
30	1513.40	20,516	59	992	6	893	6	0	-40
31	1525.87	25,803	5,287	8,284	4	0	4	2,990	-7
<b>Total</b>			<b>5,924</b>	<b>98,509</b>	<b>620</b>	<b>13,171</b>	<b>620</b>	<b>78,405</b>	<b>-1,009</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**April 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Mar 31	1525.87	25,803							
1	1519.68	23,104	-2,699	1,994	6	609	6	4,081	-3
2	1516.51	21,778	-1,326	2,664	6	382	6	3,608	0
3	1515.36	21,307	-471	2,884	6	0	6	3,358	3
4	1508.65	18,668	-2,639	1,075	6	0	6	3,711	-3
5	1505.12	17,354	-1,314	1,845	6	0	6	3,160	1
6	1508.43	18,585	1,231	1,222	5	12	5	0	21
7	1510.37	19,327	742	5,024	5	1,221	5	3,057	-4
8	1512.53	20,171	844	5,542	5	1,580	5	3,117	-1
9	1515.28	21,274	1,103	3,896	4	0	4	2,795	2
10	1517.00	21,980	706	3,618	4	0	4	2,914	2
11	1516.90	21,939	-41	3,377	4	0	4	3,419	1
12	1508.10	18,460	-3,479	244	4	958	4	2,767	2
13	1509.30	18,916	456	480	7	12	7	0	-12
14	1517.20	22,063	3,147	4,842	81	1,286	81	0	-409
15	1517.80	22,313	250	5,387	93	1,534	93	3,474	-129
16	1517.21	22,067	-246	5,357	44	808	44	4,810	15
17	1517.09	22,017	-50	5,656	31	1,512	31	4,193	-1
18	1519.35	22,964	947	6,401	25	1,379	25	4,050	-25
19	1514.85	21,099	-1,865	1,185	21	0	21	3,049	-1
20	1512.91	20,321	-778	92	19	950	19	0	80
21	1510.46	19,362	-959	5,641	18	2,461	18	4,113	-26
22	1507.86	18,370	-992	5,411	17	2,053	17	4,333	-17
23	1519.95	23,219	4,849	6,913	15	1,991	15	0	-73
24	1521.90	24,057	838	6,039	14	721	14	4,457	-23
25	1513.15	20,417	-3,640	2,924	14	2,317	14	4,236	-11
26	1507.42	18,205	-2,212	1,796	12	0	12	4,001	-7
27	1507.90	18,385	180	124	11	51	11	0	107
28	1509.94	19,161	776	6,125	11	2,197	11	3,131	-21
29	1513.84	20,692	1,531	6,706	11	1,373	11	3,791	-11
30	1517.46	22,171	1,479	6,282	11	1,269	11	3,530	-4
<b>Total</b>			<b>-3,632</b>	<b>110,746</b>	<b>516</b>	<b>26,676</b>	<b>516</b>	<b>87,155</b>	<b>-547</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**May 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Apr 30	1517.46	22,171							
1	1520.57	23,484	1,313	6,415	9	1,731	9	3,370	-1
2	1523.30	24,666	1,182	6,488	10	1,726	10	3,575	-5
3	1509.88	19,138	-5,528	1,025	78	3,021	78	3,547	15
4	1510.40	19,338	200	2,814	58	3,159	58	0	545
5	1515.39	21,319	1,981	6,850	37	1,402	37	3,399	-68
6	1517.71	22,275	956	8,019	30	3,493	30	3,540	-30
7	1522.77	24,435	2,160	8,621	28	2,835	28	3,598	-28
8	1528.43	26,959	2,524	7,665	25	1,583	25	3,351	-207
9	1531.00	28,146	1,187	6,945	19	2,604	19	3,084	-70
10	1520.00	23,241	-4,905	3,798	16	5,066	16	3,623	-14
11	1512.75	20,258	-2,983	1,947	15	5,184	15	0	254
12	1517.30	22,104	1,846	8,139	13	2,860	13	3,417	-16
13	1519.09	22,854	750	8,111	12	3,670	12	3,689	-2
14	1514.85	21,099	-1,755	4,851	11	3,566	11	3,040	0
15	1521.04	23,686	2,587	8,720	11	2,109	11	4,025	1
16	1526.97	26,296	2,610	8,708	9	2,007	9	4,092	1
17	1518.94	22,791	-3,505	1,934	8	2,483	8	2,942	-14
18	1513.68	20,628	-2,163	415	8	2,624	8	0	46
19	1518.18	22,471	1,843	4,762	6	2,930	6	0	11
20	1520.14	23,300	829	7,225	5	3,137	5	3,263	4
21	1521.78	24,005	705	6,995	5	2,937	5	3,353	0
22	1529.86	27,617	3,612	6,869	4	3,182	4	77	2
23	1530.83	28,067	450	7,915	4	3,820	4	3,644	-1
24	1519.02	22,825	-5,242	1,627	4	5,557	4	1,314	2
25	1508.32	18,543	-4,282	667	4	4,962	4	0	13
26	1518.41	22,568	4,025	5,098	3	1,117	3	0	44
27	1518.64	22,665	97	7,475	2	4,182	2	3,192	-4
28	1530.80	28,053	5,388	9,400	2	3,927	2	0	-85
29	1529.28	27,349	-704	6,902	2	4,180	2	3,427	1
30	1532.18	28,699	1,350	7,685	1	2,947	1	3,394	6
31	1518.40	22,564	-6,135	310	0	4,285	0	2,163	3
<b>Total</b>			<b>393</b>	<b>174,395</b>	<b>439</b>	<b>98,286</b>	<b>439</b>	<b>76,119</b>	<b>403</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**June 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
May 31	1518.40	22,564							
1	1509.80	19,107	-3,457	986	1	4,051	1	396	4
2	1519.48	23,019	3,912	6,729	1	2,795	1	0	-22
3	1519.78	23,147	128	7,413	1	3,845	1	3,444	4
4	1521.75	23,992	845	8,340	1	3,537	1	3,962	4
5	1526.58	26,121	2,129	8,968	1	4,359	1	2,478	-2
6	1534.56	29,829	3,708	6,884	1	3,106	1	0	-70
7	1520.03	23,253	-6,576	2,032	1	5,504	1	3,102	-2
8	1514.11	20,801	-2,452	3,441	0	5,957	0	0	64
9	1521.43	23,854	3,053	4,078	0	990	0	0	-35
10	1521.51	23,888	34	6,046	1	3,004	1	3,006	-2
11	1525.97	25,847	1,959	6,294	0	4,299	0	0	-36
12	1524.47	25,181	-666	7,431	0	4,447	0	3,650	0
13	1527.11	26,360	1,179	8,703	0	4,464	0	3,059	-1
14	1515.78	21,478	-4,882	1,459	0	4,646	0	1,696	1
15	1508.61	18,653	-2,825	1,538	0	4,389	0	0	26
16	1517.53	22,200	3,547	6,939	0	3,375	0	0	-17
17	1519.43	22,998	798	5,717	0	1,832	0	3,086	-1
18	1525.51	25,642	2,644	2,705	0	0	0	0	-61
19	1524.47	25,181	-461	4,064	0	1,418	0	3,107	0
20	1525.82	25,780	599	6,816	0	3,072	0	3,145	0
21	1516.33	21,704	-4,076	3,472	0	4,846	0	2,702	0
22	1505.75	17,585	-4,119	347	0	4,537	0	0	71
23	1513.29	20,472	2,887	4,003	0	1,123	0	0	7
24	1515.97	21,556	1,084	5,450	0	1,808	0	2,560	2
25	1521.96	24,083	2,527	4,952	0	1,775	0	650	0
26	1523.36	24,693	610	4,690	0	716	0	3,363	-1
27	1521.79	24,009	-684	4,691	0	2,022	0	3,353	0
28	1515.30	21,282	-2,727	3,457	0	3,497	0	2,686	-1
29	1512.58	20,191	-1,091	2,706	0	3,372	0	426	1
30	1519.30	22,943	2,752	6,367	0	3,622	0	0	7
<b>Total</b>			<b>379</b>	<b>146,718</b>	<b>8</b>	<b>96,408</b>	<b>8</b>	<b>49,871</b>	<b>-60</b>

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**July 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation	Natural	Castaic Powerplant Pumpback	To Castaic Lake		
							Natural	Project	
Jun 30	1519.30	22,943							
1	1521.95	24,078	1,135	5,474	0	869	0	3,471	1
2	1525.87	25,803	1,725	6,857	0	1,628	0	3,505	1
3	1524.95	25,393	-410	5,749	0	2,814	0	3,343	-2
4	1528.87	27,161	1,768	4,929	0	3,167	0	0	6
5	1521.19	23,750	-3,411	3,516	0	3,630	0	3,295	-2
6	1511.16	19,633	-4,117	180	0	4,255	0	0	-42
7	1517.08	22,013	2,380	5,783	0	3,357	0	0	-46
8	1517.66	22,254	241	6,601	0	3,887	0	2,474	1
9	1518.21	22,484	230	8,006	0	3,929	0	3,847	0
10	1523.32	24,675	2,191	6,874	0	1,058	0	3,624	-1
11	1526.25	25,973	1,298	5,413	0	1,415	0	2,701	1
12	1526.53	26,098	125	1,731	0	1,599	0	0	-7
13	1523.11	24,583	-1,515	442	0	1,982	0	0	25
14	1521.24	23,772	-811	4,837	0	1,814	0	3,834	0
15	1517.07	22,009	-1,763	3,852	0	1,706	0	3,909	0
16	1519.56	23,053	1,044	4,824	0	0	0	3,765	-15
17	1514.26	20,861	-2,192	3,351	0	1,795	0	3,749	1
18	1517.00	21,980	1,119	6,634	0	2,565	0	2,949	-1
19	1514.91	21,124	-856	2,414	0	2,407	0	864	1
20	1510.41	19,342	-1,782	0	0	1,840	0	0	58
21	1519.32	22,952	3,610	4,382	0	718	0	0	-54
22	1517.41	22,150	-802	3,849	0	862	0	3,788	-1
23	1517.09	22,017	-133	5,319	0	1,812	0	3,640	0
24	1516.57	21,802	-215	4,703	0	1,276	0	3,642	0
25	1516.82	21,906	104	5,643	0	1,897	0	3,643	1
26	1510.52	19,385	-2,521	2,803	0	4,145	0	1,179	0
27	1510.66	19,439	54	2,608	0	2,270	0	0	-284
28	1513.96	20,740	1,301	3,911	0	2,596	0	0	-14
29	1522.13	24,156	3,416	5,812	0	2,415	0	0	19
30	1523.06	24,561	405	4,307	0	0	0	3,901	-1
31	1528.23	26,868	2,307	1,602		0	0	0	705
<b>Total</b>			<b>3,925</b>	<b>132,406</b>	<b>0</b>	<b>63,708</b>	<b>0</b>	<b>65,123</b>	<b>350</b>



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**August 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project	
Jul 31	1528.23	26,868							
1	1522.87	24,478	-2,390	1,737	0	0	0	3,930	-197
2	1517.57	22,217	-2,261	933	0	0	0	3,192	-2
3	1510.38	19,331	-2,886	763	0	3,696	0	0	47
4	1512.05	19,982	651	6,583	0	1,316	0	4,617	1
5	1513.87	20,704	722	6,066	0	758	0	4,586	0
6	1516.68	21,848	1,144	7,470	0	2,665	0	3,659	-2
7	1518.84	22,749	901	7,567	0	2,707	0	3,960	1
8	1517.50	22,188	-561	6,265	0	2,026	0	4,800	0
9	1523.83	24,899	2,711	3,499	0	752	0	0	-36
10	1527.17	26,387	1,488	3,899	0	291	0	2,118	-2
11	1513.72	20,644	-5,743	4,470	0	5,463	0	4,751	1
12	1515.15	21,221	577	5,849	0	2,150	0	3,121	-1
13	1517.36	22,129	908	5,665	0	1,613	0	3,144	0
14	1515.94	21,543	-586	5,475	0	2,765	0	3,297	1
15	1515.59	21,400	-143	5,206	0	3,174	0	2,174	-1
16	1513.76	20,660	-740	3,973	0	1,040	0	3,674	1
17	1512.52	20,167	-493	3,390	0	3,441	0	442	0
18	1514.44	20,934	767	5,086	0	2,229	0	1,700	-390
19	1515.82	21,494	560	5,213	0	706	0	3,947	0
20	1517.01	21,984	490	6,498	0	2,719	0	3,288	-1
21	1517.97	22,384	400	5,866	0	1,462	0	4,006	2
22	1523.57	24,785	2,401	6,840	0	1,324	0	3,114	-1
23	1514.45	20,938	-3,847	1,833	0	1,203	0	4,477	0
24	1510.56	19,400	-1,538	2,586	0	3,687	0	436	-1
25	1518.89	22,770	3,370	5,175	0	1,759	0	0	-46
26	1520.55	23,475	705	5,213	0	955	0	3,552	-1
27	1523.07	24,566	1,091	6,176	0	1,476	0	3,610	1
28	1524.54	25,212	646	5,524	0	601	0	4,278	1
29	1528.28	26,891	1,679	5,761	0	387	0	3,695	0
30	1527.05	26,332	-559	1,788	0	2,243	0	0	-104
31	1522.82	24,457	-1,875	4,498		2,550	0	3,825	2
<b>Total</b>			<b>-2,411</b>	<b>146,867</b>	<b>0</b>	<b>57,158</b>	<b>0</b>	<b>91,393</b>	<b>-727</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**September 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project	
Aug 31	1522.82	24,457							
1	1527.20	26,400	1,943	4,742	0	2,665	0	0	-134
2	1526.01	25,865	-535	3,363	0	0	0	3,900	2
3	1526.57	26,116	251	2,628	0	0	0	2,375	-2
4	1527.79	26,668	552	3,492	0	521	0	2,420	1
5	1528.85	27,151	483	4,229	0	1,142	0	2,602	-2
6	1523.30	24,666	-2,485	684	0	1,169	0	2,001	1
7	1511.68	19,836	-4,830	18	0	4,982	0	0	134
8	1517.08	22,013	2,177	5,240	0	748	0	2,310	-5
9	1519.24	22,918	905	5,980	0	2,847	0	2,221	-7
10	1520.61	23,501	583	6,326	0	2,642	0	3,102	1
11	1520.79	23,578	77	6,228	0	2,757	0	3,484	90
12	1525.10	25,460	1,882	6,364	0	2,562	0	1,922	2
13	1515.28	21,274	-4,186	720	0	3,090	0	1,816	0
14	1509.57	19,019	-2,255	2,231	0	4,587	0	0	101
15	1516.44	21,749	2,730	6,331	0	1,629	0	1,973	1
16	1518.00	22,396	647	6,833	0	3,174	0	3,013	1
17	1521.75	23,992	1,596	6,615	0	2,015	0	3,003	-1
18	1521.40	23,841	-151	6,761	0	3,770	0	3,141	-1
19	1525.00	25,416	1,575	7,797	0	2,507	0	3,716	1
20	1516.49	21,769	-3,647	1,397	0	3,283	0	1,760	-1
21	1513.83	20,688	-1,081	4,177	0	5,291	0	0	33
22	1515.58	21,396	708	4,621	0	2,321	0	1,592	0
23	1515.51	21,368	-28	3,574	0	1,568	0	2,034	0
24	1516.05	21,589	221	3,326	0	714	0	2,392	1
25	1515.91	21,531	-58	4,657	0	2,485	0	2,230	0
26	1515.92	21,535	4	4,816	0	1,743	0	3,068	-1
27	1514.92	21,128	-407	274	0	0	0	680	-1
28	1509.82	19,115	-2,013	423	0	2,489	0	0	53
29	1514.08	20,789	1,674	5,456	0	1,630	0	2,154	2
30	1513.96	20,740	-49	4,231	0	316	0	3,963	-1
<b>Total</b>			<b>-3,717</b>	<b>123,534</b>	<b>0</b>	<b>64,647</b>	<b>0</b>	<b>62,872</b>	<b>268</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**October 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project	
Sep 30	1513.96	20,740							
1	1516.28	21,683	943	4,960	0	0	0	4,016	-1
2	1518.95	22,795	1,112	6,058	0	2,387	0	2,558	-1
3	1517.68	22,263	-532	5,800	0	2,898	0	3,435	1
4	1513.66	20,620	-1,643	2,340	0	3,161	0	0	-822
5	1518.48	22,597	1,977	4,440	0	2,434	0	0	-29
6	1513.18	20,429	-2,168	2,897	0	2,077	0	2,989	1
7	1517.90	22,354	1,925	4,803	0	2,771	0	107	0
8	1522.35	24,252	1,898	3,566	0	1,469	0	0	-199
9	1521.16	23,737	-515	2,728	0	1,426	0	1,815	-2
10	1520.39	23,407	-330	2,234	0	2,580	0	0	16
11	1515.51	21,368	-2,039	2,289	0	4,341	0	0	13
12	1512.18	20,033	-1,335	3,467	0	4,697	0	0	-105
13	1511.03	19,583	-450	4,946	0	2,540	0	2,854	-2
14	1518.29	22,518	2,935	4,464	0	1,462	0	0	-67
15	1518.08	22,430	-88	4,657	0	1,961	0	2,784	0
16	1519.50	23,028	598	4,238	0	873	0	2,765	-2
17	1522.02	24,109	1,081	5,391	0	1,522	0	2,790	2
18	1528.88	27,165	3,056	4,312	0	1,167	0	0	-89
19	1523.62	24,807	-2,358	747	0	3,015	0	0	-90
20	1520.97	23,656	-1,151	3,945	0	1,920	0	3,174	-2
21	1521.26	23,780	124	2,574	0	2,481	0	0	31
22	1523.71	24,846	1,066	3,655	0	2,614	0	0	25
23	1521.85	24,035	-811	2,219	0	3,032	0	0	2
24	1512.13	20,013	-4,022	1,575	0	2,831	0	2,766	0
25	1506.19	17,747	-2,266	339	0	512	0	2,093	0
26	1506.13	17,725	-22	1,128	0	1,157	0	0	7
27	1511.08	19,602	1,877	3,183	0	1,268	0	0	-38
28	1508.71	18,691	-911	4,437	0	2,511	0	2,836	-1
29	1515.07	21,189	2,498	4,462	0	1,919	0	2,796	2,751
30	1514.53	20,970	-219	4,131	0	1,554	0	0	-2,796
31	1523.60	24,798	3,828	6,066		2,159		0	-79
<b>Total</b>			<b>4,058</b>	<b>112,051</b>	<b>0</b>	<b>66,739</b>	<b>0</b>	<b>39,778</b>	<b>-1,476</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**November 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Oct 31	1523.60	24,798							
1	1510.39	19,335	-5,463	147	0	2,768	0	2,842	0
2	1511.46	19,750	415	3,270	0	2,833	0	0	-22
3	1516.57	21,802	2,052	4,518	0	2,454	0	0	-12
4	1514.83	21,091	-711	3,675	0	844	0	3,542	0
5	1520.64	23,514	2,423	2,546	0	66	0	0	-57
6	1515.84	21,503	-2,011	1,152	0	0	0	3,165	2
7	1522.47	24,304	2,801	2,825	0	0	0	0	-24
8	1512.90	20,317	-3,987	1,779	0	2,597	0	3,168	-1
9	1514.64	21,014	697	3,141	0	2,414	0	0	-30
10	1515.35	21,303	289	2,587	0	2,360	0	0	62
11	1511.95	19,942	-1,361	3,431	0	1,604	0	3,188	0
12	1513.23	20,449	507	2,520	0	1,988	0	0	-25
13	1509.17	18,866	-1,583	3,295	0	1,528	0	3,348	-2
14	1516.00	21,568	2,702	4,022	0	1,252	0	0	-68
15	1514.06	20,781	-787	4,508	0	1,799	0	3,497	1
16	1508.59	18,646	-2,135	1,089	0	3,248	0	0	24
17	1513.85	20,696	2,050	3,696	0	1,602	0	0	-44
18	1510.71	19,458	-1,238	4,469	0	1,624	0	4,081	-2
19	1522.50	24,317	4,859	6,226	0	1,261	0	0	-106
20	1519.87	23,185	-1,132	3,591	0	542	0	4,182	1
21	1526.61	26,134	2,949	4,343	0	1,357	0	0	-37
22	1515.67	21,433	-4,701	174	0	800	0	4,076	1
23	1516.27	21,679	246	258	0	0	0	0	-12
24	1515.46	21,347	-332	4,957	0	323	0	4,965	-1
25	1521.00	23,668	2,321	5,570	0	0	0	3,248	-1
26	1523.39	24,706	1,038	5,146	0	0	0	4,110	2
27	1523.91	24,934	228	3,940	0	0	0	3,713	1
28	1516.60	21,815	-3,119	1,645	0	731	0	4,032	-1
29	1514.21	20,841	-974	283	0	1,203	0	0	-54
30	1511.38	19,719	-1,122	755	0	1,883	0	0	6
<b>Total</b>			<b>-5,079</b>	<b>89,558</b>	<b>0</b>	<b>39,081</b>	<b>0</b>	<b>55,157</b>	<b>-399</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**December 2003**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Nov 30	1511.38	19,719							
1	1509.91	19,150	-569	4,817	0	1,404	0	3,984	2
2	1508.40	18,574	-576	4,740	0	1,282	0	4,033	-1
3	1520.67	23,527	4,953	5,061	0	0	0	0	-108
4	1524.20	25,062	1,535	6,099	0	528	0	4,038	2
5	1525.43	25,606	544	5,399	0	802	0	4,051	-2
6	1511.55	19,786	-5,820	1,378	0	2,602	0	4,597	1
7	1509.00	18,801	-985	885	0	2,663	0	0	793
8	1502.55	16,425	-2,376	3,964	0	1,558	0	4,783	1
9	1513.09	20,393	3,968	3,504	0	0	0	0	464
10	1512.02	19,970	-423	4,014	0	992	0	3,447	2
11	1513.42	20,524	554	4,385	0	0	0	3,829	-2
12	1525.01	25,420	4,896	5,001	0	0	0	0	-105
13	1516.47	21,761	-3,659	297	0	0	0	3,955	-1
14	1510.86	19,517	-2,244	108	0	2,398	0	0	46
15	1512.61	20,202	685	6,128	0	1,775	0	3,668	0
16	1518.13	22,451	2,249	5,829	0	0	0	3,582	2
17	1517.17	22,050	-401	3,189	0	0	0	3,588	-2
18	1517.12	22,030	-20	3,972	0	800	0	3,192	0
19	1519.39	22,981	951	4,872	0	883	0	3,038	0
20	1521.55	23,905	924	948	0	0	0	0	-24
21	1516.55	21,794	-2,111	1,181	0	3,328	0	0	36
22	1514.16	20,821	-973	4,817	0	2,295	0	3,497	2
23	1514.67	21,027	206	5,035	0	1,324	0	3,504	-1
24	1515.43	21,335	308	6,246	0	2,682	0	3,255	-1
25	1513.56	20,580	-755	4,181	0	1,366	0	3,571	1
26	1515.75	21,466	886	5,928	0	980	0	4,062	0
27	1517.90	22,354	888	3,530	0	0	0	2,662	20
28	1516.47	21,761	-593	476	0	1,069	0	0	0
29	1519.08	22,850	1,089	4,831	0	0	0	3,742	0
30	1523.90	24,930	2,080	5,211	0	0	0	3,134	3
31	1522.91	24,496	-434	4,805	0	1,779	0	3,457	-3
<b>Total</b>			<b>4,777</b>	<b>120,831</b>	<b>0</b>	<b>32,510</b>	<b>0</b>	<b>84,669</b>	<b>1,125</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**January 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Dec 31	1522.91	24,496							
1	1514.25	20,857	-3,639	3,649	0	3,926	0	3,363	1
2	1516.45	21,753	896	5,611	0	1,458	0	3,257	0
3	1515.31	21,286	-467	3,691	0	722	0	3,435	-1
4	1514.70	21,039	-247	1,547	0	1,797	0	0	3
5	1514.91	21,124	85	4,004	0	558	0	3,361	0
6	1515.67	21,433	309	3,543	0	0	0	3,234	0
7	1518.44	22,581	1,148	5,721	0	1,232	0	3,341	0
8	1514.86	21,103	-1,478	2,832	0	1,398	0	2,911	-1
9	1516.23	21,662	559	5,649	0	1,373	0	3,718	1
10	1509.72	19,077	-2,585	555	0	0	0	3,140	0
11	1510.09	19,219	142	1,788	0	1,714	0	0	68
12	1514.84	21,095	1,876	3,641	0	1,642	0	0	-123
13	1513.40	20,516	-579	3,474	0	1,504	0	2,549	0
14	1515.80	21,486	970	3,308	0	22	0	2,317	1
15	1515.45	21,343	-143	3,990	0	1,871	0	2,261	-1
16	1517.20	22,063	720	3,845	0	730	0	2,395	0
17	1512.05	19,982	-2,081	369	0	0	0	2,452	2
18	1510.73	19,466	-516	395	0	875	0	0	-36
19	1514.65	21,018	1,552	2,402	0	895	0	0	45
20	1515.10	21,201	183	4,329	0	1,582	0	2,564	0
21	1514.49	20,954	-247	3,779	0	1,404	0	2,623	1
22	1514.20	20,837	-117	3,712	0	1,151	0	2,679	1
23	1518.60	22,648	1,811	4,497	0	0	0	2,685	-1
24	1510.56	19,400	-3,248	625	0	1,347	0	2,525	-1
25	1507.49	18,231	-1,169	491	0	1,718	0	0	58
26	1517.20	22,063	3,832	4,832	0	901	0	0	-99
27	1517.41	22,150	87	4,166	0	0	0	4,079	0
28	1516.51	21,778	-372	4,129	0	1,215	0	3,287	1
29	1519.07	22,846	1,068	4,104	0	0	0	3,035	-1
30	1520.34	23,386	540	4,570	0	775	0	3,256	1
31	1513.73	20,648	-2,738	405		0		3,143	0
<b>Total</b>			<b>-3,848</b>	<b>99,653</b>	<b>0</b>	<b>31,810</b>	<b>0</b>	<b>71,610</b>	<b>-81</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**February 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jan 31	1513.73	20,648							
1	1506.73	17,947	-2,701	381	0	0	0	3,081	-1
2	1508.13	18,472	525	3,504	0	0	0	2,980	1
3	1508.31	18,540	68	3,501	0	0	0	3,433	0
4	1508.25	18,517	-23	3,347	0	0	0	3,370	0
5	1516.67	21,844	3,327	3,556	2	0	2	227	-2
6	1516.87	21,926	82	3,046	2	0	2	2,961	-3
7	1512.83	20,290	-1,636	1,338	2	0	2	2,972	-2
8	1511.18	19,641	-649	503	2	1,204	2	0	52
9	1511.52	19,774	133	4,628	2	1,414	2	3,078	-3
10	1514.34	20,893	1,119	4,342	2	0	2	3,221	-2
11	1515.92	21,535	642	3,763	2	0	2	3,119	-2
12	1517.94	22,371	836	4,018	0	0	0	3,183	1
13	1511.26	19,672	-2,699	500	0	0	0	3,197	-2
14	1512.31	20,084	412	410	0	0	0	0	2
15	1513.42	20,524	440	459	0	0	0	0	-19
16	1514.06	20,781	257	3,272	0	0	0	3,018	3
17	1514.94	21,136	355	3,521	0	0	0	3,163	-3
18	1513.19	20,433	-703	3,818	0	1,251	0	3,271	1
19	1514.37	20,905	472	3,955	0	364	0	3,119	0
20	1516.42	21,741	836	3,755	0	0	0	2,924	5
21	1516.79	21,893	152	3,151	0	0	0	3,008	9
22	1515.15	21,221	-672	463	5	1,201	5	0	66
23	1513.73	20,648	-573	1,775	6	2,329	6	0	-19
24	1511.40	19,727	-921	1,820	3	710	3	2,016	-15
25	1513.20	20,437	710	1,966	21	1,281	21	0	25
26	1512.82	20,286	-151	2,365	274	574	274	1,924	-18
27	1512.98	20,349	63	1,609	63	529	63	1,004	-13
28	1514.33	20,889	540	526	36	0	36	0	14
29	1516.33	21,704	815	821	24	0	24	0	-6
<b>Total</b>			<b>1,056</b>	<b>70,113</b>	<b>446</b>	<b>10,857</b>	<b>446</b>	<b>58,269</b>	<b>69</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**March 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Feb 29	1516.33	21,704							
1	1513.30	20,476	-1,228	2,349	24	0	24	3,567	-10
2	1512.70	20,238	-238	2,162	31	0	31	2,391	-9
3	1512.60	20,199	-39	2,363	31	0	31	2,392	-10
4	1512.71	20,242	43	1,763	25	0	25	1,709	-11
5	1512.73	20,250	8	2,182	20	0	20	2,164	-10
6	1511.45	19,746	-504	157	17	0	17	656	-5
7	1511.74	19,860	114	242	15	0	15	124	-4
8	1518.85	22,753	2,893	2,937	14	0	14	0	-44
9	1514.39	20,913	-1,840	2,331	12	0	12	4,151	-20
10	1514.14	20,813	-100	2,324	11	684	11	1,735	-5
11	1515.48	21,356	543	1,512	10	925	10	0	-44
12	1513.34	20,492	-864	2,641	9	0	9	3,490	-15
13	1512.98	20,349	-143	3,135	8	1,335	8	1,940	-3
14	1510.09	19,219	-1,130	383	7	943	7	565	-5
15	1515.79	21,482	2,263	3,046	6	754	6	0	-29
16	1514.32	20,885	-597	2,656	6	0	6	3,247	-6
17	1514.12	20,805	-80	2,747	6	545	6	2,282	0
18	1512.98	20,349	-456	4,061	5	1,440	5	3,075	-2
19	1512.70	20,238	-111	3,798	5	0	5	3,909	0
20	1513.73	20,648	410	3,580	3	996	3	2,172	-2
21	1512.47	20,147	-501	1,229	3	1,790	3	0	60
22	1522.62	24,369	4,222	6,024	3	1,689	3	0	-113
23	1522.59	24,356	-13	4,124	2	711	2	3,418	-8
24	1522.43	24,287	-69	5,461	2	2,084	2	3,445	-1
25	1520.70	23,540	-747	5,463	2	2,776	2	3,431	-3
26	1523.01	24,540	1,000	5,121	2	1,240	2	2,880	-1
27	1513.81	20,680	-3,860	1,947	2	2,102	2	3,703	-2
28	1509.80	19,107	-1,573	1,248	2	2,673	2	146	-2
29	1515.20	21,242	2,135	4,514	2	2,359	2	0	-20
30	1514.45	20,938	-304	3,979	2	931	2	3,349	-3
31	1511.76	19,868	-1,070	4,187	1	2,432	1	2,823	-2
<b>Total</b>			-1,836	89,666	288	28,409	288	62,764	-329

1/ Values supplied by LADWP, not verified by DWR.



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**April 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Mar 31	1511.76	19,868							
1	1511.85	19,903	35	4,116	1	1,609	1	2,472	0
2	1515.00	21,161	1,258	5,609	1	793	1	3,558	0
3	1515.05	21,181	20	5,335	1	0	1	5,315	0
4	1511.97	19,950	-1,231	146	1	4	1	1,374	1
5	1516.60	21,815	1,865	3,722	1	1,830	1	0	-27
6	1517.78	22,304	489	3,746	1	567	1	2,690	0
7	1519.17	22,888	584	4,172	0	679	0	2,902	-7
8	1522.37	24,261	1,373	6,574	0	2,249	0	2,953	1
9	1520.86	23,608	-653	4,128	0	1,938	0	2,841	-2
10	1514.39	20,913	-2,695	1,914	0	1,914	0	2,697	2
11	1516.71	21,860	947	1,710	0	754	0	0	-9
12	1516.59	21,811	-49	4,407	0	1,623	0	2,834	1
13	1516.61	21,819	8	4,569	0	1,285	0	3,275	-1
14	1520.74	23,557	1,738	6,179	0	1,587	0	2,854	0
15	1519.53	23,041	-516	2,385	0	0	0	2,902	1
16	1521.43	23,854	813	3,780	0	0	0	2,967	0
17	1516.17	21,638	-2,216	87	0	0	0	2,304	1
18	1512.30	20,080	-1,558	462	0	2,042	0	0	22
19	1514.02	20,765	685	3,383	0	824	0	1,876	2
20	1519.89	23,194	2,429	5,435	0	0	0	3,005	-1
21	1521.08	23,703	509	4,842	0	1,614	0	2,717	-2
22	1519.58	23,062	-641	2,484	0	540	0	2,586	1
23	1518.40	22,564	-498	2,861	0	560	0	2,799	0
24	1513.38	20,508	-2,056	1,351	0	1,181	0	2,225	-1
25	1513.30	20,476	-32	1,900	0	1,944	0	0	12
26	1514.43	20,930	454	3,854	0	1,052	0	2,349	1
27	1514.84	21,095	165	3,434	0	423	0	2,845	-1
28	1516.40	21,732	637	3,086	0	0	0	2,449	0
29	1514.65	21,018	-714	3,087	0	1,434	0	2,367	0
30	1514.96	21,144	126	3,239	0	935	0	2,178	0
<b>Total</b>			<b>1,276</b>	<b>101,997</b>	<b>6</b>	<b>29,381</b>	<b>6</b>	<b>71,334</b>	<b>-6</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**May 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Apr 30	1514.96	21,144							
1	1514.59	20,994	-150	2,682	0	2,841	0	0	9
2	1512.43	20,131	-863	3,170	0	4,062	0	0	29
3	1514.12	20,805	674	3,578	0	2,899	0	0	-5
4	1513.56	20,580	-225	2,731	0	1,676	0	1,279	-1
5	1510.71	19,458	-1,122	3,058	0	1,668	0	2,511	-1
6	1511.60	19,805	347	2,959	0	2,613	0	0	1
7	1508.70	18,687	-1,118	2,348	0	593	0	2,871	-2
8	1503.71	16,841	-1,846	116	0	1,265	0	699	2
9	1498.50	15,010	-1,831	32	0	1,868	0	0	5
10	1508.35	18,555	3,545	4,194	0	660	0	0	11
11	1512.55	20,179	1,624	4,692	0	813	0	2,255	0
12	1513.00	20,357	178	4,306	0	1,568	0	2,559	-1
13	1515.80	21,486	1,129	4,156	0	3,125	0	0	98
14	1512.00	19,962	-1,524	3,602	0	1,546	0	3,581	1
15	1509.10	18,840	-1,122	3,182	0	1,569	0	2,733	-2
16	1510.30	19,300	460	2,658	0	2,148	0	0	-50
17	1516.20	21,650	2,350	3,962	0	1,522	0	0	-90
18	1515.90	21,527	-123	5,288	0	1,536	0	3,876	1
19	1515.95	21,548	21	5,979	0	1,897	0	4,061	0
20	1514.60	20,998	-550	4,673	0	1,125	0	4,096	-2
21	1519.10	22,859	1,861	7,756	0	1,637	0	4,259	1
22	1509.30	18,916	-3,943	846	0	955	0	3,833	-1
23	1504.20	17,019	-1,897	707	0	2,720	0	0	116
24	1514.95	21,140	4,121	5,336	0	1,058	0	0	-157
25	1510.70	19,455	-1,685	4,293	0	1,877	0	4,039	-62
26	1514.40	20,917	1,462	6,577	0	1,112	0	3,964	-39
27	1515.80	21,486	569	7,111	0	2,453	0	4,089	0
28	1516.30	21,691	205	7,798	0	3,664	0	3,929	0
29	1521.50	23,884	2,193	7,315	0	1,058	0	4,063	-1
30	1517.10	22,021	-1,863	3,455	0	5,400	0	0	82
31	1516.40	21,732	-289	4,479	0	4,731	0	0	-37
<b>Total</b>			<b>588</b>	<b>123,039</b>	<b>0</b>	<b>63,659</b>	<b>0</b>	<b>58,697</b>	<b>-95</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**June 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
May 31	1516.40	21,732							
1	1512.30	20,080	-1,652	6,239	0	3,723	0	4,169	1
2	1513.00	20,357	277	6,280	0	1,734	0	4,268	-1
3	1518.70	22,690	2,333	5,742	0	954	0	2,456	1
4	1519.50	23,028	338	4,221	0	3,809	0	0	-74
5	1513.50	20,556	-2,472	1,715	0	4,407	0	0	220
6	1517.40	22,146	1,590	4,750	0	3,278	0	0	118
7	1526.01	25,865	3,719	7,443	0	3,656	0	0	-68
8	1524.82	25,335	-530	7,116	0	3,427	0	4,218	-1
9	1518.02	22,405	-2,930	4,522	0	3,637	0	3,818	3
10	1519.69	23,109	704	8,145	0	3,542	0	3,897	-2
11	1529.49	27,446	4,337	10,694	0	3,091	0	3,266	0
12	1518.42	22,572	-4,874	2,642	0	2,449	0	5,067	0
13	1514.63	21,010	-1,562	2,330	0	3,934	0	0	42
14	1517.92	22,363	1,353	5,327	0	3,953	0	0	-21
15	1512.60	20,199	-2,164	5,183	0	1,418	0	5,928	-1
16	1517.57	22,217	2,018	5,639	0	1,502	0	2,119	0
17	1522.82	24,457	2,240	5,521	0	717	0	2,564	0
18	1518.97	22,804	-1,653	3,422	0	0	0	5,075	0
19	1512.58	20,191	-2,613	2,378	0	754	0	4,237	0
20	1512.20	20,041	-150	4,206	0	4,345	0	0	-11
21	1518.90	22,774	2,733	6,175	0	3,368	0	0	-74
22	1521.20	23,754	980	6,291	0	2,432	0	2,878	-1
23	1522.70	24,404	650	6,668	0	1,458	0	4,561	1
24	1520.50	23,454	-950	7,140	0	3,344	0	4,746	0
25	1524.00	24,974	1,520	8,299	0	2,306	0	4,476	3
26	1514.50	20,958	-4,016	3,179	0	3,783	0	3,410	-2
27	1507.80	18,347	-2,611	698	0	3,380	0	0	71
28	1521.10	23,711	5,364	6,765	0	1,337	0	0	-64
29	1516.40	21,732	-1,979	2,061	0	1,872	0	2,169	1
30	1516.30	21,691	-41	5,681	0	2,121	0	3,602	1
<b>Total</b>			<b>-41</b>	<b>156,472</b>	<b>0</b>	<b>79,731</b>	<b>0</b>	<b>76,924</b>	<b>142</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**July 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jun 30	1516.30	21,691							
1	1520.70	23,540	1,849	8,517	0	3,330	0	3,337	-1
2	1525.70	25,727	2,187	8,772	0	1,929	0	4,657	1
3	1508.02	18,430	-7,297	1,901	0	3,317	0	5,881	0
4	1511.40	19,727	1,297	2,455	0	1,286	0	0	128
5	1506.00	17,677	-2,050	4,374	0	3,270	0	3,156	2
6	1511.10	19,610	1,933	7,316	0	1,875	0	3,506	-2
7	1510.40	19,338	-272	6,484	0	3,141	0	3,615	0
8	1512.10	20,001	663	6,693	0	2,081	0	3,950	1
9	1512.90	20,317	316	6,013	0	851	0	4,845	-1
10	1514.50	20,958	641	3,923	0	1,666	0	1,617	1
11	1511.00	19,571	-1,387	2,061	0	3,409	0	0	-39
12	1519.30	22,943	3,372	5,013	0	1,632	0	0	-9
13	1518.70	22,690	-253	6,028	0	2,349	0	3,933	1
14	1519.90	23,198	508	5,353	0	982	0	3,863	0
15	1521.80	24,013	815	4,748	0	914	0	3,019	0
16	1520.10	23,283	-730	5,454	0	1,459	0	4,725	0
17	1507.80	18,347	-4,936	1,317	0	2,270	0	3,983	0
18	1506.59	17,895	-452	2,011	0	2,024	0	438	-1
19	1522.90	24,491	6,596	6,689	0	0	0	0	-93
20	1525.98	25,852	1,361	5,765	0	1,525	0	2,881	2
21	1514.97	21,148	-4,704	2,477	0	2,477	0	4,702	-2
22	1520.23	23,339	2,191	7,068	0	975	0	3,903	1
23	1514.38	20,909	-2,430	2,803	0	752	0	4,481	0
24	1508.76	18,710	-2,199	3,892	0	2,124	0	3,965	-2
25	1506.20	17,751	-959	1,247	0	2,242	0	0	36
26	1512.10	20,001	2,250	4,272	0	1,982	0	0	-40
27	1516.04	21,584	1,583	5,890	0	1,448	0	2,859	0
28	1515.15	21,221	-363	5,807	0	2,394	0	3,775	-1
29	1517.35	22,125	904	6,379	0	1,935	0	3,540	0
30	1515.00	21,161	-964	5,917	0	1,473	0	5,409	1
31	1507.65	18,291	-2,870	3,587	0	2,399	0	4,058	0
<b>Total</b>			<b>-3,400</b>	<b>150,226</b>	<b>0</b>	<b>59,511</b>	<b>0</b>	<b>94,098</b>	<b>-17</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**August 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jul 31	1507.65	18,291							
1	1506.70	17,936	-355	2,717	0	2,602	0	469	-1
2	1514.40	20,917	2,981	5,504	0	2,433	0	0	-90
3	1517.90	22,354	1,437	6,242	0	1,823	0	2,962	-20
4	1517.92	22,363	9	5,042	0	730	0	4,304	1
5	1518.60	22,648	285	5,646	0	1,003	0	4,357	-1
6	1521.40	23,841	1,193	6,940	0	1,755	0	3,991	-1
7	1512.85	20,298	-3,543	2,788	0	2,748	0	3,584	1
8	1508.00	18,423	-1,875	2,359	0	4,123	0	0	-111
9	1517.57	22,217	3,794	5,511	0	2,032	0	0	315
10	1519.00	22,816	599	5,313	0	1,599	0	3,114	-1
11	1516.31	21,695	-1,121	3,901	0	402	0	4,621	1
12	1512.60	20,199	-1,496	3,956	0	1,837	0	3,615	0
13	1514.28	20,869	670	4,973	0	634	0	3,669	0
14	1513.50	20,556	-313	2,369	0	1,583	0	1,098	-1
15	1514.30	20,877	321	3,594	0	3,387	0	0	114
16	1516.20	21,650	773	5,837	0	2,069	0	2,995	0
17	1516.10	21,609	-41	6,057	0	2,261	0	3,838	1
18	1517.80	22,313	704	6,939	0	2,663	0	3,572	0
19	1517.10	22,021	-292	7,111	0	2,759	0	4,642	-2
20	1521.80	24,013	1,992	8,838	0	1,757	0	5,090	1
21	1516.80	21,897	-2,116	3,543	0	3,230	0	2,428	-1
22	1513.00	20,357	-1,540	3,046	0	4,768	0	0	182
23	1514.40	20,917	560	7,016	0	3,079	0	3,378	1
24	1513.20	20,437	-480	6,820	0	3,990	0	3,310	0
25	1518.40	22,564	2,127	9,197	0	2,832	0	4,238	0
26	1518.70	22,690	126	6,863	0	2,089	0	4,648	0
27	1523.30	24,666	1,976	9,691	0	2,963	0	4,751	-1
28	1515.10	21,201	-3,465	271	0	3,071	0	665	0
29	1508.10	18,460	-2,741	1,701	0	4,431	0	0	-11
30	1512.90	20,317	1,857	5,700	0	1,426	0	2,378	-39
31	1513.00	20,357	40	5,778	0	2,078		3,660	0
<b>Total</b>			2,066	161,263	0	74,157	0	85,377	337

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**September 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Aug 31	1513.00	20,357							
1	1520.30	23,369	3,012	9,105	0	2,876	0	3,218	1
2	1519.40	22,986	-383	7,493	0	3,669	0	4,207	0
3	1523.60	24,798	1,812	9,060	0	2,523	0	4,725	0
4	1517.30	22,104	-2,694	4,226	0	4,132	0	2,787	-1
5	1514.20	20,837	-1,267	2,540	0	3,845	0	0	38
6	1512.60	20,199	-638	5,093	0	3,945	0	1,785	-1
7	1516.10	21,609	1,410	7,048	0	2,368	0	3,271	1
8	1518.50	22,606	997	6,752	0	1,436	0	4,318	-1
9	1519.50	23,028	422	6,876	0	2,066	0	4,387	-1
10	1521.70	23,970	942	7,438	0	1,870	0	4,627	1
11	1519.40	22,986	-984	2,699	0	817	0	2,866	0
12	1514.85	21,099	-1,887	2,443	0	4,187	0	0	-143
13	1516.85	21,918	819	5,652	0	2,502	0	2,331	0
14	1517.30	22,104	186	5,704	0	1,101	0	4,417	0
15	1517.20	22,063	-41	6,359	0	3,086	0	3,314	0
16	1518.70	22,690	627	6,019	0	1,433	0	3,960	1
17	1523.40	24,710	2,020	8,085	0	1,788	0	4,277	0
18	1516.70	21,856	-2,854	2,430	0	2,139	0	3,144	-1
19	1507.80	18,347	-3,509	1,373	0	4,859	0	0	-23
20	1510.90	19,532	1,185	4,800	0	2,486	0	1,128	-1
21	1516.00	21,568	2,036	7,245	0	2,271	0	2,940	2
22	1516.20	21,650	82	7,457	0	2,174	0	5,200	-1
23	1521.30	23,798	2,148	8,710	0	3,662	0	2,899	-1
24	1526.40	26,040	2,242	8,957	0	3,030	0	3,686	1
25	1520.90	23,625	-2,415	1,850	0	2,639	0	1,624	-2
26	1511.91	19,927	-3,698	1,605	0	5,305	0	0	2
27	1513.35	20,496	569	6,100	0	3,506	0	1,922	-103
28	1514.50	20,958	462	6,417	0	2,937	0	3,019	1
29	1520.90	23,625	2,667	6,760	0	2,920	0	1,171	-2
30	1522.00	24,100	475	6,319	0	3,181	0	2,666	3
<b>Total</b>			<b>3,743</b>	<b>172,615</b>	<b>0</b>	<b>84,753</b>	<b>0</b>	<b>83,889</b>	<b>-230</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**October 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Sep 30	1522.00	24,100							
1	1517.90	22,354	-1,746	4,338	0	3,292	0	2,791	-1
2	1512.80	20,278	-2,076	561	0	2,812	0	0	175
3	1511.10	19,610	-668	3,954	0	2,300	0	2,322	0
4	1512.60	20,199	589	4,613	0	1,828	0	2,197	1
5	1509.50	18,992	-1,207	3,223	0	691	0	3,738	-1
6	1511.25	19,668	676	5,281	0	2,502	0	2,103	0
7	1515.80	21,486	1,818	5,965	0	2,822	0	1,326	1
8	1521.50	23,884	2,398	7,102	0	1,985	0	2,718	-1
9	1513.40	20,516	-3,368	1,513	0	2,336	0	2,545	0
10	1507.00	18,048	-2,468	1,226	0	3,581	0	0	-113
11	1508.60	18,650	602	4,749	0	1,689	0	2,458	0
12	1514.70	21,039	2,389	7,043	0	1,646	0	3,009	1
13	1516.90	21,939	900	4,758	0	1,089	0	2,768	-1
14	1515.10	21,201	-738	3,378	0	1,469	0	2,647	0
15	1515.90	21,527	326	4,360	0	1,999	0	2,037	2
16	1514.20	20,837	-690	1,893	0	2,618	0	0	35
17	1513.20	20,437	-400	3,435	0	4,368	0	0	533
18	1510.20	19,261	-1,176	4,288	0	2,631	0	2,833	0
19	1517.80	22,313	3,052	4,475	0	1,440	0	0	17
20	1522.65	24,382	2,069	6,181	7	995	7	3,208	91
21	1530.00	27,681	3,299	6,288	0	2,822	0	0	-167
22	1522.75	24,426	-3,255	1,831	0	2,191	0	2,893	-2
23	1511.70	19,844	-4,582	204	0	1,871	0	2,916	1
24	1507.65	18,291	-1,553	2,277	0	3,463	0	0	-367
25	1515.30	21,282	2,991	4,106	0	1,531	0	0	416
26	1511.20	19,649	-1,633	3,065	0	825	0	3,792	-81
27	1513.25	20,457	808	2,831	8	490	8	1,524	-9
28	1511.65	19,825	-632	3,564	1	2,002	1	2,198	4
29	1518.10	22,438	2,613	4,039	1	764	1	664	2
30	1511.00	19,571	-2,867	250	1	668	1	2,446	-3
31	1506.45	17,843	-1,728	2,784	1	2,752	1	1,759	-1
<b>Total</b>			<b>-6,257</b>	<b>113,575</b>	<b>19</b>	<b>63,472</b>	<b>19</b>	<b>56,892</b>	<b>532</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**November 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Oct 31	1506.45	17,843							
1	1509.70	19,069	1,226	2,659	0	1,374	0	0	-59
2	1510.25	19,281	212	1,749	0	1,666	0	0	129
3	1510.00	19,184	-97	2,134	0	2,101	0	0	-130
4	1511.55	19,786	602	2,228	0	1,592	0	0	-34
5	1513.25	20,457	671	1,507	0	898	0	0	62
6	1511.00	19,571	-886	139	0	1,123	0	0	98
7	1509.65	19,050	-521	1,773	0	2,226	0	0	-68
8	1512.50	20,159	1,109	2,895	0	1,971	0	0	185
9	1515.40	21,323	1,164	2,698	0	1,558	0	0	24
10	1517.70	22,271	948	2,614	0	1,578	0	0	-88
11	1519.80	23,155	884	2,428	0	1,542	0	0	-2
12	1508.30	18,536	-4,619	2,261	0	882	0	5,997	-1
13	1496.80	14,432	-4,104	1,442	0	0	0	5,545	-1
14	1493.10	13,210	-1,222	195	0	0	0	1,417	0
15	1493.10	13,210	0	0	0	0	0	0	0
16	1493.10	13,210	0	0	0	0	0	0	0
17	1493.00	13,178	-32	0	0	0	0	0	-32
18	1493.10	13,210	32	0	0	0	0	0	32
19	1493.10	13,210	0	0	0	0	0	0	0
20	1493.10	13,210	0	0	0	0	0	0	0
21	1493.10	13,210	0	0	0	0	0	0	0
22	1505.63	17,541	4,331	4,355	0	16	0	0	-8
23	1507.06	18,070	529	5,580	0	2,032	0	0	-3,019
24	1510.90	19,532	1,462	8,275	0	2,126	0	3,018	-1,669
25	1504.30	17,055	-2,477	780	0	0	0	4,687	1,430
26	1507.80	18,347	1,292	4,097	0	0	0	3,258	453
27	1511.70	19,844	1,497	4,378	0	0	0	2,805	-76
28	1518.10	22,438	2,594	3,281	0	687	0	2,881	2,881
29	1516.25	21,671	-767	4,419	0	0	0	5,185	-1
30	1512.75	20,258	-1,413	3,448	0	0	0	4,860	-1
<b>Total</b>			<b>2,415</b>	<b>65,335</b>	<b>0</b>	<b>23,372</b>	<b>0</b>	<b>39,653</b>	<b>105</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**December 2004**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Nov 30	1512.75	20,258							
1	1518.40	22,564	2,306	2,322	0	0	0	0	-16
2	1514.85	21,099	-1,465	2,395	0	578	0	3,281	-1
3	1511.90	19,923	-1,176	2,871	0	0	0	4,049	2
4	1510.60	19,416	-507	1,939	0	0	0	2,145	-301
5	1511.30	19,688	272	498	0	0	0	0	-226
6	1514.10	20,797	1,109	3,523	0	474	0	1,942	2
7	1512.60	20,199	-598	4,048	0	1,000	0	3,645	-1
8	1512.60	20,199	0	4,198	0	1,065	0	3,133	0
9	1508.20	18,498	-1,701	1,858	0	657	0	2,902	0
10	1514.30	20,877	2,379	6,353	0	973	0	3,001	0
11	1507.00	18,048	-2,829	3,236	0	1,285	0	4,779	-1
12	1509.75	19,088	1,040	2,863	0	1,776	0	0	-47
13	1509.65	19,050	-38	4,204	0	2,999	0	1,243	0
14	1510.90	19,532	482	3,729	0	0	0	3,246	-1
15	1511.80	19,883	351	4,068	0	0	0	3,718	1
16	1512.50	20,159	276	4,456	0	676	0	3,503	-1
17	1514.10	20,797	638	5,033	0	550	0	3,847	2
18	1508.30	18,536	-2,261	1,279	0	773	0	2,766	-1
19	1506.90	18,011	-525	1,132	0	1,718	0	0	61
20	1513.30	20,476	2,465	5,883	0	1,662	0	1,756	0
21	1518.00	22,396	1,920	6,478	0	545	0	4,015	2
22	1517.80	22,313	-83	4,986	0	546	0	4,523	0
23	1514.90	21,120	-1,193	2,983	0	0	0	4,175	-1
24	1514.40	20,917	-203	4,116	0	726	0	3,593	0
25	1510.90	19,532	-1,385	0	0	0	0	0	-1,385
26	1511.70	19,844	312	296	0	0	0	0	16
27	1513.70	20,636	792	3,835	0	1,188	0	1,855	0
28	1513.90	20,716	80	3,453	550	0	550	3,374	1
29	1518.90	22,774	2,058	6,571	434	890	434	3,628	5
30	1521.90	24,057	1,283	6,068	190	0	190	4,778	-7
31	1522.40	24,274	217	4,686	463	0	463	4,317	-152
<b>Total</b>			4,016	109,360	1,637	20,081	1,637	83,214	-2,049

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**January 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Dec 31	1522.40	24,274							
1	1516.40	21,732	-2,542	2,152	199	0	199	4,827	133
2	1516.10	21,609	-123	256	214	0	214	553	174
3	1520.70	23,540	1,931	1,754	995	790	995	0	967
4	1516.80	21,897	-1,643	1,972	471	0	471	3,915	300
5	1520.10	23,283	1,386	1,332	227	11	227	0	65
6	1519.00	22,816	-467	2,084	186	0	186	2,562	11
7	1516.20	21,650	-1,166	1,525	436	0	436	3,192	501
8	1513.70	20,636	-1,014	901	1,385	1,164	1,385	0	-751
9	1523.90	24,930	4,294	2,159	11,577	0	11,577	0	2,135
10	1522.40	24,274	-656	512	7,245	1,405	7,245	0	237
11	1510.40	19,338	-4,936	541	1,956	0	1,956	0	-5,477
12	1512.50	20,159	821	3,364	1,112	0	1,112	0	-2,543
13	1515.93	21,537	1,378	4,127	697	0	697	703	-2,046
14	1521.70	23,970	2,433	3,384	490	822	490	0	-129
15	1518.90	22,774	-1,196	397	373	0	373	1,942	349
16	1517.60	22,229	-545	358	282	0	282	1,154	251
17	1518.70	22,690	461	322	251	0	251	0	139
18	1520.10	23,283	593	473	214	0	214	0	120
19	1521.60	23,927	644	403	179	0	179	0	241
20	1521.90	24,057	130	4	157	0	157	0	126
21	1522.30	24,230	173	44	130	0	130	0	129
22	1522.50	24,317	87	0	122	0	122	0	87
23	1522.80	24,448	131	0	116	0	116	0	131
24	1523.30	24,666	218	54	116	0	116	0	164
25	1523.60	24,798	132	4	113	0	113	0	128
26	1519.60	23,070	-1,728	0	107	0	107	1,827	99
27	1519.80	23,155	85	0	103	0	103	0	85
28	1520.10	23,283	128	0	104	0	104	0	128
29	1520.30	23,369	86	0	94	0	94	0	86
30	1520.40	23,411	42	0	88	0	88	0	42
31	1514.70	21,039	-2,372	63	85	0	85	2,446	11
<b>Total</b>			<b>-3,235</b>	<b>28,185</b>	<b>29,824</b>	<b>4,192</b>	<b>29,824</b>	<b>23,121</b>	<b>-4,107</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**February 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jan 31	1514.70	21,039							
1	1506.20	17,751	-3,288	0	83	0	83	3,215	-73
2	1507.10	18,085	334	332	76	0	76	0	2
3	1500.20	15,597	-2,488	1,320	76	0	76	3,657	-151
4	1504.40	17,091	1,494	3,361	74	0	74	1,833	-34
5	1505.30	17,419	328	292	74	0	74	0	36
6	1506.10	17,714	295	241	69	0	69	0	54
7	1510.10	19,223	1,509	1,688	66	0	66	0	-179
8	1506.70	17,936	-1,287	1,442	61	0	61	2,516	-213
9	1506.50	17,862	-74	2,307	27	0	27	2,374	-7
10	1506.50	17,862	0	2,245	24	0	24	2,241	-4
11	1506.00	17,677	-185	2,252	86	0	86	2,473	36
12	1506.30	17,788	111	5	109	0	109	0	106
13	1511.80	19,883	2,095	2,053	108	0	108	0	42
14	1513.00	20,357	474	3,537	100	0	100	2,765	-298
15	1508.60	18,650	-1,707	3,363	83	0	83	5,007	-63
16	1509.70	19,069	419	2,534	69	0	69	2,057	-58
17	1515.70	21,445	2,376	2,385	60	0	60	0	-9
18	1516.30	21,691	246	2,872	155	0	155	2,811	185
19	1520.30	23,369	1,678	5,795	195	0	195	5,322	1,205
20	1526.30	25,995	2,626	7,681	1,971	0	1,971	3,314	-1,741
21	1530.30	27,820	1,825	3,360	6,538	0	6,538	3,434	1,899
22	1522.70	24,404	-3,416	404	5,210	0	5,210	1,259	-2,561
23	1516.20	21,650	-2,754	391	4,439	0	4,439	830	-2,315
24	1511.90	19,923	-1,727	160	2,216	0	2,216	1,072	-815
25	1510.30	19,300	-623	425	981	0	981	1,166	118
26	1509.40	18,954	-346	412	682	0	682	1,775	1,017
27	1508.90	18,763	-191	967	581	0	581	1,376	218
28	1508.50	18,612	-151	537	514	0	514	875	187
<b>Total</b>			<b>-2,427</b>	<b>52,361</b>	<b>24,727</b>	<b>0</b>	<b>24,727</b>	<b>51,372</b>	<b>-3,416</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**March 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Feb 28	1508.50	18,612							
1	1508.20	18,498	-114	491	520	0	520	886	281
2	1508.00	18,423	-75	660	512	0	512	1,024	289
3	1507.70	18,310	-113	464	483	0	483	643	66
4	1507.40	18,197	-113	356	467	0	467	601	132
5	1507.50	18,235	37	718	446	0	446	834	153
6	1507.50	18,235	0	621	407	0	407	664	43
7	1507.00	18,048	-187	359	361	0	361	485	-61
8	1506.90	18,011	-37	505	315	0	315	467	-75
9	1506.90	18,011	0	795	260	0	260	715	-80
10	1506.10	17,714	-297	142	231	0	231	310	-129
11	1506.20	17,751	37	0	207	0	207	47	84
12	1506.60	17,899	148	0	189	0	189	0	148
13	1507.10	18,085	186	0	173	0	173	0	186
14	1507.60	18,272	187	0	180	0	180	0	187
15	1508.00	18,423	150	0	232	0	232	0	150
16	1508.30	18,536	113	0	222	0	222	0	113
17	1508.70	18,687	152	0	207	0	207	0	152
18	1509.20	18,878	190	0	200	0	200	0	190
19	1509.70	19,069	191	0	201	0	201	0	191
20	1510.10	19,223	154	0	179	0	179	0	154
21	1502.17	16,288	-2,935	0	133	0	133	0	-2,935
22	1507.20	18,123	1,835	0	184	0	184	0	1,835
23	1507.80	18,347	225	0	289	0	289	0	225
24	1508.30	18,536	188	0	242	0	242	0	188
25	1506.40	17,825	-711	0	201	0	201	282	-429
26	1503.90	16,910	-915	0	176	0	176	312	-603
27	1501.40	16,018	-892	0	161	0	161	41	-851
28	1501.40	16,018	0	0	152	0	152	100	100
29	1501.70	16,124	106	0	146	0	146	0	106
30	1502.40	16,372	248	0	143	0	143	0	248
31	1502.52	16,415	43	0	133	0	133	0	43
<b>Total</b>			-2,197	5,111	7,952	0	7,952	7,411	103

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**April 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Mar 31	1502.52	16,415							
1	1502.90	16,550	135	0	136	0	136	0	135
2	1503.30	16,694	144	0	134	0	134	0	144
3	1503.65	16,820	126	0	127	0	127	0	126
4	1510.31	19,302	2,482	2,354	134	0	134	0	128
5	1517.80	22,313	3,011	2,866	133	0	133	0	145
6	1520.47	23,441	1,128	3,005	124	0	124	1,212	-665
7	1512.90	20,317	-3,124	2,819	110	0	110	5,833	-110
8	1516.70	21,856	1,539	6,706	102	0	102	5,165	-2
9	1511.60	19,805	-2,051	2,216	93	0	93	4,275	8
10	1511.80	19,883	78	0	83	0	83	0	78
11	1519.90	23,198	3,315	5,153	71	0	71	1,764	-74
12	1519.30	22,943	-255	4,202	76	0	76	4,440	-17
13	1522.20	24,187	1,244	4,624	85	0	85	3,367	-13
14	1520.80	23,583	-604	2,783	76	0	76	3,359	-28
15	1518.00	22,396	-1,187	1,458	66	0	66	2,621	-24
16	1513.30	20,476	-1,920	1,386	59	0	59	3,285	-21
17	1517.50	22,188	1,712	2,352	64	0	64	617	-23
18	1530.20	27,774	5,586	9,186	71	0	71	3,560	-40
19	1522.10	24,143	-3,631	2,321	75	0	75	5,906	-46
20	1522.40	24,274	131	2,022	78	0	78	1,833	-58
21	1529.30	27,358	3,084	4,733	75	0	75	1,583	-66
22	1523.50	24,754	-2,604	1,904	71	0	71	4,458	-50
23	1527.20	26,400	1,646	3,662	63	0	63	1,972	-44
24	1531.40	28,333	1,933	3,817	56	0	56	1,849	-35
25	1530.20	27,774	-559	3,196	54	0	54	3,664	-91
26	1531.50	28,380	606	429	58	0	58	0	177
27	1528.30	26,900	-1,480	1,735	82	0	82	3,165	-50
28	1533.20	29,181	2,281	2,292	90	171	90	0	160
29	1529.70	27,543	-1,638	321	78	0	78	0	-1,959
30	1527.10	26,355	-1,188	366	72	0	72	1,332	-222
<b>Total</b>			<b>9,940</b>	<b>77,908</b>	<b>2,596</b>	<b>171</b>	<b>2,596</b>	<b>65,260</b>	<b>-2,537</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**May 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Apr 30	1527.10	26,355							
1	1527.90	26,718	363	352	65	0	65	0	11
2	1530.00	27,681	964	2,708	60	0	60	1,640	-104
3	1524.00	24,974	-2,708	293	63	0	63	2,958	-43
4	1518.30	22,522	-2,452	287	66	0	66	2,691	-48
5	1517.30	22,104	-417	619	87	1,152	87	0	116
6	1516.50	21,773	-331	760	77	1,183	77	0	92
7	1517.45	22,167	393	2,727	74	715	74	1,401	-218
8	1520.00	23,241	1,074	2,207	76	804	76	274	-55
9	1526.60	26,130	2,889	3,629	73	822	73	0	82
10	1520.98	23,660	-2,470	1,717	68	1,332	68	2,734	-121
11	1523.10	24,579	919	2,173	63	1,302	63	0	48
12	1521.10	23,711	-867	3,909	59	1,749	59	2,925	-102
13	1522.90	24,491	780	3,202	55	2,446	55	0	24
14	1518.50	22,606	-1,886	2,784	52	1,972	52	2,601	-97
15	1517.65	22,250	-356	2,873	50	3,119	50	0	-110
16	1520.45	23,433	1,183	3,395	50	2,325	50	0	113
17	1516.40	21,732	-1,700	3,829	49	2,221	49	3,170	-138
18	1517.10	22,021	289	3,140	48	2,554	48	261	-36
19	1520.10	23,283	1,262	6,249	45	2,092	45	2,861	-34
20	1523.40	24,710	1,427	3,993	44	2,523	44	0	-43
21	1523.85	24,908	197	2,889	41	2,798	41	0	106
22	1520.00	23,241	-1,667	4,775	39	5,194	39	1,129	-119
23	1520.10	23,283	43	4,723	40	3,974	40	671	-35
24	1520.00	23,241	-43	6,430	39	3,175	39	3,264	-34
25	1524.10	25,018	1,777	2,405	38	577	38	0	-51
26	1523.80	24,886	-132	5,607	37	2,501	37	3,162	-76
27	1526.70	26,175	1,289	4,643	37	3,440	37	0	86
28	1513.40	20,516	-5,658	160	37	3,390	37	2,360	-68
29	1513.70	20,636	120	2,611	37	2,424	37	0	-67
30	1514.70	21,039	402	2,858	143	2,518	143	0	62
31	1512.30	20,080	-959	2,102	133	1,053	133	1,894	-114
<b>Total</b>			<b>-6,275</b>	<b>90,049</b>	<b>1,845</b>	<b>59,355</b>	<b>1,845</b>	<b>35,996</b>	<b>-973</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**June 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
May 31	1512.30	20,080							
1	1525.10	25,460	5,380	6,125	35	591	35	119	-35
2	1520.50	23,454	-2,006	4,777	34	2,593	34	4,121	-69
3	1529.60	27,496	4,042	7,644	34	3,810	34	0	208
4	1518.10	22,438	-5,058	2,233	33	3,483	33	3,574	-234
5	1508.50	18,612	-3,826	1,023	33	5,003	33	0	154
6	1514.30	20,877	2,265	4,817	32	2,305	32	0	-247
7	1514.95	21,140	263	4,996	31	2,136	31	2,535	-62
8	1517.60	22,229	1,089	4,055	30	2,897	30	0	-69
9	1517.90	22,354	125	5,160	29	2,099	29	2,879	-57
10	1524.30	25,106	2,752	4,856	28	1,833	28	0	-271
11	1517.50	22,188	-2,918	3,210	27	3,010	27	3,013	-105
12	1510.30	19,300	-2,888	1,902	27	4,752	27	0	-38
13	1516.85	21,918	2,618	5,960	26	3,323	26	0	-19
14	1520.60	23,497	1,579	4,535	24	3,008	24	0	52
15	1522.70	24,404	907	5,528	23	1,707	23	2,891	-23
16	1522.00	24,100	-304	5,073	23	2,416	23	2,940	-21
17	1526.70	26,175	2,075	3,914	24	1,847	24	0	8
18	1517.50	22,188	-3,987	834	24	2,161	24	2,613	-47
19	1511.30	19,688	-2,500	896	22	3,582	22	0	186
20	1520.00	23,241	3,553	4,535	21	791	21	0	-191
21	1525.20	25,504	2,263	3,732	20	1,418	20	0	-51
22	1518.30	22,522	-2,982	3,090	19	1,151	19	4,840	-81
23	1527.50	26,536	4,014	4,030	19	0	19	0	-16
24	1530.70	28,006	1,470	2,431	18	1,027	18	0	66
25	1522.90	24,491	-3,515	62	18	1,222	18	2,300	-55
26	1510.00	19,184	-5,307	98	17	3,941	17	1,449	-15
27	1513.40	20,516	1,332	4,751	17	2,455	17	945	-19
28	1508.70	18,687	-1,829	432	17	1,867	17	359	-35
29	1516.60	21,815	3,128	4,832	16	0	16	1,697	-7
30	1520.30	23,369	1,554	5,688	15	1,917	15	2,212	-5
<b>Total</b>			<b>3,289</b>	<b>111,219</b>	<b>736</b>	<b>68,345</b>	<b>736</b>	<b>38,487</b>	<b>-1,098</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**July 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jun 30	1520.30	23,369							
1	1520.00	23,241	-128	5,010	14	1,746	14	3,379	-13
2	1513.10	20,397	-2,844	1,920	11	2,259	11	2,492	-13
3	1509.00	18,801	-1,596	2,019	11	3,590	11	13	-12
4	1511.10	19,610	809	2,572	10	1,815	10	0	52
5	1514.10	20,797	1,187	4,312	10	1,687	10	1,420	-18
6	1516.70	21,856	1,059	4,035	10	0	10	2,964	-12
7	1518.40	22,564	708	4,899	9	1,379	9	2,804	-8
8	1526.90	26,265	3,701	6,097	9	575	9	1,811	-10
9	1519.30	22,943	-3,322	470	9	0	9	3,783	-9
10	1513.80	20,676	-2,267	2,594	8	4,913	8	0	52
11	1515.38	21,315	639	5,891	8	2,512	8	2,724	-16
12	1516.40	21,732	417	7,093	8	3,599	8	3,068	-9
13	1518.70	22,690	958	7,392	7	1,522	7	4,906	-6
14	1521.80	24,013	1,323	5,700	7	920	7	3,450	-7
15	1523.60	24,798	785	6,499	6	1,386	6	4,322	-6
16	1518.80	22,732	-2,066	2,305	6	2,009	6	2,355	-7
17	1514.60	20,998	-1,734	1,000	6	2,615	6	0	-119
18	1519.60	23,070	2,072	5,092	5	3,194	5	0	174
19	1526.30	25,995	2,925	6,622	5	1,753	5	1,929	-15
20	1524.90	25,371	-624	4,820	5	1,689	5	3,749	-6
21	1527.80	26,672	1,301	6,527	5	1,449	5	3,773	-4
22	1528.50	26,991	319	3,206	4	987	4	1,895	-5
23	1518.80	22,732	-4,259	396	4	2,313	4	2,338	-4
24	1509.80	19,107	-3,625	185	4	3,654	4	153	-3
25	1517.00	21,980	2,873	4,523	4	1,647	4	0	-3
26	1519.70	23,113	1,133	4,679	4	1,851	4	1,688	-7
27	1515.80	21,486	-1,627	4,471	4	2,876	4	3,218	-4
28	1520.70	23,540	2,054	4,412	3	2,003	3	351	-4
29	1521.30	23,798	258	4,467	3	1,772	3	2,434	-3
30	1514.05	20,777	-3,021	1,343	3	2,666	3	1,698	0
31	1518.10	22,438	1,661	3,458	3	1,261	3	532	-4
<b>Total</b>			-931	124,009	205	61,642	205	63,249	-49

1/ Values supplied by LADWP, not verified by DWR.



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**August 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jul 31	1518.10	22,438							
1	1517.80	22,313	-125	4,874	3	2,400	3	2,596	-3
2	1514.00	20,756	-1,557	3,917	3	613	3	4,858	-3
3	1516.22	21,658	902	5,221	3	1,812	3	2,503	-4
4	1517.20	22,063	405	4,009	3	1,623	3	1,968	-13
5	1526.50	26,085	4,022	4,047	3	0	3	0	-25
6	1526.30	25,995	-90	998	3	1,065	3	0	-23
7	1526.10	25,905	-90	532	3	695	3	0	73
8	1522.60	24,361	-1,544	3,705	3	2,753	3	2,493	-3
9	1525.00	25,416	1,055	2,683	2	1,531	2	0	-97
10	1518.70	22,690	-2,726	4,494	2	2,675	2	4,630	85
11	1521.80	24,013	1,323	3,750	2	1,593	2	832	-2
12	1522.90	24,491	478	4,189	2	1,481	2	2,227	-3
13	1519.30	22,943	-1,548	584	2	2,191	2	0	59
14	1514.80	21,079	-1,864	506	2	2,431	2	0	61
15	1517.50	22,188	1,109	5,135	2	2,694	2	1,327	-5
16	1523.60	24,798	2,610	4,428	2	1,731	2	0	-87
17	1525.00	25,416	618	4,764	2	1,203	2	2,978	35
18	1522.45	24,295	-1,121	3,243	2	1,004	2	3,357	-3
19	1521.70	23,970	-325	4,175	2	1,295	2	3,205	0
20	1515.70	21,445	-2,525	1,483	2	4,046	2	0	38
21	1513.20	20,437	-1,008	1,714	1	2,761	1	0	39
22	1513.40	20,516	79	4,459	1	2,002	1	2,374	-4
23	1520.00	23,241	2,725	3,900	1	618	1	588	31
24	1517.40	22,146	-1,095	5,156	1	1,595	1	4,653	-3
25	1522.35	24,252	2,106	5,805	1	0	1	3,699	0
26	1525.25	25,526	1,274	5,534	1	1,632	1	2,626	-2
27	1522.50	24,317	-1,209	952	0	2,207	0	0	46
28	1519.20	22,901	-1,416	1,608	0	3,028	0	0	4
29	1518.60	22,648	-253	4,102	0	1,368	0	2,986	-1
30	1523.40	24,710	2,062	3,799	0	1,674	0	0	-63
31	1521.30	23,798	-912	5,019	0	1,071	0	4,859	-1
<b>Total</b>			1,360	108,785	54	52,792	54	54,759	126

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**September 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Aug 31	1521.30	23,798							
1	1519.30	22,943	-855	4,347	1	2,678	1	2,523	-1
2	1526.50	26,085	3,142	5,463	1	1,632	1	689	0
3	1520.50	23,454	-2,631	1,012	1	3,759	1	0	116
4	1513.80	20,676	-2,778	2,487	1	5,223	1	0	-42
5	1517.50	22,188	1,512	5,004	1	3,481	1	0	-11
6	1514.60	20,998	-1,190	5,774	1	3,727	1	3,232	-5
7	1515.10	21,201	203	5,536	1	2,930	1	2,402	-1
8	1524.30	25,106	3,905	5,956	1	1,877	1	175	1
9	1522.90	24,491	-615	3,562	1	1,037	1	3,137	-3
10	1516.00	21,568	-2,923	2,667	1	3,290	1	2,301	1
11	1507.60	18,272	-3,296	463	1	3,866	1	0	107
12	1511.90	19,923	1,651	3,037	1	1,408	1	0	22
13	1518.80	22,732	2,809	5,150	2	0	2	2,334	-7
14	1515.20	21,242	-1,490	4,910	2	1,579	2	4,820	-1
15	1514.70	21,039	-203	5,056	2	583	2	4,675	-1
16	1508.90	18,763	-2,276	40	1	1,703	1	610	-3
17	1508.90	18,763	0	0	1	0	1	0	0
18	1511.20	19,649	886	880	1	0	1	0	6
19	1516.88	21,930	2,281	4,272	1	1,891	1	0	-100
20	1517.20	22,063	133	4,784	2	0	2	4,612	-39
21	1519.20	22,901	838	5,457	1	742	1	3,876	-1
22	1512.30	20,080	-2,821	2,216	1	999	1	4,038	0
23	1510.50	19,377	-703	83	1	528	1	256	-2
24	1510.50	19,377	0	0	1	0	1	0	0
25	1510.50	19,377	0	0	1	0	1	0	0
26	1519.80	23,155	3,778	3,828	1	0	1	0	-50
27	1523.50	24,754	1,599	4,166	1	0	1	2,560	-7
28	1522.10	24,143	-611	5,240	1	808	1	5,044	1
29	1525.00	25,416	1,273	4,217	1	542	1	2,401	-1
30	1525.20	25,504	88	851	1	734	1	0	-29
<b>Total</b>			<b>1,706</b>	<b>96,458</b>	<b>34</b>	<b>45,017</b>	<b>34</b>	<b>49,685</b>	<b>-50</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**October 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Sep 30	1525.20	25,504							
1	1520.50	23,454	-2,050	1,973	1	940	1	3,082	-1
2	1517.70	22,271	-1,183	632	1	1,794	1	0	-21
3	1519.50	23,028	757	5,144	1	1,513	1	2,873	-1
4	1514.00	20,756	-2,272	2,362	1	511	1	4,124	1
5	1513.60	20,596	-160	3,518	1	684	1	2,992	-2
6	1515.90	21,527	931	5,310	1	1,279	1	3,064	-36
7	1514.30	20,877	-650	5,219	1	1,274	1	4,628	33
8	1510.00	19,184	-1,693	2,055	1	853	1	2,895	0
9	1508.60	18,650	-534	1,798	1	2,058	1	270	-4
10	1513.53	20,568	1,918	2,400	1	737	1	0	255
11	1511.90	19,923	-645	2,298	1	0	1	2,942	-1
12	1515.50	21,364	1,441	3,384	1	0	1	1,941	-2
13	1519.30	22,943	1,579	2,337	1	745	1	0	-13
14	1511.60	19,805	-3,138	2,152	1	964	1	4,325	-1
15	1508.30	18,536	-1,269	1,827	1	0	1	3,095	-1
16	1507.50	18,235	-301	590	2	14	2	874	-3
17	1513.00	20,357	2,122	3,131	16	1,040	16	0	31
18	1511.40	19,727	-630	2,929	14	0	14	3,530	-29
19	1512.60	20,199	472	3,506	15	1,120	15	1,911	-3
20	1519.00	22,816	2,617	2,791	10	0	10	0	-174
21	1517.92	22,363	-453	2,447	8	0	8	2,884	-16
22	1514.31	20,881	-1,482	1,322	7	0	7	2,795	-9
23	1515.37	21,311	430	1,634	7	1,154	7	0	-50
24	1517.84	22,329	1,018	2,062	6	890	6	0	-154
25	1516.45	21,753	-576	1,443	7	0	7	1,996	-23
26	1513.27	20,464	-1,289	2,388	6	889	6	2,781	-7
27	1516.20	21,650	1,186	2,862	6	713	6	958	-5
28	1518.30	22,522	872	3,747	7	660	7	2,208	-7
29	1511.56	19,789	-2,733	1,016	6	1,279	6	2,452	-18
30	1512.82	20,286	497	1,753	6	1,052	6	0	-204
31	1513.25	20,457	171	2,336	6	2,040	6	0	-125
<b>Total</b>			<b>-5,047</b>	<b>78,366</b>	<b>145</b>	<b>24,203</b>	<b>145</b>	<b>58,620</b>	<b>-590</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**November 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Oct 31	1513.25	20,457							
1	1515.98	21,560	1,103	4,293	5	1,266	5	1,920	-4
2	1516.60	21,815	255	4,410	5	1,655	5	2,494	-6
3	1515.80	21,486	-329	3,323	5	999	5	2,647	-6
4	1511.90	19,923	-1,563	2,450	5	728	5	3,281	-4
5	1513.40	20,516	593	3,467	5	0	5	2,867	-7
6	1514.00	20,756	240	2,548	5	0	5	2,305	-3
7	1517.00	21,980	1,224	3,033	5	1,799	5	0	-10
8	1519.10	22,859	879	2,271	5	0	5	1,383	-9
9	1516.50	21,773	-1,086	1,597	7	0	7	2,675	-8
10	1515.90	21,527	-246	2,290	7	803	7	1,728	-5
11	1516.54	21,790	263	3,031	7	564	7	2,195	-9
12	1513.99	20,752	-1,038	878	6	268	6	1,644	-4
13	1516.98	21,972	1,220	1,786	6	445	6	0	-121
14	1518.84	22,749	777	3,574	6	1,572	6	1,212	-13
15	1516.52	21,782	-967	2,098	6	751	6	2,307	-7
16	1516.38	21,724	-58	2,485	6	552	6	1,985	-6
17	1516.30	21,691	-33	2,116	6	0	6	2,143	-6
18	1515.16	21,225	-466	2,398	6	0	6	2,857	-7
19	1514.28	20,869	-356	1,261	6	1,146	6	462	-9
20	1514.20	20,837	-32	2,404	6	0	6	2,437	1
21	1516.80	21,897	1,060	1,983	6	857	6	0	-66
22	1518.75	22,711	814	2,065	6	0	6	1,239	-12
23	1517.24	22,079	-632	1,754	6	0	6	2,380	-6
24	1514.96	21,144	-935	1,467	6	847	6	1,544	-11
25	1516.32	21,699	555	3,991	6	1,443	6	0	-1,993
26	1515.60	21,405	-294	2,241	6	0	6	2,523	-12
27	1516.00	21,568	163	1,371	7	1,230	7	0	22
28	1519.90	23,198	1,630	2,241	7	569	7	0	-42
29	1520.73	23,553	355	1,970	7	0	7	1,600	-15
30	1515.10	21,201	-2,352	1,251	7	386	7	3,210	-7
<b>Total</b>			<b>744</b>	<b>72,047</b>	<b>179</b>	<b>17,880</b>	<b>179</b>	<b>51,038</b>	<b>-2,385</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**December 2005**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Nov 30	1515.10	21,201							
1	1514.86	21,103	-98	2,099	7	0	7	2,190	-7
2	1514.20	20,837	-266	2,638	7	595	7	2,309	0
3	1513.81	20,677	-160	2,059	8	594	8	1,603	-22
4	1514.62	21,006	329	743	7	693	7	0	279
5	1517.43	22,158	1,152	1,829	7	603	7	0	-74
6	1517.00	21,980	-178	1,571	7	0	7	1,742	-7
7	1514.18	20,829	-1,151	1,881	7	0	7	3,027	-5
8	1515.48	21,356	527	1,820	7	0	7	1,285	-8
9	1516.57	21,802	446	2,185	7	0	7	1,731	-8
10	1514.55	20,978	-824	408	7	0	7	1,225	-7
11	1516.37	21,720	742	1,039	7	388	7	0	91
12	1519.32	22,952	1,232	2,191	8	876	8	0	-83
13	1516.66	21,839	-1,113	2,462	8	733	8	2,818	-24
14	1514.80	21,079	-760	1,495	8	0	8	2,247	-8
15	1514.50	20,958	-121	1,548	7	0	7	1,663	-6
16	1514.80	21,079	121	3,068	7	339	7	2,600	-8
17	1516.40	21,732	653	736	7	46	7	0	-37
18	1517.60	22,229	497	518	7	0	7	0	-21
19	1512.70	20,238	-1,991	843	7	0	7	2,721	-113
20	1512.20	20,041	-197	446	7	641	7	0	-2
21	1513.30	20,476	435	1,150	7	656	7	0	-59
22	1515.90	21,527	1,051	2,710	7	1,608	7	0	-51
23	1520.00	23,241	1,714	2,493	7	769	7	0	-10
24	1520.40	23,411	170	2,227	7	2,077	7	0	20
25	1515.60	21,405	-2,006	290	7	2,340	7	0	44
26	1515.20	21,242	-163	2,215	7	2,291	7	0	-87
27	1517.20	22,063	821	3,254	8	2,386	8	0	-47
28	1517.20	22,063	0	933	8	989	8	0	56
29	1516.80	21,897	-166	2,529	8	2,693	8	0	-2
30	1515.80	21,486	-411	1,408	8	1,836	8	0	17
31	1512.03	19,974	-1,512	1,310	9	2,458	9	0	-364
<b>Total</b>			<b>-1,227</b>	<b>52,098</b>	<b>227</b>	<b>25,611</b>	<b>227</b>	<b>27,161</b>	<b>-553</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**January 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Dec 31	1512.03	19,974							
1	1512.90	20,317	343	1,605	22	1,765	22	0	503
2	1518.20	22,480	2,163	4,378	433	2,613	433	0	398
3	1510.20	19,261	-3,219	2,125	104	1,298	104	3,586	-460
4	1515.90	21,527	2,266	2,310	53	0	53	0	-44
5	1518.60	22,648	1,121	3,162	36	0	36	1,951	-90
6	1518.40	22,564	-84	2,970	30	544	30	2,480	-30
7	1513.50	20,556	-2,008	1,396	25	632	25	2,746	-26
8	1514.00	20,756	200	1,358	21	1,165	21	0	7
9	1514.50	20,958	202	3,090	19	0	19	2,847	-41
10	1511.70	19,844	-1,114	5,227	17	0	17	6,324	-17
11	1515.40	21,323	1,479	3,436	17	0	17	1,943	-14
12	1523.10	24,579	3,256	4,557	18	1,276	18	0	-25
13	1522.50	24,317	-262	3,747	17	718	17	3,256	-35
14	1518.30	22,522	-1,795	2,841	18	1,053	18	3,566	-17
15	1513.30	20,476	-2,046	1,168	17	0	17	3,196	-18
16	1516.40	21,732	1,256	4,388	16	1,484	16	1,632	-16
17	1512.80	20,278	-1,454	3,139	15	0	15	4,578	-15
18	1509.00	18,801	-1,477	2,762	15	0	15	4,223	-16
19	1519.30	22,943	4,142	5,084	15	861	15	0	-81
20	1521.50	23,884	941	4,224	14	0	14	3,254	-29
21	1516.40	21,732	-2,152	2,723	14	13	14	4,848	-14
22	1514.10	20,797	-935	1,473	14	0	14	2,396	-12
23	1521.40	23,841	3,044	6,628	14	1,598	14	1,971	-15
24	1514.40	20,917	-2,924	3,179	13	907	13	5,184	-12
25	1517.20	22,063	1,146	3,822	13	1,267	13	1,395	-14
26	1520.90	23,625	1,562	3,854	13	2,212	13	0	-80
27	1517.70	22,271	-1,354	3,596	13	1,974	13	2,952	-24
28	1514.60	20,998	-1,273	2,043	13	802	13	2,500	-14
29	1516.20	21,650	652	1,406	13	738	13	0	-16
30	1513.90	20,716	-934	2,914	13	1,142	13	2,681	-25
31	1512.30	20,080	-636	3,405	13	1,292	13	2,731	-18
<b>Total</b>			106	98,010	1,068	25,354	1,068	72,240	-310

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**February 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jan 31	1512.30	20,080							
1	1512.60	20,199	119	3,234	12	473	12	2,618	-24
2	1519.60	23,070	2,871	2,945	12	6	12	0	-68
3	1519.40	22,986	-84	2,867	12	1,101	12	1,839	-11
4	1515.70	21,445	-1,541	1,978	12	0	12	3,507	-12
5	1514.70	21,039	-406	1,360	12	1,779	12	0	13
6	1511.90	19,923	-1,116	2,463	11	2,052	11	1,505	-22
7	1511.60	19,805	-118	2,396	11	0	11	2,502	-12
8	1512.00	19,962	157	674	11	502	11	0	-15
9	1513.00	20,357	395	2,654	11	652	11	1,583	-24
10	1509.20	18,878	-1,479	2,116	11	0	11	3,584	-11
11	1504.70	17,200	-1,678	462	11	0	11	2,129	-11
12	1509.50	18,992	1,792	1,824	10	0	10	0	-32
13	1513.80	20,676	1,684	2,491	10	743	10	0	-64
14	1512.70	20,238	-438	2,343	11	0	11	2,749	-32
15	1512.10	20,001	-237	1,813	10	0	10	2,041	-9
16	1518.20	22,480	2,479	2,567	11	0	11	0	-88
17	1515.70	21,445	-1,035	2,462	12	0	12	3,473	-24
18	1511.10	19,610	-1,835	1,079	13	0	13	2,900	-14
19	1512.60	20,199	589	563	13	0	13	0	26
20	1518.10	22,438	2,239	2,307	12	0	12	0	-68
21	1515.30	21,282	-1,156	1,513	11	0	11	2,631	-38
22	1510.20	19,261	-2,021	584	11	0	11	2,595	-10
23	1513.10	20,397	1,136	1,235	11	0	11	0	-99
24	1510.00	19,184	-1,213	1,047	11	15	11	2,225	-20
25	1505.15	17,364	-1,820	687	11	11	11	2,483	-13
26	1505.60	17,530	166	628	11	0	11	452	-10
27	1513.10	20,397	2,867	3,597	32	811	32	0	81
28	1512.15	20,021	-376	980	214	0	214	1,111	-245
<b>Total</b>			<b>-59</b>	<b>50,869</b>	<b>540</b>	<b>8,145</b>	<b>540</b>	<b>41,927</b>	<b>-856</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**March 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Feb 28	1512.15	20,021							
1	1506.80	17,973	-2,048	1,760	74	1,118	74	2,615	-75
2	1512.30	20,080	2,107	3,052	51	0	51	895	-50
3	1513.20	20,437	357	2,745	61	673	61	1,654	-61
4	1510.00	19,184	-1,253	1,415	50	61	50	2,558	-49
5	1512.00	19,962	778	1,504	38	749	38	0	23
6	1520.30	23,369	3,407	3,454	38	0	38	0	-47
7	1518.70	22,690	-679	2,265	41	0	41	2,827	-117
8	1516.10	21,609	-1,081	3,213	35	0	35	4,260	-34
9	1517.70	22,271	662	3,212	31	0	31	2,518	-32
10	1515.30	21,282	-989	3,426	31	0	31	4,383	-32
11	1510.90	19,532	-1,750	1,849	31	0	31	3,668	69
12	1516.00	21,568	2,036	2,099	30	0	30	0	-63
13	1517.30	22,104	536	2,735	27	0	27	2,170	-29
14	1517.00	21,980	-124	3,830	26	0	26	3,928	-26
15	1510.70	19,455	-2,525	875	25	0	25	3,376	-24
16	1512.80	20,278	823	3,947	24	859	24	2,240	-25
17	1512.00	19,962	-316	4,317	26	0	26	4,669	36
18	1509.30	18,916	-1,046	1,168	28	0	28	2,234	20
19	1517.10	22,021	3,105	3,224	25	0	25	0	-119
20	1517.40	22,146	125	3,178	27	0	27	3,061	8
21	1516.30	21,691	-455	3,149	32	0	32	3,633	29
22	1518.30	22,522	831	2,725	27	0	27	1,867	-27
23	1519.00	22,816	294	2,231	25	0	25	1,941	4
24	1515.40	21,323	-1,493	1,732	24	0	24	3,222	-3
25	1512.30	20,080	-1,243	1,312	23	0	23	2,532	-23
26	1511.72	19,852	-228	1,139	22	0	22	1,345	-22
27	1512.70	20,238	386	2,514	35	0	35	2,092	-36
28	1512.60	20,199	-39	1,979	140	0	140	1,969	-49
29	1513.50	20,556	357	645	138	0	138	199	-89
30	1512.80	20,278	-278	1,992	80	0	80	2,200	-70
31	1513.50	20,556	278	1,739	80	0	80	1,381	-80
<b>Total</b>			<b>535</b>	<b>74,425</b>	<b>1,345</b>	<b>3,460</b>	<b>1,345</b>	<b>69,437</b>	<b>-993</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**April 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Mar 31	1513.50	20,556							
1	1513.70	20,636	80	1,685	93	0	93	1,563	-42
2	1517.40	22,146	1,510	2,162	77	0	77	574	-78
3	1519.10	22,859	713	650	121	0	121	0	63
4	1515.80	21,486	-1,373	555	381	0	381	1,546	-382
5	1517.90	22,354	868	416	528	0	528	0	452
6	1513.70	20,636	-1,718	1,818	260	780	260	1,968	-788
7	1513.50	20,556	-80	1,958	177	758	177	1,252	-28
8	1517.20	22,063	1,507	2,210	133	766	133	0	63
9	1520.00	23,241	1,178	2,680	110	1,597	110	0	95
10	1515.20	21,242	-1,999	2,941	104	2,319	104	2,273	-348
11	1519.65	23,092	1,850	3,986	101	2,292	101	0	156
12	1516.80	21,897	-1,195	2,824	87	1,497	87	2,333	-189
13	1517.50	22,188	291	3,987	84	3,768	84	0	72
14	1518.00	22,396	208	4,503	95	1,850	95	2,267	-178
15	1510.55	19,396	-3,000	355	93	3,602	93	0	247
16	1507.90	18,385	-1,011	258	79	1,338	79	0	69
17	1520.80	23,583	5,198	5,263	68	0	68	0	-65
18	1521.00	23,668	85	3,002	62	0	62	2,614	-303
19	1516.20	21,650	-2,018	2,354	56	1,826	56	2,492	-54
20	1521.50	23,884	2,234	2,941	50	708	50	0	1
21	1519.30	22,943	-941	3,095	46	1,630	46	2,310	-96
22	1513.90	20,716	-2,227	2,044	44	1,978	44	2,251	-42
23	1516.50	21,773	1,057	2,505	39	1,312	39	0	-136
24	1520.30	23,369	1,596	3,429	37	1,844	37	0	11
25	1517.60	22,229	-1,140	3,066	36	800	36	3,314	-92
26	1514.20	20,837	-1,392	2,007	34	874	34	2,492	-33
27	1517.70	22,271	1,434	2,840	33	1,329	33	0	-77
28	1518.70	22,690	419	3,921	30	744	30	2,663	-95
29	1516.70	21,856	-834	700	31	1,100	31	405	-29
30	1515.40	21,323	-533	1,715	29	2,273	29	0	25
<b>Total</b>			<b>767</b>	<b>71,870</b>	<b>3,118</b>	<b>36,985</b>	<b>3,118</b>	<b>32,317</b>	<b>-1,801</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**May 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Apr 30	1515.40	21,323							
1	1523.00	24,535	3,212	3,277	29	0	29	0	-65
2	1523.80	24,886	350	5,245	28	1,855	28	2,984	-56
3	1520.20	23,326	-1,560	2,974	27	1,596	27	2,910	-28
4	1524.50	25,194	1,868	3,628	26	1,774	26	0	14
5	1525.70	25,727	533	3,560	24	959	24	2,018	-50
6	1516.00	21,568	-4,159	1,059	23	3,375	23	1,821	-22
7	1514.80	21,079	-489	1,797	22	2,284	22	0	-2
8	1524.50	25,194	4,115	5,732	19	1,681	19	0	64
9	1522.90	24,491	-703	2,965	18	1,518	18	2,090	-60
10	1517.60	22,229	-2,262	2,438	16	1,106	16	3,579	-15
11	1523.40	24,710	2,481	3,696	16	893	16	306	-16
12	1526.50	26,085	1,375	4,341	15	0	15	2,950	-16
13	1526.80	26,220	135	1,162	14	535	14	478	-14
14	1520.80	23,583	-2,637	688	13	1,275	13	2,037	-13
15	1524.60	25,238	1,656	2,490	13	775	13	0	-59
16	1523.20	24,623	-616	2,621	12	855	12	2,356	-26
17	1515.80	21,486	-3,136	2,957	12	2,473	12	3,609	-11
18	1523.20	24,623	3,136	5,061	11	1,904	11	0	-21
19	1526.45	26,062	1,440	4,624	11	630	11	2,532	-22
20	1527.60	26,581	519	1,983	11	0	11	1,453	-11
21	1523.70	24,842	-1,740	376	11	2,191	11	0	75
22	1522.70	24,404	-437	3,349	13	1,558	13	2,203	-25
23	1521.24	23,772	-633	4,371	12	2,596	12	2,395	-13
24	1525.50	25,638	1,866	4,819	11	2,808	11	0	-145
25	1527.10	26,355	717	2,914	10	2,258	10	0	61
26	1525.60	25,682	-673	4,861	9	3,179	9	2,326	-29
27	1524.80	25,327	-356	4,172	9	1,895	9	2,623	-10
28	1515.20	21,242	-4,085	447	9	4,610	9	0	78
29	1516.50	21,773	532	3,047	9	2,460	9	0	-55
30	1519.80	23,155	1,382	5,277	9	2,076	9	1,793	-26
31	1519.50	23,028	-127	5,097	6	2,968	6	2,249	-7
<b>Total</b>			1,705	101,028	468	54,087	468	44,712	-524

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**June 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
May 31	1519.50	23,028							
1	1522.40	24,274	1,246	4,608	6	2,613	6	744	-5
2	1525.30	25,549	1,275	7,047	6	3,320	6	2,446	-6
3	1521.80	24,013	-1,536	5,310	5	2,894	5	2,948	-1,004
4	1522.80	24,448	435	4,509	5	3,978	5	0	-96
5	1524.20	25,062	614	4,412	4	3,819	4	0	21
6	1523.20	24,623	-439	4,128	4	2,844	4	1,709	-14
7	1518.70	22,690	-1,933	3,911	4	3,290	4	2,550	-4
8	1518.90	22,774	84	5,180	4	3,157	4	1,934	-5
9	1524.65	25,260	2,486	5,937	3	2,693	3	755	-3
10	1526.00	25,861	601	3,001	3	2,548	3	0	148
11	1522.30	24,230	-1,631	2,527	3	4,141	3	0	-17
12	1515.20	21,242	-2,988	3,202	3	3,994	3	2,187	-9
13	1515.90	21,527	285	4,128	3	3,775	3	66	-2
14	1517.70	22,271	744	4,924	2	4,132	2	0	-48
15	1519.90	23,198	927	5,101	2	4,034	2	0	-140
16	1524.60	25,238	2,040	5,512	1	3,444	1	0	-28
17	1530.64	27,974	2,736	4,613	1	3,266	1	0	1,389
18	1522.00	24,100	-3,874	1,494	1	4,022	1	0	-1,346
19	1526.80	26,220	2,120	4,394	1	2,258	1	0	-16
20	1524.70	25,282	-938	5,116	1	3,052	1	2,992	-10
21	1518.50	22,606	-2,676	5,533	0	3,741	0	4,469	1
22	1519.10	22,859	253	7,386	0	3,327	0	3,806	0
23	1519.70	23,113	254	7,254	0	3,298	0	3,702	0
24	1511.90	19,923	-3,190	1,208	0	1,472	0	2,927	1
25	1511.30	19,688	-235	3,323	0	3,636	0	0	78
26	1512.30	20,080	392	5,311	0	2,123	0	2,797	1
27	1513.40	20,516	436	5,399	0	1,538	0	3,424	-1
28	1516.50	21,773	1,257	5,428	0	792	0	3,379	0
29	1515.10	21,201	-572	4,377	0	1,261	0	3,688	0
30	1520.90	23,625	2,424	6,145	0	1,085	0	2,635	-1
<b>Total</b>			<b>597</b>	<b>140,418</b>	<b>62</b>	<b>89,547</b>	<b>62</b>	<b>49,158</b>	<b>-1,116</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**July 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jun 30	1520.90	23,625							
1	1519.20	22,901	-724	4,697	0	2,509	0	2,913	1
2	1521.30	23,798	897	2,929	0	1,944	0	0	-88
3	1527.30	26,445	2,647	4,270	0	1,664	0	0	41
4	1518.90	22,774	-3,671	653	0	1,220	0	3,104	0
5	1520.10	23,283	509	5,797	0	1,726	0	3,563	1
6	1526.00	25,861	2,578	5,620	0	2,972	0	0	-70
7	1520.10	23,283	-2,578	2,322	0	2,390	0	2,509	-1
8	1515.00	21,161	-2,122	3,452	0	2,268	0	3,306	0
9	1517.10	22,021	860	2,465	0	1,075	0	529	-1
10	1519.00	22,816	795	4,573	0	3,730	0	0	-48
11	1516.80	21,897	-919	3,347	0	1,912	0	2,354	0
12	1514.40	20,917	-980	3,055	0	447	0	3,589	1
13	1514.90	21,120	203	2,499	0	1,551	0	745	0
14	1517.80	22,313	1,193	4,891	0	1,139	0	2,560	1
15	1512.10	20,001	-2,312	3,567	0	1,026	0	4,852	-1
16	1512.40	20,119	118	1,661	0	935	0	607	-1
17	1521.00	23,668	3,549	5,134	0	1,501	0	0	-84
18	1519.30	22,943	-725	4,550	0	2,017	0	3,259	1
19	1516.90	21,939	-1,004	5,227	0	2,479	0	3,752	0
20	1516.90	21,939	0	5,193	0	2,020	0	3,173	0
21	1515.60	21,405	-534	4,323	0	1,875	0	2,983	1
22	1512.50	20,159	-1,246	3,832	0	743	0	4,334	-1
23	1517.00	21,980	1,821	3,745	0	1,602	0	322	0
24	1519.90	23,198	1,218	4,824	0	821	0	2,786	1
25	1517.40	22,146	-1,052	4,169	0	2,220	0	3,000	-1
26	1522.00	24,100	1,954	4,175	0	2,404	0	0	183
27	1520.50	23,454	-646	4,242	0	2,155	0	2,645	-88
28	1516.40	21,732	-1,722	3,714	0	1,602	0	3,834	0
29	1513.40	20,516	-1,216	4,278	0	2,986	0	2,508	0
30	1509.90	19,146	-1,370	1,355	0	2,584	0	143	2
31	1515.60	21,405	2,259	3,995	0	1,506	0	0	-230
<b>Total</b>			-2,220	118,554	0	57,023	0	63,370	-381

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**August 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jul 31	1515.60	21,405							
1	1516.20	21,650	245	3,434	0	1,359	0	1,830	0
2	1515.10	21,201	-449	3,044	0	772	0	2,720	-1
3	1517.40	22,146	945	2,659	0	860	0	854	0
4	1517.50	22,188	42	3,052	0	725	0	2,286	1
5	1513.60	20,596	-1,592	2,482	0	1,347	0	2,727	0
6	1512.60	20,199	-397	699	0	1,110	0	0	14
7	1516.30	21,691	1,492	2,700	0	1,126	0	0	-82
8	1515.20	21,242	-449	2,713	0	1,022	0	2,140	0
9	1511.70	19,844	-1,398	2,671	0	1,058	0	3,011	0
10	1515.40	21,323	1,479	2,585	0	687	0	419	0
11	1517.50	22,188	865	4,388	0	575	0	2,948	0
12	1511.70	19,844	-2,344	1,001	0	621	0	2,724	0
13	1509.00	18,801	-1,043	1,305	0	2,460	0	0	112
14	1513.10	20,397	1,596	3,395	0	1,715	0	0	-84
15	1512.90	20,317	-80	3,204	0	909	0	2,375	0
16	1512.40	20,119	-198	3,421	0	669	0	2,950	0
17	1517.70	22,271	2,152	3,219	0	941	0	0	-126
18	1516.30	21,691	-580	2,466	0	0	0	3,046	0
19	1511.80	19,883	-1,808	1,383	0	1,079	0	2,112	0
20	1509.30	18,916	-967	1,320	0	2,355	0	0	68
21	1514.90	21,120	2,204	3,248	0	930	0	0	-114
22	1513.60	20,596	-524	2,772	0	919	0	2,377	0
23	1512.20	20,041	-555	2,604	0	744	0	2,416	1
24	1517.60	22,229	2,188	2,856	0	61	0	0	-607
25	1516.90	21,939	-290	3,480	0	1,381	0	2,388	-1
26	1508.20	18,498	-3,441	1,258	0	2,295	0	2,405	1
27	1509.75	19,088	590	2,244	0	1,534	0	0	-120
28	1514.40	20,917	1,829	3,411	0	1,506	0	0	-76
29	1513.90	20,716	-201	3,094	0	1,124	0	2,172	1
30	1513.40	20,516	-200	2,791	0	786	0	2,203	-2
31	1517.10	22,021	1,505	3,525	0	1,947	0	0	-73
<b>Total</b>			616	82,424	0	34,617	0	46,103	-1,088

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**September 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Aug 31	1517.10	22,021							
1	1515.80	21,486	-535	4,868	0	2,165	0	3,239	1
2	1516.20	21,650	164	3,655	0	2,566	0	925	0
3	1514.20	20,837	-813	1,932	0	2,730	0	0	-15
4	1514.80	21,079	242	2,427	0	2,207	0	0	22
5	1516.00	21,568	489	3,555	0	607	0	2,461	2
6	1513.10	20,397	-1,171	1,826	0	1,260	0	1,735	-2
7	1521.70	23,970	3,573	4,126	0	435	0	0	-118
8	1516.10	21,609	-2,361	905	0	0	0	3,267	1
9	1510.40	19,338	-2,271	1,435	0	770	0	2,934	-2
10	1505.80	17,603	-1,735	549	0	2,315	0	0	31
11	1512.10	20,001	2,398	3,304	0	849	0	0	-57
12	1510.60	19,416	-585	3,063	0	994	0	2,654	0
13	1509.50	18,992	-424	2,875	0	1,236	0	2,062	-1
14	1518.60	22,648	3,656	4,284	0	557	0	0	-71
15	1518.00	22,396	-252	2,086	0	0	0	2,339	1
16	1516.20	21,650	-746	548	0	1,243	0	0	-51
17	1512.20	20,041	-1,609	907	0	2,628	0	0	112
18	1522.50	24,317	4,276	5,355	0	981	0	0	-98
19	1521.20	23,754	-563	3,376	0	665	0	3,273	-1
20	1515.60	21,405	-2,349	1,685	0	2,520	0	1,516	2
21	1519.70	23,113	1,708	2,392	0	622	0	0	-62
22	1511.20	19,649	-3,464	437	0	1,456	0	2,444	-1
23	1509.40	18,954	-695	405	0	1,072	0	0	-28
24	1507.60	18,272	-682	592	0	1,255	0	0	-19
25	1513.10	20,397	2,125	2,901	0	701	0	0	-75
26	1513.58	20,588	191	5,041	0	1,696	0	3,155	1
27	1515.53	21,376	788	2,506	0	0	0	1,718	0
28	1520.11	23,287	1,911	1,987	0	0	0	0	-76
29	1519.05	22,837	-450	2,498	0	907	0	2,040	-1
30	1516.85	21,918	-919	471	0	1,419	0	0	29
<b>Total</b>			<b>-103</b>	<b>71,991</b>	<b>0</b>	<b>35,856</b>	<b>0</b>	<b>35,762</b>	<b>-476</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**October 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Sep 30	1516.85	21,918							
1	1519.43	22,998	1,080	1,131	0	0	0	0	-51
2	1520.39	23,407	409	492	0	0	0	0	-83
3	1519.94	23,215	-192	1,785	0	0	0	1,978	1
4	1518.42	22,572	-643	1,955	0	0	0	2,598	0
5	1520.76	23,565	993	1,615	0	605	0	0	-17
6	1517.00	21,980	-1,585	2,787	0	1,550	0	2,823	1
7	1510.54	19,393	-2,587	398	0	3,053	0	0	68
8	1508.03	18,434	-959	383	0	1,372	0	0	30
9	1508.59	18,646	212	751	0	586	0	0	47
10	1509.66	19,054	408	2,653	0	0	0	2,246	1
11	1509.30	18,916	-138	2,906	0	683	0	2,360	-1
12	1516.63	21,827	2,911	2,916	0	0	0	0	-5
13	1517.60	22,229	402	3,494	0	614	0	2,479	1
14	1519.09	22,854	625	628	0	0	0	0	-3
15	1518.70	22,690	-164	1,100	0	1,302	0	0	38
16	1521.90	24,057	1,367	2,237	0	808	0	0	-62
17	1518.40	22,564	-1,493	2,378	0	1,507	0	2,363	-1
18	1516.70	21,856	-708	2,370	0	790	0	2,287	-1
19	1519.70	23,113	1,257	2,715	0	1,453	0	0	-5
20	1517.20	22,063	-1,050	2,211	0	881	0	2,379	-1
21	1517.00	21,980	-83	1,004	0	988	0	0	-99
22	1518.10	22,438	458	508	0	0	0	0	-50
23	1520.20	23,326	888	1,685	0	877	0	0	80
24	1519.30	22,943	-383	1,570	0	0	0	1,952	-1
25	1519.00	22,816	-127	1,202	0	1,243	0	0	-86
26	1517.90	22,354	-462	352	0	846	0	0	32
27	1515.66	21,429	-925	1,621	0	602	0	1,944	0
28	1514.17	20,825	-604	542	0	1,116	0	0	-30
29	1505.60	17,530	-3,295	353	0	3,711	0	0	63
30	1509.50	18,992	1,462	2,763	0	1,233	0	0	-68
31	1506.19	17,747	-1,245	1,670	0	1,008	0	1,908	1
<b>Total</b>			<b>-4,171</b>	<b>50,175</b>	<b>0</b>	<b>26,828</b>	<b>0</b>	<b>27,317</b>	<b>-201</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**November 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Oct 31	1506.19	17,747							
1	1511.03	19,583	1,836	2,795	0	920	0	0	-39
2	1516.40	21,732	2,149	3,121	0	935	0	0	-37
3	1517.90	22,354	622	2,337	0	0	0	1,716	1
4	1518.93	22,787	433	445	0	0	0	0	-12
5	1520.30	23,369	582	581	0	0	0	0	1
6	1528.19	26,850	3,481	3,376	0	6	0	0	111
7	1521.96	24,083	-2,767	1,882	0	2,255	0	2,394	0
8	1521.58	23,918	-165	816	0	873	0	0	-108
9	1519.20	22,901	-1,017	455	0	1,441	0	0	-31
10	1517.76	22,296	-605	2,083	0	2,628	0	0	-60
11	1518.52	22,614	318	368	0	3	0	0	-47
12	1515.70	21,445	-1,169	371	0	1,548	0	0	8
13	1514.76	21,063	-382	1,352	0	1,727	0	0	-7
14	1510.39	19,335	-1,728	1,957	0	559	0	3,127	1
15	1513.88	20,708	1,373	2,209	0	673	0	0	-163
16	1508.66	18,672	-2,036	1,330	0	1,337	0	2,027	-2
17	1498.34	14,955	-3,717	399	0	0	0	4,117	1
18	1498.20	14,907	-48	42	0	0	0	0	-90
19	1497.62	14,709	-198	6	0	166	0	0	-38
20	1493.75	13,421	-1,288	0	0	0	0	1,289	1
21	1478.27	9,024	-4,397	0	0	0	0	4,396	-1
22	1471.58	7,636	-1,388	90	0	0	0	1,468	-10
23	1470.15	7,368	-268	218	0	0	0	274	-212
24	1470.00	7,341	-27	92	0	0	0	820	701
25	1470.00	7,341	0	0	0	0	0	0	0
26	1470.00	7,341	0	0	0	0	0	0	0
27	1470.00	7,341	0	0	0	0	0	50	50
28	1470.00	7,341	0	0	0	0	0	75	75
29	1470.00	7,341	0	0	0	0	0	0	0
30	1470.00	7,341	0	0	0	0	0	0	0
<b>Total</b>			<b>-10,406</b>	<b>26,325</b>	<b>0</b>	<b>15,071</b>	<b>0</b>	<b>21,753</b>	<b>93</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**December 2006**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Nov 30	1470.00	7,341							
1	1470.00	7,341	0	0	0	0	0	0	0
2	1470.00	7,341	0	0	0	0	0	0	0
3	1470.00	7,341	0	0	0	0	0	0	0
4	1470.00	7,341	0	0	0	0	0	0	0
5	1470.00	7,341	0	0	0	0	0	0	0
6	1470.00	7,341	0	0	0	0	0	0	0
7	1470.00	7,341	0	0	0	0	0	0	0
8	1470.00	7,341	0	0	0	0	0	0	0
9	1470.00	7,341	0	0	0	0	0	0	0
10	1470.00	7,341	0	0	0	0	0	0	0
11	1470.00	7,341	0	0	0	0	0	0	0
12	1470.00	7,341	0	0	0	0	0	0	0
13	1470.00	7,341	0	0	0	0	0	0	0
14	1470.00	7,341	0	0	0	0	0	0	0
15	1470.00	7,341	0	0	0	0	0	0	0
16	1470.00	7,341	0	0	0	0	0	0	0
17	1470.00	7,341	0	0	0	0	0	0	0
18	1470.00	7,341	0	0	0	0	0	0	0
19	1470.00	7,341	0	0	0	0	0	0	0
20	1470.00	7,341	0	0	0	0	0	0	0
21	1470.00	7,341	0	0	0	0	0	0	0
22	1470.00	7,341	0	0	0	0	0	0	0
23	1470.00	7,341	0	0	0	0	0	0	0
24	1470.00	7,341	0	0	0	0	0	0	0
25	1470.00	7,341	0	0	0	0	0	0	0
26	1470.00	7,341	0	0	0	0	0	0	0
27	1470.00	7,341	0	0	0	0	0	0	0
28	1470.00	7,341	0	0	0	0	0	0	0
29	1470.00	7,341	0	0	0	0	0	0	0
30	1470.00	7,341	0	0	0	0	0	0	0
31	1470.00	7,341	0	0	0	0	0	0	0
<b>Total</b>			0	0	0	0	0	0	0

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**January 2007**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Dec 31	1470.00	7,341							
1	1470.01	7,343	2	0	0	0	0	0	2
2	1470.01	7,343	0	0	0	0	0	0	0
3	1470.01	7,343	0	64	0	0	0	0	-64
4	1470.01	7,343	0	1,441	0	0	0	0	-1,441
5	1475.85	8,491	1,148	1,099	0	0	0	0	49
6	1478.80	9,147	656	689	0	0	0	0	-33
7	1484.36	10,568	1,421	1,443	0	0	0	0	-22
8	1489.23	11,992	1,424	1,444	0	0	0	0	-20
9	1495.15	13,881	1,889	1,922	0	0	0	0	-33
10	1500.72	15,779	1,898	1,882	0	0	0	0	16
11	1497.40	14,635	-1,144	5,945	0	0	0	7,090	1
12	1489.01	11,925	-2,710	5,774	0	0	0	8,482	-2
13	1488.80	11,861	-64	4,860	0	0	0	4,924	0
14	1487.83	11,569	-292	4,308	0	0	0	4,967	367
15	1486.51	11,179	-390	4,621	0	0	0	5,010	-1
16	1481.53	9,813	-1,366	1,605	0	0	0	2,971	0
17	1482.63	10,099	286	189	1	0	1	0	97
18	1483.01	10,200	101	0	1	0	1	0	101
19	1483.28	10,272	72	0	1	0	1	0	72
20	1483.59	10,356	84	0	1	0	1	0	84
21	1483.90	10,441	85	0	1	0	1	0	85
22	1484.20	10,523	82	0	1	0	1	0	82
23	1485.64	10,928	405	324	1	0	1	0	81
24	1485.96	11,020	92	0	1	0	1	0	92
25	1486.27	11,110	90	14	1	0	1	0	76
26	1493.12	13,217	2,107	1,865	1	0	1	0	242
27	1490.65	12,431	-786	1,833	2	0	2	2,607	-12
28	1487.23	11,391	-1,040	2,035	4	0	4	3,071	-4
29	1485.92	11,009	-382	1,718	2	0	2	2,101	1
30	1486.30	11,118	109	2,059	2	0	2	1,946	-4
31	1486.55	11,191	73	2,013	3	0	3	1,932	-8
<b>Total</b>			<b>3,850</b>	<b>49,147</b>	<b>23</b>	<b>0</b>	<b>23</b>	<b>45,101</b>	<b>-196</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**February 2007**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jan 31	1486.55	11,191							
1	1486.80	11,264	73	1,993	3	0	3	1,917	-3
2	1486.37	11,139	-125	1,970	3	0	3	2,093	-2
3	1486.53	11,185	46	2,018	3	0	3	1,968	-4
4	1486.97	11,314	129	2,237	3	0	3	2,104	-4
5	1488.81	11,864	550	3,366	3	0	3	2,813	-3
6	1489.70	12,136	272	3,509	3	0	3	3,235	-2
7	1490.51	12,387	251	3,634	3	0	3	3,109	-274
8	1485.37	10,851	-1,536	2,740	3	0	3	2,897	-1,379
9	1486.07	11,052	201	2,800	2	0	2	2,615	16
10	1486.60	11,206	154	1,949	3	0	3	1,789	-6
11	1491.28	12,629	1,423	4,665	3	0	3	3,239	-3
12	1487.53	11,480	-1,149	2,093	3	0	3	3,240	-2
13	1490.90	12,509	1,029	3,954	3	0	3	3,668	743
14	1484.49	10,604	-1,905	2,936	3	0	3	4,834	-7
15	1494.45	13,650	3,046	3,793	3	0	3	0	-747
16	1506.44	17,840	4,190	4,343	3	0	3	746	593
17	1512.43	20,131	2,291	2,379	3	0	3	0	-88
18	1518.43	22,576	2,445	2,609	3	0	3	0	-164
19	1509.46	18,977	-3,599	4,293	4	0	4	7,881	-11
20	1517.94	22,371	3,394	4,827	4	0	4	1,431	-2
21	1519.06	22,842	471	2,470	3	0	3	1,995	-4
22	1516.14	21,625	-1,217	4,618	4	0	4	5,831	-4
23	1509.60	19,031	-2,594	4,475	5	0	5	7,064	-5
24	1515.12	21,209	2,178	2,304	3	0	3	0	-126
25	1516.99	21,976	767	4,597	3	0	3	3,824	-6
26	1503.83	16,885	-5,091	4,448	3	0	3	9,538	-1
27	1499.81	15,461	-1,424	4,549	4	0	4	5,968	-5
28	1497.08	14,526	-935	4,581	4	0	4	5,511	-5
<b>Total</b>			<b>3,335</b>	<b>94,150</b>	<b>90</b>	<b>0</b>	<b>90</b>	<b>89,310</b>	<b>-1,505</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**March 2007**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Feb 28	1497.08	14,526							
1	1494.75	13,749	-777	4,300	5	0	5	5,072	-5
2	1493.98	13,496	-253	4,476	5	0	5	4,725	-4
3	1490.00	12,228	-1,268	3,138	4	0	4	4,402	-4
4	1491.36	12,654	426	3,473	4	0	4	3,042	-5
5	1492.75	13,098	444	4,418	4	0	4	3,971	-3
6	1499.67	15,413	2,315	4,129	3	0	3	1,811	-3
7	1509.33	18,927	3,514	3,571	3	0	3	0	-57
8	1519.28	22,935	4,008	4,110	3	0	3	0	-102
9	1511.18	19,641	-3,294	4,027	3	0	3	7,311	-10
10	1516.58	21,806	2,165	2,601	3	0	3	433	-3
11	1511.98	19,954	-1,852	3,264	3	0	3	5,115	-1
12	1518.39	22,560	2,606	4,724	3	0	3	2,114	-4
13	1517.51	22,192	-368	4,278	3	0	3	4,643	-3
14	1515.82	21,494	-698	3,820	3	0	3	4,515	-3
15	1516.15	21,630	136	4,634	3	0	3	4,496	-2
16	1516.94	21,955	325	4,848	2	0	2	4,519	-4
17	1512.18	20,033	-1,922	2,363	2	0	2	4,285	0
18	1519.40	22,986	2,953	3,934	2	0	2	978	-3
19	1523.41	24,714	1,728	4,813	2	0	2	3,082	-3
20	1511.51	19,770	-4,944	4,707	3	0	3	9,649	-2
21	1518.76	22,715	2,945	3,544	3	0	3	0	-599
22	1522.14	24,161	1,446	4,483	3	0	3	3,033	-4
23	1510.53	19,389	-4,772	3,771	2	0	2	8,540	-3
24	1512.42	20,127	738	765	2	0	2	0	-27
25	1517.28	22,096	1,969	2,074	2	0	2	0	-105
26	1520.21	23,330	1,234	5,487	2	0	2	4,248	-5
27	1514.44	20,934	-2,396	5,485	2	0	2	7,879	-2
28	1509.22	18,885	-2,049	2,994	2	0	2	5,039	-4
29	1514.18	20,829	1,944	2,024	2	0	2	0	-80
30	1517.13	22,034	1,205	1,260	2	0	2	0	-55
31	1499.82	15,465	-6,569	4,284	2	0	2	10,848	-5
Total			939	115,799	87	0	87	113,750	-1,110

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**April 2007**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Mar 31	1499.82	15,465							
1	1492.72	13,088	-2,377	3,599	1	0	1	5,974	-2
2	1492.13	12,899	-189	3,739	1	0	1	3,929	1
3	1493.73	13,415	516	4,396	1	0	1	3,878	-2
4	1494.99	13,828	413	4,549	1	0	1	4,134	-2
5	1495.49	13,994	166	4,305	1	0	1	4,139	0
6	1497.41	14,638	644	5,054	0	0	0	4,409	-1
7	1497.00	14,499	-139	3,883	0	0	0	4,020	-2
8	1496.45	14,314	-185	1,675	0	0	0	1,860	0
9	1497.26	14,587	273	4,271	0	0	0	3,998	0
10	1499.26	15,271	684	4,705	0	0	0	4,021	0
11	1501.26	15,968	697	5,442	0	0	0	4,745	0
12	1501.99	16,226	258	4,939	0	0	0	4,683	2
13	1501.99	16,226	0	4,900	0	0	0	4,683	-217
14	1499.59	15,385	-841	1,715	0	0	0	2,873	317
15	1506.39	17,821	2,436	3,364	0	0	0	935	7
16	1518.08	22,430	4,609	4,613	0	0	0	0	-4
17	1517.58	22,221	-209	4,137	0	0	0	4,345	-1
18	1514.29	20,873	-1,348	3,704	0	0	0	5,052	0
19	1512.66	20,222	-651	4,536	0	0	0	5,186	-1
20	1518.02	22,405	2,183	4,460	1	0	1	2,279	2
21	1515.61	21,409	-996	1,381	1	0	1	2,374	-3
22	1516.26	21,675	266	4,463	1	0	1	4,196	-1
23	1520.88	23,617	1,942	3,768	1	0	1	1,824	-2
24	1525.51	25,642	2,025	3,446	1	0	1	1,422	1
25	1521.18	23,746	-1,896	3,387	1	0	1	5,282	-1
26	1525.44	25,611	1,865	3,754	0	157	0	1,733	1
27	1523.43	24,723	-888	4,626	0	17	0	5,497	0
28	1522.81	24,452	-271	2,566	0	83	0	2,753	-1
29	1527.30	26,445	1,993	2,792	0	0	0	799	0
30	1522.88	24,483	-1,962	4,972	0	0	0	6,934	0
<b>Total</b>			<b>9,018</b>	<b>117,141</b>	<b>11</b>	<b>257</b>	<b>11</b>	<b>107,957</b>	<b>91</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**May 2007**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Apr 30	1522.88	24,483							
1	1521.48	23,875	-608	5,002	0	0	0	5,610	0
2	1521.76	23,996	121	5,601	0	0	0	5,481	1
3	1517.78	22,304	-1,692	3,378	0	98	1	4,972	1
4	1522.39	24,269	1,965	5,024	0	625	0	2,434	0
5	1523.35	24,688	419	510	1	0	0	0	-92
6	1521.28	23,789	-899	3,348	0	879	0	3,368	0
7	1521.89	24,052	263	5,906	0	439	0	5,205	1
8	1519.91	23,202	-850	4,907	0	933	0	4,824	0
9	1520.86	23,608	406	4,844	0	0	0	4,436	-2
10	1516.92	21,947	-1,661	4,453	0	0	0	6,115	1
11	1515.33	21,295	-652	4,728	0	0	0	5,381	1
12	1522.18	24,178	2,883	2,847	0	0	0	0	36
13	1525.60	25,682	1,504	1,595	0	43	0	0	-48
14	1526.23	25,964	282	4,963	0	1,117	0	3,564	0
15	1519.28	22,935	-3,029	3,138	0	1,207	0	4,960	0
16	1524.20	25,062	2,127	3,637	0	1,487	0	0	-23
17	1524.56	25,221	159	4,063	0	1,162	0	2,741	-1
18	1522.92	24,500	-721	4,211	0	956	0	3,975	-1
19	1520.20	23,326	-1,174	2,476	0	0	0	3,651	1
20	1522.26	24,213	887	2,077	0	1,164	0	0	-26
21	1522.46	24,300	87	4,175	0	739	0	3,349	0
22	1518.24	22,497	-1,803	3,563	0	693	0	4,674	1
23	1526.08	25,896	3,399	3,421	0	0	0	0	-22
24	1525.73	25,740	-156	3,649	0	0	0	3,805	0
25	1522.49	24,313	-1,427	3,713	0	0	0	5,140	0
26	1519.39	22,981	-1,332	1,548	0	0	0	2,879	-1
27	1518.06	22,421	-560	692	0	1,199	0	0	-53
28	1518.98	22,808	387	1,491	0	1,072	0	0	-32
29	1520.94	23,643	835	4,090	0	949	0	2,306	0
30	1519.49	23,024	-619	4,267	0	0	0	4,887	1
31	1522.13	24,156	1,132	3,450	0	0	0	2,317	-1
<b>Total</b>			<b>-327</b>	<b>110,767</b>	<b>1</b>	<b>14,762</b>	<b>1</b>	<b>96,074</b>	<b>-258</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**June 2007**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
May 31	1522.13	24,156							
1	1521.12	23,720	-436	2,149	0	0	0	2,584	-1
2	1515.64	21,421	-2,299	1,372	0	733	0	2,939	1
3	1516.35	21,712	291	1,413	0	1,142	0	0	20
4	1521.50	23,884	2,172	3,638	0	1,471	0	0	5
5	1520.56	23,480	-404	2,326	0	930	0	1,800	0
6	1516.80	21,897	-1,582	3,155	0	1,227	0	3,511	1
7	1515.10	21,201	-696	3,605	0	558	0	3,743	0
8	1525.04	25,433	4,232	5,200	0	938	0	0	-30
9	1523.51	24,758	-675	491	0	1,069	0	0	-97
10	1520.03	23,253	-1,505	548	0	1,989	0	0	-64
11	1525.55	25,660	2,407	3,168	0	730	0	0	-31
12	1523.12	24,588	-1,072	2,149	0	739	0	2,482	0
13	1516.03	21,580	-3,007	3,319	0	1,959	0	4,369	2
14	1517.32	22,113	532	4,243	0	1,076	0	2,633	-2
15	1523.17	24,609	2,497	3,431	0	901	0	0	-33
16	1523.51	24,758	149	1,163	0	1,041	0	0	27
17	1516.73	21,868	-2,890	421	0	3,255	0	0	-56
18	1521.39	23,836	1,968	3,442	0	1,491	0	0	17
19	1525.64	25,700	1,864	2,869	0	1,076	0	0	71
20	1524.21	25,066	-634	2,785	0	1,068	0	2,352	1
21	1517.77	22,300	-2,766	3,249	0	997	0	5,017	-1
22	1520.52	23,463	1,163	3,146	0	1,192	0	790	-1
23	1519.48	23,019	-443	766	0	1,123	0	0	-86
24	1515.42	21,331	-1,688	344	0	1,982	0	0	-50
25	1518.84	22,749	1,418	2,643	0	1,174	0	0	-51
26	1516.66	21,839	-909	2,678	0	591	0	2,996	0
27	1524.38	25,141	3,302	3,209	0	0	0	0	93
28	1527.74	26,645	1,504	2,086	0	576	0	0	-6
29	1527.17	26,387	-258	3,904	0	1,610	0	2,551	-1
30	1512.95	20,337	-6,049	110	0	2,016	0	4,144	1
<b>Total</b>			<b>-3,819</b>	<b>73,022</b>	<b>0</b>	<b>34,654</b>	<b>0</b>	<b>41,911</b>	<b>-276</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**July 2007**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jun 30	1512.95	20,337							
1	1514.73	21,051	714	1,797	0	1,047	0	0	-36
2	1512.05	19,982	-1,069	5,058	0	1,588	0	3,616	-923
3	1515.04	21,177	1,195	6,082	0	496	0	4,390	-1
4	1519.35	22,964	1,787	3,883	0	2,093	0	0	-3
5	1516.37	21,720	-1,244	6,610	0	3,035	0	4,820	1
6	1520.78	23,574	1,854	5,730	0	845	0	3,030	-1
7	1523.57	24,785	1,211	3,174	0	1,200	0	764	1
8	1519.43	22,998	-1,787	602	0	2,346	0	0	-43
9	1518.77	22,719	-279	4,379	0	1,591	0	3,067	0
10	1515.38	21,315	-1,404	3,733	0	1,664	0	3,474	1
11	1519.96	23,223	1,908	5,278	0	694	0	2,676	0
12	1518.63	22,660	-563	5,010	0	837	0	4,735	-1
13	1521.76	23,996	1,336	6,232	0	1,823	0	3,074	1
14	1518.53	22,618	-1,378	1,010	0	0	0	2,387	-1
15	1516.36	21,716	-902	234	0	1,120	0	0	-16
16	1517.29	22,100	384	4,336	0	1,388	0	2,563	-1
17	1513.92	20,724	-1,376	4,459	0	1,790	0	4,047	2
18	1519.21	22,905	2,181	5,185	0	775	0	2,227	-2
19	1517.25	22,084	-821	4,810	0	784	0	4,847	0
20	1516.15	21,630	-454	4,349	0	884	0	3,921	2
21	1515.25	21,262	-368	1,954	0	702	0	1,618	-2
22	1516.52	21,782	520	1,946	0	1,342	0	0	-84
23	1520.20	23,326	1,544	4,689	0	850	0	2,295	0
24	1512.74	20,254	-3,072	5,051	0	1,866	0	6,256	-1
25	1519.35	22,964	2,710	5,933	0	992	0	2,231	0
26	1518.21	22,484	-480	5,107	0	1,100	0	4,488	1
27	1522.20	24,187	1,703	7,302	0	1,076	0	4,524	1
28	1517.50	22,188	-1,999	3,646	0	1,246	0	4,398	-1
29	1517.59	22,225	37	2,048	0	1,975	0	0	-36
30	1525.86	25,798	3,573	5,522	0	1,907	0	0	-42
31	1526.74	26,193	395	4,592	0	575	0	3,621	-1
<b>Total</b>			<b>5,856</b>	<b>129,741</b>	<b>0</b>	<b>39,631</b>	<b>0</b>	<b>83,069</b>	<b>-1,185</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**August 2007**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jul 31	1526.74	26,193							
1	1524.24	25,079	-1,114	4,425	0	0	0	5,540	1
2	1521.62	23,936	-1,143	4,623	0	686	0	5,080	0
3	1521.34	23,815	-121	4,835	0	0	0	4,955	-1
4	1519.18	22,892	-923	3,288	0	1,015	0	3,196	0
5	1517.82	22,321	-571	386	0	979	0	0	22
6	1523.67	24,829	2,508	5,939	0	1,328	0	2,103	0
7	1517.24	22,079	-2,750	3,943	0	2,035	0	4,656	-2
8	1514.72	21,047	-1,032	4,973	0	2,116	0	3,890	1
9	1514.81	21,083	36	5,685	0	1,854	0	3,794	-1
10	1515.97	21,556	473	5,803	0	1,544	0	3,788	2
11	1509.21	18,882	-2,674	3,406	0	1,182	0	4,896	-2
12	1510.72	19,462	580	1,882	0	1,212	0	0	-90
13	1514.84	21,095	1,633	5,202	0	1,236	0	2,333	0
14	1516.49	21,769	674	5,296	0	726	0	3,896	0
15	1515.41	21,327	-442	4,656	0	977	0	4,122	1
16	1514.88	21,112	-215	4,427	0	570	0	4,072	0
17	1515.77	21,474	362	5,308	0	967	0	3,979	0
18	1512.26	20,064	-1,410	4,010	0	476	0	4,944	0
19	1514.10	20,797	733	2,018	0	1,173	0	0	-112
20	1519.20	22,901	2,104	4,886	0	580	0	2,200	-2
21	1514.28	20,869	-2,032	3,932	0	1,565	0	4,400	1
22	1514.02	20,765	-104	4,469	0	725	0	3,850	2
23	1515.18	21,234	469	4,536	0	0	0	4,065	-2
24	1517.03	21,992	758	5,442	0	622	0	4,061	-1
25	1512.49	20,155	-1,837	797	0	837	0	1,797	0
26	1516.00	21,568	1,413	3,791	0	2,409	0	0	31
27	1516.09	21,605	37	4,707	0	2,815	0	1,855	0
28	1516.10	21,609	4	4,859	0	736	0	4,119	0
29	1516.29	21,687	78	4,870	0	948	0	3,843	-1
30	1517.47	22,175	488	5,026	0	444	0	4,093	-1
31	1517.54	22,204	29	5,038	0	1,816	0	3,193	0
<b>Total</b>			<b>-3,989</b>	<b>132,458</b>	<b>0</b>	<b>33,573</b>	<b>0</b>	<b>102,720</b>	<b>-154</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**September 2007**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Aug 31	1517.54	22,204							
1	1515.64	21,421	-783	1,943	0	991	0	1,736	1
2	1515.27	21,270	-151	1,831	0	1,935	0	0	-47
3	1515.29	21,278	8	2,865	0	967	0	1,890	0
4	1512.12	20,009	-1,269	3,936	0	1,910	0	3,296	1
5	1512.81	20,282	273	4,287	0	729	0	3,284	-1
6	1517.72	22,279	1,997	6,157	0	644	0	3,517	1
7	1516.32	21,699	-580	4,022	0	618	0	3,984	0
8	1511.50	19,766	-1,933	1,448	0	1,181	0	2,199	-1
9	1512.31	20,084	318	1,435	0	1,092	0	0	-25
10	1514.56	20,982	898	3,747	0	1,055	0	1,794	0
11	1512.73	20,250	-732	4,330	0	1,892	0	3,169	-1
12	1512.43	20,131	-119	4,567	0	1,905	0	2,781	0
13	1513.85	20,696	565	5,164	0	1,789	0	2,812	2
14	1516.22	21,658	962	5,029	0	826	0	3,240	-1
15	1514.62	21,006	-652	3,871	0	1,157	0	3,365	-1
16	1511.02	19,579	-1,427	1,565	0	1,200	0	1,792	0
17	1514.95	21,140	1,561	4,079	0	895	0	1,623	0
18	1512.55	20,179	-961	3,265	0	1,027	0	3,200	1
19	1514.09	20,793	614	4,878	0	1,508	0	2,757	1
20	1516.64	21,831	1,038	4,921	0	625	0	3,256	-2
21	1517.84	22,329	498	4,654	0	681	0	3,476	1
22	1511.98	19,954	-2,375	2,411	0	720	0	4,067	1
23	1508.77	18,714	-1,240	0	0	1,268	0	0	28
24	1517.29	22,100	3,386	4,338	0	963	0	0	11
25	1517.86	22,338	238	3,538	0	913	0	2,389	2
26	1518.36	22,547	209	4,424	0	907	0	3,307	-1
27	1518.64	22,665	118	4,471	0	1,032	0	3,321	0
28	1519.68	23,104	439	4,425	0	782	0	3,203	-1
29	1516.13	21,621	-1,483	1,827	0	0	0	3,311	1
30	1512.76	20,262	-1,359	1,229	0	0	0	2,587	-1
<b>Total</b>			<b>-1,942</b>	<b>104,657</b>	<b>0</b>	<b>31,212</b>	<b>0</b>	<b>75,356</b>	<b>-31</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**October 2007**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Sep 30	1512.76	20,262							
1	1515.50	21,364	1,102	3,402	0	954	0	1,347	1
2	1518.61	22,652	1,288	4,480	0	789	0	2,403	0
3	1519.09	22,854	202	3,721	0	665	0	2,853	-1
4	1519.49	23,024	170	4,210	0	1,094	0	2,947	1
5	1514.98	21,152	-1,872	1,618	0	697	0	2,792	-1
6	1515.79	21,482	330	259	0	0	0	0	71
7	1517.30	22,104	622	617	0	0	0	0	5
8	1517.98	22,388	284	3,995	0	1,927	0	1,786	2
9	1516.85	21,918	-470	2,968	0	790	0	2,646	-2
10	1515.73	21,458	-460	2,963	0	776	0	2,649	2
11	1517.27	22,092	634	2,775	0	941	0	1,198	-2
12	1517.68	22,263	171	3,098	0	1,521	0	1,407	1
13	1514.93	21,132	-1,131	119	0	1,211	0	0	-39
14	1516.75	21,877	745	734	0	0	0	0	11
15	1519.79	23,151	1,274	2,718	0	1,356	0	0	-88
16	1519.19	22,897	-254	3,443	0	1,316	0	2,381	0
17	1511.86	19,907	-2,990	1,396	0	1,409	0	2,977	0
18	1515.62	21,413	1,506	4,529	0	700	0	2,323	0
19	1515.10	21,201	-212	3,428	0	768	0	2,871	-1
20	1515.34	21,299	98	108	0	0	0	0	-10
21	1516.62	21,823	524	714	0	19	0	0	-171
22	1513.19	20,433	-1,390	559	0	1,987	0	0	38
23	1510.92	19,540	-893	3,600	0	1,632	0	2,860	-1
24	1513.57	20,584	1,044	3,770	0	964	0	1,763	1
25	1515.16	21,225	641	4,435	0	1,040	0	2,753	-1
26	1514.10	20,797	-428	2,525	0	0	0	0	-2,953
27	1515.66	21,429	632	642	0	0	0	0	-10
28	1515.90	21,527	98	111	0	0	0	0	-13
29	1525.04	25,433	3,906	3,882	0	0	0	0	24
30	1524.83	25,340	-93	2,168	0	0	0	2,261	0
31	1529.91	27,640	2,300	3,822	0	0	0	1,524	2
Total			7,378	76,809	0	22,556	0	43,741	-3,134

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**November 2007**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Oct 31	1529.91	27,640							
1	1526.32	26,004	-1,636	295	0	126	0	2,574	769
2	1526.32	26,004	0	3,093	0	796	0	1,527	-770
3	1528.45	26,968	964	993	0	0	0	0	-29
4	1530.97	28,132	1,164	1,199	0	0	0	0	-35
5	1526.95	26,287	-1,845	1,258	0	770	0	0	-2,333
6	1526.66	26,157	-130	776	0	833	0	0	-73
7	1527.02	26,319	162	176	0	10	0	0	-4
8	1527.10	26,355	36	48	0	0	0	0	-12
9	1527.07	26,341	-14	0	0	0	0	0	-14
10	1527.20	26,400	59	0	0	80	0	0	139
11	1521.91	24,061	-2,339	1	0	2,302	0	0	-38
12	1518.57	22,635	-1,426	38	0	1,388	0	0	-76
13	1518.95	22,795	160	1,558	0	1,342	0	0	-56
14	1519.35	22,964	169	1,618	0	1,420	0	0	-29
15	1524.62	25,247	2,283	2,270	0	17	0	0	30
16	1526.77	26,206	959	986	0	0	0	0	-27
17	1526.03	25,874	-332	250	0	512	0	0	-70
18	1524.90	25,371	-503	373	0	818	0	0	-58
19	1528.54	27,010	1,639	2,306	0	643	0	0	-24
20	1527.97	26,749	-261	2,228	0	0	0	2,499	10
21	1523.09	24,574	-2,175	1,271	0	1,058	0	2,377	-11
22	1519.15	22,880	-1,694	622	0	0	0	2,317	1
23	1518.08	22,430	-450	1,394	0	0	0	1,845	1
24	1522.20	24,187	1,757	1,811	0	0	0	0	-54
25	1526.60	26,130	1,943	1,901	0	0	0	0	42
26	1523.56	24,780	-1,350	2,190	0	0	0	3,541	1
27	1526.15	25,928	1,148	1,154	0	0	0	0	-6
28	1522.21	24,191	-1,737	2,651	0	564	0	3,824	0
29	1520.09	23,279	-912	2,139	0	803	0	2,248	0
30	1522.12	24,152	873	2,906	0	0	0	2,034	1
<b>Total</b>			<b>-3,488</b>	<b>37,505</b>	<b>0</b>	<b>13,482</b>	<b>0</b>	<b>24,786</b>	<b>-2,725</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**December 2007**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Nov 30	1522.12	24,152							
1	1524.50	25,194	1,042	1,040	0	0	0	0	2
2	1526.49	26,080	886	901	0	0	0	0	-15
3	1524.63	25,251	-829	437	0	1,025	0	0	-241
4	1524.40	25,150	-101	894	0	939	0	0	-56
5	1524.82	25,335	185	967	0	761	0	0	-21
6	1521.20	23,754	-1,581	2,008	0	1,509	0	2,079	-1
7	1517.84	22,329	-1,425	1,427	0	610	0	2,244	2
8	1515.16	21,225	-1,104	32	0	1,114	0	0	-22
9	1515.25	21,262	37	58	0	0	0	0	-21
10	1516.92	21,947	685	677	0	0	0	0	8
11	1519.44	23,003	1,056	1,011	0	0	0	0	45
12	1521.31	23,802	799	895	0	0	0	0	-96
13	1519.49	23,024	-778	1,248	0	0	0	2,027	1
14	1516.13	21,621	-1,403	76	0	0	0	1,479	0
15	1516.91	21,943	322	354	0	0	0	0	-32
16	1518.17	22,467	524	819	0	286	0	0	-9
17	1525.33	25,562	3,095	3,024	0	0	0	0	71
18	1526.34	26,013	451	2,871	0	0	0	2,501	81
19	1520.78	23,574	-2,439	2,608	0	0	0	5,066	19
20	1514.79	21,075	-2,499	2,655	0	625	0	4,529	0
21	1518.45	22,585	1,510	3,904	0	0	0	2,395	1
22	1521.53	23,897	1,312	1,411	0	0	0	0	-99
23	1524.10	25,018	1,121	1,119	0	0	0	0	2
24	1525.20	25,504	486	2,782	0	0	0	2,293	-3
25	1522.20	24,187	-1,317	2,886	0	784	0	3,421	2
26	1519.65	23,092	-1,095	1,441	0	0	0	2,535	-1
27	1514.74	21,055	-2,037	2,873	0	467	0	4,443	0
28	1518.59	22,644	1,589	3,123	0	0	0	1,534	0
29	1520.04	23,258	614	1,379	0	819	0	0	54
30	1521.33	23,810	552	1,373	0	824	0	0	3
31	1520.09	23,279	-531	3,023	0	0	0	3,556	2
<b>Total</b>			<b>-873</b>	<b>49,316</b>	<b>0</b>	<b>9,763</b>	<b>0</b>	<b>40,102</b>	<b>-324</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**January 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Dec 31	1520.09	23,279							
1	1515.38	21,315	-1,964	2,523	0	0	0	4,487	0
2	1514.62	21,006	-309	3,870	0	0	0	4,178	-1
3	1515.78	21,478	472	4,540	0	0	0	4,069	1
4	1516.33	21,704	226	4,160	0	0	0	4,004	70
5	1512.99	20,353	-1,351	1,698	12	0	12	3,094	45
6	1518.42	22,572	2,219	2,164	11	0	11	0	55
7	1521.49	23,879	1,307	4,677	12	0	12	3,346	-24
8	1519.11	22,863	-1,016	3,687	5	0	5	4,698	-5
9	1514.48	20,950	-1,913	2,431	3	0	3	4,342	-2
10	1513.48	20,548	-402	3,746	0	0	0	4,147	-1
11	1514.17	20,825	277	4,198	0	0	0	3,923	2
12	1508.70	18,687	-2,138	1,011	0	0	0	3,146	-3
13	1512.57	20,187	1,500	1,498	0	0	0	0	2
14	1512.84	20,294	107	3,521	0	733	0	2,681	0
15	1511.76	19,868	-426	3,796	1	777	1	3,444	-1
16	1512.54	20,175	307	3,784	1	0	1	3,452	-25
17	1512.18	20,033	-142	3,468	1	0	1	3,610	0
18	1510.24	19,277	-756	3,463	1	0	1	4,218	-1
19	1510.45	19,358	81	1,998	1	0	1	1,915	-2
20	1511.62	19,813	455	1,003	2	557	2	0	9
21	1517.26	22,088	2,275	2,985	2	718	2	0	8
22	1514.64	21,014	-1,074	2,585	3	655	3	3,047	43
23	1513.49	20,552	-462	2,917	25	0	25	3,004	-375
24	1510.97	19,559	-993	1,815	91	0	91	2,441	-367
25	1517.11	22,026	2,467	2,286	476	568	476	112	861
26	1519.72	23,121	1,095	1,499	181	602	181	0	198
27	1522.82	24,457	1,336	1,001	1,366	1,366	1,366	0	1,701
28	1518.61	22,652	-1,805	1,307	765	699	765	490	-1,923
29	1512.80	20,278	-2,374	1,140	328	638	328	2,822	-54
30	1511.10	19,610	-668	1,346	188	0	188	1,856	-158
31	1512.68	20,230	620	976	126	0	126	239	-117
<b>Total</b>			<b>-3,049</b>	<b>81,093</b>	<b>3,601</b>	<b>7,313</b>	<b>3,601</b>	<b>76,765</b>	<b>-64</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**February 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jan 31	1512.68	20,230							
1	1515.74	21,462	1,232	1,771	90	616	90	0	77
2	1515.89	21,523	61	0	70	0	70	0	61
3	1514.60	20,998	-525	84	62	722	62	0	113
4	1511.33	19,700	-1,298	1,312	51	532	51	1,816	-262
5	1512.17	20,029	329	989	40	0	40	631	-29
6	1514.55	20,978	949	944	34	0	34	0	5
7	1514.09	20,793	-185	945	31	0	31	1,076	-54
8	1515.44	21,339	546	449	30	0	30	0	97
9	1520.07	23,270	1,931	1,957	28	0	28	0	-26
10	1518.74	22,707	-563	761	26	0	26	1,245	-79
11	1515.64	21,421	-1,286	305	25	0	25	1,566	-25
12	1516.46	21,757	336	307	25	0	25	0	29
13	1515.30	21,282	-475	68	25	573	25	0	30
14	1514.10	20,797	-485	280	25	793	25	0	28
15	1514.26	20,861	64	379	23	407	23	0	92
16	1515.22	21,250	389	387	23	0	23	0	2
17	1514.82	21,087	-163	415	23	540	23	0	-38
18	1512.34	20,096	-991	1,091	22	589	22	1,328	-165
19	1511.24	19,664	-432	2,578	21	0	21	2,988	-22
20	1512.96	20,341	677	3,609	24	0	24	2,908	-24
21	1508.68	18,680	-1,661	3,377	25	0	25	5,013	-25
22	1516.97	21,968	3,288	4,941	34	0	34	4,164	2,511
23	1513.50	20,556	-1,412	1,909	30	0	30	746	-2,575
24	1517.26	22,088	1,532	1,025	49	0	49	0	507
25	1518.73	22,703	615	2,126	41	0	41	1,324	-187
26	1515.16	21,225	-1,478	2,598	36	0	36	3,306	-770
27	1513.69	20,632	-593	1,908	32	662	32	2,556	717
28	1513.21	20,441	-191	2,187	27	847	27	1,507	-24
29	1516.71	21,860	1,419	2,956	24	539	24	973	-25
<b>Total</b>			<b>1,630</b>	<b>41,658</b>	<b>996</b>	<b>6,820</b>	<b>996</b>	<b>33,147</b>	<b>-61</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**March 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Feb 29	1516.71	21,860							
1	1516.26	21,675	-185	375	24	555	24	0	-5
2	1517.48	22,179	504	0	22	0	22	0	504
3	1516.83	21,910	-269	273	22	507	22	0	-35
4	1515.47	21,352	-558	348	19	883	19	0	-23
5	1514.36	20,901	-451	207	19	689	19	0	31
6	1513.09	20,393	-508	227	18	758	18	0	23
7	1512.08	19,993	-400	460	19	840	19	0	-20
8	1513.45	20,536	543	510	19	0	19	0	33
9	1515.55	21,384	848	851	20	0	20	0	-3
10	1514.22	20,845	-539	310	18	863	18	0	14
11	1516.92	21,947	1,102	1,860	16	721	16	0	-37
12	1517.27	22,092	145	979	15	770	15	0	-64
13	1516.31	21,695	-397	387	10	746	10	0	-38
14	1515.66	21,429	-266	428	8	663	8	0	-31
15	1514.11	20,801	-628	201	8	814	8	0	-15
16	1511.32	19,696	-1,105	334	8	1,440	8	0	1
17	1514.37	20,905	1,209	1,956	8	760	8	0	13
18	1518.95	22,795	1,890	2,619	8	750	8	0	21
19	1519.44	23,003	208	1,364	9	1,013	9	0	-143
20	1520.65	23,518	515	1,085	8	809	8	1,294	1,533
21	1517.19	22,059	-1,459	2,671	7	895	7	1,396	-1,839
22	1516.41	21,736	-323	3,418	8	1,255	8	2,400	-86
23	1516.51	21,778	42	1,204	8	1,126	8	0	-36
24	1517.20	22,063	285	1,779	8	1,151	8	0	-343
25	1516.92	21,947	-116	902	8	1,024	8	0	6
26	1518.04	22,413	466	1,134	11	641	11	0	-27
27	1517.02	21,988	-425	469	11	865	11	0	-29
28	1513.98	20,748	-1,240	247	10	1,467	10	0	-20
29	1514.79	21,075	327	365	8	0	8	0	-38
30	1516.03	21,580	505	476	7	0	7	0	29
31	1519.09	22,854	1,274	1,214	7	0	7	0	60
Total			994	28,653	391	22,005	391	5,090	-564

1/ Values supplied by LADWP, not verified by DWR.



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**April 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Mar 31	1519.09	22,854							
1	1519.83	23,168	314	318	7	0	7	0	-4
2	1520.11	23,287	119	129	7	0	7	0	-10
3	1520.57	23,484	197	187	6	0	6	0	10
4	1520.94	23,643	159	119	6	0	6	0	40
5	1519.25	22,922	-721	961	6	0	6	1,658	-24
6	1517.29	22,100	-822	1,060	5	0	5	1,873	-9
7	1520.12	23,292	1,192	3,326	5	0	5	2,130	-4
8	1515.30	21,282	-2,010	2,909	5	0	5	4,913	-6
9	1512.20	20,041	-1,241	2,826	5	0	5	4,064	-3
10	1510.41	19,342	-699	3,072	5	0	5	3,765	-6
11	1509.69	19,065	-277	3,241	4	0	4	3,514	-4
12	1511.36	19,711	646	2,244	4	0	4	1,593	-5
13	1515.62	21,413	1,702	1,769	4	0	4	0	-67
14	1521.80	24,013	2,600	2,591	3	0	3	0	9
15	1523.46	24,736	723	620	3	0	3	0	103
16	1520.11	23,287	-1,449	727	3	0	3	2,164	-12
17	1513.18	20,429	-2,858	1,703	3	0	3	4,558	-3
18	1508.08	18,453	-1,976	1,682	2	0	2	3,657	-1
19	1507.30	18,160	-293	953	2	0	2	1,236	-10
20	1509.40	18,954	794	807	3	0	3	0	-13
21	1516.33	21,704	2,750	2,749	3	0	3	0	1
22	1515.45	21,343	-361	2,574	3	0	3	2,931	-4
23	1511.59	19,801	-1,542	2,568	3	0	3	4,107	-3
24	1507.14	18,100	-1,701	2,242	3	579	3	3,361	-3
25	1507.14	18,100	0	2,385	3	0	3	2,553	168
26	1507.03	18,059	-41	2,273	2	0	2	2,121	-193
27	1508.97	18,790	731	1,658	2	0	2	935	8
28	1512.24	20,056	1,266	3,032	2	0	2	1,974	208
29	1512.81	20,282	226	4,801	1	952	1	3,545	-78
30	1508.74	18,703	-1,579	2,624	1	580	1	3,625	2
<b>Total</b>			<b>-4,151</b>	<b>58,150</b>	<b>111</b>	<b>2,111</b>	<b>111</b>	<b>60,277</b>	<b>87</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**May 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Apr 30	1508.74	18,703							
1	1510.66	19,440	737	3,888	2	0	2	3,150	-1
2	1509.06	18,824	-616	3,013	2	0	2	3,625	-4
3	1511.20	19,649	825	802	2	0	2	0	23
4	1512.76	20,262	613	627	2	0	2	0	-14
5	1518.34	22,539	2,277	3,045	2	748	2	0	-20
6	1516.55	21,794	-745	3,185	2	591	2	3,329	-10
7	1513.82	20,684	-1,110	3,407	2	537	2	3,979	-1
8	1510.68	19,447	-1,237	2,691	2	641	2	3,284	-3
9	1510.41	19,342	-105	3,291	2	781	2	2,614	-1
10	1507.45	18,216	-1,126	914	2	1,072	2	965	-3
11	1508.73	18,699	483	939	2	480	2	0	24
12	1513.49	20,552	1,853	3,302	1	0	1	1,446	-3
13	1511.44	19,743	-809	2,655	1	727	1	2,737	0
14	1511.33	19,700	-43	3,015	1	1,173	1	1,884	-1
15	1512.60	20,199	499	2,869	1	0	1	2,369	-1
16	1511.96	19,946	-253	2,768	0	1,053	0	1,969	1
17	1511.98	19,954	8	1,600	0	0	0	1,592	0
18	1516.34	21,708	1,754	1,799	0	0	0	0	-45
19	1516.81	21,901	193	1,564	0	0	0	1,370	-1
20	1516.88	21,930	29	1,803	0	0	0	1,774	0
21	1518.12	22,446	516	1,553	0	968	0	0	-69
22	1517.38	22,138	-308	2,020	0	758	0	1,570	0
23	1516.82	21,906	-232	2,883	0	847	0	2,268	0
24	1518.19	22,476	570	544	0	0	0	0	26
25	1516.51	21,778	-698	1,651	0	2,342	0	0	-7
26	1512.75	20,258	-1,520	2,311	0	2,615	0	1,215	-1
27	1511.22	19,657	-601	2,980	0	1,738	0	1,843	0
28	1518.13	22,451	2,794	4,640	0	1,809	0	0	-37
29	1517.04	21,997	-454	4,447	0	3,408	0	1,491	-2
30	1521.94	24,074	2,077	6,762	0	2,956	0	1,731	2
31	1523.43	24,723	649	3,040	0	2,353	0	0	-38
<b>Total</b>			<b>6,020</b>	<b>80,008</b>	<b>26</b>	<b>27,597</b>	<b>26</b>	<b>46,205</b>	<b>-186</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**June 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
May 31	1523.43	24,723							
1	0.00	0	-24,723	0	0	0	0	0	-24,723
2	0.00	0	0	0	0	0	0	0	0
3	0.00	0	0	0	0	0	0	0	0
4	0.00	0	0	0	0	0	0	0	0
5	0.00	0	0	0	0	0	0	0	0
6	0.00	0	0	0	0	0	0	0	0
7	0.00	0	0	0	0	0	0	0	0
8	0.00	0	0	0	0	0	0	0	0
9	0.00	0	0	0	0	0	0	0	0
10	0.00	0	0	0	0	0	0	0	0
11	0.00	0	0	0	0	0	0	0	0
12	0.00	0	0	0	0	0	0	0	0
13	0.00	0	0	0	0	0	0	0	0
14	0.00	0	0	0	0	0	0	0	0
15	0.00	0	0	0	0	0	0	0	0
16	0.00	0	0	0	0	0	0	0	0
17	0.00	0	0	0	0	0	0	0	0
18	0.00	0	0	0	0	0	0	0	0
19	0.00	0	0	0	0	0	0	0	0
20	0.00	0	0	0	0	0	0	0	0
21	0.00	0	0	0	0	0	0	0	0
22	0.00	0	0	0	0	0	0	0	0
23	0.00	0	0	0	0	0	0	0	0
24	0.00	0	0	0	0	0	0	0	0
25	0.00	0	0	0	0	0	0	0	0
26	0.00	0	0	0	0	0	0	0	0
27	0.00	0	0	0	0	0	0	0	0
28	0.00	0	0	0	0	0	0	0	0
29	0.00	0	0	0	0	0	0	0	0
30	0.00	0	0	0	0	0	0	0	0
<b>Total</b>			<b>-24,723</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-24,723</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**July 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jun 30	0.00	0							
1	1516.30	21,691	21,691	4,072	0	3,243	0	3,883	24,745
2	1518.44	22,581	890	6,689	0	3,264	0	2,535	0
3	1521.74	23,987	1,406	5,621	0	2,113	0	2,102	0
4	1525.34	25,566	1,579	5,784	0	2,419	0	1,785	-1
5	1526.83	26,233	667	2,731	0	1,979	0	0	-85
6	1519.99	23,236	-2,997	241	0	3,238	0	0	0
7	1519.98	23,232	-4	5,734	0	2,765	0	2,973	0
8	1519.02	22,825	-407	5,519	0	1,663	0	4,263	0
9	1516.60	21,815	-1,010	4,443	0	1,459	0	3,994	0
10	1519.40	22,986	1,171	3,624	0	975	0	1,478	0
11	1525.18	25,495	2,509	4,157	0	1,444	0	0	-204
12	1528.14	26,827	1,332	2,398	0	1,023	0	0	-43
13	1525.92	25,825	-1,002	930	0	592	0	1,340	0
14	1519.34	22,960	-2,865	3,837	0	1,772	0	4,928	-2
15	1518.94	22,791	-169	4,779	0	627	0	4,321	0
16	1524.24	25,079	2,288	4,818	0	0	0	2,531	1
17	1527.13	26,369	1,290	4,536	0	884	0	2,181	-181
18	1520.05	23,262	-3,107	1,619	0	570	0	4,157	1
19	1518.85	22,753	-509	562	0	952	0	0	-119
20	1516.88	21,931	-822	606	0	1,291	0	0	-137
21	1515.94	21,543	-388	3,624	0	1,594	0	2,418	0
22	1515.07	21,189	-354	4,284	0	993	0	3,645	0
23	1515.68	21,437	248	4,267	0	648	0	3,371	0
24	1515.78	21,478	41	4,200	0	876	0	3,283	0
25	1517.42	22,154	676	4,441	0	1,037	0	3,360	632
26	1520.82	23,591	1,437	2,500	0	1,006	0	0	-57
27	1518.46	22,589	-1,002	0	0	1,007	0	1	6
28	1519.08	22,850	261	3,913	0	770	0	2,881	-1
29	1517.38	22,138	-712	3,864	0	785	0	3,792	1
30	1515.76	21,469	-669	3,536	0	731	0	3,473	-1
31	1516.36	21,716	247	4,154	0	782	0	3,126	1
<b>Total</b>			21,716	111,483	0	42,502	0	71,821	24,556

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**August 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jul 31	1516.36	21,716							
1	1515.12	21,209	-507	3,117	0	526	0	3,097	-1
2	1515.95	21,548	339	1,366	0	864	0	0	-163
3	1517.67	22,258	710	809	0	0	0	0	-99
4	1519.42	22,994	736	4,014	0	562	0	2,192	-524
5	1516.83	21,910	-1,084	2,502	0	1,396	0	2,190	0
6	1519.83	23,168	1,258	3,594	0	820	0	1,517	1
7	1518.17	22,467	-701	3,842	0	778	0	3,765	0
8	1517.78	22,304	-163	3,767	0	1,653	0	2,277	0
9	1516.47	21,761	-543	1,298	0	1,712	0	0	-129
10	1514.16	20,821	-940	1,529	0	2,390	0	0	-79
11	1514.52	20,966	145	3,486	0	1,028	0	2,312	-1
12	1513.64	20,612	-354	3,319	0	963	0	2,710	0
13	1514.19	20,833	221	3,836	0	663	0	2,953	1
14	1514.41	20,921	88	3,741	0	741	0	2,911	-1
15	1514.87	21,107	186	2,466	0	790	0	1,489	-1
16	1513.29	20,472	-635	827	0	1,266	0	0	-196
17	1512.40	20,119	-353	1,527	0	1,770	0	0	-110
18	1513.08	20,389	270	3,383	0	728	0	2,385	0
19	1511.71	19,848	-541	3,372	0	998	0	2,916	1
20	1512.23	20,052	204	3,928	0	1,019	0	2,705	0
21	1513.07	20,385	333	4,600	0	1,616	0	2,650	-1
22	1514.06	20,781	396	3,638	0	963	0	2,282	3
23	1514.38	20,909	128	1,717	0	1,423	0	0	-166
24	1513.14	20,413	-496	860	0	1,151	0	0	-205
25	1512.60	20,199	-214	3,865	0	1,959	0	2,121	1
26	1510.25	19,281	-918	3,557	0	2,200	0	2,276	1
27	1512.19	20,037	756	4,471	0	1,132	0	2,583	0
28	1511.25	19,668	-369	3,600	0	1,186	0	2,781	-2
29	1516.71	21,860	2,192	7,669	0	1,356	0	4,121	0
30	1517.52	22,196	336	2,875	0	2,453	0	0	-86
31	1514.03	20,767	-1,429	1,022	0	2,445	0	0	-6
<b>Total</b>			<b>-949</b>	<b>93,597</b>	<b>0</b>	<b>38,551</b>	<b>0</b>	<b>54,233</b>	<b>-1,762</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**September 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Aug 31	1514.03	20,767							
1	1512.66	20,222	-545	4,112	0	2,763	0	1,917	23
2	1516.28	21,683	1,461	5,406	0	1,667	0	2,255	-23
3	1512.77	20,266	-1,417	3,843	0	1,934	0	3,325	-1
4	1509.66	19,054	-1,212	3,019	0	1,431	0	2,801	1
5	1512.04	19,978	924	4,844	0	980	0	2,941	1
6	1512.78	20,270	292	1,590	0	1,218	0	0	-80
7	1511.45	19,746	-524	2,034	0	2,439	0	0	-119
8	1512.27	20,068	322	3,930	0	1,578	0	2,031	1
9	1512.04	19,978	-90	4,507	0	1,604	0	2,994	1
10	1512.40	20,119	141	4,739	0	1,653	0	2,943	-2
11	1512.21	20,045	-74	4,549	0	1,583	0	3,042	2
12	1512.98	20,349	304	4,099	0	1,079	0	2,624	-92
13	1512.00	19,962	-387	2,344	0	2,672	0	0	-59
14	1508.20	18,498	-1,464	1,147	0	2,533	0	0	-78
15	1512.08	19,993	1,495	2,593	0	1,012	0	0	-86
16	1511.32	19,696	-297	1,984	0	2,166	0	0	-115
17	1512.43	20,131	435	1,606	0	1,043	0	0	-128
18	1514.72	21,047	916	2,063	0	1,019	0	0	-128
19	1516.10	21,609	562	1,770	0	1,065	0	0	-143
20	1513.82	20,684	-925	30	0	1,012	0	0	57
21	1509.56	19,015	-1,669	989	0	2,475	0	0	-183
22	1512.45	20,139	1,124	2,859	0	1,722	0	0	-13
23	1514.22	20,845	706	2,584	0	1,790	0	0	-88
24	1515.63	21,417	572	1,597	0	923	0	0	-102
25	1516.94	21,955	538	1,384	0	800	0	0	-46
26	1517.66	22,254	299	1,569	0	1,215	0	0	-55
27	1516.23	21,662	-592	2,363	0	2,940	0	0	-15
28	1512.19	20,037	-1,625	1,209	0	2,754	0	0	-80
29	1511.31	19,692	-345	3,737	0	2,166	0	1,982	66
30	1512.34	20,096	404	3,311	0	926	0	1,982	1
<b>Total</b>			<b>-671</b>	<b>81,811</b>	<b>0</b>	<b>50,162</b>	<b>0</b>	<b>30,837</b>	<b>-1,483</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**October 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Sep 30	1512.34	20,096							
1	1519.62	23,079	2,983	3,644	0	647	0	0	-14
2	1515.82	21,494	-1,585	1,905	0	1,563	0	1,927	0
3	1513.26	20,460	-1,034	2,623	0	1,516	0	2,140	-1
4	1512.04	19,978	-482	0	0	528	0	0	46
5	1509.59	19,027	-951	442	0	1,336	0	0	-57
6	1510.17	19,250	223	3,041	0	915	0	1,904	1
7	1510.76	19,478	228	2,952	0	739	0	1,983	-2
8	1511.57	19,793	315	3,306	0	684	0	2,307	0
9	1513.05	20,377	584	3,966	0	1,510	0	1,872	0
10	1507.93	18,396	-1,981	0	0	0	0	1,982	1
11	1507.69	18,306	-90	0	0	0	0	0	-90
12	1508.99	18,798	492	508	0	0	0	0	-16
13	1512.61	20,202	1,404	2,112	0	568	0	0	-140
14	1509.91	19,150	-1,052	1,487	0	1,325	0	1,216	2
15	1512.43	20,131	981	2,585	0	1,546	0	0	-58
16	1510.12	19,230	-901	2,350	0	810	0	2,442	1
17	1514.76	21,063	1,833	2,878	0	950	0	0	-95
18	1511.29	19,684	-1,379	171	0	1,541	0	0	-9
19	1507.88	18,378	-1,306	910	0	2,191	0	0	-25
20	1509.41	18,958	580	1,699	0	1,091	0	0	-28
21	1507.34	18,175	-783	2,254	0	985	0	2,052	0
22	1512.43	20,131	1,956	2,715	0	793	0	0	34
23	1511.95	19,942	-189	2,504	0	1,020	0	1,674	1
24	1510.45	19,358	-584	1,701	0	1,471	0	892	78
25	1508.85	18,744	-614	1,079	0	1,514	0	0	-179
26	1510.23	19,273	529	1,727	0	1,142	0	0	-56
27	1513.56	20,580	1,307	1,369	0	0	0	0	-62
28	1512.06	19,986	-594	1,872	0	1,262	0	1,205	1
29	1514.76	21,063	1,077	2,112	0	1,002	0	0	-33
30	1513.00	20,357	-706	1,706	0	689	0	1,723	0
31	1514.24	20,853	496	2,150	0	870	0	786	2
Total			757	57,768	0	30,208	0	26,105	-698

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**November 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Oct 31	1514.24	20,853							
1	1516.37	21,720	867	811	0	0	0	0	56
2	1517.22	22,071	351	1,126	0	699	0	0	-76
3	1516.35	21,712	-359	2,708	0	774	0	2,294	1
4	1513.22	20,445	-1,267	2,928	0	1,522	0	2,673	0
5	1512.89	20,313	-132	3,255	0	779	0	2,607	-1
6	1512.62	20,206	-107	3,169	0	572	0	2,704	0
7	1510.58	19,408	-798	2,090	0	633	0	2,255	0
8	1510.58	19,408	0	874	0	858	0	0	-16
9	1509.60	19,031	-377	861	0	1,143	0	0	-95
10	1507.87	18,374	-657	1,995	0	800	0	1,852	0
11	1510.34	19,315	941	1,609	0	633	0	0	-35
12	1511.85	19,903	588	3,088	0	0	0	2,500	0
13	1509.67	19,057	-846	3,350	0	871	0	3,324	-1
14	1510.77	19,482	425	3,554	0	786	0	2,343	0
15	1519.16	22,884	3,402	3,641	0	0	0	0	-239
16	1526.02	25,870	2,986	3,029	0	28	0	0	-15
17	1515.85	21,507	-4,363	402	0	1,390	0	3,375	0
18	1511.80	19,883	-1,624	779	0	757	0	1,645	-1
19	1516.25	21,671	1,788	2,711	0	888	0	0	-35
20	1512.76	20,262	-1,409	2,121	0	1,344	0	2,185	-1
21	1510.20	19,261	-1,001	3,625	0	1,277	0	3,350	1
22	1511.52	19,774	513	2,348	0	0	0	1,831	-4
23	1508.94	18,779	-995	480	0	1,420	0	0	-55
24	1513.40	20,516	1,737	6,591	0	160	0	4,694	0
25	1512.99	20,353	-163	4,780	0	363	0	4,585	5
26	1517.19	22,059	1,706	4,619	0	0	0	2,913	0
27	1516.67	21,844	-215	4,183	0	0	0	4,374	-24
28	1513.05	20,377	-1,467	2,829	0	0	0	4,320	24
29	1509.76	19,092	-1,285	347	0	0	0	1,633	1
30	1511.67	19,832	740	861	0	0	0	0	-121
<b>Total</b>			<b>-1,021</b>	<b>74,764</b>	<b>0</b>	<b>17,697</b>	<b>0</b>	<b>57,457</b>	<b>-631</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**December 2008**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Nov 30	1511.67	19,832							
1	1516.96	21,963	2,131	2,262	0	0	0	0	-131
2	1517.48	22,179	216	2,227	0	0	0	2,011	0
3	1518.11	22,442	263	2,735	0	586	0	1,888	2
4	1521.64	23,944	1,502	2,424	0	0	0	920	-2
5	1520.55	23,475	-469	3,275	0	561	0	3,182	-1
6	1514.47	20,946	-2,529	360	0	604	0	2,287	2
7	1513.68	20,628	-318	749	0	993	0	0	-74
8	1515.40	21,323	695	3,828	0	957	0	2,176	0
9	1516.81	21,901	578	3,547	0	0	0	2,968	-1
10	1518.38	22,555	654	2,879	0	0	0	2,226	1
11	1518.44	22,581	26	3,025	0	0	0	2,999	0
12	1515.01	21,165	-1,416	2,219	0	0	0	3,635	0
13	1516.16	21,634	469	494	0	0	0	0	-25
14	1518.82	22,740	1,106	1,185	0	0	0	0	-79
15	1515.49	21,360	-1,380	1,371	0	0	0	2,752	1
16	1513.08	20,389	-971	1,997	0	0	0	2,967	-1
17	1518.23	22,492	2,103	2,116	0	0	0	0	-13
18	1515.82	21,494	-998	1,797	0	0	0	2,795	0
19	1514.58	20,990	-504	2,275	0	876	0	1,903	0
20	1518.55	22,627	1,637	2,184	0	509	0	0	-38
21	1520.57	23,484	857	863	0	0	0	0	-6
22	1518.22	22,488	-996	183	0	1,183	0	0	4
23	1514.70	21,039	-1,449	1,674	0	576	0	2,669	122
24	1516.00	21,568	529	1,836	0	1,017	0	0	-290
25	1517.42	22,154	586	1,677	0	1,048	0	0	-43
26	1518.20	22,480	326	3,489	0	740	0	2,425	2
27	1519.48	23,019	539	622	0	0	0	0	-83
28	1522.32	24,239	1,220	1,180	0	0	0	0	40
29	1515.87	21,515	-2,724	1,044	0	922	0	2,847	1
30	1520.22	23,334	1,819	2,616	0	635	0	0	-162
31	1520.20	23,326	-8	3,042	0	0	0	3,051	1
<b>Total</b>			<b>3,494</b>	<b>61,175</b>	<b>0</b>	<b>11,207</b>	<b>0</b>	<b>45,701</b>	<b>-773</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**January 2009**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Dec 31	1520.20	23,326							
1	1523.35	24,688	1,362	1,475	0	0	0	0	-113
2	1519.75	23,134	-1,554	2,457	0	960	0	3,052	1
3	1513.56	20,580	-2,554	3,339	0	2,682	0	3,211	0
4	1516.36	21,716	1,136	2,620	0	1,475	0	0	-9
5	1512.93	20,329	-1,387	2,614	0	1,623	0	2,377	-1
6	1514.67	21,027	698	1,575	0	826	0	0	-51
7	1517.77	22,300	1,273	2,071	0	765	0	0	-33
8	1515.81	21,490	-810	2,335	0	1,189	0	1,956	0
9	1522.73	24,417	2,927	2,969	0	0	0	0	-42
10	1518.44	22,581	-1,836	821	0	563	0	2,095	1
11	1517.92	22,363	-218	1,004	0	1,093	0	0	-129
12	1515.80	21,486	-877	2,704	0	1,579	0	2,001	-1
13	1517.39	22,142	656	2,746	0	2,008	0	0	-82
14	1515.66	21,429	-713	2,949	0	1,629	0	2,033	0
15	1518.90	22,774	1,345	3,372	0	0	0	2,026	-1
16	1517.46	22,171	-603	2,180	0	921	0	1,863	1
17	1513.85	20,696	-1,475	1,655	0	1,140	0	1,991	1
18	1513.90	20,716	20	1,346	0	1,290	0	0	-36
19	1517.30	22,104	1,388	2,784	0	1,351	0	0	-45
20	1513.48	20,548	-1,556	2,982	0	2,177	0	2,358	-3
21	1514.28	20,869	321	3,124	0	1,078	0	1,725	0
22	1512.38	20,112	-757	3,140	0	1,994	0	1,902	-1
23	1508.05	18,442	-1,670	2,858	2	1,058	2	3,470	0
24	1509.18	18,870	428	419	2	0	2	0	9
25	1506.92	18,018	-852	444	2	1,303	2	0	7
26	1510.44	19,354	1,336	3,729	2	0	2	2,314	-79
27	1508.79	18,722	-632	1,500	2	0	2	2,129	-3
28	1506.75	17,955	-767	842	2	0	2	1,608	-1
29	1509.61	19,034	1,079	4,095	2	0	2	3,015	-1
30	1507.05	18,067	-967	1,696	2	0	2	2,662	-1
31	1508.66	18,672	605	842	2	0	2	262	25
<b>Total</b>			<b>-4,654</b>	<b>68,687</b>	<b>18</b>	<b>28,704</b>	<b>18</b>	<b>44,050</b>	<b>-587</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**February 2009**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jan 31	1508.66	18,672							
1	1510.75	19,474	802	897	1	0	1	0	-95
2	1515.64	21,421	1,947	2,457	1	596	1	0	86
3	1513.41	20,520	-901	2,634	1	850	1	2,683	-2
4	1512.25	20,060	-460	3,023	1	979	1	2,504	0
5	1513.47	20,544	484	3,332	2	1,012	2	1,833	-3
6	1508.91	18,767	-1,777	1,946	53	809	53	2,960	46
7	1510.78	19,486	719	1,739	53	2,020	53	0	1,000
8	1511.22	19,657	171	1,938	26	1,847	26	0	80
9	1509.22	18,885	-772	2,508	25	918	25	1,991	-371
10	1506.88	18,003	-882	2,930	20	677	20	3,399	264
11	1510.45	19,358	1,355	1,857	19	581	19	0	79
12	1512.04	19,978	620	3,693	19	821	19	2,236	-16
13	1509.99	19,180	-798	2,350	23	0	23	3,175	27
14	1508.89	18,760	-420	859	24	1,359	24	0	80
15	1511.05	19,590	830	837	23	0	23	0	-7
16	1510.42	19,346	-244	2,791	111	679	111	2,349	-7
17	1508.48	18,604	-742	3,299	170	715	170	3,274	-52
18	1510.20	19,261	657	1,236	114	693	114	0	114
19	1509.23	18,889	-372	3,295	76	602	76	2,900	-165
20	1508.51	18,615	-274	2,743	57	725	57	2,255	-37
21	1510.04	19,200	585	507	45	0	45	0	78
22	1509.99	19,180	-20	1,346	37	1,479	37	0	113
23	1509.91	19,150	-30	3,119	32	710	32	2,329	-110
24	1507.15	18,104	-1,046	3,490	28	892	28	3,614	-30
25	1514.21	20,841	2,737	2,752	26	0	26	0	-15
26	1513.26	20,460	-381	3,180	23	820	23	2,689	-52
27	1513.43	20,528	68	3,018	21	822	21	2,085	-43
28	1513.47	20,544	16	1,133	21	1,058	21	0	-59
<b>Total</b>			<b>1,872</b>	<b>64,909</b>	<b>1,052</b>	<b>21,664</b>	<b>1,052</b>	<b>42,276</b>	<b>903</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**March 2009**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Feb 28	1513.47	20,544							
1	1517.34	22,121	1,577	1,569	18	0	18	0	8
2	1514.65	21,018	-1,103	2,552	17	1,142	17	2,478	-35
3	1514.76	21,063	45	2,481	16	0	16	2,420	-16
4	1513.48	20,548	-515	1,245	21	1,736	21	0	-24
5	1512.81	20,282	-266	2,386	22	660	22	1,959	-33
6	1503.05	16,604	-3,678	1,798	19	1,766	19	3,691	-19
7	1508.99	18,798	2,194	2,070	18	0	18	0	124
8	1510.50	19,377	579	635	17	0	17	0	-56
9	1518.11	22,442	3,065	3,079	16	0	16	0	-14
10	1513.73	20,648	-1,794	762	14	0	14	2,490	-66
11	1514.62	21,006	358	2,516	13	0	13	2,144	-14
12	1511.59	19,801	-1,205	1,335	12	0	12	2,528	-12
13	1511.26	19,672	-129	1,782	10	0	10	1,901	-10
14	1514.55	20,978	1,306	1,214	9	0	9	0	92
15	1510.96	19,555	-1,423	1,358	9	2,616	9	0	-165
16	1515.87	21,515	1,960	2,911	9	886	9	0	-65
17	1514.69	21,035	-480	3,019	9	732	9	2,735	-32
18	1514.58	20,990	-45	2,894	9	855	9	2,075	-9
19	1511.31	19,692	-1,298	1,953	9	629	9	2,612	-10
20	1511.89	19,919	227	3,111	7	818	7	2,061	-5
21	1512.45	20,139	220	186	7	0	7	0	34
22	1513.68	20,628	489	482	7	0	7	0	7
23	1511.15	19,629	-999	1,482	7	0	7	2,459	-22
24	1502.77	16,504	-3,125	748	7	700	7	3,166	-7
25	1510.27	19,288	2,784	2,740	6	0	6	0	44
26	1512.10	20,001	713	3,373	6	0	6	2,653	-7
27	1512.83	20,290	289	2,987	5	0	5	2,697	-1
28	1512.73	20,250	-40	311	5	367	5	0	16
29	1509.41	18,958	-1,292	647	5	1,937	5	0	-2
30	1514.63	21,010	2,052	2,131	4	0	4	0	-79
31	1512.74	20,254	-756	2,156	4	0	4	2,901	-11
Total			-290	57,913	337	14,844	337	42,970	-389

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**April 2009**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Mar 31	1512.74	20,254							
1	1515.37	21,311	1,057	3,100	5	0	5	2,039	-4
2	1511.35	19,708	-1,603	1,874	6	0	6	3,482	5
3	1508.68	18,681	-1,027	1,217	7	0	7	2,244	0
4	1510.83	19,505	824	872	7	0	7	0	-48
5	1511.65	19,825	320	342	8	0	8	0	-22
6	1509.59	19,027	-798	1,016	8	0	8	1,795	-19
7	1511.84	19,899	872	884	6	0	6	0	-12
8	1510.57	19,404	-495	1,040	4	0	4	1,524	-11
9	1510.63	19,427	23	84	4	0	4	0	-61
10	1509.80	19,107	-320	363	4	0	4	1,436	753
11	1509.12	18,848	-259	582	3	0	3	0	-841
12	1510.38	19,331	483	510	3	0	3	0	-27
13	1511.71	19,848	517	541	3	0	3	0	-24
14	1505.22	17,390	-2,458	677	3	0	3	3,122	-13
15	1507.51	18,239	849	856	3	0	3	0	-7
16	1501.60	16,088	-2,151	123	3	0	3	2,267	-7
17	1502.19	16,297	209	248	2	0	3	0	-38
18	1503.18	16,651	353	373	2	0	2	0	-20
19	1506.29	17,784	1,133	1,073	2	0	2	0	60
20	1513.84	20,294	2,510	2,864	2	0	2	0	-354
21	1512.08	19,993	-301	1,677	2	0	2	2,352	374
22	1513.66	20,620	627	595	2	0	2	0	32
23	1506.66	17,921	-2,699	278	2	0	2	2,971	-6
24	1509.34	18,931	1,010	1,097	2	0	2	0	-87
25	1509.82	19,115	184	188	2	0	2	0	-4
26	1509.78	19,100	-15	4	2	0	2	0	-19
27	1518.78	22,724	3,624	3,519	2	0	2	0	105
28	1515.85	21,507	-1,217	682	2	0	2	1,890	-9
29	1512.27	20,068	-1,438	698	2	0	2	2,135	-1
30	1507.43	18,209	-1,860	358	1	0	1	2,216	-2
<b>Total</b>			<b>-2,045</b>	<b>27,735</b>	<b>104</b>	<b>0</b>	<b>105</b>	<b>29,473</b>	<b>-306</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**May 2009**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Apr 30	1507.43	18,209							
1	1507.56	18,257	48	2,484	1	0	1	2,433	-3
2	1510.49	19,373	1,116	952	1	0	1	0	164
3	1512.40	20,119	746	855	1	0	1	0	-109
4	1510.30	19,300	-819	3,724	1	0	1	4,539	-4
5	1508.50	18,612	-688	3,664	1	0	1	4,298	-54
6	1513.07	20,385	1,773	4,315	1	0	1	2,595	53
7	1509.52	19,000	-1,385	3,247	1	0	1	4,632	0
8	1504.74	17,215	-1,785	2,371	0	0	0	4,157	1
9	1505.65	17,548	333	467	0	0	0	0	-134
10	1507.84	18,362	814	691	0	0	0	0	123
11	1509.76	19,092	730	1,452	0	704	0	0	-18
12	1515.07	21,189	2,097	3,495	0	1,331	0	0	-67
13	1515.00	21,161	-28	3,708	0	1,472	0	2,264	0
14	1514.14	20,813	-348	3,786	0	1,253	0	2,882	1
15	1514.93	21,132	319	2,867	0	1,503	0	1,043	-2
16	1516.87	21,926	794	2,520	0	1,578	0	0	-148
17	1512.15	20,021	-1,905	1,183	0	3,047	0	0	-41
18	1520.06	23,266	3,245	4,755	0	1,721	0	0	211
19	1513.67	20,624	-2,642	3,481	0	1,074	0	5,036	-13
20	1520.55	23,475	2,851	3,624	0	697	0	0	-76
21	1517.49	22,183	-1,292	3,214	0	931	0	3,576	1
22	1524.46	25,176	2,993	4,226	0	1,285	0	0	52
23	1520.82	23,591	-1,585	122	0	1,753	0	0	46
24	1515.70	21,445	-2,146	864	0	2,807	0	0	-203
25	1513.91	20,720	-725	1,226	0	0	0	1,952	1
26	1514.16	20,821	101	4,204	0	0	0	4,103	0
27	1511.76	19,868	-953	3,913	0	1,122	0	3,743	-1
28	1511.09	19,606	-262	3,440	0	2	0	3,699	-1
29	1507.11	18,089	-1,517	3,198	0	1,137	0	3,578	0
30	1510.80	19,493	1,404	1,463	0	0	0	0	-59
31	1506.80	17,973	-1,520	87	0	1,717	0	0	110
<b>Total</b>			-236	79,598	7	25,134	7	54,530	-170

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**June 2009**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
May 31	1506.80	17,973							
1	1505.14	17,361	-612	2,958	0	0	0	3,571	1
2	1506.53	17,873	512	3,891	0	0	0	3,378	-1
3	1503.85	16,892	-981	3,408	0	0	0	4,391	2
4	1505.28	17,412	520	4,110	0	0	0	3,589	-1
5	1507.92	18,393	981	960	0	0	0	0	21
6	1508.22	18,506	113	167	0	0	0	0	-54
7	1509.50	18,992	486	508	0	0	0	0	-22
8	1505.68	17,559	-1,433	2,681	0	0	0	4,115	1
9	1504.22	17,026	-533	2,183	0	0	0	2,717	1
10	1507.42	18,205	1,179	1,160	0	0	0	0	19
11	1507.15	18,104	-101	1,873	0	0	0	1,974	0
12	1505.29	17,416	-688	1,972	0	0	0	2,661	1
13	1507.88	18,378	962	956	0	0	0	0	6
14	1509.73	19,080	702	673	0	0	0	0	29
15	1514.80	21,079	1,999	2,072	0	0	0	0	-73
16	1514.02	20,765	-314	2,430	0	0	0	2,747	3
17	1512.60	20,199	-566	1,978	0	0	0	2,542	-2
18	1517.05	22,001	1,802	1,846	0	0	0	0	-44
19	1513.35	20,496	-1,505	1,312	0	0	0	2,817	0
20	1507.99	18,419	-2,077	123	0	0	0	2,202	2
21	1508.60	18,650	231	218	0	0	0	0	13
22	1514.04	20,773	2,123	2,172	0	0	0	0	-49
23	1518.61	22,652	1,879	4,187	0	0	0	2,306	-2
24	1512.48	20,151	-2,501	3,470	0	1,813	0	4,157	-1
25	1503.73	16,849	-3,302	2,036	0	1,926	0	3,414	2
26	1514.24	20,853	4,004	3,994	0	2	0	0	12
27	1520.26	23,351	2,498	3,506	0	1,084	0	0	76
28	1517.15	22,042	-1,309	1,548	0	2,748	0	0	-109
29	1515.65	21,425	-617	3,576	0	4,154	0	0	-39
30	1513.81	20,680	-745	3,748	0	2,500	0	1,993	0
<b>Total</b>			<b>2,707</b>	<b>65,716</b>	<b>0</b>	<b>14,227</b>	<b>0</b>	<b>48,574</b>	<b>-208</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**July 2009**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jun 30	1513.81	20,680							
1	1510.92	19,540	-1,140	4,045	0	1,645	0	3,539	-1
2	1510.24	19,277	-263	4,569	0	1,129	0	3,705	2
3	1509.85	19,127	-150	2,266	0	1,130	0	1,286	0
4	1511.00	19,571	444	2,408	0	1,782	0	0	-182
5	1511.50	19,766	195	2,029	0	1,875	0	0	41
6	1513.52	20,564	798	2,836	0	1,663	0	0	-375
7	1518.22	22,488	1,924	1,887	0	0	0	0	37
8	1519.48	23,019	531	3,436	0	0	0	2,904	-1
9	1512.02	19,970	-3,049	2,234	0	963	0	4,322	2
10	1511.02	19,579	-391	2,522	0	0	0	2,911	-2
11	1512.58	20,191	612	699	0	0	0	0	-87
12	1512.93	20,329	138	149	0	0	0	0	-11
13	1517.84	22,329	2,000	1,949	0	0	0	0	51
14	1517.97	22,382	53	3,253	0	575	0	2,653	28
15	1512.74	20,254	-2,128	3,282	0	1,212	0	4,169	-29
16	1512.34	20,096	-158	4,575	0	1,299	0	3,435	1
17	1512.12	20,009	-87	4,456	0	1,232	0	3,311	0
18	1514.87	21,107	1,098	2,746	0	1,597	0	0	-51
19	1512.50	20,159	-948	1,457	0	2,409	0	0	4
20	1517.39	22,142	1,983	3,580	0	1,590	0	0	-7
21	1516.34	21,708	-434	3,519	0	1,108	0	2,845	0
22	1513.82	20,684	-1,024	4,488	0	1,530	0	3,982	0
23	1512.61	20,202	-482	4,877	0	2,153	0	3,205	-1
24	1514.46	20,942	740	5,909	0	1,793	0	3,377	1
25	1519.38	22,977	2,035	6,063	0	2,136	0	1,891	-1
26	1518.41	22,568	-409	2,346	0	2,882	0	0	127
27	1517.91	22,359	-209	2,544	0	2,638	0	0	-115
28	1512.52	20,167	-2,192	3,182	0	2,251	0	3,122	-1
29	1513.55	20,576	409	3,235	0	1,302	0	1,528	4
30	1514.35	20,897	321	2,780	0	2,483	0	0	24
31	1513.85	20,696	-201	4,250	0	2,040	0	2,412	1
<b>Total</b>			16	97,571	0	42,417	0	54,597	-541

1/ Values supplied by LADWP, not verified by DWR.



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**August 2009**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jul 31	1513.85	20,696							
1	1514.15	20,817	121	3,621	0	2,083	0	1,417	0
2	1514.77	21,067	250	3,064	0	2,682	0	0	-132
3	1518.10	22,438	1,371	2,745	0	1,428	0	0	54
4	1517.66	22,254	-184	4,278	0	1,817	0	2,644	-1
5	1515.69	21,441	-813	3,112	0	1,406	0	2,519	0
6	1517.46	22,171	730	2,656	0	1,966	0	0	40
7	1513.93	20,728	-1,443	3,715	0	2,213	0	2,946	1
8	1507.98	18,415	-2,313	2,901	0	1,572	0	3,641	-1
9	1513.59	20,592	2,177	3,317	0	1,110	0	0	-30
10	1517.09	22,017	1,425	3,045	0	1,501	0	0	-119
11	1512.56	20,183	-1,834	2,682	0	2,200	0	2,317	1
12	1510.36	19,323	-860	3,514	0	1,471	0	2,903	0
13	1515.11	21,205	1,882	3,881	0	1,955	0	0	-44
14	1513.40	20,516	-689	2,104	0	0	0	2,793	0
15	1506.64	17,914	-2,602	182	0	0	0	2,784	0
16	1507.36	18,182	268	278	0	0	0	0	-10
17	1512.50	20,159	1,977	2,022	0	0	0	0	-45
18	1510.30	19,300	-859	1,663	0	0	0	2,523	1
19	1510.50	19,377	77	1,837	0	0	0	1,759	-1
20	1507.18	18,115	-1,262	1,880	0	0	0	3,142	0
21	1504.76	17,222	-893	1,996	0	0	0	2,915	26
22	1505.53	17,504	282	307	0	0	0	0	-25
23	1507.24	18,137	633	630	0	0	0	0	3
24	1513.20	20,437	2,300	2,331	0	0	0	0	-31
25	1512.88	20,309	-128	2,124	0	0	0	2,251	-1
26	1511.21	19,653	-656	1,942	0	0	0	2,610	12
27	1510.33	19,311	-342	2,137	0	0	0	2,499	20
28	1511.28	19,680	369	2,618	0	0	0	2,248	-1
29	1514.65	21,018	1,338	1,398	0	0	0	0	-60
30	1513.96	20,740	-278	2,381	0	2,607	0	0	-52
31	1516.66	21,839	1,099	2,143	0	975	0	0	-69
<b>Total</b>			<b>1,143</b>	<b>72,504</b>	<b>0</b>	<b>26,986</b>	<b>0</b>	<b>43,911</b>	<b>-464</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**September 2009**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Aug 31	1516.66	21,839							
1	1513.16	20,421	-1,418	1,553	0	580	0	2,391	0
2	1509.17	18,866	-1,555	2,017	0	771	0	2,800	-1
3	1509.17	18,866	0	2,441	0	0	0	2,441	0
4	1507.77	18,336	-530	2,458	0	0	0	2,990	2
5	1509.01	18,805	469	484	0	0	0	0	-15
6	1509.08	18,832	27	68	0	0	0	0	-41
7	1510.17	19,250	418	387	0	0	0	0	31
8	1511.37	19,715	465	2,084	0	0	0	2,568	949
9	1510.64	19,431	-284	2,138	0	0	0	2,394	-28
10	1512.60	20,199	768	2,749	0	0	0	2,018	37
11	1510.93	19,544	-655	2,398	0	0	0	3,020	-33
12	1512.25	20,060	516	526	0	0	0	0	-10
13	1510.16	19,246	-814	155	0	980	0	0	11
14	1508.09	18,457	-789	1,887	0	1,051	0	1,625	0
15	1507.45	18,216	-241	2,154	0	0	0	2,393	-2
16	1513.71	20,640	2,424	3,488	0	0	0	1,065	1
17	1511.26	19,672	-968	3,974	0	2,002	0	2,935	-5
18	1516.17	21,638	1,966	4,250	0	2,288	0	0	4
19	1507.97	18,411	-3,227	275	0	3,481	0	0	-21
20	1502.31	16,340	-2,071	0	0	1,147	0	894	-30
21	1510.27	19,288	2,948	3,051	0	30	0	0	-73
22	1515.49	21,360	2,072	3,994	0	1,934	0	0	12
23	1514.63	21,010	-350	3,764	0	2,270	0	1,892	48
24	1521.52	23,892	2,882	6,729	0	1,827	0	2,001	-19
25	1519.25	22,922	-970	4,575	0	2,377	0	3,219	51
26	1515.59	21,400	-1,522	3,870	0	3,430	0	1,869	-93
27	1512.59	20,195	-1,205	2,293	0	3,574	0	0	76
28	1512.18	20,033	-162	2,612	0	2,689	0	0	-85
29	1514.21	20,841	808	2,689	0	85	0	1,933	137
30	1506.61	17,903	-2,938	1,627	0	1,198	0	3,213	-154
<b>Total</b>			<b>-3,936</b>	<b>70,690</b>	<b>0</b>	<b>31,714</b>	<b>0</b>	<b>43,661</b>	<b>749</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**October 2009**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Sep 30	1506.61	17,903							
1	1507.89	18,381	478	2,859	0	0	0	2,382	1
2	1512.52	20,167	1,786	4,325	0	0	0	2,539	0
3	1515.51	21,368	1,201	1,192	0	0	0	0	9
4	1517.25	22,084	716	708	0	0	0	0	8
5	1520.35	23,390	1,306	1,382	0	0	0	0	-76
6	1522.05	24,122	732	2,843	0	0	0	2,191	80
7	1513.37	20,504	-3,618	2,185	0	1,032	0	4,678	-93
8	1509.40	18,954	-1,550	3,141	0	1,040	0	3,651	0
9	1512.42	20,127	1,173	4,355	0	838	0	2,344	0
10	1513.28	20,468	341	320	0	0	0	0	21
11	1511.46	19,750	-718	848	0	1,583	0	0	17
12	1518.12	22,446	2,696	3,357	0	817	0	0	156
13	1518.04	22,413	-33	2,576	0	628	0	1,982	1
14	1512.91	20,321	-2,092	3,133	0	865	0	4,508	148
15	1514.52	20,966	645	3,407	0	830	0	1,969	37
16	1517.09	22,017	1,051	4,688	0	719	0	2,935	17
17	1514.97	21,148	-869	1,419	0	0	0	2,239	-49
18	1513.84	20,692	-456	325	0	772	0	0	-9
19	1517.08	22,013	1,321	2,207	0	883	0	0	-3
20	1518.94	22,791	778	1,652	0	805	0	0	-69
21	1515.75	21,466	-1,325	1,270	0	570	0	2,055	30
22	1513.19	20,433	-1,033	2,061	0	613	0	2,495	14
23	1510.68	19,447	-986	294	0	0	0	1,236	-44
24	1509.19	18,874	-573	546	0	1,131	0	0	12
25	1510.27	19,288	414	435	0	0	0	0	-21
26	1515.20	21,242	1,954	2,333	0	262	0	0	-117
27	1515.31	21,286	44	2,384	0	0	0	2,348	8
28	1512.07	19,989	-1,297	2,372	0	709	0	2,960	0
29	1511.50	19,766	-223	1,555	0	0	0	2,130	352
30	1507.80	18,347	-1,419	1,776	0	0	0	2,881	-314
31	1506.12	17,721	-626	366	0	981	0	0	-11
<b>Total</b>			-182	62,314	0	15,078	0	47,523	105

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**November 2009**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Oct 31	1506.12	17,721							
1	1510.49	19,373	1,652	1,673	0	0	0	0	-21
2	1517.33	22,117	2,744	2,764	0	0	0	0	-20
3	1515.90	21,527	-590	2,468	0	0	0	3,441	383
4	1511.05	19,590	-1,937	2,311	0	0	0	4,222	-26
5	1507.56	18,257	-1,333	2,457	0	598	0	3,192	0
6	1508.06	18,445	188	2,976	0	0	0	2,789	1
7	1507.62	18,280	-165	491	0	559	0	97	0
8	1509.62	19,038	758	754	0	0	0	0	4
9	1510.80	19,493	455	3,115	0	0	0	2,660	0
10	1509.46	18,977	-516	3,000	0	0	0	3,516	0
11	1507.38	18,190	-787	2,938	0	1,024	0	2,701	0
12	1508.37	18,562	372	3,409	0	588	0	2,552	103
13	1508.83	18,737	175	2,630	0	749	0	1,302	-404
14	1509.08	18,832	95	225	0	0	0	0	-130
15	1509.84	19,123	291	248	0	0	0	0	43
16	1518.20	22,480	3,357	3,303	0	0	0	0	54
17	1518.27	22,509	29	3,244	0	0	0	3,214	-1
18	1513.39	20,512	-1,997	2,105	0	0	0	4,498	396
19	1508.63	18,661	-1,851	2,228	0	842	0	3,255	18
20	1508.17	18,487	-174	2,504	0	0	0	2,612	-66
21	1507.01	18,052	-435	311	0	0	0	825	79
22	1506.48	17,854	-198	238	0	0	0	0	-436
23	1514.92	21,128	3,274	3,130	0	0	0	0	144
24	1512.73	20,250	-878	2,302	0	932	0	2,248	0
25	1508.60	18,650	-1,600	2,208	0	0	0	3,808	0
26	1507.09	18,081	-569	2,472	0	0	0	3,040	-1
27	1507.07	18,074	-7	2,899	0	0	0	2,907	1
28	1507.68	18,302	228	244	0	0	0	0	-16
29	1510.26	19,284	982	941	0	0	0	0	41
30	1516.14	21,625	2,341	3,234	0	822	0	0	-71
<b>Total</b>			<b>3,904</b>	<b>62,822</b>	<b>0</b>	<b>6,114</b>	<b>0</b>	<b>52,879</b>	<b>75</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**December 2009**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Nov 30	1516.14	21,625							
1	1514.80	21,079	-546	2,731	0	627	0	2,649	-1
2	1511.94	19,938	-1,141	3,546	0	581	0	4,107	1
3	1511.00	19,571	-367	3,485	0	0	0	3,851	-1
4	1516.51	21,778	2,207	3,652	0	0	0	1,446	1
5	1519.19	22,897	1,119	1,146	0	0	0	0	-27
6	1517.87	22,342	-555	297	0	835	0	0	-17
7	1526.34	26,013	3,671	4,159	0	678	0	0	190
8	1519.45	23,007	-3,006	1,165	0	794	0	3,457	80
9	1509.95	19,165	-3,842	1,070	0	637	0	4,286	11
10	1508.63	18,661	-504	2,261	0	0	0	2,857	92
11	1513.68	20,628	1,967	2,646	0	0	0	654	-25
12	1514.56	20,982	354	186	0	1	0	0	169
13	1508.48	18,604	-2,378	419	1	2,973	1	0	176
14	1515.77	21,474	2,870	3,509	6	604	6	0	-35
15	1516.42	21,741	267	2,813	2	0	2	2,542	-4
16	1513.94	20,732	-1,009	3,244	1	0	1	4,258	5
17	1512.33	20,092	-640	3,354	1	0	1	3,997	3
18	1506.52	17,869	-2,223	1,536	1	653	1	3,104	-2
19	1506.19	17,747	-122	9	0	0	0	132	1
20	1507.14	18,100	353	344	0	0	0	0	9
21	1509.10	18,840	740	1,293	0	550	0	0	-3
22	1516.03	21,580	2,740	4,592	0	0	0	1,904	52
23	1509.38	18,946	-2,634	1,837	0	715	0	3,681	-75
24	1512.72	20,246	1,300	5,019	0	0	0	3,719	0
25	1504.89	17,269	-2,977	0	0	0	0	2,977	0
26	1509.47	18,981	1,712	2,497	0	0	0	785	0
27	1510.75	19,474	493	1,141	0	606	0	0	-42
28	1517.88	22,346	2,872	3,540	0	620	0	0	-48
29	1517.50	22,188	-158	2,864	0	0	0	3,021	-1
30	1512.92	20,325	-1,863	3,283	0	1,074	0	4,071	-1
31	1510.54	19,393	-932	2,878	0	0	0	3,811	1
<b>Total</b>			<b>-2,232</b>	<b>70,516</b>	<b>12</b>	<b>11,948</b>	<b>12</b>	<b>61,309</b>	<b>509</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**January 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Dec 31	1510.54	19,393							
1	1508.10	18,460	-933	1,288	0	0	0	2,221	0
2	1508.55	18,631	171	1,190	0	996	0	0	-23
3	1512.13	20,013	1,382	2,051	0	709	0	0	40
4	1516.98	21,972	1,959	2,618	0	596	0	0	-63
5	1515.99	21,564	-408	2,691	0	645	0	2,456	2
6	1511.21	19,653	-1,911	2,882	0	762	0	4,088	57
7	1511.23	19,661	8	3,799	0	512	0	3,302	23
8	1512.38	20,112	451	3,086	0	0	0	2,586	-49
9	1511.61	19,809	-303	487	0	781	0	0	-9
10	1511.63	19,817	8	724	0	665	0	0	-51
11	1517.19	22,059	2,242	2,885	0	569	0	0	-74
12	1515.80	21,486	-573	2,355	0	0	0	2,929	1
13	1512.18	20,033	-1,453	2,746	0	0	0	4,239	40
14	1509.73	19,080	-953	2,632	0	0	0	3,602	17
15	1510.24	19,277	197	2,647	0	0	0	2,355	-95
16	1510.57	19,404	127	112	0	0	0	0	15
17	1510.71	19,458	54	616	0	535	0	0	-27
18	1510.77	19,482	24	573	47	648	47	0	99
19	1511.81	19,887	405	304	118	0	118	0	101
20	1512.59	20,195	308	2,435	288	0	288	1,751	-376
21	1506.33	17,799	-2,396	752	445	1,054	445	1,884	-210
22	1508.92	18,771	972	646	343	0	343	0	326
23	1512.65	20,218	1,447	1,420	142	0	142	0	27
24	1515.68	21,437	1,219	1,159	92	0	92	0	60
25	1512.93	20,329	-1,108	1,272	67	450	67	1,323	-607
26	1508.77	18,714	-1,615	1,798	43	0	43	3,429	16
27	1505.91	17,644	-1,070	1,123	34	0	34	2,146	-47
28	1505.55	17,511	-133	1,702	30	0	30	1,745	-90
29	1508.99	18,798	1,287	1,279	26	0	26	0	8
30	1509.77	19,096	298	275	24	0	24	0	23
31	1512.24	20,056	960	974	22	0	22	0	-14
<b>Total</b>			<b>663</b>	<b>50,521</b>	<b>1,721</b>	<b>8,922</b>	<b>1,721</b>	<b>40,056</b>	<b>-880</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**February 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jan 31	1512.24	20,056							
1	1515.55	21,384	1,328	1,385	20	0	20	0	-57
2	1514.12	20,805	-579	812	19	0	19	1,365	-26
3	1507.38	18,190	-2,615	1,152	19	625	19	3,199	57
4	1509.73	19,080	890	2,924	20	0	20	1,653	-381
5	1510.74	19,470	390	975	54	926	54	0	341
6	1510.99	19,567	97	132	243	0	243	0	-35
7	1511.58	19,797	230	141	159	0	159	0	89
8	1511.41	19,731	-66	1,743	126	98	126	1,189	-522
9	1507.82	18,355	-1,376	1,894	172	0	172	3,160	-110
10	1506.45	17,843	-512	1,583	161	0	161	2,005	-90
11	1505.49	17,489	-354	1,678	130	0	130	1,861	-171
12	1508.64	18,665	1,176	1,489	110	0	110	367	54
13	1509.56	19,015	350	363	96	0	96	0	-13
14	1513.15	20,417	1,402	1,358	81	0	81	0	44
15	1515.16	21,225	808	1,499	70	747	70	0	56
16	1511.48	19,758	-1,467	1,067	62	711	62	1,569	-254
17	1508.98	18,794	-964	2,551	52	0	52	3,513	-2
18	1507.57	18,261	-533	2,487	45	913	45	2,085	-22
19	1510.13	19,234	973	1,707	39	758	39	0	24
20	1512.63	20,210	976	981	36	0	36	0	-5
21	1514.38	20,909	699	682	31	0	31	0	17
22	1517.37	22,133	1,224	2,005	29	751	29	0	-30
23	1513.00	20,357	-1,776	777	25	568	25	1,869	-116
24	1514.88	21,112	755	787	22	0	22	0	-32
25	1514.31	20,881	-231	705	19	959	19	0	23
26	1510.22	19,269	-1,612	335	17	0	17	1,913	-34
27	1511.72	19,852	583	396	138	0	138	0	187
28	1512.76	20,262	410	391	134	0	134	0	19
<b>Total</b>			<b>206</b>	<b>33,999</b>	<b>2,129</b>	<b>7,056</b>	<b>2,129</b>	<b>25,748</b>	<b>-989</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**March 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Feb 28	1512.76	20,262							
1	1513.77	20,664	402	905	83	553	83	0	50
2	1508.84	18,741	-1,923	539	56	0	56	2,362	-100
3	1510.09	19,219	478	1,167	47	706	47	0	17
4	1510.90	19,532	313	1,230	44	902	44	0	-15
5	1507.45	18,216	-1,316	1,155	40	0	40	2,366	-105
6	1508.17	18,487	271	239	38	0	38	0	32
7	1509.51	18,996	509	497	35	0	35	0	12
8	1511.89	19,919	923	1,493	33	603	33	0	33
9	1509.22	18,885	-1,034	1,058	31	680	31	1,301	-111
10	1506.50	17,862	-1,023	1,317	29	0	29	2,410	70
11	1503.90	16,910	-952	597	27	0	27	1,345	-204
12	1504.95	17,291	381	335	27	0	27	0	46
13	1506.81	17,977	686	663	25	0	25	0	23
14	1507.78	18,340	363	380	24	0	24	0	-17
15	1510.09	19,219	879	843	23	0	23	0	36
16	1508.42	18,581	-638	945	20	0	20	1,506	-77
17	1508.24	18,513	-68	770	19	867	19	0	29
18	1509.19	18,874	361	1,025	17	660	17	0	-4
19	1509.61	19,034	160	1,062	15	852	15	0	-50
20	1506.59	17,895	-1,139	388	14	0	14	1,476	-51
21	1506.96	18,033	138	123	13	0	13	0	15
22	1510.15	19,242	1,209	1,236	12	0	12	0	-27
23	1513.42	20,524	1,282	1,266	12	0	12	0	16
24	1508.27	18,525	-1,999	871	11	867	11	1,963	-40
25	1506.49	17,858	-667	796	11	666	11	796	-1
26	1506.08	17,706	-152	392	9	578	9	0	34
27	1506.50	17,862	156	141	9	0	9	0	15
28	1507.16	18,108	246	218	9	0	9	0	28
29	1510.88	19,524	1,416	1,403	9	0	9	0	13
30	1512.86	20,301	777	788	9	0	9	0	-11
31	1509.41	18,958	-1,343	218	9	0	9	1,545	-16
Total			-1,304	24,060	760	7,934	760	17,070	-360

1/ Values supplied by LADWP, not verified by DWR.



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**April 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Mar 31	1509.41	18,958							
1	1506.89	18,007	-951	478	11	0	11	1,439	10
2	1507.78	18,340	333	335	10	0	10	0	-2
3	1508.35	18,555	215	159	11	0	11	0	56
4	1508.68	18,680	125	123	11	0	11	0	2
5	1510.22	19,269	589	614	22	0	22	0	-25
6	1511.73	19,856	587	629	15	0	15	0	-42
7	1509.58	19,023	-833	513	12	0	12	1,295	-51
8	1506.98	18,040	-983	265	12	0	12	1,255	7
9	1507.29	18,156	116	141	12	0	12	0	-25
10	1507.69	18,306	150	103	12	0	12	0	47
11	1509.74	19,084	778	784	16	0	16	0	-6
12	1511.81	19,887	803	737	50	0	50	0	66
13	1508.79	18,722	-1,165	1,096	33	0	33	2,159	-102
14	1510.77	19,482	760	784	29	0	29	0	-24
15	1512.43	20,131	649	718	24	0	24	0	-69
16	1508.01	18,426	-1,705	635	20	2,353	20	0	13
17	1509.75	19,088	662	668	18	0	18	0	-6
18	1512.18	20,033	945	908	16	0	16	0	37
19	1514.41	20,921	888	895	13	4	13	0	-3
20	1515.16	21,225	304	282	14	11	14	0	33
21	1509.92	19,153	-2,072	379	16	743	16	1,550	-158
22	1504.97	17,299	-1,854	410	14	623	14	1,641	0
23	1505.94	17,655	356	363	14	0	14	0	-7
24	1506.36	17,810	155	141	14	0	14	0	14
25	1506.95	18,029	219	188	10	0	10	0	31
26	1508.73	18,699	670	719	10	0	10	0	-49
27	1514.08	20,789	2,090	2,042	10	0	10	0	48
28	1509.32	18,924	-1,865	185	10	730	10	1,290	-30
29	1504.98	17,302	-1,622	367	10	631	10	1,407	49
30	1508.00	18,423	1,121	1,179	8	0	8	0	-58
<b>Total</b>			<b>-535</b>	<b>16,840</b>	<b>477</b>	<b>5,095</b>	<b>477</b>	<b>12,036</b>	<b>-244</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**May 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Apr 30	1508.00	18,423							
1	1508.44	18,589	166	159	6	0	6	0	7
2	1511.13	19,623	1,034	1,094	6	0	6	0	-60
3	1513.23	20,449	826	1,672	5	833	5	0	-13
4	1513.74	20,652	203	2,856	5	0	5	2,640	-13
5	1511.23	19,661	-991	1,252	5	0	5	2,086	-157
6	1508.52	18,620	-1,041	95	5	1,258	5	0	122
7	1509.49	18,989	369	343	4	0	4	0	26
8	1510.73	19,467	478	468	4	0	4	0	10
9	1511.23	19,661	194	188	4	0	4	0	6
10	1512.00	19,961	300	244	5	23	5	0	79
11	1505.66	17,552	-2,409	183	5	960	5	0	-1,632
12	1502.08	16,258	-1,294	863	4	0	4	2,101	-56
13	1509.36	18,939	2,681	2,706	4	0	4	0	-25
14	1510.68	19,447	508	1,248	4	768	4	0	28
15	1511.28	19,680	233	278	3	0	3	0	-45
16	1510.38	19,331	-349	982	3	1,386	3	0	55
17	1509.87	19,134	-197	472	4	634	4	0	-35
18	1513.06	20,381	1,247	2,886	4	0	4	1,618	-21
19	1512.44	20,135	-246	1,493	4	0	4	1,724	-15
20	1512.84	20,294	159	2,109	3	1,190	3	774	14
21	1505.40	17,456	-2,838	195	3	1,337	3	1,670	-26
22	1506.76	17,958	502	512	3	0	3	0	-10
23	1507.66	18,295	337	349	3	0	3	0	-12
24	1512.69	20,234	1,939	2,003	3	0	3	0	-64
25	1512.18	20,033	-201	302	3	0	3	495	-8
26	1509.47	18,981	-1,052	2,756	3	0	3	3,807	-1
27	1507.69	18,306	-675	1,996	2	842	2	1,824	-5
28	1510.55	19,396	1,090	1,145	2	0	2	0	-55
29	1511.01	19,575	179	218	2	0	2	0	-39
30	1509.61	19,034	-541	546	2	1,147	2	0	60
31	1509.79	19,104	70	105	2	0	2	0	-35
<b>Total</b>			<b>681</b>	<b>31,718</b>	<b>115</b>	<b>10,378</b>	<b>115</b>	<b>18,739</b>	<b>-1,920</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**June 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
May 31	1509.79	19,104							
1	1512.08	19,993	889	2,019	1	0	1	1,130	0
2	1510.49	19,373	-620	2,307	1	38	1	2,928	39
3	1509.98	19,177	-196	3,192	1	1,443	1	1,883	-62
4	1514.45	20,938	1,761	4,762	1	1,916	1	1,143	58
5	1515.24	21,258	320	2,588	1	2,299	1	0	31
6	1514.29	20,873	-385	2,640	0	3,027	0	0	2
7	1517.75	22,292	1,419	3,429	0	1,977	0	0	-33
8	1520.53	23,467	1,175	4,061	0	2,431	0	617	162
9	1511.23	19,661	-3,806	3,497	0	3,078	0	4,063	-162
10	1510.10	19,223	-438	3,043	0	1,933	0	1,549	1
11	1509.78	19,100	-123	1,241	0	1,266	0	0	-98
12	1510.24	19,277	177	155	0	2	0	0	24
13	1511.90	19,923	646	2,276	0	1,643	0	0	13
14	1517.53	22,200	2,277	3,687	0	1,422	0	0	12
15	1516.74	21,872	-328	3,850	0	2,077	0	2,075	-26
16	1515.16	21,225	-647	3,393	0	2,510	0	1,530	0
17	1513.04	20,373	-852	3,175	0	2,352	0	1,659	-16
18	1514.75	21,059	686	3,943	0	1,339	0	1,918	0
19	1517.03	21,992	933	3,706	0	2,686	0	0	-87
20	1517.00	21,980	-12	1,369	0	1,390	0	0	9
21	1514.89	21,116	-864	1,659	0	2,296	0	0	-227
22	1520.07	23,270	2,154	4,305	0	1,461	0	690	0
23	1511.45	19,746	-3,524	2,961	0	2,523	0	4,066	104
24	1519.07	22,846	3,100	5,884	0	2,311	0	474	1
25	1514.07	20,785	-2,061	3,621	0	3,594	0	2,080	-8
26	1512.42	20,127	-658	888	0	1,541	0	0	-5
27	1514.33	20,889	762	2,504	0	1,540	0	0	-202
28	1519.48	23,019	2,130	3,327	0	1,213	0	0	16
29	1518.22	22,488	-531	3,904	0	2,037	0	2,399	1
30	1517.47	22,175	-313	4,111	0	2,255	0	1,835	-334
<b>Total</b>			<b>3,071</b>	<b>91,497</b>	<b>5</b>	<b>55,600</b>	<b>5</b>	<b>32,039</b>	<b>-787</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**July 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jun 30	1517.47	22,175							
1	1516.65	21,835	-340	4,473	0	2,389	0	2,794	370
2	1521.89	24,052	2,217	7,387	0	3,075	0	2,068	-27
3	1515.07	21,189	-2,863	297	0	3,296	0	0	136
4	1507.07	18,074	-3,115	157	0	3,148	0	0	-124
5	1508.24	18,513	439	439	0	0	0	0	0
6	1514.56	20,982	2,469	3,612	0	60	0	1,104	21
7	1506.43	17,836	-3,146	1,834	0	2,281	0	2,693	-6
8	1508.76	18,710	874	3,220	0	0	0	2,318	-28
9	1509.39	18,950	240	3,458	0	1,240	0	1,979	1
10	1509.72	19,077	127	141	0	0	0	0	-14
11	1510.18	19,254	177	159	0	0	0	0	18
12	1517.12	22,030	2,776	3,499	0	822	0	0	99
13	1511.89	19,919	-2,111	3,941	0	2,160	0	3,875	-17
14	1507.30	18,160	-1,759	2,293	0	1,837	0	2,166	-49
15	1509.58	19,023	863	5,230	0	0	0	4,368	1
16	1507.51	18,239	-784	2,474	0	0	0	3,258	0
17	1508.52	18,619	380	1,287	0	957	0	0	50
18	1511.31	19,692	1,073	1,114	0	0	0	0	-41
19	1515.76	21,470	1,778	3,093	0	1,292	0	0	-23
20	1519.48	23,019	1,549	3,300	0	1,203	0	547	-1
21	1515.26	21,266	-1,753	4,553	0	2,021	0	4,285	0
22	1513.15	20,417	-849	5,290	0	2,855	0	3,284	0
23	1513.69	20,632	215	4,107	0	1,465	0	2,428	1
24	1511.95	19,942	-690	1,631	0	2,386	0	0	65
25	1510.49	19,373	-569	1,960	0	2,514	0	0	-15
26	1516.11	21,613	2,240	3,713	0	1,357	0	0	-116
27	1516.94	21,955	342	3,882	0	1,721	0	1,818	-1
28	1513.00	20,357	-1,598	3,219	0	2,052	0	2,717	-48
29	1511.58	19,797	-560	3,354	0	2,002	0	1,960	48
30	1513.52	20,564	767	4,807	0	1,357	0	2,703	20
31	1509.41	18,958	-1,606	327	0	1,924	0	0	-9
<b>Total</b>			<b>-3,217</b>	<b>88,251</b>	<b>0</b>	<b>45,414</b>	<b>0</b>	<b>46,365</b>	<b>311</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**August 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jul 31	1509.41	18,958							
1	1508.96	18,786	-172	1,292	0	1,405	0	0	-59
2	1516.36	21,716	2,930	3,322	0	420	0	0	28
3	1519.51	23,032	1,316	3,744	0	1,781	0	646	-1
4	1514.90	21,120	-1,912	4,118	0	1,548	0	4,483	1
5	1512.48	20,151	-969	4,022	0	1,109	0	3,881	-1
6	1512.31	20,084	-67	3,851	0	1,733	0	2,186	1
7	1513.99	20,752	668	1,955	0	1,169	0	0	-118
8	1509.85	19,127	-1,625	1,596	0	3,213	0	0	-8
9	1516.03	21,580	2,453	3,676	0	1,009	0	0	-214
10	1520.20	23,326	1,746	3,676	0	1,326	0	754	150
11	1517.86	22,338	-988	5,155	0	1,544	0	4,561	-38
12	1514.33	20,889	-1,449	4,966	0	2,404	0	4,010	-1
13	1516.48	21,765	876	4,963	0	2,208	0	1,878	-1
14	1515.95	21,548	-217	1,524	0	1,660	0	0	-81
15	1512.06	19,986	-1,562	1,325	0	2,819	0	0	-68
16	1515.47	21,352	1,366	4,682	0	46	0	3,269	-1
17	1512.75	20,258	-1,094	4,326	0	2,119	0	3,300	-1
18	1518.24	22,497	2,239	4,705	0	1,199	0	1,298	31
19	1517.51	22,192	-305	3,540	0	766	0	3,099	20
20	1514.03	20,769	-1,423	3,982	0	1,096	0	4,285	-24
21	1514.34	20,893	124	4,871	0	1,317	0	3,396	-34
22	1508.12	18,468	-2,425	154	0	2,538	0	0	-41
23	1512.80	20,278	1,810	2,775	0	743	0	0	-222
24	1513.84	20,692	414	3,733	0	1,382	0	1,939	2
25	1511.58	19,797	-895	4,119	0	1,551	0	3,477	14
26	1511.74	19,860	63	4,371	0	1,129	0	3,195	16
27	1518.17	22,467	2,607	5,678	0	1,341	0	1,708	-22
28	1513.19	20,433	-2,034	54	0	1,950	0	0	-138
29	1508.11	18,464	-1,969	15	0	1,841	0	0	-143
30	1506.23	17,762	-702	300	0	790	0	0	-212
31	1515.31	21,286	3,524	5,469	0	115	0	1,937	107
<b>Total</b>			2,328	101,959	0	45,271	0	53,302	-1,058

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**September 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Aug 31	1515.31	21,286							
1	1513.03	20,369	-917	5,367	0	2,667	0	3,483	-134
2	1513.00	20,357	-12	5,289	0	1,996	0	3,305	0
3	1514.54	20,974	617	5,431	0	2,203	0	2,610	-1
4	1520.20	23,326	2,352	4,219	0	1,731	0	0	-136
5	1513.35	20,496	-2,830	1,480	0	3,988	0	0	-322
6	1511.98	19,954	-542	2,416	0	2,847	0	0	-111
7	1512.34	20,096	142	2,643	0	788	0	1,891	178
8	1509.65	19,050	-1,046	3,183	0	777	0	3,436	-16
9	1514.62	21,006	1,956	5,860	0	0	0	3,903	-1
10	1514.99	21,156	150	5,406	0	1,225	0	4,031	0
11	1514.50	20,958	-198	391	0	0	0	590	1
12	1511.50	19,766	-1,192	393	0	1,738	0	0	153
13	1515.36	21,307	1,541	3,928	0	0	0	2,388	1
14	1510.00	19,184	-2,123	3,172	0	1,563	0	3,733	1
15	1508.99	18,798	-386	3,410	0	936	0	2,896	36
16	1505.35	17,438	-1,360	1,632	0	713	0	2,268	-11
17	1511.36	19,711	2,273	3,198	0	0	0	952	27
18	1511.08	19,602	-109	1,673	0	1,548	0	0	-234
19	1511.46	19,750	148	1,616	0	1,390	0	0	-78
20	1513.84	20,692	942	3,065	0	2,009	0	0	-114
21	1512.35	20,100	-592	2,488	0	683	0	2,396	-1
22	1510.49	19,373	-727	3,604	0	973	0	3,389	31
23	1507.44	18,212	-1,161	2,561	0	930	0	2,790	-2
24	1510.16	19,246	1,034	3,962	0	0	0	2,919	-9
25	1512.18	20,033	787	1,033	0	0	0	246	0
26	1512.78	20,270	237	2,167	0	1,776	0	0	-154
27	1521.48	23,875	3,605	7,058	0	2,184	0	1,172	-97
28	1509.91	19,150	-4,725	3,460	0	4,693	0	3,624	132
29	1507.95	18,404	-746	3,042	0	964	0	2,767	-57
30	1509.22	18,885	481	3,468	0	0	0	2,984	-3
<b>Total</b>			<b>-2,401</b>	<b>96,615</b>	<b>0</b>	<b>40,322</b>	<b>0</b>	<b>57,773</b>	<b>-921</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**October 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Sep 30	1509.22	18,885							
1	1509.32	18,924	39	1,612	0	0	0	1,574	1
2	1509.63	19,042	118	872	0	635	0	0	-119
3	1513.63	20,608	1,566	1,683	0	0	0	0	-117
4	1512.31	20,084	-524	2,352	0	0	0	2,923	47
5	1509.18	18,870	-1,214	2,866	0	784	0	3,255	-41
6	1508.40	18,574	-296	2,765	0	0	0	3,043	-18
7	1508.01	18,426	-148	2,782	0	0	0	2,930	0
8	1508.33	18,547	121	3,057	0	0	0	2,935	-1
9	1505.81	17,607	-940	3,641	0	0	0	4,583	2
10	1507.00	18,048	441	1,618	0	0	0	1,175	-2
11	1513.06	20,381	2,333	2,243	0	0	0	0	90
12	1512.58	20,191	-190	1,390	0	0	0	1,581	1
13	1507.34	18,175	-2,016	1,690	0	575	0	3,164	33
14	1506.25	17,769	-406	1,932	0	0	0	2,327	-11
15	1509.38	18,946	1,177	2,106	0	0	0	932	3
16	1511.01	19,575	629	550	0	0	0	0	79
17	1513.89	20,712	1,137	1,065	0	0	0	0	72
18	1520.92	23,634	2,922	2,756	0	0	0	0	166
19	1518.88	22,766	-868	2,864	0	728	0	3,021	17
20	1512.00	19,962	-2,804	2,201	0	728	0	4,264	-13
21	1511.45	19,746	-216	3,927	0	581	0	3,553	-9
22	1511.39	19,723	-23	4,695	0	1,011	0	3,699	-8
23	1508.77	18,714	-1,009	151	0	1,245	0	0	85
24	1508.72	18,695	-19	1,076	0	1,183	0	0	88
25	1516.87	21,926	3,231	3,218	0	0	0	0	13
26	1515.59	21,400	-526	3,186	0	819	0	2,913	20
27	1512.71	20,242	-1,158	3,802	0	947	0	3,956	-57
28	1511.94	19,938	-304	3,439	0	0	0	3,744	1
29	1504.90	17,273	-2,665	2,893	0	0	0	5,557	-1
30	1505.80	17,603	330	944	0	0	0	615	1
31	1507.91	18,389	786	667	0	0	0	0	119
Total			-496	70,043	0	9,236	0	61,744	441

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**November 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Oct 31	1507.91	18,389							
1	1517.67	22,258	3,869	3,833	0	0	0	0	36
2	1516.47	21,761	-497	2,149	0	0	0	2,617	-29
3	1515.39	21,319	-442	1,932	0	0	0	2,350	-24
4	1514.29	20,873	-446	1,843	0	0	0	2,318	29
5	1508.74	18,703	-2,170	561	0	0	0	2,724	-7
6	1509.50	18,992	289	210	0	0	0	0	79
7	1510.16	19,246	254	213	0	0	0	0	41
8	1511.22	19,657	411	278	0	0	0	0	133
9	1509.26	18,901	-756	779	0	0	0	1,535	0
10	1508.17	18,487	-414	2,409	0	0	0	2,862	39
11	1506.15	17,732	-755	307	0	0	0	1,054	-8
12	1511.58	19,797	2,065	1,954	0	0	0	0	111
13	1512.00	19,962	165	123	0	0	0	0	42
14	1509.62	19,038	-924	117	0	1,147	0	0	106
15	1511.48	19,758	720	1,586	0	932	0	0	66
16	1512.71	20,242	484	367	0	0	0	0	117
17	1512.60	20,199	-43	1,796	0	0	0	1,828	-11
18	1507.18	18,115	-2,084	1,822	0	883	0	3,024	1
19	1505.75	17,585	-530	1,417	0	529	0	1,482	64
20	1506.68	17,929	344	248	0	0	0	0	96
21	1507.42	18,205	276	159	0	0	0	0	117
22	1510.24	19,277	1,072	1,579	0	611	0	0	104
23	1518.00	22,396	3,119	3,004	0	0	0	0	115
24	1519.69	23,109	713	2,682	0	0	0	1,956	-13
25	1515.66	21,429	-1,680	123	0	0	0	1,803	0
26	1512.14	20,017	-1,412	662	0	0	0	2,074	0
27	1512.79	20,274	257	141	0	0	0	0	116
28	1513.75	20,656	382	307	0	0	0	0	75
29	1515.02	21,169	513	333	0	0	0	0	180
30	1513.19	20,433	-736	1,351	0	0	0	2,098	11
<b>Total</b>			<b>2,044</b>	<b>34,285</b>	<b>0</b>	<b>4,102</b>	<b>0</b>	<b>29,725</b>	<b>1,586</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**December 2010**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Nov 30	1513.19	20,433							
1	1511.21	19,653	-780	2,000	0	0	0	2,767	-13
2	1513.19	20,433	780	3,358	0	0	0	2,552	-26
3	1515.84	21,503	1,070	4,287	0	972	0	2,262	17
4	1516.30	21,691	188	190	0	0	0	0	-2
5	1516.47	21,761	70	105	0	0	0	0	-35
6	1516.85	21,918	157	159	0	0	0	0	-2
7	1517.02	21,988	70	1,871	0	0	0	1,801	0
8	1513.94	20,732	-1,256	1,280	0	0	0	2,562	26
9	1512.34	20,096	-636	1,358	0	0	0	1,969	-25
10	1507.89	18,381	-1,715	1,488	0	0	0	3,203	0
11	1508.91	18,767	386	404	0	0	0	0	-18
12	1509.43	18,966	199	218	0	0	0	0	-19
13	1513.08	20,389	1,423	2,326	0	936	0	0	33
14	1514.58	20,990	601	3,293	0	1,093	0	1,628	29
15	1518.52	22,614	1,624	4,662	0	728	0	2,291	-19
16	1517.77	22,300	-314	2,848	0	0	0	3,187	25
17	1514.43	20,930	-1,370	1,674	0	0	0	3,035	-9
18	1514.97	21,148	218	2,330	0	0	0	2,074	-38
19	1512.78	20,270	-878	188	98	1,400	98	0	334
20	1517.99	22,392	2,122	3,983	89	1,732	89	0	-129
21	1520.44	23,428	1,036	2,907	96	0	96	1,629	-242
22	1516.42	21,741	-1,687	2,503	505	0	505	3,864	-326
23	1514.22	20,845	-896	1,485	194	574	194	1,654	-153
24	1516.01	21,572	727	1,271	93	645	93	0	101
25	1517.18	22,055	483	1,611	68	1,240	68	0	112
26	1512.93	20,329	-1,726	156	63	1,960	63	0	78
27	1514.25	20,857	528	1,496	46	984	46	0	16
28	1509.87	19,134	-1,723	1,032	36	747	36	1,759	-249
29	1505.33	17,430	-1,704	1,455	39	752	39	2,328	-79
30	1511.10	19,610	2,180	2,135	36	0	36	0	45
31	1517.58	22,221	2,611	2,676	30	0	30	0	-65
<b>Total</b>			<b>1,788</b>	<b>56,749</b>	<b>1,393</b>	<b>13,763</b>	<b>1,393</b>	<b>40,565</b>	<b>-633</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**January 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Dec 31	1517.58	22,221							
1	1518.64	22,665	444	389	27	0	27	0	55
2	1516.03	21,580	-1,085	414	26	1,525	26	0	26
3	1516.60	21,815	235	854	28	638	28	0	19
4	1516.09	21,605	-210	430	25	622	25	0	-18
5	1517.68	22,263	658	1,322	24	672	24	0	8
6	1517.42	22,154	-109	2,809	22	0	22	2,777	-141
7	1515.76	21,470	-684	3,404	20	0	20	4,083	-5
8	1504.86	17,259	-4,211	188	18	0	18	4,393	-6
9	1505.05	17,328	69	133	16	0	16	0	-64
10	1509.65	19,050	1,722	1,636	14	0	14	0	86
11	1510.79	19,489	439	3,194	13	561	13	2,136	-58
12	1508.02	18,430	-1,059	2,658	12	0	12	3,702	-15
13	1512.45	20,139	1,709	2,854	12	0	12	1,117	-28
14	1518.75	22,711	2,572	2,725	11	10	11	0	-143
15	1514.30	20,877	-1,834	363	11	0	11	2,175	-22
16	1510.53	19,389	-1,488	996	11	1,529	11	938	-17
17	1508.32	18,543	-846	157	10	1,044	10	0	41
18	1508.28	18,528	-15	673	10	649	10	0	-39
19	1509.88	19,138	610	2,546	9	32	9	1,884	-20
20	1509.13	18,851	-287	641	8	594	8	331	-3
21	1511.14	19,625	774	1,534	9	716	9	0	-44
22	1508.09	18,457	-1,168	216	9	1,452	9	0	68
23	1506.96	18,033	-424	182	8	672	8	0	66
24	1509.63	19,042	1,009	1,012	7	0	7	0	-3
25	1509.18	18,870	-172	716	8	816	8	0	-72
26	1508.97	18,790	-80	2,134	7	831	7	1,349	-34
27	1508.90	18,763	-27	729	7	735	7	13	-8
28	1506.61	17,903	-860	282	7	1,187	7	0	45
29	1506.96	18,033	130	123	7	0	7	0	7
30	1510.54	19,393	1,360	1,382	7	0	7	0	-22
31	1511.11	19,614	221	1,235	7	1,003	7	0	-11
<b>Total</b>			<b>-2,607</b>	<b>37,931</b>	<b>410</b>	<b>15,288</b>	<b>410</b>	<b>24,898</b>	<b>-352</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**February 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jan 31	1511.11	19,614							
1	1514.00	20,756	1,142	2,105	7	995	7	0	32
2	1511.72	19,852	-904	1,771	7	0	7	2,666	-9
3	1509.45	18,973	-879	2,388	6	0	6	3,266	-1
4	1509.23	18,889	-84	1,189	6	0	6	1,274	1
5	1509.76	19,092	203	248	6	0	6	0	-45
6	1510.93	19,544	452	446	6	0	6	0	6
7	1512.11	20,005	461	1,173	5	757	5	0	45
8	1514.85	21,099	1,094	1,515	6	482	6	0	61
9	1513.52	20,564	-535	1,585	5	0	5	2,104	-16
10	1511.28	19,680	-884	1,524	5	85	5	2,301	-22
11	1508.64	18,665	-1,015	1,756	5	737	5	2,025	-9
12	1514.58	20,990	2,325	2,301	5	0	5	0	24
13	1511.50	19,766	-1,224	300	6	1,493	6	0	-31
14	1511.32	19,696	-70	1,120	6	1,266	6	0	76
15	1515.05	21,181	1,485	2,612	6	1,010	6	0	-117
16	1512.79	20,274	-907	933	14	62	14	1,740	-38
17	1507.80	18,347	-1,927	2,121	11	793	11	3,252	-3
18	1510.91	19,536	1,189	4,694	19	436	19	3,056	-13
19	1511.99	19,958	422	396	75	0	75	0	26
20	1510.16	19,246	-712	1,585	52	0	52	2,328	31
21	1508.94	18,777	-469	2,160	39	0	39	2,521	-108
22	1511.83	19,895	1,118	3,958	31	0	31	2,912	72
23	1506.79	17,970	-1,925	2,296	26	0	26	3,936	-285
24	1506.30	17,788	-182	3,252	22	0	22	3,409	-25
25	1513.24	20,453	2,665	2,591	28	0	28	0	74
26	1512.07	19,989	-464	410	115	1,015	115	0	141
27	1511.13	19,622	-367	367	67	529	67	0	-205
28	1510.17	19,250	-372	496	51	1,090	51	0	222
<b>Total</b>			<b>-364</b>	<b>47,292</b>	<b>637</b>	<b>10,750</b>	<b>637</b>	<b>36,790</b>	<b>-116</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**March 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Feb 28	1510.17	19,250							
1	1513.58	20,588	1,338	1,292	42	0	42	0	46
2	1510.58	19,408	-1,180	896	34	0	34	2,025	-51
3	1505.71	17,570	-1,838	117	31	802	31	1,149	-4
4	1506.11	17,718	148	114	29	17	29	0	51
5	1506.50	17,862	144	123	26	0	26	0	21
6	1507.31	18,164	302	218	25	0	25	0	84
7	1513.64	20,612	2,448	2,541	23	36	23	0	-57
8	1511.23	19,661	-951	2,218	21	1,289	21	1,785	-95
9	1508.66	18,672	-989	1,532	20	0	20	2,517	-4
10	1507.89	18,381	-291	1,629	19	0	19	1,891	-29
11	1501.90	16,194	-2,187	720	18	747	18	2,162	2
12	1503.28	16,687	493	470	17	0	17	0	23
13	1505.72	17,574	887	803	15	0	15	0	84
14	1510.76	19,478	1,904	1,864	15	0	15	0	40
15	1511.96	19,946	468	2,282	14	0	14	1,764	-50
16	1506.37	17,814	-2,132	1,201	13	870	13	2,458	-5
17	1505.35	17,438	-376	1,243	13	0	13	1,615	-4
18	1501.65	16,106	-1,332	181	13	0	13	1,509	-4
19	1503.01	16,590	484	510	15	0	15	0	-26
20	1516.96	21,963	5,373	3,873	2,459	0	2,459	0	1,500
21	1515.73	21,458	-505	1,214	1,395	0	1,395	607	-1,112
22	1508.39	18,570	-2,888	704	336	716	336	230	-2,646
23	1505.75	17,585	-985	2,092	236	0	236	2,983	-94
24	1509.52	19,000	1,415	1,698	193	0	193	197	-86
25	1511.65	19,825	825	3,239	340	993	340	1,293	-128
26	1506.39	17,821	-2,004	542	250	1,116	250	1,309	-121
27	1510.30	19,300	1,479	1,529	214	0	214	-44	-94
28	1514.19	20,833	1,533	3,087	178	0	178	1,464	-90
29	1513.23	20,449	-384	2,198	148	0	148	2,538	-44
30	1510.90	19,532	-917	1,616	126	1,043	126	1,425	-65
31	1511.54	19,782	250	2,290	110	0	110	2,008	-32
Total			532	44,036	6,388	7,629	6,388	32,885	-2,990

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**April 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Mar 31	1511.54	19,782							
1	1511.86	19,907	125	3,394	100	754	100	2,480	-35
2	1510.16	19,246	-661	1,224	95	0	95	1,839	-46
3	1509.93	19,157	-89	123	97	0	97	174	-38
4	1515.17	21,229	2,072	1,924	99	0	99	0	148
5	1512.45	20,139	-1,090	1,151	90	891	90	1,209	-141
6	1510.59	19,412	-727	1,162	67	959	67	929	-1
7	1513.41	20,520	1,108	1,992	58	0	58	860	-24
8	1514.62	21,006	486	1,345	52	975	52	0	116
9	1513.52	20,564	-442	231	43	891	43	0	218
10	1510.98	19,563	-1,001	638	41	1,733	41	0	94
11	1513.91	20,720	1,157	2,004	39	895	39	0	48
12	1516.83	21,910	1,190	1,990	38	905	38	0	105
13	1513.17	20,425	-1,485	928	36	996	36	1,188	-229
14	1511.64	19,821	-604	1,523	34	0	34	2,115	-12
15	1513.58	20,588	767	1,505	32	753	32	0	15
16	1514.46	20,942	354	248	31	0	31	0	106
17	1512.40	20,119	-823	101	30	1,119	30	0	195
18	1518.26	22,505	2,386	2,291	28	0	28	0	95
19	1517.47	22,175	-330	1,742	27	0	27	1,944	-128
20	1511.98	19,954	-2,221	557	26	0	26	2,743	-35
21	1508.72	18,695	-1,259	658	25	867	25	1,054	4
22	1512.51	20,163	1,468	2,777	24	0	24	1,293	-16
23	1509.36	18,939	-1,224	343	24	0	24	1,546	-21
24	1508.60	18,650	-289	123	23	0	23	394	-18
25	1510.28	19,292	642	605	21	0	21	0	37
26	1512.75	20,258	966	944	20	0	20	0	22
27	1514.10	20,797	539	1,937	19	0	19	1,348	-50
28	1513.58	20,588	-209	2,168	19	0	19	2,368	-9
29	1512.32	20,088	-500	1,558	18	0	18	2,050	-8
30	1510.09	19,219	-869	123	18	0	18	984	-8
<b>Total</b>			<b>-563</b>	<b>37,309</b>	<b>1,274</b>	<b>11,738</b>	<b>1,274</b>	<b>26,518</b>	<b>384</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**May 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Apr 30	1510.09	19,219							
1	1514.65	21,018	1,799	2,914	20	0	20	1,133	18
2	1513.70	20,636	-382	1,477	20	0	20	1,822	-37
3	1511.83	19,895	-741	510	21	0	21	1,258	7
4	1514.69	21,035	1,140	1,196	18	0	18	43	-13
5	1515.60	21,405	370	301	13	0	13	0	69
6	1510.97	19,559	-1,846	258	15	1,231	15	877	4
7	1510.46	19,362	-197	159	17	0	17	322	-34
8	1510.57	19,404	42	141	17	0	17	67	-32
9	1514.04	20,773	1,369	1,328	19	0	19	0	41
10	1513.70	20,636	-137	544	16	2	16	651	-28
11	1512.67	20,226	-410	1,312	13	0	13	1,713	-9
12	1514.82	21,087	861	2,750	10	81	10	1,804	-4
13	1518.53	22,618	1,531	3,737	10	1,219	10	983	-4
14	1514.21	20,841	-1,777	113	9	1,968	9	0	78
15	1510.13	19,234	-1,607	173	10	1,885	10	0	105
16	1508.28	18,527	-707	1,541	10	741	10	0	-1,507
17	1507.98	18,413	-114	335	11	0	11	969	520
18	1508.74	18,703	290	137	13	829	13	0	982
19	1510.33	19,311	608	605	11	0	11	0	3
20	1515.11	21,205	1,894	1,814	8	0	8	0	80
21	1515.82	21,494	289	159	7	0	7	0	130
22	1514.89	21,116	-378	746	7	1,180	7	0	56
23	1517.21	22,067	951	1,870	7	998	7	0	79
24	1518.96	22,799	732	1,733	6	1,022	6	0	21
25	1514.91	21,124	-1,675	2,010	5	1,315	5	2,313	-57
26	1509.17	18,866	-2,258	443	5	1,189	5	1,511	-1
27	1512.69	20,234	1,368	3,006	5	0	5	1,640	2
28	1515.79	21,482	1,248	1,743	5	25	5	472	2
29	1512.51	20,163	-1,319	194	5	1,503	5	0	-10
30	1511.48	19,758	-405	666	4	1,085	4	0	14
31	1515.37	21,311	1,553	3,241	3	0	3	1,711	23
<b>Total</b>			<b>2,092</b>	<b>37,156</b>	<b>340</b>	<b>16,273</b>	<b>340</b>	<b>19,289</b>	<b>498</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**June 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
May 31	1515.37	21,311							
1	1512.93	20,329	-982	2,344	4	983	4	2,323	-20
2	1509.12	18,847	-1,482	157	4	0	4	1,622	-17
3	1511.26	19,672	825	1,893	4	0	4	1,097	29
4	1508.81	18,729	-943	105	4	0	4	1,048	0
5	1511.66	19,829	1,100	1,443	4	0	4	314	-29
6	1512.06	19,986	157	2,159	4	0	4	2,004	2
7	1511.44	19,743	-243	2,493	4	205	4	2,531	0
8	1509.87	19,134	-609	1,546	4	1,187	4	969	1
9	1510.52	19,385	251	1,876	3	0	3	1,626	1
10	1508.89	18,760	-625	543	3	0	3	1,168	0
11	1508.23	18,509	-251	105	3	0	3	356	0
12	1510.40	19,338	829	2,384	3	0	3	1,568	13
13	1512.09	19,997	659	3,085	3	0	3	2,418	-8
14	1513.68	20,628	631	3,213	3	1,131	3	1,476	25
15	1514.14	20,813	185	2,833	2	0	2	2,642	-6
16	1520.09	23,277	2,464	3,402	2	0	2	2,673	1,735
17	1515.29	21,278	-1,999	2,975	2	145	2	3,101	-1,728
18	1511.12	19,618	-1,660	243	2	897	2	1,000	-6
19	1511.49	19,762	144	152	2	70	2	0	62
20	1514.59	20,994	1,232	3,147	2	1,183	2	736	4
21	1512.30	20,080	-914	2,038	1	1,227	1	1,731	6
22	1511.97	19,950	-130	1,587	0	1,149	0	572	4
23	1516.42	21,741	1,791	2,909	0	0	0	1,119	1
24	1515.70	21,445	-296	3,106	0	1,486	0	1,918	2
25	1515.67	21,433	-12	1,880	0	1,100	0	794	2
26	1510.79	19,489	-1,944	146	0	2,133	0	0	43
27	1518.88	22,766	3,277	3,215	0	0	0	0	62
28	1511.70	19,844	-2,922	65	0	968	0	2,036	17
29	1508.88	18,756	-1,088	16	0	0	0	1,145	41
30	1515.09	21,197	2,441	4,084	0	0	0	1,588	-55
<b>Total</b>			<b>-114</b>	<b>55,144</b>	<b>63</b>	<b>13,864</b>	<b>63</b>	<b>41,575</b>	<b>181</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**July 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jun 30	1515.09	21,197							
1	1514.18	20,829	-368	3,496	0	1,235	0	2,676	47
2	1511.70	19,844	-985	681	0	1,375	0	232	-59
3	1509.50	18,992	-852	435	0	1,323	0	0	36
4	1512.41	20,123	1,131	1,073	0	0	0	0	58
5	1516.45	21,753	1,630	2,638	0	1,113	0	0	105
6	1520.08	23,275	1,522	2,402	0	952	0	0	72
7	1518.56	22,631	-644	2,459	0	1,211	0	1,891	-1
8	1516.17	21,638	-993	2,169	0	999	0	2,164	1
9	1517.22	22,071	433	1,679	0	1,339	0	0	93
10	1512.53	20,171	-1,900	1,501	0	3,476	0	0	75
11	1520.04	23,258	3,087	4,164	0	1,186	0	0	109
12	1518.39	22,560	-698	4,040	0	2,526	0	2,228	16
13	1510.54	19,393	-3,167	1,724	0	2,629	0	2,194	-68
14	1516.42	21,741	2,348	5,158	0	1,339	0	1,471	0
15	1517.67	22,258	517	6,037	0	2,352	0	3,168	0
16	1515.77	21,474	-784	2,222	0	3,068	0	0	62
17	1511.82	19,891	-1,583	1,906	0	3,489	0	0	0
18	1516.02	21,576	1,685	3,501	0	1,897	0	0	81
19	1516.16	21,634	58	3,872	0	1,920	0	1,894	0
20	1512.37	20,108	-1,526	2,764	0	1,742	0	2,547	-1
21	1513.75	20,656	548	3,986	0	1,858	0	1,580	0
22	1515.29	21,278	622	4,975	0	2,003	0	2,398	48
23	1519.47	23,952	2,674	3,577	0	1,438	0	387	922
24	1516.41	21,736	-2,216	1,922	0	3,276	0	0	-862
25	1518.88	22,766	1,030	3,039	0	2,107	0	0	98
26	1516.34	21,708	-1,058	2,909	0	1,840	0	2,127	0
27	1514.73	21,051	-657	2,772	0	1,304	0	2,173	48
28	1514.51	20,962	-89	3,721	0	2,200	0	1,594	-16
29	1514.25	20,857	-105	2,687	0	0	0	2,813	21
30	1516.48	21,765	908	1,673	0	849	0	0	84
31	1519.72	23,121	1,356	2,216	0	976	0	0	116
<b>Total</b>			1,924	87,398	0	53,022	0	33,537	1,085

1/ Values supplied by LADWP, not verified by DWR.



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**August 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jul 31	1519.72	23,121							
1	1524.00	24,974	1,853	3,557	0	1,798	0	0	94
2	1516.08	21,601	-3,373	2,741	0	2,640	0	3,473	-1
3	1517.53	22,200	599	3,236	0	1,097	0	1,568	28
4	1519.71	23,117	917	3,755	0	1,261	0	1,577	0
5	1517.12	22,030	-1,087	3,779	0	1,574	0	3,266	-26
6	1518.04	22,413	383	3,851	0	3,547	0	0	79
7	1515.15	21,221	-1,192	1,697	0	2,828	0	0	-61
8	1519.27	22,931	1,710	2,218	0	814	0	0	306
9	1518.77	22,719	-212	2,459	0	0	0	2,661	-10
10	1519.42	22,993	274	2,660	0	1,029	0	1,640	283
11	1510.21	19,265	-3,728	1,334	0	690	0	4,065	-307
12	1514.96	21,144	1,879	1,853	0	0	0	0	26
13	1515.11	21,205	61	1,214	0	1,225	0	0	72
14	1512.58	20,191	-1,014	1,233	0	2,277	0	0	30
15	1515.08	21,193	1,002	3,157	0	2,212	0	0	57
16	1514.64	21,014	-179	2,971	0	1,225	0	1,924	-1
17	1514.69	21,035	21	4,627	0	2,501	0	2,106	1
18	1512.97	20,345	-690	3,864	0	2,699	0	1,854	-1
19	1508.59	18,646	-1,699	2,420	0	1,940	0	2,179	0
20	1514.60	20,998	2,352	3,465	0	1,233	0	0	120
21	1513.62	20,604	-394	113	0	610	0	0	103
22	1518.64	22,665	2,061	2,574	0	605	0	0	92
23	1524.67	25,269	2,604	3,227	0	749	0	0	126
24	1517.66	22,254	-3,015	2,327	0	2,656	0	2,744	58
25	1521.21	23,759	1,505	4,263	0	996	0	1,767	5
26	1509.65	19,050	-4,709	1,195	0	912	0	4,910	-82
27	1512.23	20,052	1,002	881	0	1	0	0	122
28	1512.19	20,037	-15	2,490	0	2,508	0	0	3
29	1516.06	21,593	1,556	2,651	0	1,172	0	0	77
30	1513.05	20,377	-1,216	2,013	0	1,152	0	2,075	-2
31	1508.55	18,631	-1,746	1,500	0	0	0	3,246	0
<b>Total</b>			<b>-4,490</b>	<b>79,325</b>	<b>0</b>	<b>43,951</b>	<b>0</b>	<b>41,055</b>	<b>1,191</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**September 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Aug 31	1508.55	18,631							
1	1510.32	19,308	677	4,123	0	871	0	2,577	2
2	1512.65	20,218	910	3,700	0	783	0	2,005	-2
3	1515.66	21,429	1,211	1,846	0	729	0	0	94
4	1512.20	20,041	-1,388	98	0	1,564	0	0	78
5	1514.41	20,921	880	1,641	0	735	0	0	-26
6	1515.60	21,405	484	2,932	0	586	0	1,912	50
7	1511.43	19,739	-1,666	3,322	0	1,515	0	3,434	-39
8	1509.10	18,840	-899	3,261	0	1,279	0	2,837	-44
9	1512.99	20,353	1,513	4,636	0	866	0	2,257	0
10	1513.81	20,680	327	329	0	0	0	0	-2
11	1514.40	20,917	237	123	0	0	0	0	114
12	1519.11	22,863	1,946	2,573	0	706	0	0	79
13	1519.81	23,160	297	2,760	0	584	0	1,880	1
14	1511.75	19,864	-3,296	2,045	0	1,081	0	4,260	0
15	1511.22	19,657	-207	2,694	0	1,018	0	1,882	-1
16	1514.62	21,006	1,349	2,272	0	988	0	0	65
17	1511.69	19,840	-1,166	122	0	1,411	0	0	123
18	1511.59	19,801	-39	1,342	0	1,443	0	0	62
19	1511.61	19,809	8	3,466	0	1,145	0	1,693	-620
20	1511.61	19,809	0	1,798	0	954	0	3,082	2,238
21	1508.10	18,460	-1,349	2,834	0	0	0	2,569	-1,614
22	1507.67	18,299	-161	2,512	0	39	0	2,644	10
23	1513.30	20,476	2,177	3,277	0	0	0	1,090	-10
24	1510.90	19,532	-944	152	0	1,264	0	0	168
25	1509.56	19,015	-517	511	0	1,023	0	0	-5
26	1513.96	20,740	1,725	2,634	0	863	0	0	-46
27	1517.53	22,200	1,460	2,163	0	0	0	702	-1
28	1509.48	18,985	-3,215	862	0	0	0	4,077	0
29	1508.87	18,752	-233	2,826	0	0	0	3,058	-1
30	1511.44	19,743	991	2,131	0	0	0	1,142	2
<b>Total</b>			<b>1,112</b>	<b>64,985</b>	<b>0</b>	<b>21,447</b>	<b>0</b>	<b>43,101</b>	<b>675</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**October 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Sep 30	1511.44	19,743							
1	1512.61	20,202	459	459	0	0	0	0	0
2	1511.28	19,680	-522	273	0	983	0	0	188
3	1512.27	20,068	388	1,077	0	741	0	0	52
4	1510.71	19,458	-610	450	0	1,120	0	0	60
5	1503.88	16,903	-2,555	733	0	817	0	2,419	-52
6	1505.11	17,350	447	390	0	0	0	0	57
7	1512.40	20,119	2,769	2,711	0	0	0	0	58
8	1511.04	19,587	-532	536	0	1,130	0	0	62
9	1507.73	18,321	-1,266	210	0	1,524	0	0	48
10	1510.84	19,509	1,188	1,134	0	0	0	0	54
11	1515.23	21,254	1,745	2,901	0	0	0	1,157	1
12	1511.43	19,739	-1,515	2,983	0	779	0	3,773	54
13	1509.41	18,958	-781	2,827	0	778	0	2,836	6
14	1511.43	19,739	781	2,924	0	827	0	1,306	-10
15	1512.36	20,104	365	288	0	0	0	0	77
16	1510.90	19,532	-572	739	0	1,393	0	0	82
17	1514.56	20,982	1,450	2,343	0	971	0	0	78
18	1519.03	22,829	1,847	1,759	0	0	0	0	88
19	1515.97	21,556	-1,273	1,392	0	632	0	2,026	-7
20	1514.01	20,760	-796	2,231	0	887	0	2,139	-1
21	1514.45	20,938	178	2,210	0	0	0	2,028	-4
22	1515.16	21,225	287	298	0	0	0	0	-11
23	1516.13	21,621	396	305	0	0	0	0	91
24	1518.48	22,597	976	980	0	0	0	0	-4
25	1516.43	21,745	-852	2,740	0	925	0	2,751	84
26	1505.77	17,592	-4,153	2,518	0	974	0	5,614	-83
27	1507.72	18,317	725	2,968	0	77	0	1,787	-379
28	1514.63	21,010	2,693	2,445	0	0	0	130	378
29	1507.47	18,224	-2,786	297	0	1,145	0	1,939	1
30	1510.70	19,455	1,231	1,848	0	719	0	0	102
31	1512.71	20,242	787	1,849	0	987	0	0	-75
<b>Total</b>			<b>499</b>	<b>46,818</b>	<b>0</b>	<b>17,409</b>	<b>0</b>	<b>29,905</b>	<b>995</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**November 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Oct 31	1512.71	20,242							
1	1514.98	21,152	910	2,133	0	0	0	1,207	-16
2	1507.64	18,287	-2,865	1,603	0	970	0	3,532	34
3	1507.92	18,392	105	2,223	0	0	0	2,167	49
4	1510.05	19,203	811	1,648	0	822	0	0	-15
5	1510.46	19,362	158	105	0	0	0	0	53
6	1512.18	20,033	671	572	0	0	0	0	99
7	1517.22	22,071	2,038	2,047	0	0	0	0	-9
8	1518.55	22,627	556	2,496	0	0	0	1,941	1
9	1508.91	18,767	-3,860	1,096	0	792	0	4,162	-2
10	1507.55	18,254	-514	2,307	0	0	0	2,822	1
11	1506.55	17,880	-373	1,495	0	0	0	1,868	0
12	1506.79	17,970	89	120	0	0	0	0	-31
13	1507.95	18,404	434	416	0	0	0	0	18
14	1515.05	21,181	2,777	2,760	0	0	0	0	17
15	1516.68	21,848	667	1,260	0	699	0	0	106
16	1523.15	24,601	2,753	4,766	0	380	0	1,630	-3
17	1515.33	21,295	-3,306	1,426	0	0	0	4,739	7
18	1512.69	20,234	-1,060	89	0	1,058	0	0	-91
19	1511.03	19,583	-651	131	0	786	0	0	4
20	1515.63	21,417	1,834	1,885	0	0	0	0	-51
21	1516.72	21,864	447	1,456	0	0	0	1,013	4
22	1507.47	18,224	-3,641	366	0	0	0	4,007	0
23	1508.93	18,775	551	668	0	0	0	116	-1
24	1509.48	18,985	210	200	0	0	0	0	10
25	1507.25	18,141	-843	172	0	1,021	0	0	6
26	1510.56	19,400	1,259	1,233	0	0	0	0	26
27	1513.48	20,548	1,148	1,147	0	0	0	0	1
28	1513.88	20,708	160	136	0	0	0	0	24
29	1515.09	21,197	489	444	0	0	0	0	45
30	1513.04	20,373	-824	152	0	713	0	262	-1
<b>Total</b>			131	36,552	0	7,241	0	29,466	286

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**December 2011**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Nov 30	1513.04	20,373							
1	1506.83	17,985	-2,388	1,031	0	0	0	2,339	-1,080
2	1510.60	19,416	1,431	1,452	0	0	0	0	-21
3	1513.17	20,425	1,009	1,033	0	0	0	0	-24
4	1514.30	20,877	452	469	0	0	0	0	-17
5	1513.44	20,532	-345	1,173	0	0	0	1,517	-1
6	1509.60	19,031	-1,501	1,550	0	726	0	2,326	1
7	1508.31	18,540	-491	1,395	0	0	0	1,886	0
8	1504.29	17,051	-1,489	619	0	0	0	2,108	0
9	1508.07	18,449	1,398	1,533	0	0	0	135	0
10	1510.23	19,273	824	847	0	0	0	0	-23
11	1513.66	20,620	1,347	1,369	0	0	0	0	-22
12	1516.30	21,691	1,071	1,054	0	0	0	0	17
13	1518.79	22,728	1,037	992	0	0	0	0	45
14	1511.37	19,715	-3,013	181	0	0	0	3,180	-14
15	1514.41	20,921	1,206	1,241	0	0	0	0	-35
16	1509.30	18,916	-2,005	110	0	0	0	2,143	28
17	1507.60	18,272	-644	159	0	843	0	0	40
18	1509.50	18,992	720	713	0	0	0	0	7
19	1510.13	19,234	242	1,177	0	910	0	0	-25
20	1512.57	20,187	953	927	0	0	0	0	26
21	1511.88	19,915	-272	1,612	0	0	0	1,885	1
22	1509.11	18,843	-1,072	1,386	0	0	0	2,455	-3
23	1509.36	18,939	96	130	0	0	0	0	-34
24	1511.44	19,743	804	803	0	0	0	0	1
25	1513.61	20,600	857	795	0	0	0	0	62
26	1513.70	20,636	36	841	0	783	0	0	-22
27	1512.34	20,096	-540	1,487	0	945	0	1,114	32
28	1506.13	17,725	-2,371	985	0	0	0	3,297	-59
29	1508.48	18,604	879	904	0	0	0	28	3
30	1508.91	18,767	163	175	0	0	0	0	-12
31	1507.34	18,175	-592	830	0	0	0	1,423	1
<b>Total</b>			-2,198	28,973	0	4,207	0	25,836	-1,128

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation  
(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**January 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Dec 31	1507.34	18,175							
1	1509.88	19,138	963	1,020	0	0	0	0	-57
2	1512.01	19,966	828	859	0	0	0	0	-31
3	1511.60	19,805	-161	1,225	0	0	0	1,385	-1
4	1506.46	17,847	-1,958	1,195	0	0	0	3,152	-1
5	1505.45	17,474	-373	1,059	0	0	0	1,432	0
6	1510.08	19,215	1,741	1,749	0	0	0	0	-8
7	1508.54	18,627	-588	1,450	0	0	0	2,036	-2
8	1510.79	19,489	862	909	0	0	0	0	-47
9	1515.27	21,270	1,781	1,772	0	0	0	0	9
10	1516.94	21,955	685	1,857	0	0	0	1,263	91
11	1513.72	20,644	-1,311	2,253	0	0	0	3,486	-78
12	1513.70	20,636	-8	1,842	0	0	0	1,858	8
13	1509.80	19,107	-1,529	1,485	0	0	0	2,986	-28
14	1510.11	19,227	120	155	0	0	0	0	-35
15	1512.26	20,064	837	834	0	0	0	0	3
16	1512.41	20,123	59	88	0	0	0	0	-29
17	1514.15	20,817	694	2,057	0	0	0	1,365	2
18	1508.41	18,578	-2,239	1,621	0	0	0	3,859	-1
19	1508.05	18,442	-136	2,777	0	0	0	2,914	1
20	1508.61	18,653	211	1,694	0	0	0	1,481	-2
21	1509.97	19,173	520	559	0	0	0	0	-39
22	1510.82	19,501	328	327	0	0	0	0	1
23	1511.36	19,711	210	1,972	0	0	0	1,778	16
24	1507.80	18,347	-1,364	1,851	0	0	0	3,199	-16
25	1506.43	17,836	-511	1,928	0	0	0	2,454	15
26	1505.79	17,599	-237	1,773	0	0	0	1,896	-114
27	1507.45	18,216	617	2,697	0	0	0	2,134	54
28	1505.16	17,368	-848	504	0	0	0	1,349	-3
29	1506.56	17,884	516	591	0	0	0	0	-75
30	1508.36	18,559	675	2,281	0	0	0	1,607	1
31	1508.07	18,449	-110	2,498	0	0	0	2,608	0
<b>Total</b>			<b>274</b>	<b>44,882</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>44,242</b>	<b>-366</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation  
(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**February 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jan 31	1508.07	18,449							
1	1506.04	17,692	-757	1,612	0	0	0	2,447	78
2	1508.13	18,472	780	2,972	0	0	0	2,242	50
3	1511.10	19,610	1,138	3,780	0	0	0	2,513	-129
4	1512.56	20,183	573	522	1	0	1	0	51
5	1513.52	20,564	381	418	0	0	0	0	-37
6	1514.31	20,881	317	292	1	20	1	0	45
7	1515.27	21,270	389	352	0	0	0	0	37
8	1510.57	19,404	-1,866	130	1	0	1	2,006	10
9	1506.65	17,918	-1,486	571	0	0	0	2,029	-28
10	1508.17	18,487	569	589	1	0	1	0	-20
11	1508.50	18,612	125	120	0	0	0	0	5
12	1508.71	18,691	79	99	0	0	0	0	-20
13	1510.96	19,555	864	826	0	0	0	0	38
14	1512.01	19,966	411	412	0	0	0	0	-1
15	1508.97	18,790	-1,176	826	0	0	0	1,987	-15
16	1506.02	17,684	-1,106	1,601	0	0	0	2,710	3
17	1506.43	17,836	152	124	1	0	1	0	28
18	1507.80	18,347	511	617	0	0	0	0	-106
19	1509.08	18,832	485	332	0	0	0	0	153
20	1509.95	19,165	333	350	0	0	0	0	-17
21	1510.33	19,311	146	176	0	0	0	0	-30
22	1506.89	18,007	-1,304	206	0	0	0	1,482	-28
23	1505.25	17,401	-606	1,206	0	0	0	1,812	0
24	1507.22	18,130	729	935	0	0	0	206	0
25	1508.17	18,487	357	343	1	0	1	0	14
26	1510.71	19,458	971	968	0	0	0	0	3
27	1514.45	20,938	1,480	1,474	0	0	0	0	6
28	1514.08	20,789	-149	1,272	0	0	0	1,423	2
29	1508.62	18,657	-2,132	1,599	0	0	0	3,722	-9
<b>Total</b>			<b>208</b>	<b>24,724</b>	<b>6</b>	<b>20</b>	<b>6</b>	<b>24,579</b>	<b>83</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation  
(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**March 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Feb 29	1508.62	18,657							
1	1506.43	17,836	-821	1,097	0	0	0	1,904	-14
2	1507.25	18,141	305	317	0	0	0	0	-12
3	1507.62	18,280	139	164	0	0	0	0	-25
4	1508.39	18,570	290	248	0	0	0	0	42
5	1510.00	19,184	614	608	0	0	0	0	6
6	1511.81	19,887	703	719	0	0	0	0	-16
7	1508.10	18,460	-1,427	508	0	0	0	1,919	-16
8	1506.98	18,040	-420	748	0	0	0	1,163	-5
9	1507.25	18,141	101	132	0	0	0	0	-31
10	1507.80	18,347	206	164	0	0	0	0	42
11	1508.66	18,672	325	390	0	0	0	0	-65
12	1507.99	18,419	-253	1,406	0	0	0	1,691	32
13	1507.11	18,089	-330	1,841	0	0	0	2,161	-10
14	1508.25	18,517	428	2,913	1	0	1	2,438	-47
15	1507.85	18,366	-151	2,436	1	25	1	2,562	0
16	1508.18	18,491	125	2,766	1	0	1	2,641	0
17	1508.52	18,619	128	1,683	3	10	3	1,567	22
18	1511.59	19,801	1,182	1,042	3	0	3	0	140
19	1512.93	20,329	528	2,709	2	0	2	2,164	-17
20	1508.44	18,589	-1,740	1,743	2	0	2	3,496	13
21	1508.32	18,543	-46	2,450	1	0	1	2,543	47
22	1506.65	17,918	-625	1,713	1	0	1	2,272	-66
23	1504.98	17,302	-616	1,061	1	0	1	1,679	2
24	1504.51	17,131	-171	1,182	1	0	1	1,353	0
25	1506.63	17,910	779	2,235	5	0	5	1,490	34
26	1506.28	17,780	-130	1,759	13	0	13	1,840	-49
27	1504.35	17,073	-707	821	6	0	6	1,560	32
28	1506.27	17,777	704	2,203	5	0	5	1,494	-5
29	1506.09	17,710	-67	1,962	4	0	4	2,024	-5
30	1505.49	17,489	-221	809	4	0	4	1,021	-9
31	1506.02	17,684	195	188	4	0	4	0	7
<b>Total</b>			<b>-973</b>	<b>40,017</b>	<b>58</b>	<b>35</b>	<b>58</b>	<b>40,982</b>	<b>27</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 26. Elderberry Forebay**

Daily Operation  
(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**April 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Mar 31	1506.02	17,684							
1	1508.17	18,487	803	822	3	0	3	0	-19
2	1509.16	18,862	376	1,800	2	0	2	1,410	-14
3	1506.78	17,966	-897	1,615	2	0	2	2,483	-29
4	1505.71	17,570	-396	1,363	2	0	2	1,750	-9
5	1507.07	18,074	504	2,270	2	0	2	1,733	-33
6	1512.20	20,041	1,967	2,627	2	0	2	694	34
7	1515.16	21,225	1,185	1,199	2	0	2	0	-14
8	1515.31	21,286	61	126	2	0	2	0	-65
9	1514.08	20,789	-498	1,975	2	0	2	2,469	-4
10	1509.30	18,916	-1,873	2,035	2	0	2	3,932	24
11	1507.73	18,321	-595	2,075	5	0	5	2,641	-29
12	1511.58	19,797	1,476	2,882	4	0	4	1,384	-22
13	1513.42	20,524	727	713	35	0	35	0	14
14	1513.55	20,573	49	210	31	0	31	0	-161
15	1514.32	20,885	312	150	13	0	13	0	162
16	1513.46	20,540	-345	947	10	0	10	1,212	-80
17	1510.00	19,184	-1,356	2,513	7	0	7	3,912	43
18	1506.37	17,814	-1,371	1,181	6	0	6	2,655	103
19	1509.21	18,882	1,068	3,801	4	0	4	2,704	-29
20	1508.70	18,687	-194	2,152	3	0	3	2,270	-76
21	1509.25	18,897	209	276	3	0	3	0	-67
22	1509.54	19,008	111	127	2	0	2	0	-16
23	1513.17	20,425	1,417	3,845	2	0	2	2,416	-12
24	1511.37	19,715	-709	3,201	3	0	3	3,970	60
25	1511.04	19,587	-129	3,522	2	0	2	3,625	-26
26	1507.03	18,059	-1,528	1,668	3	0	3	3,208	13
27	1510.29	19,296	1,237	4,195	3	0	3	2,909	-49
28	1510.46	19,362	66	3,226	3	0	3	3,205	45
29	1510.82	19,501	139	3,172	3	0	3	3,037	4
30	1511.67	19,832	331	3,458	2	0	2	3,149	22
<b>Total</b>			<b>2,148</b>	<b>59,146</b>	<b>165</b>	<b>0</b>	<b>165</b>	<b>56,768</b>	<b>-230</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation  
(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**May 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Apr 30	1511.67	19,832							
1	1509.23	18,889	-943	2,081	2	0	2	3,008	-16
2	1510.05	19,203	314	2,955	2	0	2	2,522	-119
3	1510.44	19,354	151	2,770	2	0	2	2,702	83
4	1507.56	18,257	-1,097	1,377	2	0	2	2,447	-27
5	1506.81	17,977	-280	1,679	1	0	1	1,857	-102
6	1510.24	19,277	1,300	2,240	1	0	1	1,027	87
7	1514.62	21,006	1,729	3,252	0	0	0	1,570	47
8	1511.76	19,868	-1,138	2,158	0	0	0	3,256	-40
9	1512.01	19,966	98	2,574	0	0	0	2,516	40
10	1512.91	20,321	355	3,623	0	400	0	2,870	2
11	1511.63	19,817	-504	2,546	0	228	0	2,795	-27
12	1507.56	18,257	-1,560	510	0	3	0	2,084	17
13	1508.75	18,706	449	1,935	0	0	0	1,463	-23
14	1513.77	20,664	1,958	4,343	0	146	0	2,254	15
15	1513.19	20,433	-231	2,668	0	0	0	2,874	-25
16	1515.51	21,368	935	3,453	0	0	0	2,612	94
17	1513.99	20,752	-616	2,413	0	0	0	2,992	-37
18	1513.77	20,664	-88	2,543	0	0	0	2,623	-8
19	1512.45	20,139	-525	1,980	0	0	0	2,528	23
20	1513.96	20,740	601	1,411	0	0	0	760	-50
21	1515.62	21,413	673	3,508	0	0	0	2,839	4
22	1516.34	21,708	295	3,203	0	0	0	2,933	25
23	1517.37	22,133	425	3,529	0	0	0	3,041	-63
24	1512.49	20,155	-1,978	1,002	0	98	0	2,882	0
25	1514.31	20,881	726	3,377	0	418	0	2,234	1
26	1511.94	19,938	-943	1,224	0	0	0	2,167	0
27	1513.32	20,484	546	2,081	0	0	0	1,514	-21
28	1518.96	22,799	2,315	2,183	0	0	0	0	132
29	1516.44	21,749	-1,050	591	0	0	0	1,608	-33
30	1512.56	20,183	-1,566	1,218	0	0	0	2,843	59
31	1513.22	20,445	262	2,493	0	0	0	2,195	-36
<b>Total</b>			613	72,920	10	1,293	10	71,016	2

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation  
(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**June 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
May 31	1513.22	20,445							
1	1517.60	22,229	1,784	4,662	0	95	0	2,797	14
2	1511.14	19,625	-2,604	139	0	0	0	2,755	12
3	1509.73	19,080	-545	964	0	0	0	1,479	-30
4	1512.00	19,962	882	2,463	0	0	0	1,629	48
5	1513.02	20,365	403	2,630	0	0	0	2,199	-28
6	1512.67	20,226	-139	2,074	0	0	0	2,209	-4
7	1513.55	20,576	350	2,481	0	0	0	2,151	20
8	1515.93	21,539	963	3,399	0	0	0	2,422	-14
9	1510.57	19,404	-2,135	199	0	0	0	2,386	52
10	1509.76	19,092	-312	278	0	0	0	516	-74
11	1513.94	20,732	1,640	1,697	0	0	0	0	-57
12	1514.82	21,087	355	1,878	0	0	0	1,542	19
13	1511.50	19,766	-1,321	1,740	0	462	0	2,586	-13
14	1513.24	20,449	683	2,554	0	0	0	2,217	346
15	1510.49	19,373	-1,076	1,421	0	0	0	2,182	-315
16	1510.22	19,269	-104	554	0	0	0	627	-31
17	1512.66	20,222	953	1,040	0	0	0	0	-87
18	1514.69	21,035	813	1,545	0	0	0	766	34
19	1516.08	21,601	566	3,774	0	0	0	3,209	1
20	1510.92	19,540	-2,061	889	0	0	0	2,938	-12
21	1509.82	19,115	-425	1,661	0	0	0	2,036	-50
22	1510.48	19,369	254	1,767	0	0	0	1,512	-1
23	1510.67	19,443	74	105	0	0	0	0	-31
24	1511.01	19,575	132	121	0	0	0	0	11
25	1515.60	21,405	1,830	2,239	0	0	0	412	3
26	1512.64	20,214	-1,191	2,280	0	76	0	3,401	6
27	1509.40	18,954	-1,260	2,010	0	830	0	2,419	-21
28	1510.90	19,532	578	3,174	0	763	0	1,849	16
29	1510.31	19,304	-228	1,984	0	814	0	1,388	-10
30	1510.99	19,567	263	281	0	0	0	0	-18
<b>Total</b>			<b>-878</b>	<b>52,003</b>	<b>0</b>	<b>3,040</b>	<b>0</b>	<b>49,627</b>	<b>-214</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation  
(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**July 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jun 30	1510.99	19,567							
1	1511.57	19,793	226	887	0	653	0	0	-8
2	1518.00	22,396	2,603	2,608	0	0	0	0	-5
3	1523.81	24,890	2,494	3,062	0	0	0	568	0
4	1514.71	21,043	-3,847	1,665	0	929	0	4,635	52
5	1509.74	19,084	-1,959	1,392	0	2	0	3,345	-4
6	1508.41	18,578	-506	1,025	0	0	0	1,512	-19
7	1511.01	19,575	997	998	0	0	0	0	-1
8	1509.43	18,966	-609	643	0	1,223	0	0	-29
9	1514.21	20,841	1,875	2,540	0	680	0	0	15
10	1518.79	22,728	1,887	2,638	0	0	0	763	12
11	1511.72	19,852	-2,876	1,300	0	0	0	4,105	-71
12	1509.67	19,057	-795	2,487	0	0	0	3,303	21
13	1511.56	19,789	732	2,717	0	0	0	1,612	-373
14	1511.90	19,923	134	140	0	0	0	293	287
15	1512.16	20,025	102	130	0	0	0	0	-28
16	1513.96	20,740	716	653	0	0	0	0	63
17	1516.41	21,736	996	1,678	0	0	0	723	41
18	1510.85	19,513	-2,224	2,176	0	0	0	4,320	-80
19	1512.72	20,246	733	4,096	0	0	0	3,363	0
20	1507.14	18,100	-2,146	457	0	721	0	1,882	0
21	1510.88	19,524	1,424	1,458	0	0	0	0	-34
22	1511.37	19,715	191	131	0	0	0	0	60
23	1514.65	21,018	1,303	2,021	0	726	0	0	8
24	1515.66	21,429	411	1,708	0	0	0	1,351	54
25	1509.43	18,966	-2,463	1,576	0	0	0	4,004	-35
26	1509.58	19,023	57	3,647	0	849	0	2,725	-16
27	1508.06	18,445	-578	2,104	0	0	0	2,705	23
28	1506.79	17,970	-475	1,240	0	0	0	1,688	-27
29	1510.58	19,408	1,438	1,500	0	0	0	0	-62
30	1511.30	19,688	280	2,413	0	0	0	2,133	0
31	1510.46	19,362	-326	3,099	0	0	0	3,426	1
<b>Total</b>			-205	54,189	0	5,783	0	48,456	-155

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation  
(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**August 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jul 31	1510.46	19,362							
1	1508.73	18,699	-663	2,530	0	0	0	3,192	-1
2	1508.26	18,521	-178	2,584	0	0	0	2,812	50
3	1507.88	18,378	-143	2,436	0	0	0	2,602	23
4	1505.88	17,633	-745	1,202	0	0	0	1,894	-53
5	1508.96	18,786	1,153	1,166	0	0	0	0	-13
6	1510.55	19,396	610	2,884	0	0	0	2,267	-7
7	1509.65	19,050	-346	3,328	0	908	0	2,759	-7
8	1509.21	18,882	-168	3,332	0	1,019	0	2,515	34
9	1515.20	21,242	2,360	3,724	0	460	0	895	-9
10	1518.61	22,652	1,410	3,111	0	968	0	735	2
11	1513.19	20,433	-2,219	1,305	0	1,711	0	1,790	-23
12	1514.38	20,909	476	1,978	0	1,547	0	0	45
13	1515.35	21,303	394	3,733	0	3,302	0	0	-37
14	1511.79	19,879	-1,424	2,426	0	3,099	0	0	-751
15	1508.07	18,449	-1,430	2,420	0	1,125	0	2,679	-46
16	1507.77	18,336	-113	2,492	0	0	0	2,605	0
17	1511.92	19,931	1,595	2,569	0	0	0	975	1
18	1511.21	19,653	-278	1,238	0	1,639	0	0	123
19	1512.64	20,214	561	1,323	0	919	0	0	157
20	1510.18	19,254	-960	2,702	0	1,438	0	2,250	26
21	1507.33	18,171	-1,083	2,199	0	573	0	2,713	4
22	1508.17	18,487	316	2,876	0	0	0	2,593	33
23	1497.89	14,801	-3,686	2,598	0	0	0	6,250	-34
24	1500.09	15,559	758	1,036	0	0	0	265	-13
25	1495.82	14,103	-1,456	106	0	0	0	1,565	3
26	1500.78	15,800	1,697	1,767	0	0	0	0	-70
27	1507.95	18,404	2,604	2,633	0	0	0	0	-29
28	1512.23	20,052	1,648	2,468	0	0	0	819	-1
29	1510.05	19,203	-849	3,055	0	774	0	3,230	100
30	1507.49	18,231	-972	2,433	0	978	0	2,367	-60
31	1505.64	17,544	-687	2,561	0	0	0	3,226	-22
<b>Total</b>			<b>-1,818</b>	<b>72,215</b>	<b>0</b>	<b>20,460</b>	<b>0</b>	<b>52,998</b>	<b>-575</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation  
(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**September 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Aug 31	1505.64	17,544							
1	1505.81	17,607	63	147	0	0	0	0	-84
2	1509.80	19,107	1,500	1,451	0	0	0	0	49
3	1515.20	21,242	2,135	2,142	0	0	0	0	-7
4	1514.85	21,099	-143	2,701	0	0	0	2,851	7
5	1507.38	18,190	-2,909	784	0	0	0	3,665	-28
6	1510.37	19,327	1,137	3,726	0	0	0	2,672	83
7	1509.91	19,150	-177	3,072	0	0	0	3,229	-20
8	1508.35	18,555	-595	1,035	0	0	0	1,583	-47
9	1512.67	20,226	1,671	1,637	0	25	0	0	59
10	1512.20	20,041	-185	2,362	0	1,222	0	1,314	-11
11	1508.88	18,756	-1,285	2,162	0	0	0	3,422	-25
12	1510.31	19,304	548	3,543	0	0	0	3,000	5
13	1510.75	19,474	170	3,426	0	0	0	3,255	-1
14	1510.86	19,517	43	2,550	0	0	0	2,507	0
15	1515.70	21,445	1,928	2,012	0	0	0	0	-84
16	1516.50	21,773	328	286	0	65	0	0	107
17	1515.51	21,368	-405	1,991	0	1,256	0	1,177	37
18	1510.73	19,466	-1,902	2,216	0	0	0	4,159	41
19	1508.96	18,786	-680	850	0	0	0	1,459	-71
20	1510.40	19,338	552	590	0	0	0	0	-38
21	1510.93	19,544	206	989	0	810	0	0	27
22	1511.45	19,746	202	220	0	0	0	0	-18
23	1508.57	18,638	-1,108	545	0	1,600	0	0	-53
24	1512.56	20,183	1,545	4,074	0	819	0	1,755	45
25	1514.40	20,917	734	3,311	0	0	0	2,554	-23
26	1516.79	21,893	976	2,143	0	0	0	1,208	41
27	1513.19	20,433	-1,460	2,752	0	0	0	4,190	-22
28	1509.32	18,924	-1,509	2,113	0	0	0	3,593	-29
29	1508.39	18,570	-354	174	0	0	0	517	-11
30	1508.74	18,703	133	142	0	0	0	0	-9
<b>Total</b>			<b>1,159</b>	<b>55,146</b>	<b>0</b>	<b>5,797</b>	<b>0</b>	<b>48,110</b>	<b>-80</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation  
(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**October 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Sep 30	1508.74	18,703							
1	1511.10	19,610	907	1,588	0	699	0	0	18
2	1510.79	19,489	-121	917	0	910	0	0	-128
3	1510.16	19,246	-243	741	0	1,055	0	0	71
4	1512.66	20,222	976	1,784	0	0	0	910	102
5	1509.60	19,031	-1,191	1,444	0	0	0	2,544	-91
6	1509.95	19,165	134	147	0	0	0	0	-13
7	1511.85	19,903	738	788	0	0	0	0	-50
8	1515.66	21,429	1,526	2,183	0	652	0	0	-5
9	1513.37	20,504	-925	2,112	0	1,173	0	1,891	27
10	1506.76	17,958	-2,546	1,125	0	0	0	3,611	-60
11	1506.15	17,732	-226	1,885	0	0	0	2,135	24
12	1505.90	17,640	-92	1,877	0	0	0	1,970	1
13	1507.64	18,287	647	1,148	0	0	0	499	-2
14	1509.95	19,165	878	871	0	0	0	0	7
15	1514.80	21,079	1,914	1,909	0	0	0	0	5
16	1516.21	21,654	575	1,743	0	1,192	0	0	24
17	1514.51	20,962	-692	1,562	0	1,110	0	1,209	65
18	1509.87	19,134	-1,828	2,073	0	0	0	3,885	-16
19	1509.27	18,904	-230	218	0	0	0	416	-32
20	1509.40	18,954	50	47	0	0	0	0	3
21	1510.95	19,552	598	677	0	0	0	0	-79
22	1511.86	19,907	355	2,879	0	0	0	2,525	1
23	1508.80	18,725	-1,182	2,980	0	956	0	3,204	-2
24	1509.49	18,989	264	3,303	0	0	0	3,056	17
25	1510.37	19,327	338	3,551	0	0	0	3,237	24
26	1510.27	19,288	-39	2,923	0	0	0	2,919	-43
27	1511.89	19,919	631	672	0	0	0	0	-41
28	1512.56	20,183	264	217	0	0	0	0	47
29	1515.68	21,437	1,254	4,082	0	0	0	2,866	38
30	1518.04	22,413	976	5,390	0	0	0	4,400	-14
31	1516.76	21,881	-532	3,925	0	0	0	4,563	106
<b>Total</b>			<b>3,178</b>	<b>56,761</b>	<b>0</b>	<b>7,747</b>	<b>0</b>	<b>45,840</b>	<b>4</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation  
(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**November 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Oct 31	1516.76	21,881							
1	1514.58	20,990	-891	3,624	0	0	0	4,390	-125
2	1510.33	19,311	-1,679	2,260	0	0	0	3,984	45
3	1507.82	18,355	-956	121	0	0	0	1,030	-47
4	1508.52	18,619	264	318	0	0	0	0	-54
5	1511.26	19,672	1,053	3,798	0	349	0	2,435	39
6	1514.35	20,894	1,222	4,303	0	0	0	3,695	614
7	1512.04	19,978	-916	3,791	0	0	0	4,037	-670
8	1511.16	19,633	-345	3,988	0	724	0	3,607	-2
9	1511.67	19,832	199	3,838	0	0	0	3,639	0
10	1512.42	20,127	295	4,153	0	0	0	3,858	0
11	1512.67	20,226	99	123	0	0	0	0	-24
12	1513.04	20,373	147	188	0	0	0	0	-41
13	1517.66	22,254	1,881	1,761	0	0	0	0	120
14	1513.70	20,636	-1,618	301	0	0	0	1,943	24
15	1508.79	18,722	-1,914	1,676	0	0	0	3,580	-10
16	1506.21	17,754	-968	434	0	0	0	1,406	4
17	1507.53	18,246	492	451	0	0	0	0	41
18	1511.72	19,852	1,606	1,639	0	0	0	0	-33
19	1515.23	21,254	1,402	4,089	0	0	0	2,687	0
20	1512.60	20,199	-1,055	3,136	0	0	0	4,191	0
21	1510.94	19,548	-651	3,278	0	0	0	3,928	-1
22	1507.97	18,411	-1,137	2,276	0	0	0	3,414	1
23	1509.56	19,015	604	3,524	0	0	0	2,976	56
24	1506.21	17,754	-1,261	1,253	0	0	0	2,473	-41
25	1505.57	17,519	-235	653	0	0	0	881	-7
26	1507.23	18,134	615	1,533	0	0	0	920	2
27	1512.88	20,309	2,175	5,721	0	0	0	3,558	12
28	1514.62	21,006	697	4,663	0	0	0	3,972	6
29	1517.34	22,121	1,115	5,342	0	0	0	4,231	4
30	1512.89	20,313	-1,808	2,630	0	0	0	4,440	2
<b>Total</b>			<b>-1,568</b>	<b>74,865</b>	<b>0</b>	<b>1,073</b>	<b>0</b>	<b>75,275</b>	<b>-85</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 26. Elderberry Forebay**

Daily Operation  
(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**December 2012**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Nov 30	1512.89	20,313							
1	1505.15	17,364	-2,949	1,719	0	0	0	4,644	-24
2	1517.22	22,071	4,707	4,707	0	0	0	0	0
3	1522.91	24,496	2,425	5,334	0	0	0	2,954	45
4	1519.98	23,232	-1,264	3,788	0	0	0	5,055	3
5	1517.22	22,071	-1,161	3,627	0	0	0	4,719	-69
6	1514.33	20,889	-1,182	3,248	0	0	0	4,431	1
7	1511.91	19,927	-962	3,116	0	0	0	4,079	1
8	1508.41	18,578	-1,349	1,871	0	0	0	3,219	-1
9	1517.16	22,046	3,468	3,882	0	0	0	0	-414
10	1519.40	22,986	940	1,011	0	0	0	0	-71
11	1518.06	22,421	-565	1,300	0	0	0	2,007	142
12	1510.64	19,431	-2,990	1,326	0	0	0	4,193	-123
13	1506.34	17,803	-1,628	1,434	0	124	0	2,949	11
14	1509.16	18,862	1,059	3,479	0	0	0	2,419	-1
15	1509.30	18,916	54	722	0	0	0	669	1
16	1509.41	18,958	42	125	0	0	0	0	-83
17	1516.97	21,968	3,010	5,685	0	0	0	2,258	-417
18	1511.41	19,731	-2,237	2,033	0	0	0	4,271	1
19	1508.57	18,638	-1,093	2,135	0	0	0	3,261	33
20	1509.19	18,874	236	2,639	0	0	0	2,452	49
21	1511.28	19,680	806	1,249	0	0	0	0	-443
22	1511.79	19,879	199	223	0	0	0	0	-24
23	1512.22	20,049	170	131	0	0	0	0	39
24	1512.66	20,222	173	182	0	0	0	0	-9
25	1512.88	20,309	87	111	0	0	0	0	-24
26	1513.44	20,532	223	244	0	0	0	0	-21
27	1514.36	20,901	369	1,494	0	0	0	1,207	82
28	1511.14	19,625	-1,276	435	0	0	0	1,613	-98
29	1512.27	20,068	443	446	0	0	0	0	-3
30	1512.71	20,242	174	163	0	0	0	0	11
31	1512.93	20,329	87	123	0	0	0	0	-36
<b>Total</b>			16	57,982	0	124	0	56,400	-1,442

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

January 2013

Capacity: 32,476 ac-ft

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Dec 31	1512.93	20,329							
1	1514.03	20,769	440	443	0	0	0	0	-3
2	1510.92	19,540	-1,229	670	0	0	0	1,919	20
3	1507.91	18,389	-1,151	455	0	0	0	1,572	-34
4	1510.24	19,277	888	828	0	0	0	0	60
5	1510.42	19,346	69	143	0	0	0	0	-74
6	1510.86	19,517	171	151	0	0	0	0	20
7	1512.56	20,183	666	686	0	0	0	0	-20
8	1513.81	20,680	497	514	0	0	0	0	-17
9	1510.93	19,544	-1,136	486	0	0	0	1,656	34
10	1508.99	18,798	-746	696	0	0	0	1,410	-32
11	1509.27	18,904	106	131	0	0	0	0	-25
12	1509.93	19,157	253	255	0	0	0	0	-2
13	1510.81	19,497	340	323	0	0	0	0	17
14	1514.32	20,885	1,388	1,417	0	0	0	0	-29
15	1512.77	20,266	-619	1,140	0	0	0	1,786	27
16	1507.51	18,239	-2,027	1,221	0	0	0	3,249	1
17	1505.38	17,449	-790	1,141	0	0	0	1,897	-34
18	1507.93	18,396	947	1,093	0	0	0	199	53
19	1508.59	18,646	250	313	0	0	0	0	-63
20	1509.12	18,847	201	204	0	0	0	0	-3
21	1512.56	20,183	1,336	1,327	0	0	0	0	9
22	1510.88	19,524	-659	1,277	0	0	0	1,978	42
23	1509.63	19,042	-482	2,829	0	0	0	3,387	76
24	1507.73	18,321	-721	2,192	0	0	0	2,889	-24
25	1510.29	19,296	975	1,770	0	0	0	741	-54
26	1510.46	19,362	66	82	0	0	0	0	-16
27	1510.64	19,431	69	32	0	0	0	0	37
28	1517.23	22,075	2,644	2,696	0	0	0	0	-52
29	1517.45	22,167	92	2,476	0	0	0	2,426	42
30	1511.99	19,958	-2,209	2,183	0	0	0	4,344	-48
31	1506.43	17,836	-2,122	927	0	0	0	3,048	-1
<b>Total</b>			<b>-2,493</b>	<b>30,101</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>32,501</b>	<b>-93</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**February 2013**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jan 31	1506.43	17,836							
1	1508.79	18,722	886	2,035	0	0	0	1,148	-1
2	1511.41	19,731	1,009	991	0	0	0	0	18
3	1513.15	20,417	686	684	0	0	0	0	2
4	1519.54	23,045	2,628	2,699	0	0	0	0	-71
5	1517.88	22,346	-699	1,633	0	71	0	2,365	104
6	1510.73	19,466	-2,880	1,684	0	0	0	4,430	-134
7	1506.32	17,794	-1,672	1,231	0	0	0	2,903	0
8	1505.93	17,651	-143	1,542	0	0	0	1,702	17
9	1511.43	19,739	2,088	2,098	0	0	0	0	-10
10	1515.19	21,238	1,499	1,553	0	0	0	0	-54
11	1518.94	22,791	1,553	1,406	0	0	0	0	147
12	1516.05	21,589	-1,202	729	0	0	0	1,933	2
13	1507.91	18,389	-3,200	758	0	0	0	3,987	29
14	1507.78	18,340	-49	1,281	0	0	0	1,349	19
15	1510.51	19,381	1,041	1,104	0	0	0	0	-63
16	1510.73	19,466	85	105	0	0	0	0	-20
17	1511.17	19,637	171	155	0	0	0	0	16
18	1514.25	20,857	1,220	1,176	0	0	0	0	44
19	1513.70	20,636	-221	1,608	0	0	0	1,907	78
20	1508.19	18,494	-2,142	1,441	0	0	0	3,583	0
21	1505.77	17,592	-902	1,357	0	0	0	2,256	-3
22	1508.59	18,646	1,054	1,392	0	0	0	284	-54
23	1509.49	18,989	343	347	0	0	0	0	-4
24	1509.84	19,123	134	177	0	0	0	0	-43
25	1513.32	20,484	1,361	1,356	0	0	0	0	5
26	1513.61	20,600	116	2,037	0	0	0	1,934	13
27	1509.02	18,809	-1,791	2,036	0	0	0	3,813	-14
28	1507.14	18,101	-708	1,809	0	0	0	2,519	2
<b>Total</b>			<b>265</b>	<b>36,424</b>	<b>0</b>	<b>71</b>	<b>0</b>	<b>36,113</b>	<b>25</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

March 2013

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Feb 28	1507.14	18,101							
1	1508.16	18,483	382	1,480	0	0	0	1,098	0
2	1508.67	18,676	193	188	0	7	0	0	12
3	1509.65	19,050	374	407	0	0	0	0	-33
4	1517.05	22,001	2,951	2,925	0	0	0	0	26
5	1516.59	21,811	-190	1,650	0	0	0	1,964	124
6	1509.21	18,882	-2,929	1,209	0	0	0	4,043	-95
7	1507.18	18,115	-767	1,832	0	0	0	2,553	-46
8	1506.01	17,681	-434	565	0	0	0	1,053	54
9	1506.19	17,747	66	118	0	0	0	0	-52
10	1509.53	19,004	1,257	1,267	0	0	0	0	-10
11	1510.59	19,412	408	2,489	0	0	0	2,080	-1
12	1507.94	18,400	-1,012	2,180	0	0	0	3,193	1
13	1506.14	17,729	-671	1,684	0	0	0	2,389	34
14	1506.15	17,732	3	1,920	0	0	0	1,913	-4
15	1506.67	17,925	193	2,154	0	0	0	1,964	3
16	1508.30	18,536	611	1,264	0	0	0	601	-52
17	1511.21	19,653	1,117	1,130	0	0	0	0	-13
18	1511.30	19,688	35	1,873	0	0	0	1,830	-8
19	1509.07	18,828	-860	2,666	0	0	0	3,525	-1
20	1509.14	18,855	27	3,011	0	0	0	3,087	103
21	1507.42	18,205	-650	2,059	0	0	0	2,700	-9
22	1507.78	18,340	135	2,728	0	0	0	2,489	-104
23	1507.18	18,115	-225	199	0	0	0	445	21
24	1509.95	19,165	1,050	1,076	0	0	0	0	-26
25	1512.29	20,076	911	2,947	0	0	0	2,086	50
26	1510.16	19,246	-830	2,923	0	0	0	3,722	-31
27	1509.45	18,973	-273	3,072	0	0	0	3,316	-29
28	1509.11	18,843	-130	3,112	0	0	0	3,241	-1
29	1509.34	18,931	88	2,752	0	0	0	2,665	1
30	1510.13	19,234	303	225	0	0	0	0	78
31	1512.36	20,104	870	831	0	0	0	0	39
<b>Total</b>			<b>2,003</b>	<b>53,936</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>51,957</b>	<b>31</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

April 2013

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Mar 31	1512.36	20,104							
1	1514.17	20,825	721	2,791	0	0	0	2,103	33
2	1512.33	20,092	-733	3,438	0	0	0	4,142	-29
3	1510.64	19,431	-661	3,028	0	0	0	3,746	57
4	1508.39	18,570	-861	2,135	0	0	0	2,957	-39
5	1508.94	18,779	209	2,963	0	0	0	2,735	-19
6	1506.14	17,729	-1,050	555	0	0	0	1,584	-21
7	1510.85	19,513	1,784	1,779	0	0	0	0	5
8	1514.59	20,994	1,481	3,593	0	0	0	2,112	0
9	1513.90	20,716	-278	3,719	0	0	0	3,999	2
10	1511.74	19,860	-856	2,936	0	0	0	3,818	26
11	1512.05	19,982	122	3,655	0	0	0	3,523	-10
12	1511.70	19,844	-138	2,985	0	0	0	3,285	162
13	1509.71	19,073	-771	177	0	0	0	796	-152
14	1510.75	19,474	401	412	0	0	0	0	-11
15	1514.14	20,813	1,339	1,391	0	0	0	0	-52
16	1515.48	21,356	543	2,506	0	0	0	1,970	7
17	1512.53	20,171	-1,185	2,804	0	0	0	3,967	-22
18	1506.21	17,754	-2,417	439	0	0	0	2,889	33
19	1509.14	18,855	1,101	2,178	0	0	0	1,058	-19
20	1509.91	19,150	295	379	0	0	0	0	-84
21	1510.68	19,447	297	276	0	0	0	0	21
22	1517.80	22,313	2,866	2,885	0	0	0	0	-19
23	1516.34	21,708	-605	2,216	0	0	0	2,858	37
24	1511.07	19,598	-2,110	2,247	0	0	0	4,238	-119
25	1504.89	17,269	-2,329	799	0	0	0	3,128	0
26	1512.91	20,321	3,052	3,184	0	0	0	132	0
27	1513.25	20,457	136	157	0	0	0	0	-21
28	1513.68	20,628	171	213	0	0	0	0	-42
29	1518.59	22,644	2,016	2,019	0	0	0	0	-3
30	1516.85	21,918	-726	144	0	0	0	0	-870
<b>Total</b>			<b>1,814</b>	<b>58,003</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>55,040</b>	<b>-1,149</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

May 2013

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Apr 30	1516.85	21,918							
1	1510.93	19,544	-2,374	2,230	0	6	0	4,583	-15
2	1506.87	17,999	-1,545	2,398	0	1,157	0	2,758	-28
3	1511.19	19,645	1,646	2,954	0	0	0	1,324	16
4	1510.09	19,219	-426	945	0	1,361	0	0	-10
5	1510.69	19,450	231	142	0	0	0	0	89
6	1519.16	22,884	3,434	3,572	0	0	0	0	-138
7	1520.09	23,279	395	2,937	0	1,182	0	1,361	1
8	1509.36	18,939	-4,340	1,089	0	1,208	0	4,289	68
9	1507.64	18,287	-652	2,839	0	0	0	3,474	-17
10	1506.81	17,977	-310	258	0	0	0	0	-568
11	1512.99	20,353	2,376	2,455	0	0	0	0	-79
12	1515.68	21,437	1,084	2,622	0	1,543	0	0	5
13	1518.50	22,606	1,169	2,603	0	1,526	0	0	92
14	1516.23	21,662	-944	1,637	0	1,394	0	1,224	37
15	1510.07	19,211	-2,451	1,825	0	80	0	4,355	159
16	1506.26	17,773	-1,438	1,763	0	818	0	2,210	-173
17	1508.50	18,612	839	802	0	0	0	0	37
18	1512.67	20,226	1,614	1,718	0	0	0	0	-104
19	1515.66	21,429	1,203	1,126	0	0	0	0	77
20	1515.77	21,474	45	2,144	0	0	0	2,152	53
21	1510.26	19,284	-2,190	2,716	0	907	0	3,991	-8
22	1507.93	18,396	-888	3,005	0	918	0	2,897	-78
23	1513.15	20,417	2,021	3,564	0	114	0	1,428	-1
24	1516.24	21,667	1,250	2,146	0	1,136	0	0	240
25	1516.56	21,798	131	145	0	15	0	0	1
26	1511.61	19,809	-1,989	105	0	1,217	0	1,041	164
27	1504.60	17,164	-2,645	117	0	0	0	2,683	-79
28	1507.58	18,265	1,101	3,256	0	0	0	2,059	-96
29	1508.70	18,687	422	2,975	0	0	0	2,590	37
30	1510.35	19,319	632	3,768	0	412	0	2,788	64
31	1512.53	20,171	852	1,975	0	1,061	0	0	-62
<b>Total</b>			<b>-1,747</b>	<b>61,831</b>	<b>0</b>	<b>16,055</b>	<b>0</b>	<b>47,207</b>	<b>-316</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

June 2013

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
May 31	1512.53	20,171							
1	1513.11	20,401	230	2,150	0	1,969	0	0	49
2	1509.92	19,153	-1,248	815	0	2,033	0	0	-30
3	1519.50	23,028	3,875	3,940	0	0	0	0	-65
4	1519.46	23,011	-17	2,249	0	1,011	0	1,255	0
5	1512.05	19,982	-3,029	2,512	0	1,312	0	4,243	14
6	1506.21	17,754	-2,228	1,498	0	1,069	0	2,670	13
7	1510.93	19,544	1,790	2,571	0	0	0	700	-81
8	1511.81	19,887	343	356	0	0	0	0	-13
9	1512.47	20,147	260	299	0	0	0	0	-39
10	1515.62	21,413	1,266	2,069	0	0	0	813	10
11	1509.58	19,023	-2,390	2,687	0	1,337	0	3,726	-14
12	1505.48	17,485	-1,538	879	0	0	0	2,402	-15
13	1506.03	17,688	203	1,797	0	0	0	1,693	99
14	1506.79	17,970	282	1,577	0	0	0	1,242	-53
15	1507.86	18,370	400	429	0	0	0	0	-29
16	1512.64	20,214	1,844	1,889	0	0	0	0	-45
17	1517.62	22,238	2,024	2,119	0	51	0	0	-44
18	1512.82	20,286	-1,952	1,325	0	1,279	0	1,945	-53
19	1507.45	18,216	-2,070	1,257	0	0	0	3,396	69
20	1507.40	18,197	-19	2,561	0	0	0	2,523	-57
21	1510.53	19,389	1,192	2,510	0	0	0	1,373	55
22	1510.75	19,474	85	127	0	0	0	0	-42
23	1511.04	19,587	113	115	0	0	0	0	-2
24	1511.34	19,703	116	123	0	101	0	0	94
25	1507.42	18,205	-1,498	1,290	0	1,082	0	1,812	106
26	1508.28	18,528	323	2,914	0	0	0	2,509	-82
27	1509.41	18,958	430	3,193	0	11	0	2,755	3
28	1510.15	19,242	284	3,555	0	553	0	2,736	18
29	1513.77	20,664	1,422	3,190	0	1,230	0	526	-12
30	1512.02	19,970	-694	803	0	1,368	0	0	-129
<b>Total</b>			<b>-201</b>	<b>52,799</b>	<b>0</b>	<b>14,406</b>	<b>0</b>	<b>38,319</b>	<b>-275</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

July 2013

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jun 30	1512.02	19,970							
1	1513.59	20,592	622	3,900	0	926	0	2,502	150
2	1514.57	20,986	394	4,494	0	0	0	4,100	0
3	1512.97	20,345	-641	4,844	0	2,200	0	3,847	562
4	1511.59	19,801	-544	4,414	0	1,550	0	3,435	27
5	1514.14	20,813	1,012	5,459	0	1,358	0	3,050	-39
6	1516.85	21,918	1,105	6,217	0	1,708	0	3,395	-9
7	1515.92	21,535	-383	3,256	0	1,785	0	1,830	-24
8	1519.21	22,905	1,370	4,149	0	1,207	0	1,571	-1
9	1516.25	21,671	-1,234	4,449	0	1,227	0	4,449	-7
10	1513.77	20,664	-1,007	4,344	0	1,156	0	4,107	-88
11	1518.06	22,421	1,757	5,121	0	796	0	2,673	105
12	1514.40	20,917	-1,504	3,984	0	1,227	0	4,267	6
13	1507.34	18,175	-2,742	1,598	0	1,021	0	3,316	-3
14	1515.53	21,376	3,201	3,406	0	0	0	200	-5
15	1515.88	21,519	143	2,621	0	81	0	2,569	172
16	1510.09	19,219	-2,300	3,162	0	1,879	0	3,423	-160
17	1511.15	19,629	410	3,649	0	0	0	3,225	-14
18	1511.06	19,594	-35	3,491	0	0	0	3,522	-4
19	1509.64	19,046	-548	2,898	0	0	0	3,424	-22
20	1506.89	18,007	-1,039	1,592	0	0	0	2,641	10
21	1508.90	18,763	756	3,969	0	0	0	3,228	15
22	1514.30	20,877	2,114	5,056	0	0	0	2,937	-5
23	1515.88	21,519	642	3,281	0	0	0	2,672	33
24	1513.68	20,628	-891	3,066	0	0	0	3,932	-25
25	1514.69	21,035	407	3,407	0	0	0	3,000	0
26	1516.76	21,881	846	2,939	0	0	0	2,081	-12
27	1516.25	21,671	-210	4,166	0	0	0	4,402	26
28	1512.81	20,282	-1,389	2,863	0	0	0	4,209	-43
29	1509.96	19,169	-1,113	2,617	0	0	0	3,732	2
30	1508.40	18,574	-595	2,398	0	0	0	2,992	-1
31	1508.13	18,472	-102	2,491	0	0	0	2,662	69
<b>Total</b>			<b>-1,498</b>	<b>113,301</b>	<b>0</b>	<b>18,121</b>	<b>0</b>	<b>97,393</b>	<b>715</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

August 2013

Capacity: 32,476 ac-ft

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jul 31	1508.13	18,472							
1	1504.54	17,142	-1,330	671	0	0	0	1,979	-22
2	1509.01	18,805	1,663	3,455	0	0	0	1,804	12
3	1507.00	18,048	-757	1,067	0	0	0	1,775	-49
4	1510.82	19,501	1,453	1,460	0	0	0	35	28
5	1517.29	22,100	2,599	2,587	0	0	0	0	12
6	1515.82	21,494	-606	2,228	0	358	0	2,468	-8
7	1512.55	20,179	-1,315	2,791	0	0	0	4,129	23
8	1509.56	19,015	-1,164	2,138	0	0	0	3,368	66
9	1508.04	18,438	-577	0	0	0	0	487	-90
10	1508.44	18,589	151	220	0	0	0	0	-69
11	1511.83	19,895	1,306	1,363	0	0	0	0	-57
12	1515.62	21,413	1,518	2,915	0	1,324	0	0	-73
13	1514.21	20,841	-572	2,804	0	1,187	0	2,251	62
14	1509.17	18,866	-1,975	2,581	0	1,329	0	3,159	-68
15	1509.12	18,847	-19	2,922	0	0	0	2,941	0
16	1510.04	19,200	353	2,586	0	0	0	2,236	3
17	1512.52	20,167	967	1,009	0	0	0	0	-42
18	1511.37	19,715	-452	1,467	0	1,944	0	0	25
19	1515.02	21,169	1,454	2,375	0	1,101	0	0	180
20	1514.58	20,990	-179	2,105	0	0	0	2,377	93
21	1510.15	19,242	-1,748	3,065	0	1,349	0	3,363	-101
22	1511.58	19,797	555	3,786	0	0	0	3,233	2
23	1514.76	21,063	1,266	4,034	0	1,144	0	1,602	-22
24	1509.67	19,057	-2,006	120	0	2,205	0	0	79
25	1511.70	19,844	787	820	0	0	0	0	-33
26	1520.02	23,249	3,405	3,458	0	0	0	0	-53
27	1517.29	22,100	-1,149	3,175	0	1,231	0	3,120	27
28	1515.09	21,197	-903	4,541	0	1,246	0	4,234	36
29	1514.89	21,116	-81	4,833	0	1,356	0	3,505	-53
30	1513.21	20,441	-675	518	0	1,192	0	0	-1
31	1513.22	20,441	0	0	0	0	0	0	0
<b>Total</b>			<b>1,969</b>	<b>67,094</b>	<b>0</b>	<b>16,966</b>	<b>0</b>	<b>48,066</b>	<b>-93</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**Daily Operation  
(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**September 2013**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Aug 31	1513.22	20,441							
1	1512.47	20,147	-294	946	0	1,212	0	0	-28
2	1511.83	19,895	-252	1,108	0	1,383	0	0	23
3	1517.95	22,375	2,480	4,152	0	660	0	1,039	27
4	1513.70	20,636	-1,739	3,765	0	1,410	0	4,120	26
5	1510.09	19,219	-1,417	3,560	0	1,949	0	3,034	6
6	1511.63	19,817	598	3,336	0	576	0	2,115	-47
7	1513.19	20,433	616	2,386	0	1,644	0	0	-126
8	1511.30	19,688	-745	942	0	1,748	0	0	61
9	1508.93	18,775	-913	2,345	0	1,635	0	1,599	-24
10	1507.78	18,340	-435	2,616	0	0	0	3,074	23
11	1508.55	18,631	291	2,961	0	0	0	2,647	-23
12	1510.22	19,269	638	3,649	0	0	0	3,012	1
13	1509.39	18,950	-319	3,010	0	0	0	3,328	-1
14	1510.26	19,284	334	796	0	0	0	463	1
15	1510.79	19,489	205	1,743	0	1,525	0	0	-13
16	1513.33	20,488	999	2,749	0	640	0	1,246	136
17	1508.02	18,430	-2,058	1,959	0	755	0	3,221	-41
18	1509.54	19,008	578	3,214	0	0	0	2,553	-83
19	1511.63	19,817	809	4,144	0	0	0	3,324	-11
20	1507.38	18,190	-1,627	0	0	0	0	1,626	-1
21	1507.38	18,190	0	0	0	0	0	0	0
22	1511.37	19,715	1,525	1,674	0	0	0	0	-149
23	1511.70	19,844	129	3,236	0	779	0	2,340	12
24	1510.05	19,203	-641	2,751	0	0	0	3,377	-15
25	1506.89	18,007	-1,196	1,521	0	0	0	2,745	28
26	1510.93	19,544	1,537	2,853	0	0	0	1,291	-25
27	1510.44	19,354	-190	2,121	0	0	0	2,358	47
28	1507.18	18,115	-1,239	1,182	0	0	0	2,380	-41
29	1512.67	20,226	2,111	2,115	0	0	0	0	-4
30	1514.21	20,841	615	2,985	0	42	0	2,326	-2
<b>Total</b>			<b>400</b>	<b>69,819</b>	<b>0</b>	<b>15,958</b>	<b>0</b>	<b>53,218</b>	<b>-243</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

October 2013

Capacity: 32,476 ac-ft

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Sep 30	1514.21	20,841							
1	1510.38	19,331	-1,510	2,469	0	0	0	3,982	3
2	1509.60	19,031	-300	3,048	0	0	0	3,396	48
3	1508.59	18,646	-385	2,910	0	1,080	0	2,261	46
4	1506.03	17,688	-958	1,414	0	0	0	2,332	-40
5	1508.21	18,502	814	1,379	0	0	0	514	-51
6	1508.21	18,502	0	0	0	0	0	0	0
7	1513.66	20,620	2,118	2,180	0	0	0	0	-62
8	1514.85	21,099	479	1,592	0	0	0	1,137	24
9	1510.20	19,261	-1,838	2,294	0	0	0	4,080	-52
10	1503.85	16,892	-2,369	0	0	0	0	2,370	1
11	1509.39	18,950	2,058	2,421	0	0	0	361	-2
12	1510.16	19,246	296	310	0	0	0	0	-14
13	1510.22	19,269	23	0	0	2	0	0	25
14	1510.18	19,254	-15	0	0	0	0	0	-15
15	1512.56	20,183	929	953	0	0	0	0	-24
16	1514.60	20,998	816	1,605	0	0	0	866	77
17	1507.42	18,205	-2,793	987	0	0	0	3,778	-2
18	1508.11	18,464	259	662	0	439	0	25	61
19	1512.60	20,199	1,735	1,715	0	0	0	0	20
20	1512.53	20,171	-28	0	0	0	0	0	-28
21	1512.64	20,214	43	1,986	0	967	0	1,000	24
22	1509.27	18,904	-1,310	2,869	0	953	0	3,197	-29
23	1509.84	19,123	219	3,042	0	0	0	2,768	-55
24	1505.73	17,577	-1,546	983	0	0	0	2,555	26
25	1508.74	18,703	1,126	3,353	0	0	0	2,199	-28
26	1507.22	18,130	-573	579	0	0	0	1,205	53
27	1513.26	20,460	2,330	2,354	0	0	0	0	-24
28	1516.12	21,617	1,157	2,956	0	0	0	1,817	18
29	1511.65	19,825	-1,793	2,309	0	0	0	4,103	1
30	1506.96	18,033	-1,792	1,234	0	0	0	3,050	24
31	1504.60	17,164	-869	2,062	0	0	0	2,971	40
<b>Total</b>			<b>-3,677</b>	<b>49,666</b>	<b>0</b>	<b>3,441</b>	<b>0</b>	<b>49,967</b>	<b>65</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

November 2013

Capacity: 32,476 ac-ft

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Oct 31	1504.60	17,164							
1	1509.38	18,946	1,782	3,918	0	0	0	2,066	-70
2	1509.43	18,966	20	0	0	0	0	0	20
3	1511.04	19,583	617	364	0	0	0	0	253
4	1514.63	21,011	1,428	2,958	0	0	0	1,304	-226
5	1509.76	19,092	-1,919	2,224	0	0	0	4,124	-19
6	1507.53	18,246	-846	2,632	0	0	0	3,499	21
7	1505.81	17,607	-639	2,268	0	0	0	2,849	-58
8	1507.94	18,400	793	2,523	0	0	0	1,729	-1
9	1507.93	18,396	-4	0	0	0	0	0	-4
10	1509.01	18,805	409	441	0	0	0	0	-32
11	1510.05	19,203	398	2,238	0	0	0	1,941	101
12	1505.27	17,408	-1,795	1,281	0	0	0	2,979	-97
13	1506.61	17,903	495	2,056	0	0	0	1,565	4
14	1507.49	18,231	328	2,012	0	0	0	1,688	4
15	1504.76	17,222	-1,009	1,405	0	0	0	2,417	3
16	1503.52	16,773	-449	1,222	0	0	0	1,667	-4
17	1506.67	17,925	1,152	1,361	0	0	0	206	-3
18	1507.27	18,149	224	2,192	0	323	0	1,675	30
19	1506.58	17,892	-257	1,404	0	270	0	1,635	244
20	1504.51	17,131	-761	999	0	0	0	1,534	-226
21	1508.75	18,706	1,575	2,553	0	240	0	933	195
22	1506.70	17,936	-770	1,646	0	0	0	2,187	-229
23	1503.11	16,626	-1,310	434	0	0	0	1,704	-40
24	1505.26	17,405	779	817	0	0	0	0	-38
25	1509.96	19,169	1,764	3,693	0	0	0	1,920	-9
26	1510.16	19,246	77	3,696	0	0	0	3,623	4
27	1504.96	17,295	-1,951	963	0	0	0	3,018	104
28	1500.92	15,849	-1,446	0	0	0	0	1,356	-90
29	1508.08	18,453	2,604	2,717	0	0	0	0	-113
30	1508.06	18,445	-8	0	0	0	0	0	-8
<b>Total</b>			<b>1,281</b>	<b>50,017</b>	<b>0</b>	<b>833</b>	<b>0</b>	<b>47,619</b>	<b>-284</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

December 2013

Capacity: 32,476 ac-ft

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Nov 30	1508.06	18,445							
1	1516.68	21,848	3,403	3,304	0	1,026	0	0	1,125
2	1515.66	21,429	-419	3,062	0	597	0	2,844	-40
3	1511.43	19,739	-1,690	3,029	0	0	0	4,100	-619
4	1509.32	18,924	-815	2,674	0	0	0	3,453	-36
5	1511.32	19,696	772	3,007	0	0	0	2,236	1
6	1509.76	19,092	-604	1,793	0	0	0	2,397	0
7	1513.55	20,576	1,484	1,396	0	0	0	0	88
8	1514.85	21,099	523	547	0	0	0	0	-24
9	1519.43	22,998	1,899	4,478	0	0	0	2,592	13
10	1516.47	21,761	-1,237	3,243	0	62	0	4,584	166
11	1513.26	20,460	-1,301	3,199	0	0	0	4,325	-175
12	1510.16	19,246	-1,214	2,873	0	0	0	4,061	-26
13	1507.99	18,419	-827	2,824	0	0	0	3,693	42
14	1503.15	16,640	-1,779	0	0	0	0	1,708	-71
15	1510.57	19,404	2,764	2,840	0	0	0	0	-76
16	1513.37	20,504	1,100	3,364	0	0	0	2,284	20
17	1512.45	20,139	-365	3,873	0	0	0	4,246	8
18	1512.36	20,104	-35	3,984	0	0	0	4,004	-15
19	1514.95	21,140	1,036	5,130	0	0	0	4,102	8
20	1510.93	19,544	-1,596	2,411	0	0	0	4,017	10
21	1509.76	19,092	-452	2,653	0	0	0	3,071	-34
22	1509.98	19,177	85	880	0	0	0	792	-3
23	1511.67	19,832	655	669	0	0	0	0	-14
24	1510.13	19,234	-598	634	0	0	0	1,271	39
25	1503.30	16,694	-2,540	0	0	0	0	2,560	20
26	1507.01	18,052	1,358	3,222	0	0	0	1,945	81
27	1511.48	19,758	1,706	1,984	0	0	0	130	-148
28	1511.48	19,758	0	0	0	0	0	0	0
29	1511.61	19,809	51	3	0	0	0	0	48
30	1513.97	20,744	935	1,000	0	0	0	0	-65
31	1512.45	20,139	-605	0	0	0	0	699	94
<b>Total</b>			<b>1,694</b>	<b>68,076</b>	<b>0</b>	<b>1,685</b>	<b>0</b>	<b>65,114</b>	<b>417</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

January 2014

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Dec 31	1512.45	20,139							
1	1506.25	17,769	-2,370	1,215	0	0	0	3,474	-111
2	1504.28	17,048	-721	1,334	0	0	0	2,056	1
3	1508.66	18,672	1,624	2,034	0	0	0	408	-2
4	1508.65	18,668	-4	0	0	0	0	0	-4
5	1513.21	20,441	1,773	1,750	0	0	0	0	23
6	1517.40	22,146	1,705	2,625	0	824	0	0	-96
7	1514.80	21,079	-1,067	1,858	0	0	0	3,042	117
8	1506.89	18,007	-3,072	1,574	0	777	0	3,745	-124
9	1503.86	16,895	-1,112	1,093	0	0	0	2,177	-28
10	1513.81	20,680	3,785	4,483	0	0	0	717	19
11	1514.16	20,821	141	91	0	0	0	0	50
12	1511.44	19,743	-1,078	0	0	1,153	0	0	75
13	1516.08	21,601	1,858	2,504	0	654	0	0	8
14	1515.21	21,246	-355	1,725	0	0	0	2,079	-1
15	1509.69	19,065	-2,181	1,890	0	0	0	4,090	19
16	1505.33	17,430	-1,635	1,018	0	0	0	2,655	2
17	1507.38	18,190	760	780	0	0	0	0	-20
18	1510.26	19,284	1,094	1,111	0	0	0	0	-17
19	1511.58	19,797	513	592	0	0	0	0	-79
20	1514.41	20,921	1,124	1,139	0	0	0	0	-15
21	1513.74	20,652	-269	1,768	0	0	0	2,053	16
22	1507.73	18,321	-2,331	1,467	0	0	0	3,878	80
23	1501.89	16,191	-2,130	0	0	0	0	2,071	-59
24	1508.72	18,695	2,504	2,974	0	0	0	423	-47
25	1509.82	19,115	420	486	0	0	0	0	-66
26	1509.63	19,042	-73	679	0	768	0	0	16
27	1511.45	19,746	704	1,741	0	953	0	0	-84
28	1513.41	20,520	774	1,593	0	0	0	815	-4
29	1507.25	18,141	-2,379	1,403	0	0	0	3,774	-8
30	1505.35	17,438	-703	1,713	0	0	0	2,417	1
31	1505.60	17,530	92	1,216	0	0	0	1,124	0
<b>Total</b>			<b>-2,609</b>	<b>43,856</b>	<b>0</b>	<b>5,129</b>	<b>0</b>	<b>40,998</b>	<b>-338</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**February 2014**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jan 31	1505.60	17,530							
1	1509.04	18,817	1,287	1,290	0	0	0	0	-3
2	1511.78	19,876	1,059	1,090	0	0	0	0	-31
3	1515.13	21,213	1,337	1,492	0	0	0	0	-155
4	1514.38	20,909	-304	1,139	0	134	0	1,602	293
5	1507.88	18,378	-2,531	1,412	0	0	0	3,843	-100
6	1509.01	18,805	427	3,241	0	0	0	2,805	-9
7	1510.86	19,517	712	944	0	0	0	241	9
8	1510.86	19,517	0	0	0	0	0	0	0
9	1510.75	19,474	-43	0	0	0	0	0	-43
10	1510.75	19,474	0	0	0	0	0	0	0
11	1510.76	19,478	4	0	0	0	0	0	4
12	1511.14	19,625	147	711	0	0	0	595	31
13	1506.50	17,862	-1,763	1,641	0	0	0	3,351	-53
14	1506.90	18,011	149	1,027	0	0	0	923	45
15	1507.84	18,362	351	349	0	0	0	0	2
16	1507.86	18,370	8	0	0	0	0	0	8
17	1510.71	19,458	1,088	1,131	0	0	0	0	-43
18	1512.31	20,084	626	1,526	0	0	0	910	10
19	1506.79	17,970	-2,114	1,480	0	0	0	3,527	-67
20	1503.37	16,719	-1,251	566	0	0	0	1,854	37
21	1505.42	17,463	744	737	0	0	0	0	7
22	1509.30	18,916	1,453	1,412	0	0	0	0	41
23	1510.93	19,544	628	644	0	0	0	0	-16
24	1514.25	20,857	1,313	1,311	0	0	0	0	2
25	1514.14	20,813	-44	1,184	0	0	0	1,233	5
26	1506.92	18,018	-2,795	934	0	0	0	3,738	9
27	1507.71	18,314	296	1,807	0	0	0	1,455	-56
28	1507.91	18,389	75	0	32	0	32	0	75
<b>Total</b>			<b>859</b>	<b>27,068</b>	<b>32</b>	<b>134</b>	<b>32</b>	<b>26,077</b>	<b>2</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

March 2014

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Feb 28	1507.91	18,389							
1	1513.32	20,484	2,095	1,958	41	0	41	0	137
2	1514.63	21,010	526	2,901	18	0	18	2,980	605
3	1511.58	19,797	-1,213	3,030	9	0	9	4,235	-8
4	1503.35	16,708	-3,089	2,045	7	0	7	3,586	-1,548
5	1504.96	17,295	587	1,701	6	0	6	2,623	1,509
6	1503.85	16,892	-403	1,480	4	0	4	1,862	-21
7	1506.65	17,918	1,026	1,762	3	0	3	759	23
8	1507.67	18,299	381	423	2	0	2	0	-42
9	1509.41	18,958	659	652	1	0	1	0	7
10	1509.38	18,946	-12	2,248	1	0	1	2,341	81
11	1507.78	18,340	-606	2,734	1	0	1	3,213	-127
12	1505.48	17,485	-855	1,595	0	0	0	2,490	40
13	1504.89	17,269	-216	1,990	0	0	0	2,224	18
14	1509.08	18,832	1,563	2,798	0	0	0	1,236	1
15	1509.05	18,821	-11	0	1	0	1	0	-11
16	1509.05	18,821	0	0	1	0	1	0	0
17	1510.93	19,544	723	762	1	0	1	0	-39
18	1511.65	19,825	281	249	1	0	1	0	32
19	1511.68	19,836	11	11	1	0	1	0	0
20	1513.88	20,708	872	881	1	0	1	0	-9
21	1508.13	18,472	-2,236	0	1	0	1	2,227	-9
22	1507.84	18,362	-110	0	1	0	1	0	-110
23	1509.19	18,874	512	567	1	0	1	0	-55
24	1509.27	18,904	30	16	1	0	1	0	14
25	1509.78	19,100	196	232	1	0	1	0	-36
26	1510.37	19,327	227	238	1	0	1	0	-11
27	1509.41	18,958	-369	1,383	1	0	1	1,755	3
28	1510.90	19,532	574	1,661	1	0	1	1,114	27
29	1513.28	20,468	936	977	1	0	1	0	-41
30	1513.57	20,584	116	88	1	0	1	0	28
31	1516.98	21,972	1,388	1,351	1	0	1	0	37
<b>Total</b>			<b>3,583</b>	<b>35,733</b>	<b>110</b>	<b>0</b>	<b>110</b>	<b>32,645</b>	<b>495</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

April 2014

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Mar 31	1516.98	21,972							
1	1512.58	20,191	-1,781	275	0	0	0	2,154	98
2	1500.31	15,635	-4,556	450	0	0	0	5,058	52
3	1495.02	13,838	-1,797	968	0	0	0	2,507	-258
4	1497.36	14,621	783	790	0	0	0	0	-7
5	1498.94	15,161	540	465	0	0	0	0	75
6	1503.10	16,622	1,461	1,464	0	0	0	0	-3
7	1509.45	18,973	2,351	2,356	0	0	0	0	-5
8	1513.00	20,357	1,384	1,344	0	0	0	0	40
9	1509.03	18,813	-1,544	1,038	0	0	0	2,608	26
10	1507.34	18,175	-638	894	0	0	0	1,498	-34
11	1510.26	19,284	1,109	1,083	0	0	0	0	26
12	1510.33	19,311	27	23	0	0	0	0	4
13	1510.31	19,304	-7	0	0	0	0	0	-7
14	1514.84	21,095	1,791	1,857	0	0	0	0	-66
15	1513.83	20,688	-407	1,669	0	0	0	2,121	45
16	1507.67	18,299	-2,389	1,479	0	0	0	3,954	86
17	1504.45	17,109	-1,190	201	0	0	0	1,271	-120
18	1504.45	17,109	0	0	0	0	0	0	0
19	1505.70	17,566	457	478	0	0	0	0	-21
20	1505.75	17,585	19	2	0	0	0	0	17
21	1505.75	17,585	0	0	0	0	0	0	0
22	1505.75	17,585	0	0	0	0	0	0	0
23	1505.75	17,585	0	1	0	0	0	0	-1
24	1505.75	17,585	0	0	0	0	0	0	0
25	1505.75	17,585	0	0	0	0	0	0	0
26	1505.75	17,585	0	0	0	0	0	0	0
27	1505.79	17,599	14	39	0	0	0	0	-25
28	1505.79	17,599	0	0	0	0	0	0	0
29	1506.23	17,762	163	164	0	0	0	0	-1
30	1506.21	17,754	-8	0	0	0	0	0	-8
<b>Total</b>			<b>-4,218</b>	<b>17,040</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21,171</b>	<b>-87</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

May 2014

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Apr 30	1506.21	17,754							
1	1506.21	17,754	0	0	0	0	0	0	0
2	1506.21	17,754	0	0	0	0	0	0	0
3	1506.21	17,754	0	0	0	0	0	0	0
4	1506.17	17,740	-14	0	0	0	0	0	-14
5	1506.17	17,740	0	0	0	0	0	0	0
6	1506.03	17,688	-52	0	0	61	0	0	9
7	1506.30	17,788	100	118	0	0	0	0	-18
8	1506.34	17,803	15	6	0	0	0	0	9
9	1506.37	17,814	11	0	0	0	0	0	11
10	1506.30	17,788	-26	0	0	0	0	0	-26
11	1506.30	17,788	0	0	0	0	0	0	0
12	1506.34	17,803	15	0	0	0	0	0	15
13	1506.30	17,788	-15	3	0	0	0	0	-18
14	1510.31	19,304	1,516	1,551	0	0	0	0	-35
15	1506.15	17,732	-1,572	0	0	1,564	0	0	-8
16	1508.88	18,756	1,024	1,016	0	0	0	0	8
17	1508.00	18,423	-333	815	0	1,159	0	0	11
18	1508.17	18,487	64	11	0	0	0	0	53
19	1508.15	18,479	-8	0	0	0	0	0	-8
20	1508.64	18,665	186	34	0	0	0	0	152
21	1508.57	18,638	-27	0	0	0	0	0	-27
22	1509.19	18,874	236	234	0	0	0	0	2
23	1509.19	18,874	0	0	0	0	0	0	0
24	1509.19	18,874	0	0	0	0	0	0	0
25	1509.19	18,874	0	0	0	0	0	0	0
26	1509.19	18,874	0	0	0	0	0	0	0
27	1509.21	18,882	8	6	0	0	0	0	2
28	1509.27	18,904	22	0	0	0	0	0	22
29	1509.25	18,897	-7	0	0	0	0	0	-7
30	1508.15	18,479	-418	794	0	1,164	0	0	-48
31	1508.15	18,479	0	0	0	0	0	0	0
<b>Total</b>			<b>725</b>	<b>4,588</b>	<b>0</b>	<b>3,948</b>	<b>0</b>	<b>0</b>	<b>85</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

June 2014

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
May 31	1508.15	18,479							
1	1508.24	18,513	34	1,086	0	1,075	0	0	23
2	1506.45	17,843	-670	329	0	1,011	0	0	12
3	1513.04	20,373	2,530	2,690	0	130	0	0	-30
4	1512.45	20,139	-234	1,709	0	1,847	0	0	-96
5	1514.34	20,893	754	2,422	0	1,762	0	0	94
6	1510.77	19,482	-1,411	1,219	0	2,586	0	0	-44
7	1508.88	18,756	-726	0	0	780	0	0	54
8	1508.88	18,756	0	0	0	0	0	0	0
9	1511.34	19,703	947	2,256	0	1,235	0	0	-74
10	1513.00	20,357	654	1,958	0	1,220	0	0	-84
11	1509.98	19,177	-1,180	0	0	1,274	0	0	94
12	1513.15	20,417	1,240	1,327	0	46	0	0	-41
13	1512.62	20,206	-211	1,008	0	1,209	0	0	-10
14	1513.21	20,441	235	2,093	0	1,785	0	0	-73
15	1508.88	18,756	-1,685	161	0	1,880	0	0	34
16	1509.47	18,981	225	1,533	0	1,280	0	0	-28
17	1505.60	17,530	-1,451	0	0	1,453	0	0	2
18	1510.84	19,509	1,979	2,023	0	65	0	0	21
19	1510.57	19,404	-105	1,215	0	1,266	0	0	-54
20	1509.58	19,023	-381	575	0	1,008	0	0	52
21	1514.91	21,124	2,101	2,177	0	0	0	0	-76
22	1510.04	19,200	-1,924	0	0	1,990	0	0	66
23	1510.02	19,192	-8	1,350	0	1,310	0	0	-48
24	1508.37	18,562	-630	659	0	1,323	0	0	34
25	1510.77	19,482	920	2,114	0	1,115	0	0	-79
26	1513.26	20,460	978	2,202	0	1,308	0	0	84
27	1513.94	20,732	272	1,459	0	1,211	0	0	24
28	1507.88	18,378	-2,354	726	0	3,067	0	0	-13
29	1508.68	18,680	302	305	0	0	0	0	-3
30	1511.92	19,931	1,251	2,183	0	970	0	0	38
<b>Total</b>			<b>1,452</b>	<b>36,779</b>	<b>0</b>	<b>35,206</b>	<b>0</b>	<b>0</b>	<b>-121</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

July 2014

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jun 30	1511.92	19,931							
1	1515.99	21,564	1,633	2,559	0	970	0	0	44
2	1517.99	22,392	828	1,646	0	866	0	0	48
3	1517.91	22,359	-33	0	0	0	0	0	-33
4	1515.46	21,347	-1,012	0	0	1,083	0	0	71
5	1513.00	20,357	-990	1,102	0	1,988	0	0	-104
6	1512.01	19,966	-391	3,036	0	892	0	2,556	21
7	1513.52	20,564	598	3,109	0	0	0	2,494	-17
8	1517.38	22,138	1,574	2,506	0	902	0	0	-30
9	1515.70	21,445	-693	2,300	0	933	0	2,157	97
10	1507.47	18,224	-3,221	1,360	0	1,079	0	3,492	-10
11	1508.63	18,661	437	2,331	0	0	0	1,804	-90
12	1514.84	21,095	2,434	2,416	0	0	0	0	18
13	1511.90	19,923	-1,172	0	0	1,207	0	0	35
14	1517.27	22,092	2,169	2,319	0	0	0	0	-150
15	1519.34	22,960	868	2,055	0	0	0	1,208	21
16	1512.11	20,005	-2,955	1,647	0	0	0	4,621	19
17	1505.49	17,489	-2,516	1,537	0	1,106	0	2,913	-34
18	1508.15	18,479	990	1,683	0	0	0	690	-3
19	1509.84	19,123	644	643	0	0	0	0	1
20	1512.91	20,321	1,198	3,084	0	1,703	0	0	-183
21	1518.55	22,627	2,306	3,329	0	1,167	0	0	144
22	1522.58	24,352	1,725	3,827	0	930	0	1,335	163
23	1513.19	20,433	-3,919	2,382	0	1,126	0	4,871	-304
24	1511.14	19,625	-808	3,716	0	887	0	3,783	146
25	1515.16	21,225	1,600	3,334	0	1,081	0	646	-7
26	1513.93	20,726	-499	760	0	1,284	0	0	25
27	1510.90	19,532	-1,194	0	0	1,237	0	0	43
28	1515.59	21,400	1,868	2,669	0	786	0	0	-15
29	1517.18	22,055	655	2,333	0	934	0	769	25
30	1512.16	20,025	-2,030	3,403	0	940	0	4,309	-184
31	1508.35	18,555	-1,470	2,667	0	683	0	3,623	169
<b>Total</b>			<b>-1,376</b>	<b>63,753</b>	<b>0</b>	<b>23,784</b>	<b>0</b>	<b>41,271</b>	<b>-74</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**August 2014**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Jul 31	1508.35	18,555							
1	1511.43	19,739	1,184	2,538	0	0	0	1,351	-3
2	1512.01	19,966	227	1,247	0	994	0	0	-26
3	1511.83	19,895	-71	1,107	0	1,189	0	0	11
4	1517.51	22,192	2,297	2,293	0	0	0	0	4
5	1518.42	22,572	380	1,628	0	1,235	0	0	-13
6	1519.54	23,045	473	2,054	0	1,089	0	594	102
7	1510.46	19,362	-3,683	1,881	0	1,169	0	4,389	-6
8	1509.95	19,165	-197	2,246	0	0	0	2,327	-116
9	1509.52	19,000	-165	1,087	0	1,260	0	0	8
10	1509.76	19,092	92	1,292	0	1,229	0	0	29
11	1510.49	19,373	281	1,287	0	1,005	0	0	-1
12	1511.03	19,583	210	1,033	0	848	0	0	25
13	1510.74	19,470	-113	957	0	1,014	0	0	-56
14	1515.70	21,445	1,975	1,149	0	0	0	0	826
15	1514.76	21,063	-382	2,471	0	1,013	0	1,125	-715
16	1514.10	20,797	-266	0	0	1,370	0	0	1,104
17	1514.10	20,797	0	0	0	0	0	0	0
18	1509.20	18,878	-1,919	997	0	827	0	2,087	-2
19	1509.20	18,878	0	0	0	0	0	0	0
20	1511.90	19,923	1,045	1,041	0	0	0	0	4
21	1511.90	19,923	0	1,133	0	1,081	0	0	-52
22	1513.00	20,357	434	1,491	0	1,042	0	0	-15
23	1512.00	19,962	-395	966	0	1,370	0	0	9
24	1510.90	19,532	-430	653	0	1,049	0	0	-34
25	1504.20	17,019	-2,513	2	0	0	0	2,517	2
26	1507.00	18,048	1,029	1,027	0	0	0	0	2
27	1510.40	19,338	1,290	1,332	0	0	0	0	-42
28	1510.90	19,532	194	1,361	0	985	0	0	-182
29	1511.99	19,958	426	1,214	0	228	0	0	-560
30	1513.03	20,369	411	1,757	0	1,317	0	0	-29
31	1509.82	19,115	-1,254	0	0	1,306	0	0	52
<b>Total</b>			<b>560</b>	<b>37,244</b>	<b>0</b>	<b>22,620</b>	<b>0</b>	<b>14,390</b>	<b>326</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**September 2014**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Aug 31	1509.82	19,115							
1	1509.74	19084	-31	19	0	0	0	0	-50
2	1509.74	19084	0	0	0	0	0	0	0
3	1511.06	19594	510	1031	0	865	0	0	344
4	1513.77	20664	1070	1069	0	0	0	0	1
5	1514.90	21120	456	493	0	0	0	0	-37
6	1512.59	20195	-925	3	0	961	0	0	33
7	1509.77	19096	-1099	0	0	1110	0	0	11
8	1509.77	19096	0	0	0	0	0	0	0
9	1509.72	19077	-19	0	0	0	0	0	-19
10	1506.75	17955	-1122	0	0	0	0	1128	6
11	1506.37	17814	-141	0	0	0	0	0	-141
12	1509.36	18939	1125	1146	0	0	0	0	-21
13	1512.41	20123	1184	1250	0	0	0	0	-66
14	1514.83	21091	968	2073	0	1077	0	0	-28
15	1512.27	20068	-1023	1511	0	2573	0	0	39
16	1511.63	19817	-251	1307	0	1553	0	0	-5
17	1511.64	19821	4	1151	0	1109	0	0	-38
18	1507.63	18284	-1537	117	0	0	0	1645	-9
19	1507.63	18284	0	0	0	0	0	0	0
20	1508.15	18479	195	212	0	0	0	0	-17
21	1508.12	18468	-11	0	0	0	0	0	-11
22	1510.82	19501	1033	1066	0	0	0	0	-33
23	1511.57	19793	292	1276	0	1045	0	0	61
24	1510.86	19517	-276	854	0	1003	0	0	-127
25	1509.43	18966	-551	976	0	0	0	1550	23
26	1507.26	18145	-821	0	0	763	0	0	-58
27	1507.27	18149	4	0	0	0	0	0	4
28	1510.12	19230	1081	1130	0	0	0	0	-49
29	1507.61	18276	-954	0	0	975	0	0	21
30	1511.71	19848	1572	1727	0	0	0	0	-155
<b>Total</b>			<b>733</b>	<b>18,411</b>	<b>0</b>	<b>13,034</b>	<b>0</b>	<b>4,323</b>	<b>-321</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

October 2014

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Sep 30	1511.71	19,848							
1	1512.65	20,218	370	1,494	0	1,150	0	0	26
2	1509.70	19,069	-1,149	1,647	0	1,061	0	1,720	-15
3	1510.98	19,563	494	1,498	0	912	0	0	-92
4	1510.60	19,416	-147	1,353	0	1,466	0	0	-34
5	1507.76	18,332	-1,084	0	0	1,163	0	0	79
6	1509.94	19,161	829	898	0	0	0	0	-69
7	1512.30	20,080	919	862	0	0	0	0	57
8	1513.68	20,628	548	649	0	0	0	0	-101
9	1511.04	19,587	-1,041	770	0	0	0	1,810	-1
10	1511.04	19,587	0	0	0	0	0	0	0
11	1511.00	19,571	-16	0	0	0	0	0	-16
12	1511.00	19,571	0	0	0	0	0	0	0
13	1516.21	21,654	2,083	2,246	0	0	0	0	-163
14	1518.77	22,719	1,065	1,935	0	0	0	1,055	185
15	1508.36	18,555	-4,164	1,527	0	0	0	4,426	-1,265
16	1508.54	18,627	72	1,417	0	0	0	2,424	1,079
17	1509.32	18,924	297	275	0	0	0	0	22
18	1510.56	19,400	476	499	0	0	0	0	-23
19	1510.57	19,404	4	0	0	0	0	0	4
20	1515.25	21,262	1,858	2,042	0	0	0	0	-184
21	1511.73	19,856	-1,406	1,105	0	380	0	2,142	11
22	1508.33	18,547	-1,309	2,259	0	0	0	3,564	-4
23	1508.33	18,547	0	2,909	0	0	0	2,909	0
24	1509.85	19,127	580	1,887	0	0	0	1,293	-14
25	1509.90	19,146	19	0	0	0	0	0	19
26	1509.86	19,130	-16	0	0	0	0	0	-16
27	1514.93	21,132	2,002	2,095	0	0	0	0	-93
28	1517.21	22,067	935	1,857	0	0	0	1,000	78
29	1510.45	19,358	-2,709	1,489	0	0	0	4,256	58
30	1506.88	18,003	-1,355	1,943	0	0	0	3,156	-142
31	1506.28	17,780	-223	45	0	0	0	351	83
<b>Total</b>			<b>-2,068</b>	<b>34,701</b>	<b>0</b>	<b>6,132</b>	<b>0</b>	<b>30,106</b>	<b>-531</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

**November 2014**

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Oct 31	1506.28	17,780							
1	1506.18	17,743	-37	0	0	0	0	0	-37
2	1506.38	17,817	74	142	0	0	0	0	-68
3	1513.07	20,385	2,568	2,578	0	0	0	0	-10
4	1516.85	21,918	1,533	1,909	0	0	0	401	25
5	1511.03	19,583	-2,335	1,884	0	0	0	4,209	-10
6	1508.63	18,661	-922	2,541	0	0	0	3,451	-12
7	1510.69	19,451	790	1,377	0	0	0	576	-11
8	1511.23	19,661	210	176	0	0	0	0	34
9	1511.24	19,664	3	0	0	0	0	0	3
10	1511.17	19,637	-27	962	0	956	0	0	-33
11	1510.60	19,416	-221	1,658	0	0	0	2,005	126
12	1504.71	17,204	-2,212	682	0	0	0	2,743	-151
13	1504.31	17,058	-146	1,589	0	0	0	1,742	7
14	1508.16	18,483	1,425	1,469	0	0	0	48	4
15	1508.32	18,543	60	61	0	0	0	0	-1
16	1509.86	19,130	587	617	0	0	0	0	-30
17	1514.45	20,938	1,808	1,903	0	0	0	0	-95
18	1517.60	22,229	1,291	1,333	0	0	0	63	21
19	1510.30	19,300	-2,929	1,361	0	0	0	4,273	-17
20	1507.90	18,385	-915	2,401	0	0	0	3,319	3
21	1507.09	18,081	-304	560	0	0	0	836	-28
22	1514.22	20,845	2,764	2,810	0	0	0	0	-46
23	1512.93	20,329	-516	1,182	0	1,726	0	0	28
24	1512.41	20,123	-206	1,969	0	0	0	2,175	0
25	1506.98	18,040	-2,083	1,488	0	0	0	3,578	7
26	1506.65	17,918	-122	1,900	0	0	0	2,142	120
27	1504.37	17,080	-838	904	0	0	0	1,689	-53
28	1503.68	16,831	-249	1,232	0	0	0	1,294	-187
29	1506.95	18,029	1,198	1,202	0	0	0	0	-4
30	1509.72	19,077	1,048	1,043	0	0	0	0	5
<b>Total</b>			<b>1,297</b>	<b>38,933</b>	<b>0</b>	<b>2,682</b>	<b>0</b>	<b>34,544</b>	<b>-410</b>

1/ Values supplied by LADWP, not verified by DWR.



**Table 26. Elderberry Forebay**

Daily Operation

(in acre-feet except as noted)

Capacity: 32,476 ac-ft

December 2014

Date	Water Surface Elevation (in feet)	Storage	Storage Change	Inflow		Outflow			Computed Losses (-) And Gains (+)
				Castaic Powerplant Generation 1/	Natural	Castaic Powerplant Pumpback 1/	To Castaic Lake		
							Natural	Project 1/	
Nov 30	1509.72	19,077							
1	1514.25	20,857	1,780	1,787	0	0	0	0	-7
2	1513.60	20,596	-261	1,510	0	0	0	1,863	92
3	1508.68	18,680	-1,916	1,877	0	0	0	3,837	44
4	1505.60	17,530	-1,150	1,289	0	0	0	2,420	-19
5	1505.19	17,379	-151	569	0	0	0	661	-59
6	1507.21	18,126	747	695	0	0	0	0	52
7	1512.11	20,005	1,879	1,948	0	0	0	0	-69
8	1512.65	20,218	213	1,392	0	0	0	0	-1,179
9	1518.55	22,627	2,409	3,433	0	0	0	2,148	1,124
10	1513.76	20,660	-1,967	2,634	0	0	0	4,574	-27
11	1513.05	20,377	-283	3,884	0	0	0	4,186	19
12	1511.16	19,633	-744	3,004	24	0	24	3,695	-53
13	1510.28	19,292	-341	2,936	15	0	15	3,263	-14
14	1511.02	19,579	287	337	4	0	4	26	-24
15	1519.88	23,189	3,610	3,575	2	0	2	0	35
16	1517.06	22,005	-1,184	1,858	0	0	0	3,048	6
17	1513.83	20,688	-1,317	1,461	0	0	0	2,758	-20
18	1516.54	21,790	1,102	1,058	0	0	0	0	44
19	1512.80	20,278	-1,512	1,526	0	0	0	3,049	11
20	1506.43	17,836	-2,442	472	0	0	0	2,891	-23
21	1508.37	18,562	726	749	0	0	0	0	-23
22	1513.02	20,365	1,803	1,831	0	0	0	0	-28
23	1512.40	20,119	-246	2,397	0	0	0	2,639	-4
24	1505.14	17,361	-2,758	387	0	0	0	3,207	62
25	1503.23	16,669	-692	770	0	0	0	1,439	-23
26	1506.48	17,854	1,185	2,519	0	0	0	1,399	65
27	1508.03	18,434	580	1,379	0	0	0	700	-99
28	1511.10	19,610	1,176	1,195	0	0	0	0	-19
29	1516.26	21,675	2,065	2,030	0	0	0	0	35
30	1517.74	22,288	613	1,797	0	0	0	1,197	13
31	1508.90	18,763	-3,525	723	0	0	0	4,275	27
<b>Total</b>			<b>-314</b>	<b>53,022</b>	<b>45</b>	<b>0</b>	<b>45</b>	<b>53,275</b>	<b>-61</b>

1/ Values supplied by LADWP, not verified by DWR.

**Table 38. Southern Field Division Energy Data**

(in kWh)

**January 2000**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	960,912	2,280,000
2	1,066,032	2,280,000
3	1,438,128	2,280,000
4	1,412,784	2,280,000
5	1,741,896	2,280,000
6	1,075,464	1,440,000
7	1,179,360	1,440,000
8	1,197,144	1,440,000
9	0	1,440,000
10	1,142,352	1,440,000
11	997,704	1,440,000
12	983,088	1,440,000
13	983,232	1,440,000
14	1,003,248	1,440,000
15	617,328	1,440,000
16	300,960	1,440,000
17	909,288	1,320,000
18	915,768	1,320,000
19	885,816	1,320,000
20	886,176	1,320,000
21	897,768	1,320,000
22	1,453,104	2,520,000
23	758,880	2,640,000
24	872,928	1,080,000
25	532,152	1,080,000
26	573,984	1,080,000
27	770,256	1,080,000
28	767,088	1,080,000
29	880,128	1,080,000
30	0	1,080,000
31	718,056	1,080,000
<b>Total</b>	<b>27,921,024</b>	<b>47,640,000</b>

(in kWh)

**February 2000**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	730,944	1,080,000
2	751,896	1,080,000
3	766,512	1,080,000
4	773,496	1,080,000
5	968,112	1,080,000
6	0	1,080,000
7	587,952	840,000
8	620,712	840,000
9	591,192	840,000
10	595,656	840,000
11	625,824	840,000
12	683,208	840,000
13	222,048	840,000
14	475,344	1,080,000
15	690,336	1,080,000
16	839,952	1,080,000
17	797,472	1,080,000
18	783,936	1,080,000
19	906,768	1,440,000
20	908,928	1,560,000
21	909,288	1,392,000
22	1,800	0
23	0	0
24	0	0
25	586,296	912,000
26	1,650,672	1,368,000
27	228,816	1,368,000
28	778,176	1,080,000
29	785,376	1,080,000
<b>Total</b>	<b>18,260,712</b>	<b>27,960,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**March 2000**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	738,504	1,080,000
2	883,440	1,080,000
3	724,896	1,080,000
4	475,560	1,080,000
5	358,848	1,080,000
6	619,560	720,000
7	623,880	720,000
8	688,752	720,000
9	448,560	720,000
10	404,496	720,000
11	596,520	720,000
12	108,864	720,000
13	628,416	960,000
14	677,304	960,000
15	695,088	960,000
16	671,976	1,247,000
17	684,648	960,000
18	760,104	960,000
19	0	960,000
20	441,000	840,000
21	617,760	840,000
22	641,736	840,000
23	1,277,496	1,680,000
24	1,281,456	1,680,000
25	1,243,800	1,680,000
26	1,512	1,680,000
27	1,599,912	2,280,000
28	1,604,016	2,280,000
29	1,548,864	2,280,000
30	1,540,080	2,280,000
31	1,593,000	2,280,000
<b>Total</b>	<b>24,180,048</b>	<b>38,087,000</b>

(in kWh)

**April 2000**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,338,624	2,280,000
2	1,872	2,185,000
3	1,682,928	2,760,000
4	1,716,336	2,760,000
5	1,718,928	2,760,000
6	1,723,248	2,760,000
7	1,709,784	2,760,000
8	1,718,352	2,760,000
9	1,099,080	2,760,000
10	1,556,712	2,760,000
11	1,721,520	2,760,000
12	1,708,704	2,760,000
13	1,682,928	2,760,000
14	1,745,352	2,760,000
15	1,723,752	2,760,000
16	1,356,264	2,760,000
17	1,692,576	2,760,000
18	1,722,528	2,760,000
19	1,653,624	2,760,000
20	1,685,232	2,760,000
21	1,717,488	2,760,000
22	1,689,264	2,760,000
23	1,503,936	2,760,000
24	1,693,512	2,760,000
25	1,712,016	2,760,000
26	1,511,496	2,256,000
27	1,401,336	2,256,000
28	1,290,960	2,256,000
29	1,270,296	2,256,000
30	1,480,320	2,256,000
<b>Total</b>	<b>46,228,968</b>	<b>79,225,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**May 2000**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,296,504	1,800,000
2	1,276,632	1,800,000
3	1,684,800	2,808,000
4	1,265,544	2,808,000
5	1,733,976	2,808,000
6	1,796,328	2,808,000
7	1,522,800	2,808,000
8	500,400	720,000
9	496,368	720,000
10	493,272	720,000
11	496,008	720,000
12	548,928	720,000
13	495,720	720,000
14	0	720,000
15	497,088	720,000
16	495,936	720,000
17	496,008	720,000
18	787,248	720,000
19	498,024	720,000
20	758,160	720,000
21	78,624	720,000
22	917,496	1,560,000
23	909,072	1,560,000
24	906,336	1,560,000
25	908,496	1,560,000
26	806,400	1,560,000
27	908,424	1,560,000
28	907,272	1,560,000
29	1,166,544	1,800,000
30	1,069,344	1,800,000
31	1,056,240	1,800,000
<b>Total</b>	<b>26,773,992</b>	<b>44,040,000</b>

(in kWh)

**June 2000**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,052,928	1,800,000
2	1,118,160	1,400,000
3	1,149,984	1,400,000
4	1,026,504	1,800,000
5	1,135,368	1,400,000
6	1,171,944	1,400,000
7	1,142,424	1,400,000
8	1,041,480	1,400,000
9	1,056,888	1,400,000
10	1,009,296	1,400,000
11	936,648	1,800,000
12	979,992	1,400,000
13	786,168	1,400,000
14	977,544	1,400,000
15	1,026,216	1,400,000
16	1,056,888	1,400,000
17	1,057,680	1,400,000
18	1,042,848	1,800,000
19	1,053,648	1,400,000
20	1,116,720	1,400,000
21	1,131,840	1,400,000
22	1,132,416	1,400,000
23	1,013,184	1,400,000
24	705,456	1,400,000
25	949,896	1,800,000
26	1,062,360	1,640,000
27	1,214,280	1,640,000
28	1,196,136	1,640,000
29	1,194,408	1,640,000
30	1,027,872	1,640,000
<b>Total</b>	<b>31,567,176</b>	<b>45,200,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**July 2000**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,062,432	1,640,000
2	1,111,896	2,040,000
3	1,159,488	1,640,000
4	1,237,464	2,040,000
5	1,221,912	1,976,000
6	1,125,648	1,976,000
7	1,363,464	1,976,000
8	1,352,880	1,976,000
9	1,283,544	2,376,000
10	1,295,280	1,880,000
11	1,436,688	1,880,000
12	779,184	872,000
13	755,568	872,000
14	767,448	872,000
15	796,032	872,000
16	758,880	1,272,000
17	757,728	1,160,000
18	948,600	1,160,000
19	949,032	1,160,000
20	948,240	1,160,000
21	1,003,824	1,160,000
22	949,176	1,160,000
23	949,032	1,560,000
24	1,017,648	1,160,000
25	986,616	1,160,000
26	949,392	1,160,000
27	956,664	1,160,000
28	956,808	1,160,000
29	998,064	1,160,000
30	948,816	1,560,000
31	754,200	200,000
<b>Total</b>	<b>31,581,648</b>	<b>43,400,000</b>

(in kWh)

**August 2000**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	320,688	200,000
2	918,216	1,040,000
3	919,224	1,040,000
4	837,000	1,040,000
5	905,616	1,040,000
6	896,544	1,440,000
7	1,126,872	1,520,000
8	1,127,376	1,520,000
9	1,140,912	1,520,000
10	1,076,184	1,520,000
11	1,162,080	1,520,000
12	1,194,552	1,520,000
13	1,024,632	1,920,000
14	1,209,384	1,520,000
15	1,137,456	1,520,000
16	1,192,824	1,520,000
17	1,154,736	1,520,000
18	1,175,256	1,520,000
19	1,119,168	1,520,000
20	1,068,048	1,920,000
21	1,133,712	1,520,000
22	1,012,536	1,520,000
23	1,194,912	1,520,000
24	1,132,848	1,520,000
25	1,102,896	1,520,000
26	1,181,448	1,520,000
27	1,173,528	1,920,000
28	1,198,152	1,640,000
29	1,255,536	1,640,000
30	1,514,520	2,144,000
31	1,447,272	2,144,000
<b>Total</b>	<b>34,054,128</b>	<b>46,488,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**September 2000**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,435,968	2,144,000
2	1,351,512	2,144,000
3	1,520,136	2,544,000
4	1,448,784	2,400,000
5	1,521,576	2,000,000
6	1,489,752	2,000,000
7	1,481,328	2,000,000
8	1,633,032	2,000,000
9	1,446,624	2,000,000
10	3,600	2,400,000
11	0	200,000
12	0	200,000
13	0	200,000
14	1,571,112	1,880,000
15	1,592,640	1,880,000
16	1,492,128	1,880,000
17	1,638,720	2,280,000
18	1,369,224	1,640,000
19	1,382,472	1,640,000
20	1,415,232	1,640,000
21	1,410,768	1,640,000
22	1,327,896	1,640,000
23	1,369,944	1,640,000
24	1,728	2,040,000
25	1,127,088	1,400,000
26	1,356,480	1,400,000
27	1,623,672	1,904,000
28	1,694,808	1,904,000
29	1,698,768	1,904,000
30	1,681,416	1,904,000
<b>Total</b>	<b>37,086,408</b>	<b>52,448,000</b>

(in kWh)

**October 2000**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	3,240	2,304,000
2	1,563,696	2,400,000
3	1,628,280	2,400,000
4	796,248	2,400,000
5	1,561,752	2,640,000
6	1,186,272	2,880,000
7	1,071,504	2,880,000
8	107,064	2,880,000
9	1,119,024	2,760,000
10	1,073,448	2,760,000
11	1,152,432	2,760,000
12	1,181,592	2,760,000
13	1,182,312	2,760,000
14	1,015,200	2,760,000
15	129,168	2,760,000
16	1,597,392	2,760,000
17	1,398,960	2,760,000
18	623,664	2,760,000
19	1,178,208	2,760,000
20	1,635,408	2,760,000
21	1,527,336	2,760,000
22	1,646,208	2,760,000
23	1,711,368	2,400,000
24	1,689,984	2,400,000
25	1,716,912	2,400,000
26	1,721,520	2,400,000
27	1,290,096	2,400,000
28	1,723,608	2,400,000
29	1,893,240	2,500,000
30	1,813,968	2,400,000
31	1,316,304	2,400,000
<b>Total</b>	<b>39,255,408</b>	<b>81,124,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**November 2000**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,047,168	2,367,000
2	1,782,864	2,400,000
3	1,748,664	2,400,000
4	1,822,392	2,400,000
5	1,823,400	2,400,000
6	1,834,128	2,400,000
7	1,798,416	2,400,000
8	1,825,776	2,400,000
9	1,804,968	2,400,000
10	1,801,008	2,400,000
11	1,753,344	2,400,000
12	1,598,976	2,400,000
13	1,640,952	2,400,000
14	1,837,152	2,400,000
15	1,826,928	2,400,000
16	1,817,568	2,400,000
17	1,817,064	2,400,000
18	1,805,688	2,400,000
19	1,822,104	2,400,000
20	1,821,960	2,880,000
21	1,818,936	2,880,000
22	1,817,928	2,880,000
23	1,783,368	2,880,000
24	1,793,232	2,880,000
25	1,789,560	2,880,000
26	1,570,392	2,880,000
27	1,793,016	2,880,000
28	1,729,440	2,880,000
29	1,664,496	2,880,000
30	1,747,728	2,880,000
<b>Total</b>	<b>52,538,616</b>	<b>77,247,000</b>

(in kWh)

**December 2000**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,187,568	2,040,000
2	1,291,608	2,040,000
3	1,236,528	2,040,000
4	1,668,456	2,160,000
5	848,160	2,160,000
6	1,185,336	2,160,000
7	1,337,112	2,160,000
8	1,393,416	2,160,000
9	1,245,960	2,160,000
10	1,155,672	2,160,000
11	1,479,600	2,640,000
12	1,085,544	2,160,000
13	374,616	2,160,000
14	784,296	2,160,000
15	1,748,880	2,160,000
16	1,783,008	2,160,000
17	1,844,928	2,520,000
18	1,842,552	2,640,000
19	1,829,520	2,640,000
20	1,435,896	2,160,000
21	1,460,448	2,160,000
22	1,296,432	2,160,000
23	1,272,240	2,160,000
24	1,835,496	2,160,000
25	1,207,512	2,160,000
26	1,318,824	2,160,000
27	1,359,792	2,160,000
28	1,429,344	2,160,000
29	1,419,048	2,160,000
30	1,421,280	2,160,000
31	1,627,128	2,160,000
<b>Total</b>	<b>42,406,200</b>	<b>68,400,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**January 2001**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,836,288	2,160,000
2	1,539,576	2,160,000
3	1,333,656	2,160,000
4	1,047,600	1,320,000
5	833,256	1,320,000
6	833,904	1,320,000
7	953,136	1,320,000
8	826,776	1,440,000
9	857,880	1,440,000
10	1,022,328	1,440,000
11	1,059,048	1,440,000
12	909,936	1,440,000
13	1,033,920	1,440,000
14	846,792	1,440,000
15	988,416	1,680,000
16	997,488	1,680,000
17	985,536	1,680,000
18	1,260,144	1,680,000
19	1,841,544	2,040,000
20	1,059,408	2,040,000
21	975,384	1,800,000
22	1,296,288	2,040,000
23	1,161,360	2,040,000
24	1,058,544	2,040,000
25	1,224,000	2,040,000
26	1,080	240,000
27	0	0
28	0	0
29	0	0
30	398,160	1,608,000
31	937,728	720,000
<b>Total</b>	<b>29,119,176</b>	<b>45,168,000</b>

(in kWh)

**February 2001**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	945,000	720,000
2	902,016	720,000
3	853,920	720,000
4	1,384,704	2,232,000
5	244,224	480,000
6	233,856	480,000
7	386,496	480,000
8	313,128	480,000
9	324,792	480,000
10	408,096	480,000
11	1,431,072	2,160,000
12	367,056	480,000
13	369,072	480,000
14	358,776	480,000
15	356,112	480,000
16	387,792	480,000
17	383,904	480,000
18	788,688	1,320,000
19	399,024	480,000
20	347,328	513,000
21	338,832	480,000
22	284,760	480,000
23	296,640	480,000
24	0	480,000
25	43,920	1,320,000
26	113,760	480,000
27	113,832	480,000
28	113,616	0
<b>Total</b>	<b>12,490,416</b>	<b>18,825,000</b>



**Table 38. Southern Field Division Energy Data**

(in kWh)

**March 2001**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	109,656	0
2	105,912	0
3	100,440	0
4	145,872	0
5	109,800	0
6	112,896	0
7	113,400	0
8	123,120	0
9	118,224	0
10	113,184	0
11	113,688	0
12	127,152	0
13	117,072	0
14	111,528	0
15	109,728	0
16	112,392	0
17	106,344	0
18	316,872	0
19	740,736	945,000
20	1,450,224	827,000
21	728,712	960,000
22	401,544	960,000
23	488,520	960,000
24	708,768	960,000
25	122,832	960,000
26	683,712	960,000
27	647,568	960,000
28	1,061,136	1,464,000
29	1,056,384	1,464,000
30	1,106,928	1,464,000
31	959,976	1,464,000
<b>Total</b>	<b>12,424,320</b>	<b>14,348,000</b>

(in kWh)

**April 2001**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,272,744	1,403,000
2	1,200,672	1,440,000
3	1,135,008	1,440,000
4	965,304	1,440,000
5	1,027,152	1,440,000
6	984,456	1,440,000
7	777,240	1,440,000
8	979,992	1,440,000
9	0	0
10	0	0
11	791,064	1,344,000
12	762,480	1,344,000
13	661,968	1,344,000
14	399,888	1,344,000
15	574,848	1,344,000
16	495,432	504,000
17	0	0
18	0	0
19	0	0
20	193,392	312,000
21	197,712	312,000
22	892,656	216,000
23	411,264	312,000
24	571,392	312,000
25	534,096	624,000
26	377,136	624,000
27	79,992	624,000
28	0	624,000
29	197,208	576,000
30	430,920	1,680,000
<b>Total</b>	<b>15,914,016</b>	<b>24,923,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**May 2001**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	994,824	1,680,000
2	894,312	1,490,000
3	1,176,768	1,530,000
4	1,495,008	2,256,000
5	1,508,184	2,256,000
6	1,576,584	2,208,000
7	1,525,392	2,760,000
8	1,345,536	2,760,000
9	1,383,624	2,760,000
10	1,567,440	2,760,000
11	1,690,920	2,760,000
12	1,115,928	2,760,000
13	1,583,640	2,760,000
14	1,347,768	1,920,000
15	1,029,384	1,920,000
16	1,088,424	1,920,000
17	1,174,968	1,920,000
18	1,149,480	1,920,000
19	1,058,688	1,920,000
20	1,128,312	1,920,000
21	1,347,336	2,256,000
22	1,210,752	2,256,000
23	1,282,896	2,256,000
24	1,392,768	2,256,000
25	1,482,336	2,256,000
26	1,146,456	2,256,000
27	1,434,456	2,760,000
28	1,343,520	2,280,000
29	1,371,240	2,256,000
30	954,576	1,608,000
31	998,280	1,608,000
<b>Total</b>	<b>39,799,800</b>	<b>68,228,000</b>

(in kWh)

**June 2001**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	926,208	1,608,000
2	791,928	1,608,000
3	1,095,408	1,608,000
4	796,824	1,440,000
5	809,496	1,440,000
6	488,088	1,104,000
7	571,392	1,104,000
8	821,160	1,104,000
9	832,392	1,104,000
10	0	1,104,000
11	834,336	1,200,000
12	889,920	1,200,000
13	864,936	1,200,000
14	910,512	1,200,000
15	806,688	1,200,000
16	1,000,584	1,200,000
17	81,432	1,200,000
18	764,280	1,200,000
19	882,432	1,200,000
20	829,224	1,200,000
21	879,624	1,200,000
22	1,006,128	1,200,000
23	658,944	1,200,000
24	330,120	1,200,000
25	790,416	1,200,000
26	842,256	1,200,000
27	799,128	1,200,000
28	721,656	1,200,000
29	981,504	1,200,000
30	844,416	1,200,000
<b>Total</b>	<b>22,851,432</b>	<b>37,224,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**July 2001**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	3,744	1,200,000
2	988,560	1,200,000
3	1,001,736	1,200,000
4	857,520	1,200,000
5	902,016	1,200,000
6	853,056	1,200,000
7	859,392	1,200,000
8	124,416	1,200,000
9	921,816	1,200,000
10	731,304	1,200,000
11	931,104	1,200,000
12	965,664	1,200,000
13	1,057,968	1,536,000
14	950,328	1,536,000
15	670,176	1,536,000
16	877,176	1,560,000
17	1,048,032	1,560,000
18	1,002,528	1,560,000
19	1,081,224	1,560,000
20	1,017,936	1,560,000
21	708,552	1,560,000
22	236,304	1,560,000
23	1,099,800	1,560,000
24	1,072,944	1,560,000
25	1,101,312	1,560,000
26	1,096,488	1,560,000
27	1,089,000	1,560,000
28	1,100,736	1,560,000
29	77,616	1,560,000
30	994,680	1,560,000
31	1,073,304	1,560,000
<b>Total</b>	<b>26,496,432</b>	<b>43,968,000</b>

(in kWh)

**August 2001**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,066,320	1,560,000
2	1,085,760	1,560,000
3	1,165,248	1,560,000
4	1,320,840	1,560,000
5	0	1,560,000
6	0	0
7	0	0
8	0	0
9	301,608	0
10	1,322,856	1,680,000
11	1,412,208	1,680,000
12	0	1,680,000
13	943,704	1,560,000
14	1,206,144	1,560,000
15	1,189,296	1,560,000
16	1,144,296	1,560,000
17	948,456	1,560,000
18	1,196,136	1,560,000
19	337,608	1,560,000
20	1,133,352	1,560,000
21	1,083,960	1,560,000
22	1,082,376	1,560,000
23	1,041,624	1,560,000
24	1,053,864	1,560,000
25	1,101,384	1,560,000
26	0	1,560,000
27	1,067,400	1,560,000
28	1,132,128	1,560,000
29	994,896	1,560,000
30	1,156,248	1,560,000
31	1,140,552	1,560,000
<b>Total</b>	<b>26,628,264</b>	<b>42,480,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**September 2001**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,557,144	1,560,000
2	17,280	1,560,000
3	1,211,256	1,560,000
4	1,163,232	1,560,000
5	1,067,904	1,560,000
6	1,174,176	1,896,000
7	1,341,144	2,144,000
8	1,441,152	1,896,000
9	35,136	1,896,000
10	1,324,080	1,920,000
11	1,402,848	1,920,000
12	1,373,256	1,920,000
13	1,356,048	1,920,000
14	1,281,384	2,256,000
15	1,479,888	2,256,000
16	685,008	2,256,000
17	1,557,288	1,920,000
18	1,417,968	1,920,000
19	1,067,040	1,920,000
20	1,422,648	1,920,000
21	1,284,984	2,424,000
22	1,489,896	2,424,000
23	1,773,720	2,424,000
24	1,507,248	1,920,000
25	1,473,192	1,920,000
26	1,261,512	1,920,000
27	1,409,616	1,920,000
28	608,040	1,920,000
29	0	1,920,000
30	117,576	1,920,000
<b>Total</b>	<b>34,301,664</b>	<b>58,472,000</b>

(in kWh)

**October 2001**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,095,480	1,680,000
2	1,191,816	1,680,000
3	1,048,752	1,680,000
4	1,101,096	1,680,000
5	1,123,488	1,680,000
6	1,324,944	1,680,000
7	0	1,680,000
8	1,154,664	1,680,000
9	1,124,640	1,680,000
10	1,230,120	1,680,000
11	1,203,912	1,680,000
12	1,190,592	1,680,000
13	1,243,368	1,680,000
14	1,372,824	1,680,000
15	1,372,680	2,160,000
16	1,197,504	2,160,000
17	1,522,152	2,160,000
18	1,341,288	2,160,000
19	1,347,048	2,160,000
20	1,188,936	2,160,000
21	1,399,248	2,160,000
22	1,289,376	2,160,000
23	1,416,744	2,160,000
24	1,349,928	2,160,000
25	1,291,896	2,160,000
26	1,349,784	2,160,000
27	1,349,928	2,160,000
28	1,406,592	2,250,000
29	1,311,336	2,160,000
30	1,311,624	2,160,000
31	1,324,152	2,160,000
<b>Total</b>	<b>38,175,912</b>	<b>60,330,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**November 2001**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,175,616	2,160,000
2	1,324,512	2,160,000
3	1,425,672	2,160,000
4	1,440,936	2,160,000
5	1,305,792	2,160,000
6	1,334,736	2,160,000
7	947,952	2,160,000
8	1,436,040	2,160,000
9	1,413,360	1,830,000
10	915,768	2,160,000
11	1,822,824	2,160,000
12	1,574,136	2,160,000
13	1,363,824	2,160,000
14	1,205,136	2,160,000
15	1,359,000	2,160,000
16	1,310,184	2,160,000
17	1,621,080	2,160,000
18	1,224,288	2,160,000
19	1,119,888	2,160,000
20	1,240,056	2,160,000
21	1,127,664	2,160,000
22	1,385,856	2,160,000
23	1,379,592	2,160,000
24	1,329,768	2,160,000
25	1,214,928	2,160,000
26	1,017,504	1,560,000
27	966,888	1,560,000
28	980,424	1,560,000
29	980,352	1,560,000
30	889,776	1,560,000
<b>Total</b>	<b>37,833,552</b>	<b>61,470,000</b>

(in kWh)

**December 2001**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	965,808	1,560,000
2	957,816	1,560,000
3	950,328	1,560,000
4	898,200	1,560,000
5	982,368	1,560,000
6	969,624	1,560,000
7	990,792	1,560,000
8	856,800	1,560,000
9	942,696	1,560,000
10	22,248	1,560,000
11	0	1,560,000
12	0	0
13	0	0
14	168,768	0
15	375,912	0
16	830,592	0
17	895,680	1,560,000
18	806,688	1,560,000
19	984,384	1,560,000
20	915,624	1,560,000
21	950,544	1,560,000
22	1,018,944	1,560,000
23	989,064	1,560,000
24	1,121,256	1,560,000
25	1,770,768	1,560,000
26	762,120	1,560,000
27	874,224	1,560,000
28	929,088	1,560,000
29	967,320	1,560,000
30	967,464	1,560,000
31	1,042,920	1,560,000
<b>Total</b>	<b>24,908,040</b>	<b>40,560,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**January 2002**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,024,992	1,560,000
2	1,210,968	1,560,000
3	810,072	960,000
4	717,480	960,000
5	829,728	960,000
6	1,145,232	960,000
7	673,488	1,080,000
8	658,944	1,080,000
9	542,376	1,080,000
10	616,968	1,080,000
11	652,680	1,080,000
12	713,952	1,080,000
13	834,192	1,080,000
14	674,280	1,080,000
15	687,456	1,080,000
16	446,328	1,080,000
17	623,160	1,080,000
18	396,576	1,080,000
19	598,824	1,080,000
20	641,880	1,080,000
21	672,552	1,080,000
22	692,136	1,080,000
23	669,384	1,080,000
24	691,848	1,080,000
25	704,304	1,080,000
26	739,656	1,080,000
27	746,280	1,080,000
28	767,880	1,080,000
29	758,808	1,080,000
30	678,600	1,080,000
31	713,520	1,080,000
<b>Total</b>	<b>22,334,544</b>	<b>33,960,000</b>

(in kWh)

**February 2002**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	723,528	1,416,000
2	730,944	1,416,000
3	877,248	1,416,000
4	908,136	1,440,000
5	530,208	1,440,000
6	899,928	1,440,000
7	899,280	1,440,000
8	912,600	1,440,000
9	899,928	1,440,000
10	930,384	1,440,000
11	902,520	1,440,000
12	902,016	1,440,000
13	900,288	1,440,000
14	907,128	1,440,000
15	903,240	1,440,000
16	898,416	1,440,000
17	690,264	1,440,000
18	794,736	1,440,000
19	911,592	1,440,000
20	791,064	1,440,000
21	907,776	1,440,000
22	918,720	1,440,000
23	917,208	1,440,000
24	918,720	1,440,000
25	892,656	1,440,000
26	910,080	1,440,000
27	902,160	1,440,000
28	889,128	1,440,000
<b>Total</b>	<b>24,169,896</b>	<b>40,248,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**March 2002**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	885,960	1,440,000
2	889,488	1,440,000
3	865,008	1,440,000
4	960,264	1,440,000
5	909,288	1,440,000
6	1,044,432	2,280,000
7	875,736	2,280,000
8	1,361,376	2,280,000
9	1,391,040	2,280,000
10	1,371,888	2,280,000
11	1,119,240	2,040,000
12	1,130,760	2,040,000
13	1,228,824	2,040,000
14	1,163,448	2,040,000
15	1,090,944	2,040,000
16	1,808,784	2,040,000
17	1,781,856	2,040,000
18	794,952	2,040,000
19	1,192,896	2,040,000
20	318,888	2,040,000
21	412,632	2,040,000
22	1,125,000	2,040,000
23	1,806,984	2,040,000
24	1,806,624	2,040,000
25	1,805,760	2,880,000
26	1,771,776	2,880,000
27	1,739,880	2,880,000
28	1,780,344	2,880,000
29	1,696,968	2,880,000
30	1,728,792	2,880,000
31	1,764,360	2,880,000
<b>Total</b>	<b>39,624,192</b>	<b>67,320,000</b>

(in kWh)

**April 2002**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,730,304	2,880,000
2	1,796,328	2,880,000
3	1,793,664	2,880,000
4	1,785,456	2,880,000
5	1,805,040	2,880,000
6	1,791,936	2,880,000
7	929,664	2,760,000
8	1,123,776	2,040,000
9	1,106,712	2,040,000
10	1,100,592	2,040,000
11	796,176	2,040,000
12	1,427,040	2,040,000
13	1,310,400	2,040,000
14	1,236,600	2,040,000
15	1,278,432	1,765,000
16	1,288,656	1,765,000
17	1,258,056	2,040,000
18	1,220,976	1,765,000
19	1,188,144	2,040,000
20	1,250,352	2,040,000
21	1,286,640	2,040,000
22	1,275,120	2,040,000
23	1,288,656	2,040,000
24	1,744,560	2,880,000
25	1,743,696	2,880,000
26	1,736,784	2,880,000
27	1,698,552	2,880,000
28	1,621,728	2,880,000
29	1,714,752	2,880,000
30	1,743,408	2,880,000
<b>Total</b>	<b>43,072,200</b>	<b>72,015,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**May 2002**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,742,184	2,880,000
2	1,742,760	2,880,000
3	1,744,200	2,880,000
4	1,646,280	2,880,000
5	1,744,776	2,880,000
6	1,795,248	2,880,000
7	1,816,632	2,880,000
8	1,286,640	2,880,000
9	1,762,416	2,880,000
10	1,761,264	2,880,000
11	1,801,584	2,880,000
12	1,517,184	2,880,000
13	1,386,864	2,880,000
14	1,770,768	2,880,000
15	1,720,368	2,880,000
16	1,721,232	2,880,000
17	1,669,032	2,880,000
18	1,604,088	2,880,000
19	1,658,376	2,880,000
20	1,039,176	1,872,000
21	1,327,320	1,872,000
22	1,214,928	1,872,000
23	1,051,488	1,872,000
24	1,185,552	1,872,000
25	1,798,704	2,880,000
26	1,779,120	2,880,000
27	1,669,968	2,880,000
28	1,740,096	2,880,000
29	1,573,200	2,880,000
30	1,795,752	2,880,000
31	1,807,488	2,880,000
<b>Total</b>	<b>49,874,688</b>	<b>84,240,000</b>

(in kWh)

**June 2002**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,606,248	2,880,000
2	1,617,264	2,880,000
3	1,613,376	2,640,000
4	1,684,872	2,640,000
5	1,662,264	2,640,000
6	1,720,872	2,640,000
7	1,714,536	2,640,000
8	1,605,888	2,640,000
9	525,312	2,640,000
10	1,309,248	1,920,000
11	1,243,656	1,920,000
12	1,392,408	1,920,000
13	1,366,200	1,920,000
14	1,351,368	1,920,000
15	1,405,512	1,920,000
16	431,784	1,920,000
17	1,312,704	2,280,000
18	1,474,560	2,280,000
19	1,573,416	2,280,000
20	1,550,520	2,280,000
21	1,310,688	2,280,000
22	1,688,544	2,280,000
23	606,168	2,280,000
24	1,459,152	2,880,000
25	1,743,912	2,880,000
26	1,771,200	2,880,000
27	1,766,736	2,880,000
28	1,795,896	2,880,000
29	1,771,848	2,880,000
30	1,479,600	2,880,000
<b>Total</b>	<b>43,555,752</b>	<b>73,800,000</b>



**Table 38. Southern Field Division Energy Data**

(in kWh)

**July 2002**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,731,096	2,880,000
2	1,744,776	2,880,000
3	1,728,360	2,880,000
4	1,681,848	2,880,000
5	1,662,336	2,880,000
6	1,713,384	2,880,000
7	1,748,952	2,880,000
8	1,759,392	2,760,000
9	1,785,240	2,760,000
10	1,784,736	2,760,000
11	1,797,696	2,760,000
12	1,636,128	2,760,000
13	534,672	2,760,000
14	1,771,344	2,760,000
15	1,630,944	2,760,000
16	1,760,544	2,760,000
17	1,699,344	2,760,000
18	1,674,504	2,760,000
19	1,671,192	2,760,000
20	1,629,648	2,760,000
21	1,282,464	2,760,000
22	1,657,800	2,760,000
23	1,680,408	2,760,000
24	1,636,560	2,760,000
25	1,624,608	2,760,000
26	1,514,664	2,760,000
27	1,488,096	2,760,000
28	1,483,992	2,760,000
29	1,261,368	2,040,000
30	1,300,896	2,040,000
31	1,320,984	2,040,000
<b>Total</b>	<b>49,397,976</b>	<b>84,240,000</b>

(in kWh)

**August 2002**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,277,424	2,040,000
2	1,143,216	2,040,000
3	1,368,432	2,040,000
4	1,132,632	2,040,000
5	1,152,288	2,040,000
6	1,478,088	2,040,000
7	1,231,776	2,040,000
8	1,211,184	2,040,000
9	1,235,592	2,040,000
10	1,212,840	2,040,000
11	1,224,144	2,040,000
12	1,257,984	2,040,000
13	1,278,216	2,040,000
14	1,221,408	2,040,000
15	1,192,464	2,040,000
16	1,239,336	2,040,000
17	1,226,880	2,040,000
18	1,221,408	2,040,000
19	1,378,152	1,320,000
20	835,848	1,320,000
21	883,008	1,320,000
22	833,040	1,320,000
23	807,336	1,320,000
24	1,225,944	1,320,000
25	892,872	1,320,000
26	1,218,600	1,920,000
27	1,201,680	1,920,000
28	1,203,048	1,920,000
29	1,203,120	1,920,000
30	1,225,440	1,920,000
31	1,230,336	1,920,000
<b>Total</b>	<b>36,443,736</b>	<b>57,480,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**September 2002**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,366,488	1,920,000
2	1,137,312	1,800,000
3	1,090,296	1,800,000
4	1,112,112	1,800,000
5	1,139,256	1,800,000
6	1,246,248	1,800,000
7	920,304	1,800,000
8	1,100,448	1,800,000
9	1,182,816	1,920,000
10	1,249,776	1,920,000
11	1,092,384	1,920,000
12	1,213,992	1,920,000
13	1,215,720	1,920,000
14	1,257,768	1,920,000
15	1,199,520	1,920,000
16	1,079,712	1,920,000
17	1,097,568	1,920,000
18	1,093,824	1,920,000
19	1,094,688	1,920,000
20	1,125,504	1,920,000
21	1,262,808	1,920,000
22	1,254,744	1,920,000
23	1,247,472	2,040,000
24	1,079,208	2,040,000
25	1,161,144	2,040,000
26	1,152,720	2,040,000
27	1,150,920	2,040,000
28	1,161,648	2,040,000
29	1,542,384	2,003,000
30	1,155,024	1,920,000
<b>Total</b>	<b>35,183,808</b>	<b>57,563,000</b>

(in kWh)

**October 2002**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,161,504	1,920,000
2	1,233,576	1,920,000
3	1,182,600	1,920,000
4	1,092,600	1,920,000
5	597,024	1,920,000
6	1,674,360	1,920,000
7	1,078,056	1,440,000
8	940,032	1,440,000
9	904,824	1,440,000
10	950,256	1,440,000
11	991,656	1,440,000
12	888,192	1,440,000
13	936,216	1,440,000
14	792	0
15	0	0
16	0	0
17	0	0
18	0	0
19	745,992	1,344,000
20	928,872	1,344,000
21	975,816	1,440,000
22	577,800	1,440,000
23	975,384	1,440,000
24	977,472	1,440,000
25	970,632	1,440,000
26	915,768	1,440,000
27	988,920	1,500,000
28	868,392	1,440,000
29	883,368	1,440,000
30	890,640	1,440,000
31	922,032	1,440,000
<b>Total</b>	<b>25,252,776</b>	<b>40,188,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**November 2002**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,136,016	1,440,000
2	935,208	1,440,000
3	810,576	1,440,000
4	1,725,624	2,880,000
5	1,768,536	2,880,000
6	1,682,784	2,880,000
7	1,673,568	2,880,000
8	1,624,608	2,880,000
9	1,780,128	2,880,000
10	1,381,464	2,880,000
11	1,399,032	2,520,000
12	1,559,952	1,440,000
13	1,425,096	2,400,000
14	1,427,544	2,400,000
15	1,440,720	2,400,000
16	1,412,568	2,400,000
17	1,364,328	2,400,000
18	1,522,368	2,640,000
19	1,638,648	2,640,000
20	1,327,464	2,640,000
21	1,536,048	2,640,000
22	1,743,984	2,640,000
23	1,666,656	2,640,000
24	1,765,224	2,640,000
25	1,587,744	2,880,000
26	1,608,768	1,440,000
27	1,586,448	2,760,000
28	1,601,352	2,760,000
29	1,602,936	2,760,000
30	1,563,984	2,760,000
<b>Total</b>	<b>45,299,376</b>	<b>74,280,000</b>

(in kWh)

**December 2002**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,596,888	2,760,000
2	1,770,408	2,880,000
3	1,735,704	2,880,000
4	1,673,352	2,880,000
5	1,595,088	2,880,000
6	1,636,704	2,880,000
7	1,818,648	2,880,000
8	1,713,312	2,880,000
9	1,600,920	2,880,000
10	1,592,064	2,880,000
11	1,613,880	2,880,000
12	1,439,280	2,880,000
13	1,732,104	2,880,000
14	1,804,248	2,880,000
15	1,771,200	2,880,000
16	1,768,320	2,880,000
17	464,544	0
18	0	0
19	153,792	0
20	931,032	2,400,000
21	1,217,232	2,400,000
22	987,984	2,400,000
23	1,475,352	2,880,000
24	1,748,160	2,880,000
25	1,804,824	2,880,000
26	1,642,032	2,880,000
27	1,774,656	2,880,000
28	1,776,744	2,880,000
29	1,563,120	2,880,000
30	1,716,624	2,880,000
31	1,666,872	2,880,000
<b>Total</b>	<b>45,785,088</b>	<b>79,080,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**January 2003**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,835,496	2,880,000
2	685,584	1,008,000
3	833,256	1,008,000
4	678,096	1,008,000
5	684,288	1,008,000
6	1,008	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	144,000
28	404,640	144,000
29	487,728	144,000
30	0	144,000
31	0	144,000
<b>Total</b>	<b>5,610,096</b>	<b>7,632,000</b>

(in kWh)

**February 2003**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	0	144,000
2	0	144,000
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	34,848	0
13	0	600,000
14	0	1,800,000
15	0	720,000
16	0	720,000
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	328,392	0
25	165,456	0
26	0	0
27	1,724,112	2,520,000
28	1,737,432	2,520,000
<b>Total</b>	<b>3,990,240</b>	<b>9,168,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**March 2003**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,788,768	2,520,000
2	1,364,184	2,520,000
3	1,159,344	2,880,000
4	1,691,712	2,880,000
5	1,712,808	1,440,000
6	1,259,928	1,440,000
7	1,547,136	1,440,000
8	1,493,856	2,520,000
9	1,203,624	2,520,000
10	1,461,024	2,880,000
11	1,426,680	2,880,000
12	1,125,504	1,440,000
13	1,786,104	1,440,000
14	1,831,320	1,440,000
15	1,689,408	2,520,000
16	1,212,552	1,608,000
17	1,617,768	2,880,000
18	1,615,320	2,880,000
19	1,712,376	2,880,000
20	1,662,336	1,416,000
21	1,525,248	1,416,000
22	462,888	708,000
23	1,797,480	1,392,000
24	1,188,288	1,440,000
25	1,168,632	1,440,000
26	1,357,776	1,440,000
27	1,799,568	2,160,000
28	1,711,368	2,880,000
29	1,648,512	2,880,000
30	1,556,928	2,880,000
31	1,751,112	2,880,000
<b>Total</b>	<b>46,329,552</b>	<b>65,940,000</b>

(in kWh)

**April 2003**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,793,376	2,880,000
2	1,840,680	2,880,000
3	1,841,184	2,880,000
4	1,816,848	2,880,000
5	1,839,384	2,880,000
6	1,761,336	2,760,000
7	1,452,960	2,880,000
8	1,531,800	2,880,000
9	1,612,656	2,880,000
10	1,572,696	2,880,000
11	1,532,376	2,880,000
12	1,571,256	2,880,000
13	976,824	2,880,000
14	1,540,800	2,880,000
15	1,823,184	2,880,000
16	1,540,368	2,880,000
17	1,686,672	2,880,000
18	1,609,056	2,880,000
19	1,613,376	2,880,000
20	1,300,032	2,880,000
21	1,705,680	2,880,000
22	1,765,008	2,880,000
23	1,787,688	2,880,000
24	1,818,360	2,880,000
25	1,650,888	2,880,000
26	1,663,344	2,880,000
27	1,820,304	2,880,000
28	1,541,592	2,880,000
29	1,512,288	2,880,000
30	1,801,656	2,880,000
<b>Total</b>	<b>49,323,672</b>	<b>86,280,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**May 2003**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,678,536	2,880,000
2	1,811,232	2,880,000
3	1,804,392	2,880,000
4	1,810,872	2,880,000
5	1,758,168	2,880,000
6	1,810,800	2,880,000
7	1,690,776	2,880,000
8	1,694,160	2,880,000
9	1,771,848	2,880,000
10	1,767,384	2,880,000
11	1,771,920	2,880,000
12	1,817,064	2,880,000
13	1,776,168	2,880,000
14	1,692,000	2,880,000
15	1,654,560	2,880,000
16	1,797,984	2,880,000
17	1,783,944	2,880,000
18	1,629,216	2,880,000
19	994,752	2,400,000
20	1,023,912	2,400,000
21	1,147,104	2,400,000
22	990,288	2,400,000
23	1,084,104	2,400,000
24	995,976	2,400,000
25	1,095,768	2,400,000
26	911,304	2,160,000
27	1,007,208	2,160,000
28	1,101,960	2,160,000
29	1,259,856	2,040,000
30	1,160,784	2,736,000
31	1,146,384	2,340,000
<b>Total</b>	<b>45,440,424</b>	<b>82,236,000</b>

(in kWh)

**June 2003**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,280,448	2,880,000
2	1,460,880	2,880,000
3	1,452,240	2,880,000
4	1,355,328	2,880,000
5	1,380,960	2,880,000
6	1,272,240	2,880,000
7	1,591,488	2,880,000
8	1,584,864	2,880,000
9	591,840	960,000
10	589,968	960,000
11	668,232	960,000
12	681,912	960,000
13	570,168	960,000
14	587,088	960,000
15	644,040	960,000
16	1,184,976	1,920,000
17	1,152,216	1,920,000
18	1,195,416	1,920,000
19	1,197,864	1,920,000
20	1,349,280	1,920,000
21	1,242,072	1,920,000
22	1,270,800	1,920,000
23	1,427,256	1,920,000
24	1,235,016	1,920,000
25	1,208,304	1,920,000
26	1,193,616	1,920,000
27	1,239,984	1,920,000
28	1,175,688	1,920,000
29	1,188,504	1,920,000
30	1,055,448	1,920,000
<b>Total</b>	<b>34,028,136</b>	<b>58,560,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**July 2003**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,140,768	1,920,000
2	784,512	1,920,000
3	1,236,672	1,920,000
4	1,210,680	1,920,000
5	1,196,712	1,920,000
6	1,191,024	1,920,000
7	1,237,536	1,920,000
8	1,207,872	1,920,000
9	1,293,480	1,820,000
10	1,206,792	1,920,000
11	1,265,544	1,920,000
12	1,106,856	1,920,000
13	1,141,488	1,920,000
14	1,665,360	2,640,000
15	1,664,712	2,640,000
16	1,644,408	2,640,000
17	1,657,368	2,640,000
18	1,662,408	2,640,000
19	1,643,688	2,640,000
20	1,501,272	2,640,000
21	1,564,056	2,520,000
22	1,544,976	2,520,000
23	1,439,856	2,520,000
24	778,968	2,520,000
25	998,424	2,520,000
26	997,776	1,560,000
27	997,200	1,560,000
28	996,768	1,560,000
29	996,624	1,560,000
30	1,155,168	1,560,000
31	1,183,032	1,560,000
<b>Total</b>	<b>39,312,000</b>	<b>65,300,000</b>

(in kWh)

**August 2003**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,799,712	2,880,000
2	1,800,288	2,880,000
3	1,805,472	2,880,000
4	1,719,648	2,880,000
5	1,764,288	2,880,000
6	1,803,384	2,880,000
7	1,797,984	2,880,000
8	1,789,488	2,880,000
9	1,749,168	2,880,000
10	1,802,304	2,880,000
11	1,732,320	2,880,000
12	1,709,208	2,880,000
13	1,793,664	2,880,000
14	1,790,136	2,880,000
15	1,786,752	2,880,000
16	1,724,544	2,880,000
17	1,798,344	2,880,000
18	1,757,736	2,880,000
19	1,759,392	2,880,000
20	1,783,800	2,880,000
21	1,799,784	2,880,000
22	1,798,920	2,880,000
23	1,801,152	2,880,000
24	1,799,856	2,880,000
25	1,810,872	2,640,000
26	1,664,784	2,640,000
27	1,805,184	2,640,000
28	1,801,800	2,640,000
29	1,793,952	2,640,000
30	1,766,376	2,640,000
31	1,788,408	2,640,000
<b>Total</b>	<b>55,098,720</b>	<b>87,600,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**September 2003**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,791,216	2,400,000
2	1,382,184	2,400,000
3	1,640,664	2,400,000
4	782,208	1,200,000
5	777,600	1,200,000
6	848,736	1,200,000
7	943,992	1,200,000
8	1,065,672	1,920,000
9	1,211,760	1,920,000
10	1,133,640	1,920,000
11	1,133,352	1,920,000
12	849,384	1,920,000
13	1,177,776	1,920,000
14	1,134,792	1,920,000
15	1,448,640	2,400,000
16	1,460,880	2,400,000
17	1,435,176	2,400,000
18	1,130,904	2,400,000
19	1,376,352	2,400,000
20	1,409,904	2,400,000
21	1,232,856	2,400,000
22	1,181,448	1,680,000
23	1,093,968	1,680,000
24	973,728	1,680,000
25	967,680	1,680,000
26	1,095,408	1,680,000
27	1,068,984	1,680,000
28	487,728	1,680,000
29	1,754,208	2,880,000
30	1,818,432	2,880,000
<b>Total</b>	<b>35,809,272</b>	<b>59,760,000</b>

(in kWh)

**October 2003**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,815,552	2,880,000
2	1,766,952	2,880,000
3	1,758,744	2,880,000
4	1,501,632	2,880,000
5	958,320	2,880,000
6	163,800	0
7	0	0
8	0	0
9	0	0
10	0	0
11	937,800	1,320,000
12	831,096	1,320,000
13	821,160	1,440,000
14	916,200	1,440,000
15	903,816	1,440,000
16	863,208	1,440,000
17	902,664	1,440,000
18	798,048	1,440,000
19	905,184	1,440,000
20	931,536	1,440,000
21	898,560	1,440,000
22	926,568	1,440,000
23	720,144	1,440,000
24	201,672	0
25	953,856	1,440,000
26	1,016,496	1,250,000
27	893,448	1,440,000
28	900,216	1,440,000
29	871,632	1,440,000
30	931,752	1,440,000
31	934,848	1,440,000
<b>Total</b>	<b>26,024,904</b>	<b>42,770,000</b>



**Table 38. Southern Field Division Energy Data**

(in kWh)

**November 2003**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	950,400	1,440,000
2	950,184	1,440,000
3	902,016	1,440,000
4	945,576	1,440,000
5	930,744	1,440,000
6	887,832	1,440,000
7	949,032	1,440,000
8	946,224	1,440,000
9	919,152	1,440,000
10	403,632	660,000
11	931,752	1,440,000
12	895,896	1,440,000
13	923,112	1,440,000
14	917,784	1,440,000
15	949,392	1,440,000
16	950,472	1,440,000
17	932,976	1,200,000
18	751,320	1,200,000
19	772,992	1,200,000
20	852,840	1,200,000
21	895,248	1,200,000
22	1,713,888	2,880,000
23	1,812,816	2,880,000
24	1,745,496	2,760,000
25	1,741,464	2,760,000
26	1,638,864	2,760,000
27	1,725,768	2,760,000
28	1,671,120	2,760,000
29	1,763,352	2,760,000
30	1,798,776	2,760,000
<b>Total</b>	<b>34,170,120</b>	<b>53,340,000</b>

(in kWh)

**December 2003**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,814,256	2,760,000
2	1,758,456	2,760,000
3	1,675,944	2,760,000
4	1,775,232	2,760,000
5	1,744,560	2,760,000
6	1,725,552	2,760,000
7	1,496,592	2,760,000
8	1,039,608	1,920,000
9	1,109,736	1,920,000
10	1,052,424	1,920,000
11	1,657,584	1,920,000
12	1,199,016	1,920,000
13	1,216,080	1,920,000
14	1,180,368	1,920,000
15	1,696,608	2,760,000
16	1,510,992	2,760,000
17	1,324,368	2,760,000
18	1,430,496	2,760,000
19	1,582,128	2,760,000
20	1,845,000	2,760,000
21	1,831,176	2,760,000
22	1,617,264	2,760,000
23	1,616,544	2,760,000
24	1,570,464	2,760,000
25	1,571,832	2,760,000
26	1,497,888	2,760,000
27	1,804,824	2,760,000
28	1,837,944	2,760,000
29	1,564,704	2,760,000
30	1,532,736	2,760,000
31	1,585,224	2,760,000
<b>Total</b>	<b>47,865,600</b>	<b>79,680,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**January 2004**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,545,264	2,760,000
2	1,562,904	2,760,000
3	1,718,640	2,760,000
4	1,756,080	2,760,000
5	1,568,664	2,760,000
6	1,570,608	2,760,000
7	1,582,200	2,760,000
8	1,374,480	2,760,000
9	1,661,544	2,760,000
10	1,798,704	2,760,000
11	1,649,016	2,760,000
12	1,139,256	1,800,000
13	1,292,472	1,800,000
14	1,111,320	1,800,000
15	1,114,704	1,800,000
16	1,082,088	1,800,000
17	1,297,368	1,800,000
18	1,145,088	1,800,000
19	1,212,336	1,800,000
20	1,013,832	1,800,000
21	282,888	1,800,000
22	449,784	1,800,000
23	1,590,984	1,800,000
24	1,486,224	1,800,000
25	1,548,432	1,800,000
26	1,649,808	2,640,000
27	1,539,648	2,640,000
28	1,560,456	2,640,000
29	1,506,744	2,640,000
30	1,547,208	2,640,000
31	1,554,696	2,640,000
<b>Total</b>	<b>42,913,440</b>	<b>71,400,000</b>

(in kWh)

**February 2004**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,737,432	2,640,000
2	1,432,944	2,160,000
3	1,404,720	2,160,000
4	1,422,576	2,160,000
5	1,402,776	2,160,000
6	1,273,968	2,160,000
7	1,337,760	2,160,000
8	1,137,672	2,160,000
9	1,579,536	2,640,000
10	1,571,976	2,640,000
11	1,503,360	2,640,000
12	1,590,120	2,640,000
13	1,541,592	2,640,000
14	1,603,368	2,640,000
15	1,831,104	2,640,000
16	1,382,832	2,280,000
17	1,379,304	2,280,000
18	1,342,656	2,280,000
19	1,398,024	2,280,000
20	1,389,528	2,280,000
21	1,445,040	2,280,000
22	1,448,928	2,280,000
23	348,840	480,000
24	337,680	480,000
25	272,808	720,000
26	300,744	720,000
27	757,368	720,000
28	250,632	720,000
29	247,752	720,000
<b>Total</b>	<b>34,673,040</b>	<b>56,760,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**March 2004**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,041,408	1,707,000
2	1,143,720	1,680,000
3	1,064,304	1,680,000
4	1,044,864	1,680,000
5	1,020,960	1,680,000
6	1,039,176	1,680,000
7	893,520	1,680,000
8	1,118,880	1,680,000
9	955,296	1,680,000
10	1,012,896	1,680,000
11	1,108,728	1,680,000
12	1,064,376	1,680,000
13	1,108,440	1,680,000
14	1,042,920	1,680,000
15	1,278,144	2,040,000
16	1,312,560	2,040,000
17	1,228,752	2,040,000
18	1,416,240	2,040,000
19	814,752	2,040,000
20	1,219,248	2,040,000
21	1,284,624	2,040,000
22	1,467,360	2,400,000
23	1,491,336	2,400,000
24	1,505,160	2,400,000
25	1,410,552	2,400,000
26	1,357,416	2,400,000
27	1,422,216	2,400,000
28	1,457,568	2,400,000
29	1,471,608	2,400,000
30	1,462,968	2,400,000
31	1,502,784	2,880,000
<b>Total</b>	<b>37,762,776</b>	<b>62,307,000</b>

(in kWh)

**April 2004**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,149,264	2,880,000
2	1,437,408	2,880,000
3	1,680,768	2,880,000
4	1,406,016	2,070,000
5	1,495,728	2,880,000
6	1,545,552	2,880,000
7	1,570,608	2,880,000
8	1,587,096	2,880,000
9	1,679,184	2,880,000
10	1,365,984	0
11	856,800	2,400,000
12	1,456,272	2,400,000
13	1,325,592	2,400,000
14	1,571,112	2,400,000
15	1,346,760	2,400,000
16	1,548,288	2,400,000
17	1,454,976	2,400,000
18	1,739,088	2,400,000
19	1,796,112	2,760,000
20	1,731,816	2,760,000
21	1,458,576	2,760,000
22	967,680	1,704,000
23	1,025,712	1,704,000
24	1,004,040	1,704,000
25	1,005,840	1,704,000
26	954,216	1,560,000
27	938,448	1,560,000
28	1,020,384	1,560,000
29	1,149,408	1,560,000
30	1,100,952	1,560,000
<b>Total</b>	<b>40,369,680</b>	<b>67,206,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**May 2004**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,147,968	1,560,000
2	910,728	1,560,000
3	693,360	840,000
4	282,744	840,000
5	462,816	840,000
6	423,360	840,000
7	320,040	840,000
8	94,680	0
9	0	0
10	0	0
11	1,367,568	2,520,000
12	1,607,760	2,520,000
13	1,452,168	2,520,000
14	1,365,624	2,520,000
15	1,320,552	2,520,000
16	1,533,744	2,520,000
17	1,246,032	2,880,000
18	1,736,136	2,880,000
19	1,582,560	2,880,000
20	1,753,488	2,880,000
21	1,718,064	2,880,000
22	1,801,296	2,880,000
23	1,725,624	2,880,000
24	1,711,440	2,880,000
25	1,640,088	2,880,000
26	1,450,728	2,880,000
27	1,591,632	2,880,000
28	1,723,608	2,880,000
29	1,570,680	2,880,000
30	1,662,480	2,880,000
31	1,749,312	2,880,000
<b>Total</b>	<b>37,646,280</b>	<b>65,640,000</b>

(in kWh)

**June 2004**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,595,736	2,880,000
2	1,674,936	2,880,000
3	1,726,344	2,880,000
4	89,928	0
5	0	0
6	1,635,552	2,760,000
7	1,643,904	2,880,000
8	1,735,056	2,880,000
9	1,580,400	2,040,000
10	1,162,800	2,040,000
11	1,755,504	2,880,000
12	1,760,976	2,880,000
13	1,745,712	2,880,000
14	1,515,744	2,880,000
15	1,742,400	2,880,000
16	1,519,344	2,880,000
17	1,686,888	2,880,000
18	1,508,832	2,880,000
19	1,760,256	2,880,000
20	1,758,312	2,880,000
21	1,715,400	2,880,000
22	1,758,960	2,880,000
23	1,614,672	2,880,000
24	1,669,392	2,880,000
25	1,667,016	2,880,000
26	1,681,992	2,880,000
27	1,738,368	2,880,000
28	1,676,952	2,880,000
29	1,720,440	2,880,000
30	1,337,256	2,880,000
<b>Total</b>	<b>46,179,072</b>	<b>78,840,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**July 2004**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,695,312	2,880,000
2	1,722,528	2,880,000
3	1,733,616	2,880,000
4	1,767,096	2,880,000
5	1,721,160	2,880,000
6	1,702,224	2,880,000
7	1,709,784	2,880,000
8	1,709,496	2,880,000
9	1,716,768	2,880,000
10	1,654,344	2,880,000
11	1,627,992	2,880,000
12	1,594,944	2,880,000
13	1,784,880	2,880,000
14	1,715,544	2,880,000
15	1,719,000	2,880,000
16	1,698,264	2,880,000
17	1,677,960	2,880,000
18	1,731,096	2,880,000
19	1,715,760	2,880,000
20	1,605,672	2,880,000
21	1,565,856	2,880,000
22	1,717,344	2,880,000
23	1,647,720	2,880,000
24	1,641,096	2,880,000
25	1,569,672	2,880,000
26	1,751,904	2,880,000
27	1,693,008	2,880,000
28	1,716,696	2,880,000
29	1,714,104	2,880,000
30	1,792,296	2,880,000
31	1,203,768	2,880,000
<b>Total</b>	<b>52,016,904</b>	<b>89,280,000</b>

(in kWh)

**August 2004**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,784,016	2,880,000
2	1,791,936	2,880,000
3	1,726,128	2,880,000
4	1,767,600	2,880,000
5	1,604,016	2,880,000
6	1,796,040	2,880,000
7	682,128	2,880,000
8	1,755,144	2,880,000
9	1,809,432	2,880,000
10	1,797,768	2,880,000
11	1,719,792	2,880,000
12	1,736,928	2,880,000
13	1,717,848	2,880,000
14	1,711,368	2,880,000
15	1,630,512	2,880,000
16	1,789,776	2,880,000
17	1,788,264	2,880,000
18	1,681,704	2,880,000
19	1,393,200	2,880,000
20	1,792,008	2,880,000
21	1,747,152	2,880,000
22	1,790,712	2,880,000
23	1,737,720	2,880,000
24	1,765,296	2,880,000
25	1,763,424	2,880,000
26	1,744,272	2,880,000
27	1,671,984	2,880,000
28	1,670,400	2,880,000
29	1,643,256	2,880,000
30	1,768,032	2,880,000
31	1,763,784	2,880,000
<b>Total</b>	<b>50,777,856</b>	<b>86,400,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**September 2004**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,628,568	2,880,000
2	1,792,512	2,880,000
3	1,762,704	2,880,000
4	1,730,736	2,880,000
5	1,662,624	2,880,000
6	1,756,224	2,880,000
7	1,712,520	2,880,000
8	1,758,960	2,880,000
9	1,764,144	2,880,000
10	1,724,328	2,880,000
11	1,780,992	2,880,000
12	1,770,840	2,880,000
13	1,646,208	2,880,000
14	1,765,368	2,880,000
15	1,754,208	2,880,000
16	1,764,792	2,880,000
17	1,717,920	2,880,000
18	1,767,384	2,880,000
19	1,566,864	2,880,000
20	1,544,472	2,400,000
21	1,526,832	2,400,000
22	1,637,136	2,400,000
23	1,521,648	2,400,000
24	1,472,184	2,400,000
25	1,451,232	2,400,000
26	1,424,376	2,400,000
27	1,656,864	1,920,000
28	1,149,048	1,920,000
29	1,257,120	1,920,000
30	1,290,672	1,920,000
<b>Total</b>	<b>48,759,480</b>	<b>79,200,000</b>

(in kWh)

**October 2004**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,344,744	1,920,000
2	1,111,752	1,920,000
3	1,238,112	1,920,000
4	1,236,960	1,920,000
5	1,204,056	1,920,000
6	1,246,968	1,920,000
7	1,134,288	1,920,000
8	1,117,800	1,920,000
9	1,252,944	1,920,000
10	1,269,432	1,920,000
11	1,275,048	1,920,000
12	1,363,680	1,920,000
13	1,251,864	1,920,000
14	1,365,120	1,920,000
15	668,952	1,920,000
16	1,285,992	1,920,000
17	1,227,240	1,920,000
18	956,088	1,440,000
19	1,015,632	1,440,000
20	892,296	1,440,000
21	952,704	1,440,000
22	1,140,120	1,440,000
23	952,056	1,440,000
24	713,664	1,440,000
25	1,034,568	1,440,000
26	1,044,432	1,440,000
27	1,119,744	1,440,000
28	909,000	1,440,000
29	1,005,336	1,440,000
30	956,160	1,440,000
31	1,408,536	1,500,000
<b>Total</b>	<b>33,286,752</b>	<b>51,360,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**November 2004**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	3,816	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	599,256	960,000
9	686,232	960,000
10	655,776	960,000
11	528,264	960,000
12	601,992	960,000
13	610,200	960,000
14	617,688	960,000
15	0	0
16	0	0
17	338,760	0
18	39,528	0
19	128,448	0
20	100,872	0
21	65,952	0
22	1,422,504	2,880,000
23	1,656,000	2,880,000
24	1,604,808	2,880,000
25	1,679,904	20,160,000
26	1,653,840	2,880,000
27	1,657,080	2,880,000
28	1,636,632	2,880,000
29	1,601,856	2,880,000
30	1,556,784	2,880,000
<b>Total</b>	<b>19,446,192</b>	<b>49,920,000</b>

(in kWh)

**December 2004**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	1,783,872	2,880,000
2	1,699,848	2,880,000
3	1,757,808	2,880,000
4	1,681,920	2,880,000
5	1,628,064	2,880,000
6	1,026,720	2,880,000
7	1,278,648	2,880,000
8	1,794,096	2,880,000
9	1,673,352	2,880,000
10	1,663,128	2,880,000
11	1,668,096	2,880,000
12	1,538,352	2,880,000
13	1,474,488	2,880,000
14	1,718,208	2,880,000
15	1,466,496	2,880,000
16	1,698,768	2,880,000
17	1,618,200	2,880,000
18	1,674,144	2,880,000
19	973,368	2,880,000
20	1,553,688	2,880,000
21	1,540,368	2,880,000
22	1,656,648	2,880,000
23	1,744,488	2,880,000
24	1,651,032	2,880,000
25	1,545,192	20,160,000
26	1,585,944	20,160,000
27	1,697,760	20,160,000
28	1,705,824	20,160,000
29	1,199,520	9,202,000
30	1,575,432	5,136,000
31	1,099,728	3,538,000
<b>Total</b>	<b>47,273,472</b>	<b>164,098,000</b>

**Table 38. Southern Field Division Energy Data**

(in kWh)

**January 2005**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	842,328	2,880,000
2	974,664	2,880,000
3	973,008	2,040,000
4	998,208	0
5	1,000,440	2,040,000
6	998,640	2,355,000
7	42,192	2,880,000
8	0	2,880,000
9	0	2,880,000
10	0	2,880,000
11	0	0
12	0	0
13	0	0
14	9,360	0
15	0	0
16	0	0
17	0	0
18	7,128	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	13,392	0
29	0	0
30	0	0
31	233,640	1,440,000
<b>Total</b>	<b>5,859,360</b>	<b>23,715,000</b>

(in kWh)

**February 2005**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation
1	950,472	1,440,000
2	947,880	1,440,000
3	947,448	1,440,000
4	890,496	1,440,000
5	950,328	1,440,000
6	951,192	1,440,000
7	890,136	1,440,000
8	893,304	1,440,000
9	893,664	1,440,000
10	882,720	1,440,000
11	923,904	1,440,000
12	921,168	1,440,000
13	923,256	1,440,000
14	920,304	1,560,000
15	923,328	0
16	920,520	0
17	947,808	2,040,000
18	697,248	2,040,000
19	0	5,136,000
20	0	5,136,000
21	0	3,424,000
22	0	0
23	0	0
24	17,856	0
25	0	0
26	0	0
27	0	0
28	0	0
<b>Total</b>	<b>16,393,032</b>	<b>38,056,000</b>



**Table 38. Southern Field Division Energy Data**

(in kWh)

**March 2005**

West Branch			
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/	
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	0	0	0
8	0	0	0
9	0	0	0
10	0	0	0
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
15	0	0	0
16	0	0	0
17	0	0	0
18	0	0	0
19	0	0	0
20	0	0	0
21	0	0	0
22	0	0	0
23	0	0	0
24	0	0	0
25	0	0	0
26	0	0	0
27	0	0	0
28	0	0	0
29	0	0	0
30	0	0	0
31	0	0	0
Total	0	0	0

(in kWh)

**April 2005**

West Branch			
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/	
1	0	0	0
2	0	0	0
3	0	0	0
4	0	2,880,000	
5	368,610	2,880,000	
6	969,190	2,880,000	
7	1,035,130	2,880,000	
8	1,826,480	2,880,000	
9	1,826,930	2,880,000	
10	1,829,630	2,880,000	
11	1,827,760	2,880,000	
12	1,823,120	2,880,000	
13	1,817,640	2,880,000	
14	1,816,030	2,880,000	
15	1,814,250	2,880,000	
16	1,815,970	2,880,000	
17	1,626,350	2,880,000	
18	1,532,730	2,880,000	
19	1,663,290	2,880,000	
20	1,832,890	2,880,000	
21	1,827,620	2,880,000	
22	1,794,230	2,880,000	
23	1,823,240	2,880,000	
24	1,805,780	2,880,000	
25	1,431,720	2,280,000	
26	1,405,720	2,280,000	
27	626,020	960,000	
28	622,440	960,000	
29	621,040	960,000	
30	619,900	960,000	
Total	38,003,710	68,880,000	

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh)

**May 2005**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	619,290	960,000
2	955,100	1,440,000
3	928,640	1,440,000
4	910,820	1,440,000
5	1,845,270	1,440,000
6	899,690	1,440,000
7	916,260	1,440,000
8	918,410	1,440,000
9	681,450	600,000
10	704,440	600,000
11	371,050	600,000
12	333,200	600,000
13	193,410	600,000
14	131,420	600,000
15	164,090	600,000
16	575,860	1,320,000
17	774,800	1,320,000
18	877,470	1,320,000
19	836,090	1,320,000
20	603,250	1,320,000
21	865,310	1,320,000
22	839,350	1,320,000
23	1,080,070	1,200,000
24	1,058,900	1,200,000
25	1,047,990	1,200,000
26	1,045,130	1,200,000
27	1,045,350	1,200,000
28	820	1,200,000
29	0	1,140,000
30	1,141,950	1,200,000
31	1,045,610	1,200,000
<b>Total</b>	<b>23,410,490</b>	<b>35,220,000</b>

(in kWh)

**June 2005**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,061,820	1,200,000
2	1,056,680	1,200,000
3	1,078,050	1,200,000
4	880	1,200,000
5	0	1,200,000
6	1,024,000	1,200,000
7	1,152,600	1,200,000
8	964,620	1,200,000
9	1,049,640	1,200,000
10	1,053,490	1,200,000
11	870	1,200,000
12	0	1,200,000
13	707,680	1,080,000
14	830,230	1,080,000
15	863,870	1,080,000
16	883,720	1,080,000
17	838,710	1,080,000
18	893,910	1,080,000
19	0	1,080,000
20	861,290	1,200,000
21	1,083,530	1,200,000
22	867,360	1,560,000
23	1,192,900	1,560,000
24	1,205,150	1,560,000
25	1,191,590	1,560,000
26	0	1,560,000
27	1,066,080	1,560,000
28	621,690	1,560,000
29	1,120,480	1,560,000
30	1,120,870	1,560,000
<b>Total</b>	<b>23,791,710</b>	<b>38,400,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) July 2005

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,120,390	1,506,000
2	1,104,440	1,560,000
3	458,580	1,560,000
4	458,390	1,800,000
5	1,320,250	1,800,000
6	1,314,920	1,800,000
7	1,301,640	1,800,000
8	1,399,570	1,800,000
9	1,351,780	1,800,000
10	467,030	1,800,000
11	1,771,960	2,880,000
12	1,718,840	2,880,000
13	1,720,310	2,880,000
14	1,752,500	2,880,000
15	1,737,310	2,880,000
16	1,755,020	2,880,000
17	1,753,770	2,880,000
18	1,458,990	2,400,000
19	1,435,400	2,400,000
20	1,077,950	1,680,000
21	1,045,540	1,680,000
22	1,062,140	1,680,000
23	1,327,270	1,680,000
24	1,037,670	1,680,000
25	1,423,110	1,680,000
26	882,650	1,680,000
27	1,095,240	1,680,000
28	1,101,150	1,680,000
29	1,097,390	1,680,000
30	1,050,250	1,680,000
31	999,990	1,680,000
Total	38,601,440	62,346,000

(in kWh) August 2005

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	812,240	1,320,000
2	841,560	1,320,000
3	812,520	1,530,000
4	808,890	1,560,000
5	821,930	1,320,000
6	837,210	1,320,000
7	792,340	1,320,000
8	753,430	1,320,000
9	802,830	1,320,000
10	825,720	1,320,000
11	829,300	1,320,000
12	836,700	1,320,000
13	839,440	1,320,000
14	795,220	1,320,000
15	1,027,090	1,680,000
16	736,650	1,680,000
17	901,370	1,680,000
18	932,890	1,680,000
19	927,970	1,680,000
20	1,293,460	1,680,000
21	1,320,090	1,680,000
22	928,930	1,680,000
23	919,920	1,680,000
24	952,240	1,680,000
25	961,100	1,680,000
26	882,310	1,680,000
27	1,296,600	1,680,000
28	1,277,760	1,680,000
29	932,000	1,680,000
30	927,170	1,680,000
31	926,010	1,680,000
Total	28,552,890	47,490,000

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **September 2005**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	923,390	1,680,000
2	1,101,370	1,680,000
3	1,398,400	1,680,000
4	1,296,460	1,680,000
5	905,700	1,440,000
6	900,710	1,440,000
7	898,400	1,440,000
8	900,170	1,440,000
9	891,390	1,440,000
10	523,660	1,440,000
11	1,304,920	1,440,000
12	1,816,070	1,800,000
13	1,806,420	1,800,000
14	1,766,420	1,800,000
15	1,763,000	1,800,000
16	4,620	1,800,000
17	0	1,800,000
18	0	0
19	1,113,010	0
20	1,084,260	1,800,000
21	1,083,750	2,160,000
22	1,082,510	2,160,000
23	1,096,860	2,160,000
24	1,102,500	2,160,000
25	1,083,360	2,160,000
26	1,322,620	2,160,000
27	1,388,280	2,160,000
28	1,256,230	2,160,000
29	1,349,540	2,160,000
30	1,326,320	2,160,000
<b>Total</b>	<b>32,490,340</b>	<b>51,000,000</b>

(in kWh) **October 2005**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,327,700	2,160,000
2	1,301,070	2,160,000
3	1,678,700	2,880,000
4	1,713,830	2,880,000
5	1,688,670	2,880,000
6	1,600,000	2,880,000
7	1,801,990	2,880,000
8	1,740,710	2,880,000
9	1,801,170	2,880,000
10	1,477,390	1,680,000
11	957,200	1,680,000
12	444,730	1,680,000
13	970,850	1,680,000
14	971,130	1,680,000
15	965,740	1,680,000
16	970,820	1,680,000
17	969,170	1,560,000
18	969,220	1,560,000
19	968,830	1,560,000
20	969,500	1,560,000
21	970,830	1,560,000
22	972,070	1,560,000
23	972,400	1,560,000
24	969,760	1,560,000
25	970,410	1,560,000
26	803,490	1,560,000
27	970,700	1,560,000
28	973,220	1,560,000
29	1,106,650	1,560,000
30	972,180	1,625,000
31	1,347,720	2,160,000
<b>Total</b>	<b>36,317,850</b>	<b>60,305,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **November 2005**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,231,460	2,160,000
2	1,262,150	2,160,000
3	1,269,020	2,160,000
4	1,271,400	2,160,000
5	1,273,580	2,160,000
6	1,279,760	2,160,000
7	931,250	1,560,000
8	950,480	1,560,000
9	935,760	1,560,000
10	854,210	1,560,000
11	948,580	1,560,000
12	1,275,880	1,560,000
13	1,282,610	2,520,000
14	993,700	1,560,000
15	974,070	1,560,000
16	925,230	1,560,000
17	0	1,560,000
18	43,490	1,560,000
19	0	1,560,000
20	0	2,400,000
21	950,220	1,560,000
22	954,810	1,560,000
23	950,260	1,560,000
24	954,170	1,560,000
25	955,010	1,560,000
26	931,640	1,560,000
27	918,050	1,560,000
28	955,240	1,560,000
29	953,450	1,560,000
30	954,640	1,560,000
<b>Total</b>	<b>27,180,120</b>	<b>52,200,000</b>

(in kWh) **December 2005**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	958,220	1,560,000
2	954,830	1,560,000
3	953,480	1,560,000
4	956,810	1,560,000
5	961,320	1,440,000
6	754,310	1,440,000
7	906,110	1,440,000
8	917,230	1,440,000
9	917,970	1,440,000
10	921,010	1,440,000
11	930,070	1,440,000
12	1,348,300	1,680,000
13	1,036,040	1,680,000
14	1,024,800	1,680,000
15	1,155,660	1,680,000
16	1,331,250	1,680,000
17	1,333,530	1,680,000
18	1,340,000	1,680,000
19	630	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	230,100	0
26	387,830	0
27	39,780	0
28	0	0
29	0	0
30	0	0
31	0	0
<b>Total</b>	<b>19,359,280</b>	<b>28,080,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) January 2006

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	0	0
2	133,130	0
3	225,600	0
4	350	0
5	238,020	384,000
6	234,050	384,000
7	1,802,450	2,880,000
8	1,808,280	2,880,000
9	1,807,600	2,880,000
10	1,808,210	2,880,000
11	1,808,560	2,880,000
12	1,759,420	2,880,000
13	854,600	2,880,000
14	1,805,850	2,880,000
15	1,811,220	2,880,000
16	1,771,110	2,880,000
17	1,769,150	2,880,000
18	1,769,580	2,880,000
19	1,768,920	2,880,000
20	1,770,220	2,880,000
21	1,748,850	2,880,000
22	1,453,430	2,880,000
23	1,187,150	2,040,000
24	1,300,350	2,040,000
25	1,299,490	2,040,000
26	1,298,310	2,040,000
27	1,299,070	2,040,000
28	1,239,860	2,040,000
29	1,233,840	2,040,000
30	1,240,010	2,040,000
31	1,284,300	2,040,000
<b>Total</b>	<b>39,530,980</b>	<b>65,208,000</b>

(in kWh) February 2006

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,299,110	2,040,000
2	1,251,630	2,040,000
3	1,245,250	2,040,000
4	1,061,160	2,040,000
5	1,054,730	2,040,000
6	1,249,270	2,040,000
7	1,249,700	2,040,000
8	1,060,820	1,560,000
9	924,840	1,560,000
10	925,510	1,560,000
11	920,520	1,560,000
12	921,300	1,560,000
13	925,890	1,560,000
14	927,060	1,560,000
15	923,480	1,560,000
16	924,410	1,560,000
17	922,290	1,560,000
18	927,030	1,560,000
19	925,890	1,560,000
20	924,010	1,560,000
21	924,750	1,560,000
22	924,230	1,560,000
23	925,950	1,560,000
24	925,940	1,560,000
25	925,070	1,560,000
26	928,420	1,560,000
27	927,440	1,320,000
28	298,810	1,320,000
<b>Total</b>	<b>27,344,510</b>	<b>46,560,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) March 2006

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,000,960	1,320,000
2	1,741,380	1,320,000
3	1,191,370	1,320,000
4	972,220	1,320,000
5	863,730	1,320,000
6	1,556,060	2,640,000
7	1,552,470	2,640,000
8	1,568,440	2,640,000
9	1,587,470	2,640,000
10	1,398,450	2,640,000
11	1,738,990	2,640,000
12	1,724,200	2,640,000
13	1,758,020	2,880,000
14	1,757,000	2,880,000
15	1,752,200	2,880,000
16	1,730,650	2,880,000
17	1,756,440	2,880,000
18	1,753,540	2,880,000
19	1,755,270 2/	2,880,000
20	1,754,200 2/	2,880,000
21	1,755,820	2,880,000
22	1,038,200	1,680,000
23	1,035,660	1,680,000
24	1,030,600	1,680,000
25	1,030,660	1,680,000
26	1,030,870	1,680,000
27	1,044,060	1,680,000
28	1,026,080	1,680,000
29	726,070	1,200,000
30	724,900	1,200,000
31	645,560	1,200,000
<b>Total</b>	<b>42,001,540</b>	<b>66,360,000</b>

(in kWh) April 2006

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	430,370	720,000
2	463,130	690,000
3	726,580	840,000
4	596,100	840,000
5	233,430	840,000
6	567,750 2/	840,000
7	517,290 2/	840,000
8	532,110 2/	840,000
9	506,360 2/	840,000
10	567,970 2/	840,000
11	522,300 2/	840,000
12	526,380 2/	840,000
13	535,670 2/	840,000
14	683,830 2/	840,000
15	530,730 2/	840,000
16	588,270 2/	840,000
17	924,640 3/	1,440,000
18	898,010 3/	1,440,000
19	855,510 3/	1,440,000
20	887,340 3/	1,440,000
21	945,890 3/	1,440,000
22	882,250 3/	1,440,000
23	880,390 3/	1,440,000
24	922,460 3/	1,440,000
25	894,440 3/	1,440,000
26	905,200 3/	1,440,000
27	889,390 3/	1,440,000
28	898,340 3/	1,440,000
29	900,660 3/	1,440,000
30	904,770 3/	1,440,000
<b>Total</b>	<b>21,117,560</b>	<b>33,330,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

2/ LADWP purchased all of SWP energy delivered at Sylmar on these days.

3/ LADWP purchased 840,000 kWh of SWP energy delivered at Sylmar on these days.

**Table 38. Southern Field Division Energy Data**

(in kWh) May 2006

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	867,500	1,440,000
2	897,990	1,440,000
3	866,890	1,440,000
4	896,610	1,440,000
5	898,980	1,440,000
6	758,990	1,440,000
7	854,480	1,440,000
8	975,610	1,440,000
9	824,070	1,440,000
10	889,270	1,440,000
11	915,140	1,440,000
12	841,010	1,440,000
13	834,810	1,440,000
14	850,760	1,440,000
15	870,590	1,440,000
16	966,780	1,440,000
17	876,840	1,440,000
18	1,010,380	1,440,000
19	883,960	1,440,000
20	922,680	1,440,000
21	869,160	1,440,000
22	884,640	1,440,000
23	877,330	1,440,000
24	883,690	1,440,000
25	964,950	1,440,000
26	894,140	1,440,000
27	887,340	1,440,000
28	897,880	1,440,000
29	898,510	1,440,000
30	894,960	1,440,000
31	895,990	1,440,000
<b>Total</b>	<b>27,551,930</b>	<b>44,640,000</b>

(in kWh) June 2006

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	877,570	1,440,000
2	794,800	1,440,000
3	853,580	1,440,000
4	1,104,070	1,440,000
5	1,075,920	1,440,000
6	870,850	1,440,000
7	894,470	1,440,000
8	868,230	1,440,000
9	862,880	1,440,000
10	467,580	1,440,000
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	3,880	0
18	763,750	0
19	1,225,160	2,280,000
20	1,343,290	2,280,000
21	1,339,030	2,280,000
22	1,383,930	2,280,000
23	1,280,090	2,280,000
24	1,340,330	2,280,000
25	1,321,310	2,280,000
26	1,566,750	2,640,000
27	1,559,400	2,640,000
28	1,556,850	2,640,000
29	1,564,050	2,640,000
30	1,561,390	2,640,000
<b>Total</b>	<b>26,479,160</b>	<b>43,560,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations



**Table 38. Southern Field Division Energy Data**

(in kWh)

**July 2006**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,558,090	2,640,000
2	1,553,050	2,640,000
3	1,146,930	1,800,000
4	1,113,810	1,800,000
5	1,119,480	1,800,000
6	1,305,120	1,800,000
7	1,112,590	1,800,000
8	1,131,350	1,800,000
9	907,240	1,800,000
10	1,418,400	2,160,000
11	1,283,270	2,160,000
12	1,283,330	2,160,000
13	1,270,900	2,160,000
14	1,271,960	2,160,000
15	1,273,750	2,160,000
16	1,287,070	2,160,000
17	1,457,300	2,400,000
18	1,506,320	2,400,000
19	1,462,540	2,400,000
20	1,394,050	2,400,000
21	1,389,490	2,400,000
22	1,373,060	2,400,000
23	1,373,350	2,400,000
24	1,349,100	2,400,000
25	1,403,640	2,400,000
26	1,114,030	2,180,000
27	1,181,060	1,920,000
28	1,177,600	1,920,000
29	1,185,260	1,920,000
30	1,243,400	1,920,000
31	1,171,400	1,560,000
<b>Total</b>	<b>39,817,940</b>	<b>66,020,000</b>

(in kWh)

**August 2006**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	994,490	1,560,000
2	1,092,380	1,560,000
3	890,410	1,560,000
4	1,011,500	1,560,000
5	991,860	1,560,000
6	770,590	1,560,000
7	1,188,650	1,560,000
8	975,130	1,560,000
9	992,190	1,560,000
10	978,940	1,560,000
11	969,750	1,560,000
12	998,210	1,560,000
13	397,530	1,560,000
14	972,260	1,440,000
15	832,410	1,440,000
16	850,490	1,440,000
17	859,480	1,440,000
18	845,720	1,440,000
19	849,170	1,440,000
20	853,330	1,440,000
21	848,980	1,440,000
22	815,350	1,440,000
23	879,040	1,440,000
24	778,550	1,440,000
25	889,580	1,440,000
26	878,710	1,440,000
27	886,890	1,440,000
28	857,370	1,440,000
29	861,420	1,440,000
30	850,490	1,440,000
31	939,390	1,440,000
<b>Total</b>	<b>27,800,260</b>	<b>46,200,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **September 2006**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	795,370	1,440,000
2	844,860	1,440,000
3	879,120	1,440,000
4	805,350	1,440,000
5	849,860	1,440,000
6	851,530	1,440,000
7	861,380	1,440,000
8	853,430	1,440,000
9	848,340	1,440,000
10	798,190	1,440,000
11	599,380	960,000
12	638,800	960,000
13	693,100	960,000
14	692,120	960,000
15	609,940	960,000
16	634,690	960,000
17	615,810	960,000
18	951,510	960,000
19	923,670	960,000
20	839,610	960,000
21	784,500	960,000
22	876,090	960,000
23	130,630	960,000
24	0	960,000
25	852,500	960,000
26	853,210	960,000
27	921,920	960,000
28	732,280	960,000
29	794,030	960,000
30	0	960,000
<b>Total</b>	<b>21,531,220</b>	<b>33,600,000</b>

(in kWh) **October 2006**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	0	960,000
2	798,780	960,000
3	675,480	960,000
4	1,006,440	960,000
5	813,900	960,000
6	811,140	960,000
7	200	960,000
8	0	960,000
9	797,460	960,000
10	803,580	960,000
11	805,040	960,000
12	834,910	960,000
13	821,240	960,000
14	320	960,000
15	0	960,000
16	856,230	960,000
17	909,940	960,000
18	819,220	960,000
19	821,930	960,000
20	816,790	960,000
21	90	960,000
22	0	960,000
23	869,430	720,000
24	565,860	720,000
25	582,630	720,000
26	585,070	720,000
27	597,850	720,000
28	0	720,000
29	0	750,000
30	354,910	480,000
31	361,630	480,000
<b>Total</b>	<b>16,310,070</b>	<b>27,150,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh)

**November 2006**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	403,530	480,000
2	465,670	480,000
3	432,560	480,000
4	0	480,000
5	0	480,000
6	422,160	480,000
7	428,060	480,000
8	631,000	480,000
9	487,480	480,000
10	461,230	480,000
11	0	480,000
12	0	480,000
13	352,970	1,200,000
14	0	1,200,000
15	5,210	1,200,000
16	660	1,200,000
17	0	1,200,000
18	0	1,200,000
19	0	1,200,000
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
Total	4,090,530	14,160,000

(in kWh)

**December 2006**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
Total	0	0

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh)

**January 2007**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	0	0
2	0	0
3	0	0
4	0	0
5	850	0
6	0	0
7	0	0
8	0	0
9	497,260	0
10	1,027,970	0
11	1,430,320	1,320,000
12	1,567,470	1,320,000
13	1,832,360	1,320,000
14	1,834,440	1,320,000
15	1,836,500	3,984,000
16	1,269,000	3,984,000
17	308,500	1,920,000
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	935,410	0
24	1,839,460	0
25	1,821,310	2,880,000
26	1,828,670	2,880,000
27	1,833,350	2,880,000
28	1,836,480	2,880,000
29	1,837,200	2,880,000
30	1,838,400	2,880,000
31	1,840,460	2,880,000
<b>Total</b>	<b>27,215,410</b>	<b>35,328,000</b>

(in kWh)

**February 2007**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,843,100	2,880,000
2	1,845,350	2,880,000
3	1,625,880	2,880,000
4	1,835,450	2,880,000
5	1,835,510	2,880,000
6	1,834,760	2,880,000
7	1,834,630	2,880,000
8	1,834,910	2,880,000
9	1,837,970	2,880,000
10	1,836,720	2,880,000
11	1,836,410	2,880,000
12	1,843,510	3,984,000
13	1,842,610	3,984,000
14	1,840,830	3,984,000
15	1,845,180	3,984,000
16	1,845,050	3,984,000
17	1,841,520	3,984,000
18	1,838,820	3,984,000
19	1,841,660	4,032,000
20	1,841,810	4,032,000
21	1,841,390	4,032,000
22	1,839,290	4,032,000
23	1,838,290	4,032,000
24	1,838,200	4,032,000
25	1,841,630	4,032,000
26	1,843,960	4,032,000
27	1,843,140	4,032,000
28	1,844,950	4,032,000
<b>Total</b>	<b>51,312,530</b>	<b>99,888,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) March 2007

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,848,020	4,032,000
2	1,849,660	4,032,000
3	1,845,970	4,032,000
4	1,843,300	4,032,000
5	1,842,060	4,272,000
6	1,845,540	4,272,000
7	1,845,110	4,440,000
8	1,859,510	4,440,000
9	1,852,260	4,440,000
10	1,843,410	4,440,000
11	1,766,470	4,255,000
12	1,840,460	4,320,000
13	1,837,350	4,320,000
14	1,835,760	4,320,000
15	1,827,190	4,320,000
16	1,822,650	4,320,000
17	1,822,330	4,320,000
18	1,824,930	4,320,000
19	1,820,380	3,432,000
20	1,837,180	3,432,000
21	1,839,980	3,432,000
22	1,848,480	3,432,000
23	1,848,630	3,432,000
24	1,847,910	3,432,000
25	1,831,610	3,432,000
26	1,804,560	3,144,000
27	1,788,700	3,432,000
28	1,831,240	3,432,000
29	1,832,540	3,432,000
30	1,831,710	3,432,000
31	1,829,770	3,432,000
Total	56,844,670	121,255,000

(in kWh) April 2007

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,825,590	3,432,000
2	1,816,290	2,880,000
3	1,808,490	2,880,000
4	1,804,560	2,880,000
5	1,805,820	2,880,000
6	1,809,540	2,880,000
7	1,811,180	2,880,000
8	1,813,850	2,880,000
9	1,815,460	3,432,000
10	1,816,230	3,432,000
11	1,814,110	3,432,000
12	1,817,640	3,432,000
13	1,821,230	3,432,000
14	1,820,860	3,432,000
15	1,819,880	3,432,000
16	1,821,260	2,880,000
17	1,818,730	2,880,000
18	1,820,060	2,880,000
19	1,824,180	2,880,000
20	1,824,470	2,880,000
21	1,822,450	2,880,000
22	1,818,210	2,880,000
23	1,820,960	1,920,000
24	1,434,480	1,920,000
25	1,826,340	3,432,000
26	1,822,610	3,432,000
27	1,814,150	3,432,000
28	1,806,670	3,432,000
29	1,805,600	3,432,000
30	1,806,190	3,432,000
Total	54,107,090	92,208,000

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) May 2007

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,807,500	3,432,000
2	1,800,680	3,432,000
3	1,794,650	3,432,000
4	1,794,060	3,432,000
5	1,797,820	3,432,000
6	1,802,190	3,432,000
7	1,804,230	2,880,000
8	1,803,790	2,880,000
9	1,802,830	2,880,000
10	1,798,320	2,880,000
11	1,794,510	2,880,000
12	1,790,630	2,880,000
13	1,787,070	2,880,000
14	1,785,890	2,880,000
15	1,758,500	2,880,000
16	1,785,800	2,880,000
17	1,439,330	2,400,000
18	1,433,530	2,400,000
19	1,444,710	2,400,000
20	1,438,160	2,400,000
21	1,582,070	2,640,000
22	1,578,570	2,640,000
23	1,251,840	2,640,000
24	1,600,390	2,640,000
25	1,642,870	2,640,000
26	1,609,870	2,640,000
27	1,662,810	2,640,000
28	1,661,250	2,640,000
29	1,526,380	2,640,000
30	1,458,580	2,640,000
31	1,149,200	1,920,000
<b>Total</b>	<b>51,188,030</b>	<b>87,312,000</b>

(in kWh) June 2007

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,289,710	1,920,000
2	1,146,900	1,440,000
3	310,970	1,440,000
4	844,330	1,440,000
5	844,370	1,440,000
6	844,370	1,440,000
7	850,130	1,440,000
8	845,850	1,440,000
9	846,630	1,440,000
10	850,020	1,440,000
11	852,530	1,440,000
12	850,360	1,440,000
13	850,520	1,440,000
14	849,130	1,440,000
15	848,490	1,440,000
16	850,100	1,440,000
17	795,770	1,440,000
18	846,870	1,440,000
19	852,140	1,440,000
20	878,680	1,440,000
21	845,950	1,440,000
22	899,690	1,440,000
23	913,570	1,440,000
24	835,630	1,440,000
25	785,020	1,440,000
26	826,810	1,440,000
27	706,260	1,440,000
28	966,420	1,440,000
29	772,430	1,440,000
30	786,330	1,440,000
<b>Total</b>	<b>25,485,980</b>	<b>43,680,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh)

**July 2007**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,068,630	1,440,000
2	1,532,690	2,880,000
3	1,542,080	2,880,000
4	1,530,010	2,880,000
5	1,517,060	2,880,000
6	1,516,090	2,880,000
7	1,513,360	2,880,000
8	1,520,480	2,880,000
9	1,553,280	2,520,000
10	1,544,350	2,520,000
11	1,551,830	2,520,000
12	1,565,210	2,520,000
13	1,563,880	2,520,000
14	1,032,350	2,520,000
15	1,093,210	2,520,000
16	1,567,450	2,880,000
17	1,566,320	2,880,000
18	1,565,100	2,880,000
19	1,568,010	2,880,000
20	1,556,880	2,880,000
21	1,556,750	2,880,000
22	1,559,350	2,880,000
23	1,554,640	3,216,000
24	1,554,260	3,216,000
25	1,557,760	3,216,000
26	1,556,060	3,216,000
27	1,554,080	3,216,000
28	1,558,450	3,216,000
29	1,556,050	3,216,000
30	1,557,740	3,216,000
31	1,556,040	3,216,000
<b>Total</b>	<b>46,589,450</b>	<b>88,344,000</b>

(in kWh)

**August 2007**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,556,420	3,216,000
2	1,556,690	3,216,000
3	1,557,620	3,216,000
4	1,553,190	3,216,000
5	1,555,170	3,216,000
6	1,557,720	3,216,000
7	1,557,040	3,216,000
8	1,558,530	3,216,000
9	1,558,950	3,216,000
10	1,558,100	3,216,000
11	1,556,230	3,216,000
12	1,556,870	3,216,000
13	1,557,970	3,216,000
14	1,558,150	3,216,000
15	1,557,980	3,216,000
16	1,556,510	3,216,000
17	1,346,620	3,216,000
18	1,566,970	3,216,000
19	1,566,350	3,216,000
20	1,548,250	2,904,000
21	1,469,250	2,904,000
22	1,550,320	2,904,000
23	1,549,880	2,904,000
24	1,550,850	2,904,000
25	1,553,810	2,904,000
26	1,549,320	2,904,000
27	1,549,140	2,736,000
28	1,553,320	2,736,000
29	1,550,850	2,736,000
30	1,551,080	2,736,000
31	1,552,130	2,736,000
<b>Total</b>	<b>47,921,280</b>	<b>95,112,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **September 2007**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,552,760	2,736,000
2	1,552,920	2,736,000
3	1,550,250	2,544,000
4	1,550,390	2,544,000
5	1,554,210	2,544,000
6	1,552,910	2,544,000
7	1,551,100	2,544,000
8	1,552,060	2,544,000
9	1,553,640	2,544,000
10	1,554,240	2,544,000
11	1,554,310	2,544,000
12	1,554,790	2,544,000
13	1,564,970	2,544,000
14	1,573,640	2,544,000
15	1,575,150	2,544,000
16	1,577,420	2,544,000
17	1,573,300	2,544,000
18	1,575,580	2,544,000
19	1,573,450	2,544,000
20	1,573,800	2,544,000
21	1,577,250	2,544,000
22	1,580,390	2,544,000
23	1,579,570	2,544,000
24	1,583,100	2,544,000
25	1,583,580	2,544,000
26	1,581,970	2,544,000
27	1,582,590	2,544,000
28	1,579,470	2,544,000
29	1,577,490	2,544,000
30	1,579,510	2,544,000
Total	47,025,810	76,704,000

(in kWh) **October 2007**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,093,900	1,560,000
2	946,730	1,560,000
3	945,250	1,560,000
4	944,650	1,560,000
5	945,290	1,560,000
6	943,540	1,560,000
7	944,320	1,560,000
8	944,620	1,560,000
9	718,760	1,560,000
10	968,380	1,560,000
11	969,480	1,560,000
12	970,200	1,560,000
13	969,230	1,560,000
14	971,540	1,560,000
15	970,820	1,488,000
16	969,520	1,488,000
17	968,540	1,488,000
18	969,430	1,488,000
19	960,400	1,488,000
20	950,130	1,488,000
21	948,590	1,488,000
22	949,340	1,488,000
23	949,500	1,488,000
24	950,540	1,488,000
25	950,250	1,488,000
26	950,490	1,488,000
27	950,900	1,488,000
28	950,690	1,488,000
29	950,790	1,488,000
30	950,000	1,488,000
31	949,900	1,488,000
Total	29,515,720	47,136,000

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations



**Table 38. Southern Field Division Energy Data**

(in kWh)

**November 2007**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	86,560	0
2	0	976,000
3	0	1,464,000
4	0	1,525,000
5	0	1,464,000
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	912,000
17	0	1,368,000
18	0	1,368,000
19	0	1,464,000
20	0	1,464,000
21	0	1,464,000
22	0	1,464,000
23	0	1,464,000
24	0	1,464,000
25	0	1,464,000
26	0	1,368,000
27	0	1,368,000
28	0	1,368,000
29	0	1,368,000
30	260,300	1,368,000
<b>Total</b>	<b>346,860</b>	<b>26,165,000</b>

(in kWh)

**December 2007**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,298,570	3,048,000
2	1,301,510	3,048,000
3	324,900	576,000
4	326,660	576,000
5	364,250	576,000
6	356,520	576,000
7	365,570	576,000
8	366,030	576,000
9	366,330	576,000
10	360,960	576,000
11	352,670	576,000
12	364,810	576,000
13	363,890	576,000
14	370,210	576,000
15	370,000	576,000
16	370,590	576,000
17	1,304,800	2,088,000
18	1,305,220	2,088,000
19	1,309,780	2,088,000
20	1,104,610	2,088,000
21	1,304,510	2,088,000
22	1,302,220	2,088,000
23	1,307,020	2,088,000
24	1,305,600	2,088,000
25	1,303,990	2,088,000
26	1,303,030	2,088,000
27	1,305,780	2,088,000
28	1,304,110	2,088,000
29	1,300,820	2,088,000
30	1,306,980	2,088,000
31	1,305,170	3,192,000
<b>Total</b>	<b>26,997,110</b>	<b>46,584,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh)

**January 2008**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,304,310	
2	1,303,090	
3	1,303,740	
4	1,303,480	
5	1,302,400	
6	1,307,090	
7	1,304,600	
8	1,303,570	
9	1,303,290	
10	1,304,920	
11	1,304,200	
12	1,305,630	
13	1,306,290	
14	1,304,890	
15	1,302,860	
16	1,303,840	
17	1,306,510	
18	1,306,550	
19	1,304,300	
20	1,305,530	
21	1,302,520	
22	997,650	
23	1,000,200	
24	598,900	
25	602,340	
26	631,790	
27	658,240	
28	736,450	
29	646,670	
30	506,310	
31	515,540	
Total	34,287,700	0

(in kWh)

**February 2008**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	514,500	
2	508,030	
3	513,920	
4	391,470	
5	382,080	
6	383,400	
7	384,420	
8	0	
9	0	
10	0	
11	0	
12	0	
13	0	
14	725,950	
15	690,440	
16	727,170	
17	1,074,670	
18	0	
19	0	
20	0	
21	0	
22	0	
23	0	
24	0	
25	0	
26	0	
27	0	
28	0	
29	0	
Total	6,296,050	0

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh)

**March 2008**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	0	
2	0	
3	0	
4	0	
5	0	
6	0	
7	0	
8	0	
9	0	
10	0	
11	0	
12	0	
13	0	
14	0	
15	0	
16	0	
17	0	
18	0	
19	0	
20	48,210	
21	929,270	
22	1,303,710	
23	1,307,230	
24	1,308,530	
25	1,307,930	
26	1,303,550	
27	1,304,470	
28	1,301,530	
29	1,304,580	
30	1,305,460	
31	1,305,880	
Total	14,030,350	0

(in kWh)

**April 2008**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,306,230	
2	1,302,360	
3	1,304,170	
4	1,308,130	
5	1,306,210	
6	1,300,680	
7	1,270,700	
8	1,307,530	
9	1,307,760	
10	1,308,550	
11	1,307,460	
12	1,305,360	
13	1,303,420	
14	412,440	
15	0	
16	330,270	
17	661,040	
18	634,680	
19	635,670	
20	634,910	
21	635,440	
22	636,830	
23	637,740	
24	637,640	
25	638,570	
26	637,490	
27	637,220	
28	635,590	
29	636,400	
30	634,180	
Total	26,614,670	0

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh)

**May 2008**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	637,720	
2	638,360	
3	636,170	
4	635,600	
5	634,410	
6	636,290	
7	638,240	
8	636,650	
9	637,580	
10	636,520	
11	635,790	
12	633,340	
13	636,000	
14	618,600	
15	634,410	
16	635,690	
17	635,310	
18	635,140	
19	634,510	
20	620,990	
21	498,150	
22	662,340	
23	792,420	
24	799,310	
25	780,950	
26	655,440	
27	625,690	
28	688,940	
29	687,600	
30	683,620	
31	687,900	
Total	20,249,680	0

(in kWh)

**June 2008**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	688,370	
2	947,320	
3	967,290	
4	1,208,420	
5	1,350,430	
6	1,202,230	
7	1,131,030	
8	1,135,170	
9	1,288,500	
10	1,146,480	
11	1,420,610	
12	1,597,980	
13	1,555,160	
14	1,556,550	
15	1,558,080	
16	1,444,480	
17	1,437,450	
18	1,438,210	
19	1,437,250	
20	1,440,700	
21	1,412,640	
22	1,415,710	
23	1,172,300	
24	1,174,070	
25	1,090,900	
26	1,096,850	
27	1,099,630	
28	1,095,780	
29	1,101,010	
30	1,096,070	
Total	37,706,670	0

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh)

**July 2008**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,093,810	
2	1,099,890	
3	1,099,870	
4	1,721,070	
5	1,608,880	
6	1,664,610	
7	1,381,770	
8	1,372,430	
9	1,488,830	
10	1,487,890	
11	580,150	
12	615,480	
13	1,288,030	
14	1,387,070	
15	1,389,910	
16	1,393,740	
17	1,384,480	
18	1,335,470	
19	1,339,950	
20	1,804,110	
21	1,380,220	
22	1,365,210	
23	1,394,930	
24	1,378,260	
25	1,382,950	
26	1,384,370	
27	1,188,470	
28	1,370,650	
29	1,368,470	
30	1,361,320	
31	1,362,210	
Total	41,474,500	0

(in kWh)

**August 2008**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,358,530	
2	1,356,220	
3	1,380,250	
4	1,148,220	
5	1,028,920	
6	1,032,460	
7	1,031,020	
8	1,027,840	
9	1,023,180	
10	1,112,730	
11	1,032,340	
12	1,030,730	
13	1,073,510	
14	1,041,460	
15	1,041,190	
16	1,043,800	
17	962,670	
18	1,043,080	
19	1,006,920	
20	1,058,140	
21	863,340	
22	1,412,350	
23	940,790	
24	923,380	
25	1,151,600	
26	1,071,030	
27	1,189,280	
28	1,156,840	
29	1,096,180	
30	1,151,430	
31	1,157,240	
Total	33,946,670	0

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh)

**September 2008**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,060,170	
2	1,057,930	
3	1,066,910	
4	1,413,530	
5	1,179,680	
6	1,183,260	
7	1,035,460	
8	1,175,370	
9	1,181,380	
10	1,178,490	
11	1,179,990	
12	390,580	
13	974,300	
14	1,133,710	
15	0	
16	0	
17	0	
18	0	
19	0	
20	0	
21	0	
22	0	
23	0	
24	0	
25	0	
26	0	
27	0	
28	0	
29	850,260	
30	946,840	
Total	17,007,860	0

(in kWh)

**October 2008**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	680,930	
2	947,750	
3	949,270	
4	948,180	
5	950,390	
6	948,840	
7	946,830	
8	949,990	
9	946,280	
10	947,930	
11	933,490	
12	948,480	
13	399,470	
14	405,160	
15	353,790	
16	386,450	
17	389,600	
18	393,370	
19	394,890	
20	393,180	
21	398,870	
22	398,890	
23	406,380	
24	408,660	
25	377,000	
26	0	
27	0	
28	0	
29	233,300	
30	581,410	
31	615,810	
Total	17,634,590	0

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh)

**November 2008**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	583,850	
2	616,010	
3	1,071,770	
4	1,215,340	
5	1,237,980	
6	1,241,190	
7	1,142,850	
8	1,229,770	
9	1,222,620	
10	1,231,840	
11	857,300	
12	850,450	
13	876,370	
14	558,220	
15	898,380	
16	761,290	
17	872,890	
18	849,130	
19	782,080	
20	1,051,870	
21	1,383,270	
22	1,555,680	
23	1,760,140	
24	1,702,440	
25	1,772,230	
26	1,433,550	
27	1,535,660	
28	940,550	
29	918,680	
30	872,050	
Total	33,025,450	0

(in kWh)

**December 2008**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	584,550	
2	194,750	
3	314,440	
4	450,710	
5	441,440	
6	345,920	
7	428,950	
8	319,420	
9	555,990	
10	507,210	
11	562,320	
12	1,356,780	
13	1,359,190	
14	1,290,270	
15	779,580	
16	821,510	
17	690,920	
18	976,830	
19	774,870	
20	842,380	
21	1,817,470	
22	1,818,800	
23	1,762,080	
24	1,829,660	
25	1,830,750	
26	1,837,150	
27	1,836,920	
28	1,840,450	
29	1,845,800	
30	1,843,160	
31	1,817,320	
Total	33,677,590	0

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) January 2009

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	337,884	864,000
2	333,587	864,000
3	334,160	864,000
4	340,351	864,000
5	628,766	1,056,000
6	623,711	1,056,000
7	789,117	1,056,000
8	629,756	1,056,000
9	614,907	1,056,000
10	621,343	1,056,000
11	329,438	1,056,000
12	601,940	1,368,000
13	943,356	1,368,000
14	961,662	1,368,000
15	842,448	1,368,000
16	840,256	1,368,000
17	842,593	1,368,000
18	842,983	1,368,000
19	827,602	1,368,000
20	835,959	1,368,000
21	782,770	1,368,000
22	828,479	1,368,000
23	929,367	1,368,000
24	961,404	1,368,000
25	830,374	1,311,000
26	1,046,240	1,560,000
27	930,920	1,560,000
28	897,171	1,560,000
29	952,847	1,560,000
30	958,088	1,560,000
31	960,945	1,560,000
<b>Total</b>	<b>23,200,424</b>	<b>39,303,000</b>

(in kWh) February 2009

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	940,928	1,560,000
2	960,757	0
3	948,883	0
4	963,976	0
5	966,300	0
6	987,007	0
7	948,121	0
8	945,940	0
9	653,948	0
10	804,641	0
11	1,337,955	0
12	980,718	0
13	955,573	0
14	965,612	0
15	966,200	0
16	813,200	0
17	959,853	0
18	963,787	0
19	960,989	0
20	961,546	0
21	956,983	0
22	962,021	0
23	955,603	0
24	963,012	0
25	1,009,884	0
26	648,923	0
27	857,039	0
28	799,397	0
<b>Total</b>	<b>26,138,795</b>	<b>1,560,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations



**Table 38. Southern Field Division Energy Data**

(in kWh)

**March 2009**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,019,806	1,368,000
2	808,574	0
3	863,671	0
4	876,884	0
5	786,518	0
6	859,594	0
7	830,361	0
8	827,831	0
9	957,369	0
10	881,866	0
11	744,128	0
12	860,355	0
13	834,581	0
14	833,158	0
15	857,858	0
16	856,162	0
17	850,130	0
18	863,760	0
19	888,084	0
20	861,632	0
21	848,696	0
22	822,417	0
23	961,519	0
24	969,260	0
25	970,034	0
26	970,248	0
27	970,666	0
28	969,230	0
29	970,121	0
30	969,748	0
31	969,932	0
<b>Total</b>	<b>27,554,191</b>	<b>1,368,000</b>

(in kWh)

**April 2009**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	781,796	1,512,000
2	564,978	1,512,000
3	947,732	1,512,000
4	946,242	1,512,000
5	946,858	1,512,000
6	520,792	792,000
7	514,836	792,000
8	466,528	792,000
9	619,907	792,000
10	804,641	792,000
11	399,470	792,000
12	516,386	792,000
13	529,494	792,000
14	491,200	792,000
15	487,709	792,000
16	512,120	792,000
17	519,718	792,000
18	473,923	792,000
19	470,551	792,000
20	510,241	792,000
21	434,492	792,000
22	386,532	792,000
23	463,628	792,000
24	506,852	792,000
25	466,312	792,000
26	475,176	792,000
27	918,956	1,440,000
28	937,810	1,440,000
29	935,356	1,440,000
30	938,358	1,440,000
<b>Total</b>	<b>18,211,765</b>	<b>29,952,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh)

**May 2009**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	838,285	1,440,000
2	933,028	1,440,000
3	949,255	1,440,000
4	947,865	3,072,000
5	963,816	3,072,000
6	970,407	2,712,000
7	971,298	2,712,000
8	969,430	2,712,000
9	969,060	2,712,000
10	970,650	2,712,000
11	969,373	1,320,000
12	446,585	1,320,000
13	947,014	1,320,000
14	945,537	2,952,000
15	947,403	1,512,000
16	946,555	1,512,000
17	947,892	1,512,000
18	947,333	2,736,000
19	947,962	2,736,000
20	948,540	2,736,000
21	947,503	2,736,000
22	946,312	216,000
23	946,901	216,000
24	946,469	216,000
25	947,390	1,512,000
26	947,001	1,512,000
27	947,233	1,512,000
28	947,905	1,512,000
29	946,814	2,304,000
30	948,926	2,304,000
31	947,273	2,304,000
<b>Total</b>	<b>28,897,015</b>	<b>60,024,000</b>

(in kWh)

**June 2009**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	946,858	1,992,000
2	947,074	1,992,000
3	958,403	1,992,000
4	971,671	2,472,000
5	972,086	2,472,000
6	971,185	2,472,000
7	972,618	2,472,000
8	971,584	1,992,000
9	972,073	1,992,000
10	804,641	1,512,000
11	972,373	1,512,000
12	971,155	1,512,000
13	973,582	1,512,000
14	972,489	1,512,000
15	973,077	1,392,000
16	525,131	1,392,000
17	948,308	1,392,000
18	948,856	1,392,000
19	948,480	1,392,000
20	947,732	1,392,000
21	946,528	1,392,000
22	947,732	1,512,000
23	946,728	1,512,000
24	945,810	1,512,000
25	947,117	1,512,000
26	947,503	1,512,000
27	947,965	1,512,000
28	946,655	1,512,000
29	946,342	1,512,000
30	946,469	1,512,000
<b>Total</b>	<b>28,306,662</b>	<b>50,760,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **July 2009**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	946,399	1,512,000
2	947,462	1,512,000
3	945,824	1,512,000
4	945,751	1,512,000
5	947,978	1,512,000
6	947,849	1,512,000
7	947,792	1,512,000
8	947,273	1,512,000
9	946,958	1,512,000
10	947,735	1,512,000
11	947,876	1,512,000
12	947,246	1,512,000
13	947,519	1,512,000
14	946,542	1,512,000
15	945,451	1,512,000
16	947,044	1,512,000
17	946,499	1,512,000
18	947,417	1,512,000
19	948,051	1,512,000
20	947,217	2,448,000
21	948,221	2,448,000
22	947,719	2,448,000
23	946,269	2,448,000
24	945,983	2,448,000
25	946,382	2,448,000
26	946,987	2,448,000
27	947,001	1,512,000
28	947,662	1,512,000
29	946,283	1,512,000
30	946,299	1,512,000
31	946,555	1,512,000
<b>Total</b>	<b>29,357,240</b>	<b>53,424,000</b>

(in kWh) **August 2009**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	947,390	1,512,000
2	947,376	1,512,000
3	946,628	1,512,000
4	947,344	1,512,000
5	946,931	1,512,000
6	945,508	1,512,000
7	947,160	1,512,000
8	945,724	1,512,000
9	943,483	1,512,000
10	804,641	1,512,000
11	946,412	1,512,000
12	945,794	1,512,000
13	945,824	1,512,000
14	945,208	1,512,000
15	945,880	1,512,000
16	940,024	1,512,000
17	937,853	1,512,000
18	941,371	1,512,000
19	961,435	1,512,000
20	960,628	1,512,000
21	947,719	1,512,000
22	946,083	1,512,000
23	947,876	1,512,000
24	947,419	1,512,000
25	948,235	1,512,000
26	947,160	1,512,000
27	947,303	1,512,000
28	949,428	1,512,000
29	949,112	1,512,000
30	949,358	1,512,000
31	947,387	1,512,000
<b>Total</b>	<b>29,358,374</b>	<b>46,872,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh)

**September 2009**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	948,008	1,512,000
2	948,653	1,512,000
3	948,321	1,512,000
4	948,078	1,512,000
5	947,273	1,512,000
6	948,267	1,512,000
7	949,312	1,512,000
8	947,433	1,512,000
9	948,151	1,512,000
10	948,723	1,512,000
11	947,117	1,512,000
12	947,533	1,512,000
13	947,662	1,512,000
14	948,291	1,512,000
15	948,094	1,512,000
16	526,322	1,512,000
17	0	1,512,000
18	0	696,000
19	0	696,000
20	0	696,000
21	0	960,000
22	0	960,000
23	0	960,000
24	0	2,544,000
25	208,832	1,944,000
26	663,012	1,944,000
27	662,926	1,944,000
28	659,264	1,992,000
29	661,416	1,872,000
30	306,477	1,872,000
<b>Total</b>	<b>17,909,165</b>	<b>44,784,000</b>

(in kWh)

**October 2009**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	661,173	1,872,000
2	661,433	1,872,000
3	662,494	1,872,000
4	661,087	1,872,000
5	659,853	2,016,000
6	664,821	2,016,000
7	662,523	1,968,000
8	660,671	1,968,000
9	661,476	1,968,000
10	804,641	1,968,000
11	663,341	1,968,000
12	661,144	2,016,000
13	659,939	2,016,000
14	660,023	1,704,000
15	662,367	1,704,000
16	660,498	2,232,000
17	662,437	2,232,000
18	657,439	2,232,000
19	0	960,000
20	0	960,000
21	0	960,000
22	0	960,000
23	0	960,000
24	0	960,000
25	0	960,000
26	250,862	1,824,000
27	665,194	1,824,000
28	663,571	1,824,000
29	663,341	1,824,000
30	662,407	1,824,000
31	663,398	1,824,000
<b>Total</b>	<b>15,472,939</b>	<b>53,160,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **November 2009**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	693,357	1,824,000
2	661,551	2,016,000
3	662,226	2,016,000
4	663,782	2,016,000
5	663,981	2,016,000
6	663,949	2,016,000
7	662,882	2,016,000
8	660,585	2,016,000
9	660,852	2,016,000
10	662,534	2,016,000
11	664,924	2,016,000
12	662,162	2,016,000
13	662,777	2,016,000
14	665,410	2,016,000
15	659,753	2,016,000
16	661,098	2,016,000
17	663,107	2,016,000
18	662,645	2,016,000
19	665,901	2,016,000
20	665,080	2,016,000
21	664,870	2,016,000
22	660,120	2,016,000
23	663,738	2,016,000
24	662,091	2,016,000
25	662,175	2,016,000
26	663,771	2,016,000
27	663,209	2,016,000
28	661,678	2,016,000
29	663,922	2,016,000
30	661,435	2,016,000
<b>Total</b>	<b>19,915,565</b>	<b>60,288,000</b>

(in kWh) **December 2009**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	661,875	2,016,000
2	661,271	2,016,000
3	659,181	2,016,000
4	663,296	2,016,000
5	660,550	2,016,000
6	660,612	2,016,000
7	660,477	2,016,000
8	661,052	2,016,000
9	662,861	2,016,000
10	804,641	2,016,000
11	491,962	2,016,000
12	620,671	2,016,000
13	663,366	2,016,000
14	662,999	2,016,000
15	662,426	2,016,000
16	658,179	2,016,000
17	661,146	2,016,000
18	661,487	2,016,000
19	663,314	2,016,000
20	662,135	2,016,000
21	564,926	2,016,000
22	658,997	2,016,000
23	631,298	2,016,000
24	660,822	2,016,000
25	664,330	2,016,000
26	661,724	2,016,000
27	662,583	2,016,000
28	660,903	2,016,000
29	661,298	2,016,000
30	662,820	2,016,000
31	661,851	2,016,000
<b>Total</b>	<b>20,173,174</b>	<b>62,496,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh)

**January 2010**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	665,777	2,016,000
2	663,692	2,016,000
3	661,370	2,016,000
4	664,200	2,016,000
5	663,144	2,016,000
6	662,418	2,016,000
7	664,646	2,016,000
8	662,712	2,016,000
9	512,271	2,016,000
10	663,649	2,016,000
11	661,011	2,016,000
12	221,540	2,016,000
13	207,727	2,016,000
14	663,981	2,016,000
15	662,772	2,016,000
16	661,654	2,016,000
17	663,422	2,016,000
18	663,935	1,056,000
19	663,325	816,000
20	661,794	816,000
21	662,405	816,000
22	663,377	816,000
23	661,141	816,000
24	661,438	816,000
25	663,231	1,056,000
26	661,700	1,056,000
27	662,199	1,056,000
28	516,534	1,056,000
29	663,233	1,056,000
30	663,117	1,056,000
31	663,590	1,056,000
<b>Total</b>	<b>19,357,007</b>	<b>47,616,000</b>

(in kWh)

**February 2010**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	664,565	1,056,000
2	659,027	1,056,000
3	660,099	1,056,000
4	662,572	1,056,000
5	661,109	1,056,000
6	662,591	1,056,000
7	662,283	1,056,000
8	664,608	1,056,000
9	664,818	1,056,000
10	664,235	1,056,000
11	664,686	1,056,000
12	661,136	1,056,000
13	661,611	1,056,000
14	661,665	1,056,000
15	663,449	1,056,000
16	663,215	1,056,000
17	662,126	1,056,000
18	664,230	1,056,000
19	663,865	1,056,000
20	662,291	1,056,000
21	662,440	1,056,000
22	480,592	528,000
23	350,519	528,000
24	350,654	528,000
25	354,380	528,000
26	331,393	528,000
27	326,678	528,000
28	323,557	528,000
<b>Total</b>	<b>16,434,392</b>	<b>25,872,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh)

**March 2010**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	324,049	528,000
2	327,229	528,000
3	327,038	528,000
4	328,703	528,000
5	330,053	528,000
6	331,601	528,000
7	331,511	528,000
8	663,074	1,056,000
9	663,474	1,056,000
10	662,386	1,056,000
11	330,367	528,000
12	330,518	528,000
13	329,908	528,000
14	316,000	506,000
15	329,789	528,000
16	329,800	528,000
17	329,403	528,000
18	331,085	528,000
19	331,204	528,000
20	331,239	528,000
21	332,165	528,000
22	326,484	528,000
23	320,973	528,000
24	329,100	528,000
25	327,826	528,000
26	328,274	528,000
27	328,928	528,000
28	332,084	528,000
29	332,481	528,000
30	330,472	528,000
31	328,439	528,000
<b>Total</b>	<b>11,195,653</b>	<b>17,930,000</b>

(in kWh)

**April 2010**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	328,304	528,000
2	327,875	528,000
3	327,783	528,000
4	326,630	528,000
5	327,278	528,000
6	332,926	528,000
7	334,195	528,000
8	339,352	528,000
9	335,275	528,000
10	341,469	528,000
11	336,342	528,000
12	336,099	528,000
13	333,658	528,000
14	332,799	528,000
15	331,250	528,000
16	335,305	528,000
17	334,436	528,000
18	335,370	528,000
19	335,208	528,000
20	334,457	528,000
21	333,874	528,000
22	334,341	528,000
23	334,174	528,000
24	334,708	528,000
25	336,191	528,000
26	332,443	528,000
27	334,074	528,000
28	332,240	528,000
29	340,454	528,000
30	333,731	528,000
<b>Total</b>	<b>10,012,237</b>	<b>15,840,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **May 2010**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	332,249	528,000
2	333,998	528,000
3	334,174	528,000
4	334,814	528,000
5	334,433	528,000
6	332,081	528,000
7	330,607	528,000
8	335,345	528,000
9	336,147	528,000
10	333,739	528,000
11	338,666	528,000
12	332,195	528,000
13	333,847	528,000
14	330,604	528,000
15	335,829	528,000
16	338,216	528,000
17	637,559	1,056,000
18	557,018	1,056,000
19	639,895	1,056,000
20	639,662	1,056,000
21	638,272	1,056,000
22	639,641	1,056,000
23	639,579	1,056,000
24	640,019	1,056,000
25	639,317	1,056,000
26	638,766	1,056,000
27	638,483	1,056,000
28	637,516	1,056,000
29	638,550	1,056,000
30	641,131	1,056,000
31	641,412	984,000
<b>Total</b>	<b>14,853,761</b>	<b>24,216,000</b>

(in kWh) **June 2010**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	636,258	984,000
2	636,104	984,000
3	639,244	984,000
4	640,370	984,000
5	577,797	984,000
6	639,903	984,000
7	638,550	984,000
8	639,338	984,000
9	637,241	984,000
10	638,677	984,000
11	638,342	984,000
12	640,216	984,000
13	638,871	984,000
14	639,919	984,000
15	638,920	984,000
16	635,507	984,000
17	638,010	984,000
18	639,384	984,000
19	635,715	984,000
20	638,688	984,000
21	689,351	984,000
22	624,151	984,000
23	682,368	984,000
24	662,845	984,000
25	662,753	984,000
26	661,649	984,000
27	660,153	984,000
28	661,916	1,056,000
29	661,538	1,056,000
30	661,173	1,056,000
<b>Total</b>	<b>19,334,948</b>	<b>29,736,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations



**Table 38. Southern Field Division Energy Data**

(in kWh) July 2010

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	764,848	1,296,000
2	630,237	1,296,000
3	687,188	1,296,000
4	794,875	1,296,000
5	798,298	1,296,000
6	797,918	1,296,000
7	860,239	1,296,000
8	855,962	1,296,000
9	894,224	1,296,000
10	794,426	1,296,000
11	795,706	1,296,000
12	796,303	1,296,000
13	797,243	1,296,000
14	793,603	1,296,000
15	1,373,425	2,304,000
16	1,421,901	2,304,000
17	1,470,404	2,304,000
18	1,405,355	2,304,000
19	969,953	1,560,000
20	947,719	1,560,000
21	949,803	1,560,000
22	803,093	1,296,000
23	819,574	1,296,000
24	818,348	1,296,000
25	812,689	1,296,000
26	816,283	1,296,000
27	812,471	1,296,000
28	792,045	1,296,000
29	810,721	1,296,000
30	855,946	1,296,000
31	884,042	1,296,000
<b>Total</b>	<b>27,824,842</b>	<b>45,000,000</b>

(in kWh) August 2010

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	862,834	1,296,000
2	1,093,190	1,560,000
3	1,027,482	1,560,000
4	1,026,016	1,560,000
5	1,016,958	1,632,000
6	1,063,819	1,632,000
7	1,038,682	1,632,000
8	639,379	1,632,000
9	1,015,737	1,512,000
10	1,020,986	1,512,000
11	1,011,158	1,512,000
12	641,828	1,512,000
13	1,115,529	1,512,000
14	1,483,804	1,512,000
15	1,491,985	2,448,000
16	1,449,843	2,448,000
17	1,421,045	2,448,000
18	1,418,078	2,448,000
19	1,415,726	2,448,000
20	1,339,246	2,448,000
21	1,448,804	2,448,000
22	1,403,538	2,448,000
23	970,161	1,512,000
24	977,837	1,512,000
25	945,675	1,512,000
26	948,907	1,512,000
27	634,816	1,512,000
28	973,412	1,512,000
29	981,123	1,512,000
30	936,900	1,512,000
31	932,410	1,512,000
<b>Total</b>	<b>33,746,909</b>	<b>54,768,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **September 2010**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	923,360	1,512,000
2	1,093,786	1,752,000
3	1,096,616	1,752,000
4	1,096,111	1,752,000
5	1,097,960	1,752,000
6	1,098,025	1,752,000
7	1,095,063	1,752,000
8	1,096,646	1,752,000
9	1,096,324	1,752,000
10	1,171,930	2,328,000
11	1,450,659	2,328,000
12	1,452,603	2,328,000
13	933,566	2,328,000
14	1,235,139	2,328,000
15	953,540	1,512,000
16	960,973	1,512,000
17	962,666	1,512,000
18	962,836	1,512,000
19	964,980	1,512,000
20	1,078,026	1,752,000
21	1,093,700	1,752,000
22	1,081,104	1,752,000
23	1,078,151	1,752,000
24	1,077,505	1,752,000
25	1,076,517	1,752,000
26	1,083,105	1,752,000
27	1,085,333	1,752,000
28	1,100,820	1,752,000
29	1,115,151	1,752,000
30	1,080,664	1,752,000
<b>Total</b>	<b>32,692,858</b>	<b>54,000,000</b>

(in kWh) **October 2010**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,145,645	1,752,000
2	1,477,329	1,752,000
3	1,480,129	1,752,000
4	1,481,701	2,160,000
5	1,480,785	2,160,000
6	1,482,667	2,160,000
7	1,484,109	2,160,000
8	1,481,055	2,160,000
9	1,479,800	2,880,000
10	1,081,393	2,880,000
11	627,626	1,032,000
12	709,722	1,032,000
13	624,189	1,032,000
14	628,241	1,032,000
15	624,291	1,032,000
16	624,875	1,032,000
17	631,919	1,032,000
18	1,565,228	2,520,000
19	1,566,038	2,520,000
20	1,565,120	2,520,000
21	1,564,070	2,520,000
22	1,540,415	2,520,000
23	1,586,968	2,520,000
24	1,587,117	2,520,000
25	1,586,264	2,520,000
26	1,575,177	2,520,000
27	1,516,220	2,520,000
28	1,497,425	2,520,000
29	1,494,569	2,520,000
30	1,493,829	2,520,000
31	1,495,176	2,520,000
<b>Total</b>	<b>40,179,092</b>	<b>64,320,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh)

**November 2010**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,495,622	1,200,000
2	1,552,068	1,200,000
3	317,112	1,200,000
4	0	1,200,000
5	0	1,200,000
6	291,492	1,200,000
7	1,381,074	1,200,000
8	676,669	1,032,000
9	655,403	1,032,000
10	655,374	1,032,000
11	655,865	1,032,000
12	655,987	1,032,000
13	655,466	1,032,000
14	655,430	1,032,000
15	655,790	1,032,000
16	653,068	1,032,000
17	653,627	1,032,000
18	654,566	1,032,000
19	652,253	1,032,000
20	652,263	1,032,000
21	654,329	1,032,000
22	653,808	1,032,000
23	653,017	1,032,000
24	652,658	1,032,000
25	653,621	1,032,000
26	655,069	1,032,000
27	654,431	1,032,000
28	654,407	1,032,000
29	864,953	1,416,000
30	858,722	1,416,000
<b>Total</b>	<b>20,524,142</b>	<b>32,904,000</b>

(in kWh)

**December 2010**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	878,048	1,416,000
2	957,920	1,416,000
3	864,888	1,416,000
4	780,921	1,416,000
5	875,248	1,416,000
6	868,595	1,416,000
7	865,931	1,416,000
8	872,829	1,416,000
9	686,321	1,416,000
10	883,575	1,416,000
11	910,391	1,416,000
12	866,484	1,416,000
13	859,896	1,416,000
14	1,230,671	1,416,000
15	1,569,027	1,416,000
16	1,224,188	1,416,000
17	651,977	1,416,000
18	653,292	2,880,000
19	383,643	2,880,000
20	664,062	1,272,000
21	664,716	1,272,000
22	663,890	1,272,000
23	662,683	1,272,000
24	663,544	1,272,000
25	660,466	1,272,000
26	663,790	1,272,000
27	318,605	504,000
28	361,741	504,000
29	323,603	504,000
30	302,138	504,000
31	301,323	504,000
<b>Total</b>	<b>23,134,405</b>	<b>41,256,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) January 2011

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	300,110	504,000
2	300,839	504,000
3	375	0
4	389	0
5	298,285	0
6	237,160	2,880,000
7	897,920	2,880,000
8	922,779	2,880,000
9	921,715	2,880,000
10	921,632	2,880,000
11	294,908	288,000
12	896,651	2,880,000
13	897,907	2,880,000
14	638,183	960,000
15	637,411	960,000
16	638,796	960,000
17	230,623	288,000
18	189,842	288,000
19	189,540	288,000
20	189,880	288,000
21	189,311	288,000
22	190,021	288,000
23	191,724	288,000
24	195,761	288,000
25	192,850	288,000
26	191,581	288,000
27	182,369	288,000
28	183,484	0
29	187,242	0
30	199,778	0
31	634,408	0
<b>Total</b>	<b>12,143,474</b>	<b>27,504,000</b>

(in kWh) February 2011

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	637,554	0
2	631,881	0
3	707,805	1,080,000
4	639,927	1,080,000
5	658,020	1,080,000
6	658,657	1,080,000
7	625,990	1,080,000
8	639,587	1,080,000
9	637,151	1,080,000
10	635,294	1,080,000
11	599,527	1,080,000
12	599,837	1,080,000
13	638,353	1,080,000
14	651,019	1,080,000
15	649,612	1,080,000
16	724,432	1,080,000
17	910,354	1,560,000
18	910,111	1,792,000
19	909,279	2,256,000
20	909,584	2,256,000
21	912,057	2,376,000
22	912,489	2,376,000
23	912,038	2,376,000
24	910,950	2,376,000
25	911,733	1,440,000
26	910,286	1,440,000
27	906,134	1,440,000
28	317,053	480,000
<b>Total</b>	<b>20,666,713</b>	<b>37,288,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) March 2011

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	299,776	480,000
2	302,773	480,000
3	306,882	480,000
4	307,209	480,000
5	308,885	480,000
6	304,549	480,000
7	340,500	600,000
8	347,255	600,000
9	939,889	1,560,000
10	956,046	1,560,000
11	955,660	1,560,000
12	955,830	1,560,000
13	915,897	1,495,000
14	605,159	960,000
15	604,176	960,000
16	604,738	960,000
17	670,189	960,000
18	945,926	1,536,000
19	946,404	1,536,000
20	528,530	1,536,000
21	475,880	792,000
22	467,678	1,536,000
23	944,706	1,536,000
24	941,234	1,536,000
25	945,554	1,536,000
26	941,852	1,536,000
27	934,332	1,536,000
28	948,267	1,536,000
29	945,262	1,536,000
30	868,247	1,536,000
31	868,509	1,536,000
<b>Total</b>	<b>21,427,791</b>	<b>36,415,000</b>

(in kWh) April 2011

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	871,274	1,536,000
2	865,874	1,536,000
3	432,934	1,536,000
4	237,560	384,000
5	237,503	384,000
6	241,388	384,000
7	241,599	384,000
8	201,825	384,000
9	201,833	384,000
10	242,285	384,000
11	281,332	480,000
12	280,865	480,000
13	359,716	480,000
14	278,362	480,000
15	318,373	480,000
16	317,091	480,000
17	278,975	480,000
18	945,921	1,536,000
19	945,883	1,536,000
20	948,124	1,536,000
21	946,758	1,536,000
22	942,330	1,536,000
23	947,703	1,536,000
24	945,491	1,536,000
25	947,776	1,536,000
26	951,302	1,536,000
27	948,669	1,536,000
28	949,541	1,536,000
29	948,534	1,536,000
30	951,658	1,536,000
<b>Total</b>	<b>18,208,476</b>	<b>30,624,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) May 2011

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	948,248	1,536,000
2	357,696	576,000
3	354,923	576,000
4	352,820	576,000
5	353,525	576,000
6	349,942	576,000
7	350,889	576,000
8	348,230	576,000
9	420,668	696,000
10	426,719	696,000
11	438,183	696,000
12	419,097	696,000
13	430,550	696,000
14	471,134	696,000
15	434,184	696,000
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	591,705	960,000
22	593,384	960,000
23	595,615	960,000
24	636,379	960,000
25	633,571	960,000
26	633,007	960,000
27	629,915	960,000
28	593,946	960,000
29	591,216	960,000
30	590,882	960,000
31	593,271	960,000
<b>Total</b>	<b>13,139,699</b>	<b>21,000,000</b>

(in kWh) June 2011

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	941,487	1,536,000
2	944,317	1,536,000
3	942,257	1,536,000
4	945,043	1,536,000
5	941,790	1,536,000
6	946,706	1,536,000
7	945,346	1,536,000
8	944,892	1,536,000
9	938,709	1,536,000
10	937,159	1,536,000
11	940,942	1,536,000
12	945,983	1,536,000
13	937,680	1,536,000
14	939,622	1,536,000
15	940,928	1,536,000
16	934,554	1,536,000
17	943,153	1,536,000
18	955,503	1,536,000
19	955,265	1,536,000
20	949,358	1,536,000
21	945,786	1,536,000
22	936,471	1,536,000
23	942,165	1,536,000
24	926,921	1,536,000
25	918,651	1,536,000
26	922,493	1,536,000
27	930,363	1,152,000
28	879,206	1,152,000
29	622,949	1,152,000
30	620,595	1,152,000
<b>Total</b>	<b>27,516,294</b>	<b>44,544,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) July 2011

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	657,858	1,152,000
2	766,730	1,152,000
3	494,262	1,152,000
4	678	768,000
5	0	0
6	69,514	0
7	206,798	0
8	885,195	1,488,000
9	895,757	1,488,000
10	904,851	1,488,000
11	885,503	1,488,000
12	864,734	1,488,000
13	868,196	1,488,000
14	874,919	1,488,000
15	870,056	1,488,000
16	879,998	1,488,000
17	882,684	1,488,000
18	881,615	1,488,000
19	872,041	1,488,000
20	872,267	1,488,000
21	872,681	1,488,000
22	872,983	1,488,000
23	872,907	1,488,000
24	873,682	1,488,000
25	872,581	1,488,000
26	872,400	1,488,000
27	871,601	1,488,000
28	870,129	1,488,000
29	866,587	1,488,000
30	865,731	1,488,000
31	869,767	1,488,000
<b>Total</b>	<b>23,214,703</b>	<b>39,936,000</b>

(in kWh) August 2011

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	875,553	1,488,000
2	874,576	1,488,000
3	872,408	1,488,000
4	867,794	1,488,000
5	868,010	1,488,000
6	868,998	1,488,000
7	869,935	1,488,000
8	865,307	1,488,000
9	864,324	1,488,000
10	863,476	1,488,000
11	862,037	1,488,000
12	861,570	1,488,000
13	861,721	1,488,000
14	863,295	1,488,000
15	864,602	1,488,000
16	456,940	744,000
17	874,041	1,488,000
18	849,015	1,488,000
19	887,309	1,488,000
20	933,935	1,488,000
21	935,634	1,488,000
22	880,027	1,416,000
23	947,400	1,416,000
24	953,562	1,416,000
25	941,501	1,416,000
26	927,156	1,416,000
27	911,228	1,416,000
28	914,180	1,416,000
29	922,693	1,488,000
30	920,808	1,488,000
31	921,135	1,488,000
<b>Total</b>	<b>27,180,168</b>	<b>44,880,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **September 2011**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	922,169	1,488,000
2	921,939	1,488,000
3	896,881	1,488,000
4	870,280	1,488,000
5	872,678	1,488,000
6	874,109	1,488,000
7	872,743	1,488,000
8	870,707	1,488,000
9	880,640	1,488,000
10	914,906	1,488,000
11	879,115	1,488,000
12	899,951	1,416,000
13	913,883	1,416,000
14	903,285	1,416,000
15	921,869	1,416,000
16	919,526	1,416,000
17	902,019	1,416,000
18	913,264	1,416,000
19	890,544	1,440,000
20	907,875	1,440,000
21	903,636	1,440,000
22	909,519	1,440,000
23	915,484	1,440,000
24	910,872	1,440,000
25	893,184	1,440,000
26	907,416	1,440,000
27	910,880	1,440,000
28	909,743	1,440,000
29	908,709	1,440,000
30	902,081	1,440,000
<b>Total</b>	<b>27,019,904</b>	<b>43,560,000</b>

(in kWh) **October 2011**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	892,239	1,440,000
2	895,347	1,440,000
3	189,726	456,000
4	0	456,000
5	0	456,000
6	0	456,000
7	268,909	456,000
8	890,452	456,000
9	867,850	456,000
10	866,165	1,440,000
11	877,597	1,440,000
12	891,159	1,440,000
13	783,103	1,440,000
14	765,863	1,440,000
15	875,073	1,440,000
16	790,698	1,440,000
17	195,653	912,000
18	0	912,000
19	0	912,000
20	0	912,000
21	0	912,000
22	0	912,000
23	0	912,000
24	383,643	1,440,000
25	897,207	1,440,000
26	898,933	1,440,000
27	894,170	1,440,000
28	895,347	1,440,000
29	895,747	480,000
30	896,108	480,000
31	896,127	816,000
<b>Total</b>	<b>16,707,117</b>	<b>31,512,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations



**Table 38. Southern Field Division Energy Data**

(in kWh) **November 2011**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	896,470	816,000
2	635,267	816,000
3	632,750	816,000
4	630,933	816,000
5	895,474	816,000
6	935,496	816,000
7	847,268	1,392,000
8	880,135	1,392,000
9	895,082	1,392,000
10	897,002	1,392,000
11	898,036	1,392,000
12	896,805	1,392,000
13	896,972	1,392,000
14	519,264	816,000
15	523,444	816,000
16	597,140	816,000
17	596,784	816,000
18	595,893	816,000
19	448,486	816,000
20	412,925	816,000
21	620,228	816,000
22	598,482	816,000
23	600,399	816,000
24	536,352	816,000
25	533,010	816,000
26	533,609	816,000
27	489,162	816,000
28	525,906	816,000
29	517,053	816,000
30	610,548	816,000
<b>Total</b>	<b>20,096,375</b>	<b>28,512,000</b>

(in kWh) **December 2011**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	596,608	816,000
2	596,919	816,000
3	446,526	816,000
4	415,314	816,000
5	600,099	816,000
6	525,992	816,000
7	668,393	816,000
8	597,815	816,000
9	674,209	816,000
10	339,360	816,000
11	263,496	816,000
12	673,272	816,000
13	671,828	816,000
14	637,724	816,000
15	634,460	816,000
16	670,985	816,000
17	225,056	816,000
18	337,865	816,000
19	711,180	984,000
20	745,262	984,000
21	745,195	984,000
22	747,617	984,000
23	487,898	984,000
24	490,312	984,000
25	338,434	984,000
26	299,859	816,000
27	300,869	816,000
28	599,181	816,000
29	629,343	816,000
30	634,770	816,000
31	603,455	816,000
<b>Total</b>	<b>16,909,295</b>	<b>26,472,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) January 2012

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	596,627	816,000
2	600,008	816,000
3	526,821	816,000
4	526,916	816,000
5	528,269	816,000
6	899,645	816,000
7	898,941	816,000
8	898,819	816,000
9	897,264	1,416,000
10	899,357	1,416,000
11	899,672	1,416,000
12	912,344	1,416,000
13	899,578	1,416,000
14	899,222	1,416,000
15	898,487	1,416,000
16	972,300	1,416,000
17	926,600	1,416,000
18	897,475	1,416,000
19	895,712	1,416,000
20	866,546	1,416,000
21	863,487	1,416,000
22	761,932	1,416,000
23	955,708	1,416,000
24	838,704	1,416,000
25	1,781,630	1,416,000
26	939,962	1,416,000
27	866,325	1,416,000
28	793,481	1,416,000
29	369,271	1,416,000
30	1,045,918	1,728,000
31	937,902	1,728,000
<b>Total</b>	<b>26,494,919</b>	<b>39,720,000</b>

(in kWh) February 2012

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	968,895	1,728,000
2	1,012,465	1,728,000
3	982,765	1,728,000
4	1,132,618	1,728,000
5	1,201,789	1,728,000
6	370,364	576,000
7	368,969	576,000
8	380,425	576,000
9	378,227	576,000
10	362,718	576,000
11	362,354	576,000
12	377,374	576,000
13	377,390	576,000
14	374,474	576,000
15	376,488	576,000
16	415,319	576,000
17	403,591	576,000
18	375,600	576,000
19	262,562	576,000
20	373,950	576,000
21	375,581	576,000
22	377,303	576,000
23	377,079	576,000
24	382,115	576,000
25	189,051	576,000
26	260,223	576,000
27	603,896	1,152,000
28	515,160	1,152,000
29	561,819	1,152,000
<b>Total</b>	<b>14,500,561</b>	<b>24,192,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) March 2012

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	242,997	1,152,000
2	893,884	1,152,000
3	1,014,690	1,152,000
4	922,952	1,152,000
5	416,993	528,000
6	382,663	528,000
7	456,924	528,000
8	239,833	528,000
9	393,123	528,000
10	301,147	528,000
11	0	506,000
12	715,454	1,680,000
13	1,060,641	1,680,000
14	1,053,041	1,680,000
15	1,194,418	1,680,000
16	1,267,547	1,680,000
17	1,232,712	1,680,000
18	611,304	1,680,000
19	1,121,639	1,968,000
20	1,206,500	1,968,000
21	1,293,019	1,968,000
22	1,210,415	1,968,000
23	1,210,947	1,968,000
24	1,209,163	1,968,000
25	911,355	1,968,000
26	528,849	1,200,000
27	712,673	1,200,000
28	841,223	1,200,000
29	760,979	1,200,000
30	760,250	1,200,000
31	686,840	1,200,000
<b>Total</b>	<b>24,854,175</b>	<b>41,018,000</b>

(in kWh) April 2012

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	642,373	1,200,000
2	805,297	1,200,000
3	823,136	1,200,000
4	785,770	1,200,000
5	729,548	1,200,000
6	759,329	1,200,000
7	856,840	1,200,000
8	420,150	1,200,000
9	986,858	1,392,000
10	790,908	1,392,000
11	709,665	1,392,000
12	744,185	1,392,000
13	833,431	1,392,000
14	836,371	1,392,000
15	685,284	1,392,000
16	870,745	1,392,000
17	856,778	1,392,000
18	855,527	1,392,000
19	1,103,212	1,392,000
20	1,104,249	1,392,000
21	1,473,514	3,048,000
22	1,422,206	3,048,000
23	1,816,776	3,048,000
24	1,814,030	3,048,000
25	1,810,112	3,048,000
26	1,808,833	3,048,000
27	1,810,436	3,048,000
28	1,809,645	3,048,000
29	1,810,388	3,048,000
30	1,460,911	2,472,000
<b>Total</b>	<b>33,236,506</b>	<b>56,208,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **May 2012**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,457,509	2,472,000
2	1,459,571	2,472,000
3	1,463,068	2,472,000
4	1,444,554	2,472,000
5	1,459,658	2,472,000
6	1,439,878	2,472,000
7	1,372,891	2,136,000
8	1,320,705	2,136,000
9	1,259,110	2,136,000
10	1,242,205	2,136,000
11	1,248,942	2,136,000
12	1,246,639	2,136,000
13	1,119,482	2,136,000
14	1,371,781	2,544,000
15	1,537,118	2,544,000
16	1,324,404	2,544,000
17	1,390,006	2,544,000
18	1,461,237	2,544,000
19	1,467,383	2,544,000
20	1,481,911	2,544,000
21	1,463,608	2,544,000
22	1,474,027	2,544,000
23	1,413,612	2,544,000
24	1,429,604	2,544,000
25	1,427,981	2,544,000
26	1,430,897	2,544,000
27	1,434,618	2,544,000
28	1,192,101	2,400,000
29	1,212,999	2,400,000
30	1,241,849	2,400,000
31	1,250,105	2,400,000
<b>Total</b>	<b>42,539,453</b>	<b>75,000,000</b>

(in kWh) **June 2012**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,247,719	2,400,000
2	1,249,852	2,400,000
3	1,249,098	2,400,000
4	1,206,827	1,968,000
5	1,099,724	1,968,000
6	1,133,636	1,968,000
7	1,168,582	1,968,000
8	1,154,004	1,968,000
9	1,169,913	1,968,000
10	1,133,185	1,968,000
11	759,575	1,320,000
12	759,613	1,320,000
13	878,558	1,320,000
14	762,342	1,320,000
15	754,645	1,320,000
16	744,998	1,320,000
17	748,073	1,320,000
18	778,183	1,320,000
19	645,300	1,320,000
20	808,310	1,320,000
21	797,081	1,320,000
22	793,703	1,320,000
23	798,908	1,320,000
24	799,961	1,320,000
25	796,395	1,440,000
26	832,367	1,440,000
27	865,342	1,440,000
28	911,336	1,440,000
29	873,285	1,440,000
30	877,676	1,440,000
<b>Total</b>	<b>27,798,188</b>	<b>48,096,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) July 2012

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	891,648	1,440,000
2	881,933	1,440,000
3	878,561	1,440,000
4	844,231	1,440,000
5	840,634	1,440,000
6	843,329	1,440,000
7	842,130	1,440,000
8	845,227	1,440,000
9	835,707	1,440,000
10	820,773	1,440,000
11	797,302	1,440,000
12	780,805	1,440,000
13	790,171	1,440,000
14	783,918	1,440,000
15	788,219	1,440,000
16	793,001	1,440,000
17	798,598	1,440,000
18	834,114	1,440,000
19	910,994	1,440,000
20	947,022	1,440,000
21	985,597	1,440,000
22	901,730	1,440,000
23	1,225,395	2,016,000
24	1,155,778	2,016,000
25	1,190,344	2,016,000
26	1,283,507	2,016,000
27	1,215,062	2,016,000
28	1,215,375	2,016,000
29	1,223,573	2,016,000
30	1,272,329	2,160,000
31	1,319,603	2,160,000
<b>Total</b>	<b>29,736,609</b>	<b>50,112,000</b>

(in kWh) August 2012

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,335,909	2,160,000
2	1,367,531	2,160,000
3	1,370,223	2,160,000
4	1,364,021	2,160,000
5	1,325,705	2,160,000
6	1,326,872	2,016,000
7	1,065,636	2,016,000
8	644,325	1,340,000
9	618,146	1,288,000
10	617,069	1,252,000
11	610,797	1,248,000
12	591,578	1,248,000
13	610,513	1,248,000
14	684,736	1,248,000
15	731,176	1,248,000
16	722,056	1,248,000
17	722,142	1,248,000
18	459,146	1,248,000
19	755,231	1,248,000
20	977,640	1,518,000
21	977,549	1,680,000
22	963,203	1,680,000
23	993,495	1,680,000
24	991,289	1,680,000
25	1,005,445	1,680,000
26	994,683	1,680,000
27	1,254,266	2,112,000
28	1,253,702	2,112,000
29	1,252,004	2,112,000
30	1,251,161	2,112,000
31	1,240,952	2,112,000
<b>Total</b>	<b>30,078,200</b>	<b>52,102,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **September 2012**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,259,391	2,112,000
2	1,233,131	2,112,000
3	1,392,401	2,400,000
4	1,319,077	2,400,000
5	354,178	2,400,000
6	1,391,348	2,400,000
7	1,289,615	1,728,000
8	1,321,407	1,728,000
9	1,102,451	1,728,000
10	1,204,705	1,968,000
11	1,220,918	1,968,000
12	1,177,073	1,968,000
13	1,135,337	1,968,000
14	1,173,606	1,968,000
15	1,174,889	1,968,000
16	1,177,848	1,968,000
17	1,063,287	1,824,000
18	568,129	1,824,000
19	0	1,824,000
20	0	48,000
21	300,443	0
22	806,458	0
23	424,761	0
24	1,044,841	1,968,000
25	1,802,388	3,048,000
26	1,219,163	2,064,000
27	1,143,110	2,064,000
28	1,244,581	2,064,000
29	1,217,273	2,064,000
30	1,218,553	2,064,000
<b>Total</b>	<b>30,980,359</b>	<b>53,640,000</b>

(in kWh) **October 2012**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	0	889,000
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	1,397,000
8	1,216,895	3,048,000
9	1,172,497	1,524,000
10	299,768	0
11	0	0
12	463,115	889,000
13	1,819,633	3,048,000
14	1,805,423	3,048,000
15	297,524	864,000
16	300,559	864,000
17	317,596	864,000
18	300,173	864,000
19	413,232	864,000
20	417,452	864,000
21	653,346	864,000
22	1,508,833	2,000,000
23	1,481,468	2,400,000
24	1,479,870	2,400,000
25	1,504,570	2,400,000
26	1,477,356	2,400,000
27	1,478,058	2,400,000
28	1,482,373	2,400,000
29	1,804,081	2,832,000
30	1,804,064	2,832,000
31	1,806,635	2,832,000
<b>Total</b>	<b>25,304,519</b>	<b>44,787,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **November 2012**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,657,770	2,832,000
2	1,652,684	2,832,000
3	1,655,745	2,832,000
4	1,732,396	2,832,000
5	1,804,858	2,832,000
6	1,806,338	2,832,000
7	1,804,893	2,832,000
8	1,803,014	2,832,000
9	1,803,319	2,832,000
10	1,037,848	2,832,000
11	1,014,128	2,832,000
12	864,875	1,368,000
13	903,120	1,368,000
14	905,915	1,368,000
15	396,268	1,368,000
16	911,966	1,368,000
17	1,050,373	1,368,000
18	879,301	1,368,000
19	1,455,335	1,368,000
20	1,805,674	2,976,000
21	1,806,543	2,976,000
22	1,806,451	2,976,000
23	1,805,549	2,976,000
24	1,807,183	2,976,000
25	1,806,017	2,976,000
26	1,771,724	2,976,000
27	1,806,999	2,976,000
28	1,804,691	2,976,000
29	1,781,860	2,976,000
30	1,808,676	3,420,000
<b>Total</b>	<b>44,951,512</b>	<b>75,276,000</b>

(in kWh) **December 2012**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,805,536	3,864,000
2	1,805,992	3,864,000
3	1,806,575	3,864,000
4	1,804,048	3,864,000
5	1,805,374	3,864,000
6	1,281,825	2,160,000
7	1,604,386	2,976,000
8	1,806,859	2,976,000
9	1,805,892	2,976,000
10	999,902	1,344,000
11	788,719	1,344,000
12	840,073	0
13	908,636	1,344,000
14	833,090	1,344,000
15	1,058,775	1,344,000
16	1,357,727	1,344,000
17	1,358,567	3,072,000
18	1,805,568	3,072,000
19	1,806,332	3,072,000
20	452,963	432,000
21	451,389	432,000
22	376,137	432,000
23	381,556	432,000
24	344,858	432,000
25	305,818	432,000
26	336,736	432,000
27	271,058	432,000
28	305,173	432,000
29	305,365	432,000
30	263,399	432,000
31	263,253	432,000
<b>Total</b>	<b>31,341,581</b>	<b>52,872,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) January 2013

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	262,081	432,000
2	264,927	432,000
3	265,172	432,000
4	266,320	432,000
5	265,486	432,000
6	265,993	432,000
7	264,128	432,000
8	266,520	432,000
9	269,563	432,000
10	269,263	432,000
11	260,091	432,000
12	266,814	432,000
13	378,548	432,000
14	680,025	912,000
15	562,869	912,000
16	831,524	912,000
17	700,242	912,000
18	697,348	912,000
19	660,228	912,000
20	658,517	912,000
21	831,241	1,248,000
22	968,728	1,248,000
23	805,607	1,248,000
24	767,975	1,248,000
25	767,634	1,248,000
26	800,809	1,248,000
27	777,473	1,248,000
28	888,173	1,440,000
29	865,115	1,440,000
30	889,291	1,440,000
31	643,783	1,440,000
<b>Total</b>	<b>17,361,486</b>	<b>26,496,000</b>

(in kWh) February 2013

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,285,214	1,440,000
2	1,207,478	1,440,000
3	1,199,964	1,440,000
4	804,403	1,440,000
5	851,002	1,440,000
6	874,214	1,440,000
7	872,197	1,440,000
8	864,127	1,440,000
9	866,411	1,440,000
10	870,337	1,440,000
11	632,653	1,056,000
12	642,179	1,056,000
13	680,497	1,056,000
14	677,489	1,056,000
15	679,401	1,056,000
16	678,731	1,056,000
17	639,714	1,056,000
18	603,979	1,056,000
19	603,677	1,056,000
20	603,569	1,056,000
21	603,399	1,056,000
22	684,474	1,056,000
23	684,823	1,056,000
24	643,046	1,056,000
25	862,445	1,296,000
26	1,205,364	1,296,000
27	797,461	1,296,000
28	608,329	1,296,000
<b>Total</b>	<b>22,226,576</b>	<b>34,368,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations



**Table 38. Southern Field Division Energy Data**

(in kWh) March 2013

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	834,403	1,296,000
2	871,090	1,296,000
3	827,955	1,296,000
4	864,672	1,296,000
5	862,890	1,296,000
6	793,031	1,296,000
7	792,061	1,296,000
8	810,437	1,296,000
9	809,895	1,296,000
10	775,799	1,242,000
11	947,179	1,584,000
12	935,491	1,584,000
13	940,793	1,584,000
14	946,831	1,584,000
15	944,881	1,584,000
16	943,518	1,584,000
17	958,686	1,584,000
18	991,086	1,680,000
19	1,006,169	1,680,000
20	1,287,887	2,064,000
21	1,241,298	2,064,000
22	1,293,597	2,064,000
23	1,330,582	2,064,000
24	1,204,235	2,064,000
25	1,209,014	2,064,000
26	1,012,046	2,064,000
27	1,264,799	2,064,000
28	1,210,307	2,064,000
29	1,209,568	2,064,000
30	1,204,327	2,064,000
31	1,210,491	2,064,000
<b>Total</b>	<b>31,535,017</b>	<b>52,122,000</b>

(in kWh) April 2013

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,570,020	2,496,000
2	1,431,783	2,496,000
3	1,302,569	2,496,000
4	1,205,987	2,496,000
5	1,547,594	2,496,000
6	1,528,322	2,496,000
7	1,546,277	2,496,000
8	1,543,663	2,496,000
9	1,198,544	2,496,000
10	1,510,653	2,496,000
11	1,506,676	2,496,000
12	973,844	2,496,000
13	1,791,785	2,496,000
14	1,789,314	2,496,000
15	1,131,554	1,440,000
16	901,468	1,440,000
17	901,460	1,440,000
18	904,111	1,440,000
19	900,717	1,440,000
20	902,216	1,440,000
21	901,565	1,440,000
22	902,572	1,440,000
23	903,228	1,440,000
24	903,655	1,440,000
25	903,776	1,440,000
26	900,850	1,440,000
27	901,441	1,440,000
28	900,450	1,440,000
29	903,369	1,440,000
30	903,074	1,440,000
<b>Total</b>	<b>35,112,536</b>	<b>57,984,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh)

**May 2013**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	902,019	1,440,000
2	901,549	1,440,000
3	902,286	1,440,000
4	901,935	1,440,000
5	903,334	1,440,000
6	904,028	1,440,000
7	901,233	1,440,000
8	902,553	1,440,000
9	546,464	1,440,000
10	264,543	1,440,000
11	900,005	1,440,000
12	895,371	1,440,000
13	897,496	1,440,000
14	900,466	1,440,000
15	902,445	1,440,000
16	904,079	1,440,000
17	903,650	1,440,000
18	902,637	1,440,000
19	901,438	1,440,000
20	904,611	1,440,000
21	902,705	1,440,000
22	901,668	1,440,000
23	902,210	1,440,000
24	904,956	1,440,000
25	901,074	1,440,000
26	903,625	1,440,000
27	901,770	1,440,000
28	903,396	1,440,000
29	899,421	1,440,000
30	903,542	1,440,000
31	901,822	1,440,000
<b>Total</b>	<b>26,968,329</b>	<b>44,640,000</b>

(in kWh)

**June 2013**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	901,589	1,440,000
2	902,775	1,440,000
3	901,598	1,440,000
4	525,744	1,200,000
5	901,006	1,200,000
6	901,681	1,200,000
7	677,055	1,200,000
8	896,389	1,200,000
9	872,672	1,200,000
10	603,302	1,440,000
11	903,474	1,440,000
12	905,248	1,440,000
13	859,043	1,440,000
14	893,668	1,440,000
15	864,988	1,440,000
16	871,115	1,440,000
17	861,025	1,440,000
18	747,155	1,440,000
19	907,187	1,440,000
20	673,645	1,440,000
21	561,800	1,440,000
22	607,451	1,440,000
23	414,723	1,440,000
24	303,845	480,000
25	225,647	480,000
26	300,929	480,000
27	1,802,914	2,688,000
28	1,794,274	2,688,000
29	1,794,579	2,688,000
30	1,690,327	2,688,000
<b>Total</b>	<b>26,066,845</b>	<b>43,872,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) July 2013

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,566,370	2,976,000
2	1,572,388	2,976,000
3	1,564,758	2,376,000
4	1,803,905	2,376,000
5	1,803,381	2,376,000
6	1,805,077	2,376,000
7	1,804,262	2,376,000
8	1,736,230	2,976,000
9	1,727,671	2,976,000
10	1,617,373	2,976,000
11	1,794,301	2,976,000
12	1,804,345	2,976,000
13	1,804,748	2,976,000
14	1,805,242	2,976,000
15	1,803,605	2,976,000
16	1,804,005	2,976,000
17	1,802,795	2,976,000
18	1,800,403	2,976,000
19	1,796,977	2,976,000
20	1,798,025	2,976,000
21	1,805,150	2,976,000
22	1,807,758	2,976,000
23	1,802,361	2,976,000
24	1,797,849	2,976,000
25	1,792,495	2,976,000
26	1,791,391	2,976,000
27	1,792,400	2,976,000
28	1,794,839	2,976,000
29	1,327,010	2,064,000
30	1,243,758	2,064,000
31	1,238,655	2,064,000
<b>Total</b>	<b>53,209,524</b>	<b>86,520,000</b>

(in kWh) August 2013

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,235,315	2,064,000
2	1,236,546	2,064,000
3	1,235,644	2,064,000
4	1,238,433	2,064,000
5	1,024,577	1,680,000
6	1,024,448	1,680,000
7	1,023,921	1,680,000
8	1,023,897	1,680,000
9	1,021,928	1,680,000
10	1,061,292	1,680,000
11	1,025,101	1,680,000
12	958,503	1,536,000
13	1,000,185	1,536,000
14	963,009	1,536,000
15	949,698	1,536,000
16	948,680	1,536,000
17	953,011	1,536,000
18	950,867	1,536,000
19	889,804	1,536,000
20	946,731	1,536,000
21	945,340	1,536,000
22	948,559	1,536,000
23	949,047	1,536,000
24	948,159	1,536,000
25	948,561	1,536,000
26	949,722	1,536,000
27	950,011	1,536,000
28	949,577	1,536,000
29	1,058,449	1,536,000
30	900,785	1,536,000
31	899,024	1,536,000
<b>Total</b>	<b>31,158,824</b>	<b>50,736,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **September 2013**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	502,311	1,536,000
2	506,858	1,536,000
3	896,783	1,536,000
4	899,068	1,536,000
5	1,545,005	1,536,000
6	1,802,704	1,536,000
7	290,666	1,536,000
8	379,431	1,536,000
9	1,397,312	2,016,000
10	1,319,215	2,016,000
11	1,282,892	2,016,000
12	1,278,680	2,016,000
13	1,275,421	2,016,000
14	1,241,325	2,016,000
15	1,242,551	2,016,000
16	1,090,363	1,680,000
17	939,954	1,680,000
18	1,040,364	1,680,000
19	1,041,007	1,680,000
20	1,052,881	1,680,000
21	1,056,537	1,680,000
22	1,037,861	1,680,000
23	1,161,454	2,016,000
24	1,273,304	2,016,000
25	1,271,624	2,016,000
26	1,270,642	2,016,000
27	1,271,657	2,016,000
28	1,272,656	2,016,000
29	1,280,343	2,016,000
30	1,281,474	2,016,000
<b>Total</b>	<b>33,202,337</b>	<b>54,288,000</b>

(in kWh) **October 2013**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,278,110	2,016,000
2	1,217,624	2,016,000
3	1,218,926	2,016,000
4	1,217,489	2,016,000
5	1,215,915	2,016,000
6	1,211,533	2,016,000
7	1,088,583	1,328,000
8	409,563	1,104,000
9	303,831	1,104,000
10	452,301	1,104,000
11	519,278	1,104,000
12	740,926	1,104,000
13	1,201,786	1,104,000
14	383,891	720,000
15	382,838	720,000
16	451,373	720,000
17	446,645	720,000
18	190,774	720,000
19	602,178	720,000
20	605,086	720,000
21	1,018,545	1,872,000
22	1,015,748	1,872,000
23	1,030,606	1,872,000
24	527,056	1,872,000
25	1,094,359	1,872,000
26	1,110,318	1,872,000
27	1,401,405	1,872,000
28	1,106,036	1,872,000
29	1,110,470	1,872,000
30	1,058,729	1,872,000
31	606,647	1,872,000
<b>Total</b>	<b>26,218,571</b>	<b>45,680,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **November 2013**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,145,645	1,872,000
2	1,217,549	1,872,000
3	1,022,992	1,872,000
4	1,102,648	1,872,000
5	1,068,031	1,872,000
6	1,092,490	1,872,000
7	1,098,781	1,872,000
8	1,093,446	1,872,000
9	1,135,966	1,872,000
10	1,140,070	1,872,000
11	1,118,740	1,872,000
12	1,052,865	1,872,000
13	1,159,890	1,872,000
14	1,132,248	1,872,000
15	1,100,320	1,872,000
16	1,133,646	1,872,000
17	636,668	1,872,000
18	1,074,319	1,872,000
19	1,071,266	1,872,000
20	1,126,759	1,872,000
21	1,066,622	1,872,000
22	1,126,491	1,872,000
23	1,112,792	1,872,000
24	1,112,246	1,872,000
25	1,114,304	1,872,000
26	1,105,537	1,872,000
27	1,119,698	1,872,000
28	1,131,681	1,872,000
29	1,033,817	1,872,000
30	1,033,136	1,872,000
<b>Total</b>	<b>32,680,660</b>	<b>56,160,000</b>

(in kWh) **December 2013**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,136,722	1,872,000
2	825,787	1,872,000
3	772,222	1,872,000
4	1,135,396	1,872,000
5	1,135,979	1,872,000
6	1,155,500	1,872,000
7	1,466,910	1,872,000
8	1,142,894	1,872,000
9	1,774,958	3,048,000
10	1,816,889	3,048,000
11	1,815,267	3,048,000
12	1,813,901	3,048,000
13	1,810,868	3,048,000
14	1,814,557	3,048,000
15	1,643,833	3,048,000
16	1,784,387	3,048,000
17	1,795,875	3,048,000
18	1,800,930	3,048,000
19	1,809,421	3,048,000
20	1,808,795	3,048,000
21	1,809,073	3,048,000
22	1,808,314	3,048,000
23	492,426	816,000
24	489,011	816,000
25	483,956	816,000
26	483,435	816,000
27	490,201	816,000
28	511,736	816,000
29	543,545	816,000
30	502,286	816,000
31	496,797	816,000
<b>Total</b>	<b>38,371,871</b>	<b>64,992,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) January 2014

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	501,541	816,000
2	484,105	816,000
3	824,291	1,368,000
4	820,800	1,368,000
5	828,168	1,368,000
6	705,883	1,368,000
7	717,090	1,368,000
8	635,062	1,368,000
9	899,203	1,368,000
10	819,458	1,368,000
11	1,057,644	1,368,000
12	1,062,285	1,368,000
13	908,920	1,248,000
14	758,908	1,248,000
15	703,555	1,248,000
16	746,458	1,248,000
17	745,988	1,248,000
18	610,600	1,248,000
19	603,860	1,248,000
20	679,803	1,104,000
21	679,271	1,104,000
22	679,982	1,104,000
23	592,772	1,104,000
24	673,574	1,104,000
25	673,718	1,104,000
26	680,643	1,104,000
27	665,771	1,104,000
28	671,668	1,104,000
29	682,781	1,104,000
30	815,249	1,104,000
31	825,441	1,104,000
<b>Total</b>	<b>22,754,493</b>	<b>37,296,000</b>

(in kWh) February 2014

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	662,801	1,104,000
2	360,512	1,104,000
3	524,308	1,104,000
4	524,232	1,104,000
5	536,055	1,104,000
6	522,520	1,104,000
7	598,498	1,104,000
8	599,319	1,104,000
9	601,749	1,104,000
10	672,195	912,000
11	530,950	912,000
12	533,304	912,000
13	517,344	912,000
14	518,346	912,000
15	429,338	912,000
16	471,269	912,000
17	530,896	912,000
18	531,760	912,000
19	531,695	912,000
20	600,224	912,000
21	525,353	912,000
22	525,290	912,000
23	523,363	912,000
24	578,021	912,000
25	512,096	912,000
26	534,808	912,000
27	603,925	912,000
28	529,365	912,000
<b>Total</b>	<b>15,129,534</b>	<b>27,264,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **March 2014**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,059,953	912,000
2	746,472	912,000
3	1,720,942	1,296,000
4	377,123	1,296,000
5	1,139,948	1,296,000
6	1,264,305	1,920,000
7	716,888	1,920,000
8	512,879	1,920,000
9	395,709	1,840,000
10	817,266	1,920,000
11	1,042,616	1,920,000
12	1,029,799	1,920,000
13	867,362	1,920,000
14	809,636	1,440,000
15	735,637	1,440,000
16	803,974	1,440,000
17	609,015	960,000
18	356,705	960,000
19	220,563	624,000
20	298,131	624,000
21	346,410	624,000
22	300,470	624,000
23	298,447	624,000
24	452,860	624,000
25	671,760	624,000
26	609,077	624,000
27	785,406	624,000
28	372,587	624,000
29	533,156	624,000
30	445,384	624,000
31	445,438	960,000
<b>Total</b>	<b>20,785,912</b>	<b>35,680,000</b>

(in kWh) **April 2014**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	446,405	960,000
2	458,617	960,000
3	488,120	960,000
4	480,225	960,000
5	480,843	960,000
6	639,052	960,000
7	490,560	960,000
8	890,698	960,000
9	767,111	768,000
10	548,313	768,000
11	406,958	768,000
12	318,082	768,000
13	458,924	768,000
14	380,854	768,000
15	338,110	768,000
16	296,255	768,000
17	366,120	768,000
18	453,246	768,000
19	208,462	768,000
20	0	768,000
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
<b>Total</b>	<b>8,916,953</b>	<b>16,896,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **May 2014**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	0	0
2	0	0
3	143,100	0
4	180,484	0
5	189,697	192,000
6	0	192,000
7	0	96,000
8	0	96,000
9	0	96,000
10	203,413	96,000
11	0	96,000
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	0	0
31	0	0
<b>Total</b>	<b>716,693</b>	<b>864,000</b>

(in kWh) **June 2014**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	1,099	0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	48,000
17	0	48,000
18	225,447	48,000
19	0	48,000
20	0	48,000
21	0	48,000
22	0	48,000
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
29	0	0
30	340,484	1,248,000
<b>Total</b>	<b>567,030</b>	<b>1,584,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations



**Table 38. Southern Field Division Energy Data**

(in kWh) July 2014

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	263,574	1,248,000
2	341,947	1,248,000
3	639,206	1,248,000
4	1,167,645	1,248,000
5	1,166,427	1,248,000
6	1,564,021	1,248,000
7	636,107	1,248,000
8	670,856	1,248,000
9	643,621	1,248,000
10	723,657	1,248,000
11	731,325	1,248,000
12	740,340	1,248,000
13	1,201,063	1,248,000
14	851,953	1,440,000
15	892,307	1,440,000
16	913,140	1,440,000
17	823,989	1,440,000
18	826,751	1,440,000
19	890,271	1,440,000
20	895,766	1,440,000
21	930,720	1,440,000
22	909,908	1,440,000
23	911,285	1,440,000
24	902,178	1,440,000
25	908,223	1,440,000
26	912,932	1,440,000
27	913,845	1,440,000
28	901,843	1,440,000
29	897,853	1,440,000
30	1,012,298	1,440,000
31	913,534	1,440,000
<b>Total</b>	<b>26,698,580</b>	<b>42,144,000</b>

(in kWh) August 2014

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	952,908	1,440,000
2	952,331	1,440,000
3	954,223	1,440,000
4	596,997	960,000
5	412,147	960,000
6	596,128	960,000
7	634,581	960,000
8	724,186	960,000
9	730,539	960,000
10	596,206	960,000
11	260,096	192,000
12	213,384	192,000
13	217,377	192,000
14	207,932	192,000
15	208,283	192,000
16	207,873	192,000
17	279,715	192,000
18	244,841	192,000
19	120,312	192,000
20	129,911	192,000
21	124,608	192,000
22	124,678	192,000
23	124,273	192,000
24	0	192,000
25	124,319	192,000
26	124,656	0
27	125,318	0
28	129,308	0
29	131,474	0
30	123,593	0
31	124,011	0
<b>Total</b>	<b>10,496,207</b>	<b>13,920,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **September 2014**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	124,095	0
2	123,377	0
3	131,077	0
4	123,611	0
5	125,237	0
6	123,979	0
7	124,376	0
8	123,296	0
9	141,712	192,000
10	124,427	0
11	123,336	0
12	124,559	0
13	118,949	0
14	124,016	0
15	216,815	0
16	185,558	0
17	186,208	0
18	185,765	0
19	179,396	0
20	154,351	0
21	186,962	0
22	148,541	0
23	185,571	0
24	124,675	0
25	411,029	0
26	185,174	0
27	178,238	0
28	0	0
29	184,070	0
30	184,820	0
<b>Total</b>	<b>4,653,218</b>	<b>192,000</b>

(in kWh) **October 2014**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	192,305	0
2	186,211	0
3	186,692	0
4	186,870	0
5	197,570	0
6	198,658	0
7	191,881	0
8	163,015	0
9	148,125	0
10	148,657	0
11	148,875	0
12	149,353	0
13	842,967	0
14	844,644	0
15	811,577	0
16	845,529	0
17	680,740	0
18	850,692	0
19	845,003	0
20	845,149	0
21	585,527	0
22	844,517	0
23	860,282	0
24	912,265	0
25	908,963	0
26	908,339	0
27	910,062	0
28	912,419	0
29	700,898	0
30	669,317	0
31	906,166	0
<b>Total</b>	<b>17,783,267</b>	<b>0</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) **November 2014**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	931,740	0
2	1,023,770	0
3	894,048	0
4	805,429	0
5	874,554	0
6	944,576	0
7	868,082	0
8	743,842	0
9	526,087	0
10	519,963	0
11	484,961	0
12	523,549	0
13	676,987	0
14	900,042	0
15	673,763	0
16	711,728	0
17	674,700	0
18	674,047	0
19	896,997	0
20	897,423	0
21	898,541	0
22	898,687	0
23	899,448	0
24	792,401	0
25	632,856	0
26	903,342	0
27	736,079	0
28	902,475	0
29	900,293	0
30	898,935	0
Total	23,709,348	0

(in kWh) **December 2014**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	898,976	0
2	898,695	0
3	901,827	0
4	900,774	0
5	899,529	0
6	898,503	0
7	902,332	0
8	902,205	0
9	899,616	0
10	900,604	0
11	1,237,359	0
12	1,816,798	0
13	1,404,059	0
14	979,231	0
15	1,160,347	0
16	1,034,762	0
17	1,069,886	0
18	741,185	0
19	753,116	0
20	705,089	0
21	762,847	0
22	867,108	0
23	867,713	0
24	831,052	0
25	839,646	0
26	831,398	0
27	870,971	0
28	873,199	0
29	870,734	0
30	909,301	0
31	849,096	0
Total	29,277,955	0

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) January 2015

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	880,664	0
2	870,180	0
3	848,675	0
4	861,889	0
5	391,622	0
6	393,952	0
7	358,827	0
8	350,841	0
9	350,825	0
10	351,540	0
11	272,649	0
12	350,919	0
13	872,481	0
14	504,028	0
15	418,813	0
16	358,571	0
17	381,575	0
18	653,033	0
19	529,486	0
20	524,143	0
21	548,454	0
22	550,530	0
23	470,804	0
24	418,694	0
25	548,143	0
26	490,226	0
27	498,115	0
28	576,982	0
29	610,413	0
30	610,567	0
31	449,353	0
<b>Total</b>	<b>16,296,992</b>	<b>0</b>

(in kWh) February 2015

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	517,563	0
2	514,690	0
3	514,455	0
4	541,204	0
5	523,930	0
6	523,522	0
7	523,989	0
8	598,479	0
9	523,292	0
10	522,963	0
11	383,281	0
12	300,510	0
13	300,740	0
14	240,862	0
15	237,954	0
16	0	0
17	0	0
18	0	0
19	1,534	0
20	0	0
21	0	0
22	0	0
23	0	0
24	0	0
25	0	0
26	0	0
27	0	0
28	0	0
<b>Total</b>	<b>6,768,968</b>	<b>0</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh) March 2015

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	0	0
2	524,005	0
3	534,527	0
4	537,773	0
5	597,048	0
6	521,840	0
7	520,830	0
8	525,882	0
9	526,946	0
10	280,295	0
11	279,912	0
12	280,306	0
13	249,866	0
14	280,076	0
15	279,326	0
16	538,350	0
17	545,408	0
18	602,073	0
19	952,101	0
20	940,734	0
21	1,013,618	0
22	981,415	0
23	940,904	0
24	937,934	0
25	914,898	0
26	912,851	0
27	909,581	0
28	910,246	0
29	897,658	0
30	1,006,922	0
31	843,140	0
<b>Total</b>	<b>19,786,464</b>	<b>0</b>

(in kWh) April 2015

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	1,012,092	0
2	1,013,075	0
3	1,011,166	0
4	1,024,361	0
5	1,018,823	0
6	1,015,192	0
7	728,274	0
8	915,314	0
9	881,709	0
10	906,979	0
11	983,872	0
12	793,049	0
13	909,176	0
14	874,630	0
15	884,196	0
16	863,511	0
17	881,582	0
18	863,174	0
19	803,272	0
20	813,761	0
21	757,698	0
22	884,723	0
23	817,965	0
24	836,144	0
25	1,310,996	0
26	1,230,503	0
27	804,697	0
28	804,314	0
29	832,972	0
30	817,247	0
<b>Total</b>	<b>27,294,467</b>	<b>0</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

**Table 38. Southern Field Division Energy Data**

(in kWh)

**May 2015**

West Branch		
Date	Warne Powerplant Generation	Castaic Powerplant SWP Generation 1/
1	805,704	616,000
2	1,288,899	0
3	1,294,310	0
4	1,388,553	0
5	1,261,092	0
6	1,210,926	0
7	1,511,819	0
8	1,516,766	0
9	1,517,854	0
10	1,519,973	0
11	1,404,502	0
12	1,400,455	2,328,000
13	800,026	1,272,000
14	774,303	1,272,000
15	485,322	1,272,000
16	818,708	1,272,000
17	811,085	1,272,000
18	660,701	1,272,000
19	764,578	1,272,000
20	853,327	2,328,000
21	1,026,278	1,272,000
22	663,066	1,272,000
23	1,001,943	1,272,000
24	1,127,482	1,272,000
25	1,296,791	1,368,000
26	1,093,546	1,368,000
27	945,953	1,368,000
28	993,884	1,368,000
29	841,274	1,368,000
30	301,104	1,368,000
31	329,786	1,368,000
<b>Total</b>	<b>31,710,010</b>	<b>28,840,000</b>

1/ Energy delivered to SWP by LADWP at Sylmar substation; not necessarily related to actual Castaic operations

## **Appendix E**

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### ***Current License Articles***

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## APPENDIX E

### CURRENT LICENSE ARTICLES

License Article	Summary of Article Subject
Article 1	The entire project, as described in this order of the Commission, shall be subject to all of the provisions, terms, and conditions of the license.
Article 2	No substantial change shall be made in the maps, plans, specifications, and statements described and designated as exhibits and approved by the Commission in its order as a part of the license until such change shall have been approved by the Commission: <u>Provided, however</u> , That if the Licensee or the Commission deems it necessary or desirable that said approved exhibits, or any of them, be changed, there shall be submitted to the Commission for approval a revised, or additional exhibit or exhibits covering the proposed changes which, upon approval by the Commission, shall become a part of the license and shall supersede, in whole or in part, such exhibit or exhibits theretofore made a part of the license as may be specified by the Commission.
Article 3	<p>The project works shall be constructed in substantial conformity with the approved exhibits referred to in Article 2 herein or as changed in accordance with the provisions of said article. Except when emergency shall require for the protection of navigation, life, health, or property, there shall not be made without prior approval of the Commission any substantial alteration or addition not in conformity with the approved plans to any dam or other project works under the license or any substantial use of project lands and waters not authorized herein; and any emergency alteration, addition, or use so made shall thereafter be subject to such modification and change as the Commission may direct. Minor changes in project works, or in uses of project lands and waters, or divergence from such approved exhibits may be made if such changes will not result in a decrease in efficiency, in a material increase in cost, in an adverse environmental impact, or in impairment of the general scheme of development; but any of such minor changes made without the prior approval of the Commission, which in its judgment have produced or will produce any of such results, shall be subject to such alteration as the Commission may direct.</p> <p>Upon the completion of the project, or at such other time as the Commission may direct, the Licensee shall submit to the Commission for approval revised exhibits insofar as necessary to show any divergence from or variations in the project area and project boundary as finally located or in the project works as actually constructed when compared with the area and boundary shown and the works described in the license or in the exhibits approved by the Commission, together with a statement in writing setting forth the reasons which in the opinion of the Licensee necessitated or justified variation in or divergence from the approved exhibits. Such revised exhibits shall, if and when approved by the Commission, be made a part of the license under the provisions of Article 2 hereof.</p>
Article 4	The construction, operation, and maintenance of the project and any work incidental to additions or alterations shall be subject to the inspection and supervision of the Regional Engineer, Federal Energy Regulatory Commission, in the region wherein the project is located, or of such other officer or agent as the Commission may designate, who shall be the authorized representative of the Commission for such purposes. The Licensee shall cooperate fully with said representative and shall furnish him a detailed program of inspection by the Licensee that will provide for an adequate and qualified inspection force for construction of the project and for any subsequent alterations to the project. The Licensee shall also furnish to said representative such further information as he may require concerning the construction, operation, and maintenance of the project, and of

License Article	Summary of Article Subject
	any alteration thereof, and shall notify him of the date upon which work will begin, as far in advance thereof as said representative may reasonably specify, and shall notify him promptly in writing of any suspension of work for a period of more than one week, and of its resumption and completion. The Licensee shall allow said representative and other officers or employees of the United States, showing proper credentials, free and unrestricted access to, through, and across the project lands and project works in the performance of their official duties. The Licensee shall comply with such rules and regulations of general or special applicability as the Commission may prescribe from time to time for the protection of life, health, or property.
Article 5	The Licensee, within five years from the date of issuance of the license, shall acquire title in fee or the right to use in perpetuity all lands, other than lands of the United States, necessary or appropriate for the construction, maintenance, and operation of the project. The Licensee or its successors and assigns shall, during the period of the license, retain the possession of all project property covered by the license as issued or as later amended, including the project area, the project works, and all franchises, easements, water rights, and rights of occupancy and use; and none of such properties shall be voluntarily sold, leased, transferred, abandoned, or otherwise disposed of without the prior written approval of the Commission, except that the Licensee may lease or otherwise dispose of interests in project lands or property without specific written approval of the Commission pursuant to the then current regulations of the Commission. The provisions of this article are not intended to prevent the abandonment or the retirement from service of structures, equipment, or other project works in connection with replacements thereof when they become obsolete, inadequate, or inefficient for further service due to wear and tear; and mortgage or trust deeds or judicial sales made thereunder, or tax sales, shall not be deemed voluntary transfers within the meaning of this article.
Article 8	The Licensee shall install and thereafter maintain gages and stream-gaging stations for the purpose of determining the state and flow of the stream or streams on which the project is located, the amount of water held in and withdrawn from storage, and the effective head on the turbines; shall provide for the required reading of such gages and for the adequate rating of such stations; and shall install and maintain standard meters adequate for the determination of the amount of electric energy generated by the project works. The number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, shall at all times be satisfactory to the Commission or its authorized representative. The Commission reserves the right, after notice and opportunity for hearing, to require such alterations in the number, character and locations of gages, meters, or other measuring devices, and the method of operation thereof, as are necessary to secure adequate determinations. The installation of gages, the rating of said stream or streams, and the determination of the flow thereof, shall be under the supervision of, or in cooperation with, the District Engineer of the United States Geological Survey having charge of stream-gaging operations in the region of the project, and the Licensee shall advance to the United States Geological Survey the amount of funds estimated to be necessary for such supervision, or cooperation for such periods as may be mutually agreed upon. The Licensee shall keep accurate and sufficient records of the foregoing determinations to the satisfaction of the Commission, and shall make return of such records annually at such time and in such form as the Commission may prescribe.
Article 9	The Licensee shall, after notice and opportunity for hearing, install additional capacity or make other changes in the project as directed by the Commission, to the extent that it is economically sound and in the public interest to do so.

<b>License Article</b>	<b>Summary of Article Subject</b>
Article 10	The Licensee shall, after notice and opportunity for hearing, coordinate the operation of the project, electrically and hydraulically, with such other projects or power systems and in such manner as the Commission may direct in the interest of power and other beneficial public uses of water resources, and on such conditions concerning the equitable sharing of benefits by the Licensee as the Commission may order.
Article 11	Whenever the Licensee is directly benefited by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement, the Licensee shall reimburse the owner of the headwater improvement for such part of the annual charges for interest, maintenance, and depreciation thereof as the Commission shall determine to be equitable, and shall pay to the United States the cost of making such determination as fixed by the Commission. For benefits provided by a storage reservoir or other headwater improvement of the United States, the Licensee shall pay to the Commission the amounts for which it is billed from time to time for such headwater benefits and for the cost of making the determinations pursuant to the then current regulations of the Commission under the Federal Power Act.
Article 14	In the construction or maintenance of the project works, the Licensee shall place and maintain suitable structures and devices to reduce to a reasonable degree the liability of contact between its transmission lines and telegraph, telephone and other signal wires or power transmission lines constructed prior to its transmission lines and not owned by the Licensee, and shall also place and maintain suitable structures and devices to reduce to a reasonable degree the liability of any structures and devices to reduce to a reasonable degree the liability of any structures or wires falling or obstructing traffic or endangering life. None of the provisions of this article are intended to relieve the Licensee from any responsibility or requirement which may be imposed by any other lawful authority for avoiding or eliminating inductive interference.
Article 15	The Licensee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate, or arrange for the construction, maintenance, and operation of such reasonable facilities, and comply with such reasonable modifications of the project structures and operation, as may be ordered by the Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of any State in which the project or a part thereof is located, after notice and opportunity for hearing.
Article 16	Whenever the United States shall desire, in connection with the project, to construct fish and wildlife facilities or to improve the existing fish and wildlife facilities at its own expense, the Licensee shall permit the United States or its designated agency to use, free of cost, such of the Licensee's lands and interests in lands, reservoirs, waterways and project works as may be reasonably required to complete such facilities or such improvements thereof. In addition, after notice and opportunity for hearing, the Licensee shall modify the project operation as may be reasonably prescribed by the Commission in order to permit the maintenance and operation of the fish and wildlife facilities constructed or improved by the United States under the provisions of this article. This article shall not be interpreted to place any obligation on the United States to construct or improve fish and wildlife facilities or to relieve the Licensee of any obligation under this license.
Article 17	The Licensee shall construct, maintain, and operate, or shall arrange for the construction, maintenance, and operation of such reasonable recreational facilities, including modifications thereto, such as access roads, wharves, launching ramps, beaches, picnic and camping areas, sanitary facilities, and utilities, giving consideration to the needs of the physically handicapped, and shall comply with such reasonable modifications of the project, as may be prescribed hereafter by the Commission during

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	the term of this license upon its own motion or upon the recommendation of the Secretary of the Interior or other interested Federal or State agencies, after notice and opportunity for hearing.
Article 18	So far as is consistent with proper operation of the project, the Licensee shall allow the public free access, to a reasonable extent, to project waters and adjacent project lands owned by the Licensee for the purpose of full public utilization of such lands and waters for navigation and for outdoor recreational purposes, including fishing and hunting: <u>Provided</u> , That the Licensee may reserve from public access such portions of the project waters, adjacent lands, and project facilities as may be necessary for the protection of life, health, and property.
Article 19	In the construction, maintenance, or operation of the project, the Licensee shall be responsible for, and shall take reasonable measures to prevent, soil erosion on lands adjacent to streams or other waters, stream sedimentation, and any form of water or air pollution. The Commission, upon request or upon its own motion, may order the Licensee to take such measures as the Commission finds to be necessary for these purposes, after notice and opportunity for hearing.
Article 20	The Licensee shall consult with the appropriate State and Federal agencies and, within one year of the date of issuance of this license, shall submit for Commission approval a plan for clearing the reservoir area. Further, the Licensee shall clear and keep clear to an adequate width lands along open conduits and shall dispose of all temporary structures, unused timber, brush, refuse, or other material unnecessary for the purposes of the project which results from the clearing of lands or from the maintenance or alteration of the project works. In addition, all trees along the periphery of project reservoirs which may die during operations of the project shall be removed. Upon approval of the clearing plan all clearing of the lands and disposal of the unnecessary material shall be done with due diligence and to the satisfaction of the authorized representative of the Commission and in accordance with appropriate Federal, State, and local statutes and regulations.
Article 21	Material may be dredged or excavated from, or placed as fill in, project lands and/or waters only in the prosecution of work specifically authorized under the license; in the maintenance of the project; or after obtaining Commission approval, as appropriate. Any such material shall be removed and/or deposited in such manner as to reasonably preserve the environmental values of the project and so as not to interfere with traffic on land or water. Dredging and filling in a navigable water of the United States shall also be done to the satisfaction of the District Engineer, Department of the Army, in charge of the locality.
Article 26	Timber on lands of the United States cut, used, or destroyed in the construction and maintenance of the project works, or in the clearing of said lands, shall be paid for, and the resulting slash and debris disposed of, in accordance with the requirements of the agency of the United States having jurisdiction over said lands. Payment for merchantable timber shall be at current stumpage rates, and payment for young growth timber below merchantable size shall be at current damage appraisal values. However, the agency of the United States having jurisdiction may sell or dispose of the merchantable timber to others than the Licensee: <u>Provided</u> , That timber so sold or disposed of shall be cut and removed from the area prior to, or without undue interference with, clearing operations of the Licensee and in coordination with the Licensee's project construction schedules. Such sale or disposal to others shall not relieve the Licensee of responsibility for the clearing and disposal of all slash and debris from project lands.

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Article 27	The Licensee shall do everything reasonably within its power, and shall require its employees, contractors, and employees of contractors to do everything reasonably within their power, both independently and upon the request of officers of the agency concerned, to prevent, to make advance preparations for suppression of, and to suppress fires on the lands to be occupied or used under the license. The Licensee shall be liable for and shall pay the costs incurred by the United States in suppressing fires caused from the construction, operation, or maintenance of the project works or of the works appurtenant or accessory thereto under the license.
Article 29	The Licensee shall be liable for injury to, or destruction of, any buildings, bridges, roads, trails, lands, or other property of the United States, occasioned by the construction, maintenance, or operation of the project works or of the works appurtenant or accessory thereto under the license. Arrangements to meet such liability, either by compensation for such injury or destruction, or by reconstruction or repair of damaged property, or otherwise, shall be made with the appropriate department or agency of the United States.
Article 30	The Licensee shall allow any agency of the United States, without charge, to construct or permit to be constructed on, through, and across those project lands which are lands of the United States such conduits, chutes, ditches, railroads, roads, trails, telephone and power lines, and other routes or means of transportation and communication as are not inconsistent with the enjoyment of said lands by the Licensee for the purposes of the license. This license shall not be construed as conferring upon the Licensee any right of use, occupancy, or enjoyment of the lands of the United States other than for the construction, operation, and maintenance of the project as stated in the license.
Article 31	In the construction and maintenance of the project, the location and standards of roads and trails on lands of the United States and other uses of lands of the United States, including the location and condition of quarries, borrow pits, and spoil disposal areas, shall be subject to the approval of the department or agency of the United States having supervision over the lands involved.
Article 32	The Licensee shall make provision, or shall bear the reasonable cost, as determined by the agency of the United States affected, of making provision for avoiding inductive interference between any project transmission line or other project facility constructed, operated, or maintained under the license, and any radio installation, telephone line, or other communication facility installed or constructed before or after construction of such project transmission line or other project facility and owned, operated, or used by such agency of the United States in administering the lands under its jurisdiction.
Article 33	The Licensee shall make use of the Commission's guidelines and other recognized guidelines for treatment of transmission line rights-of-way, and shall clear such portions of transmission line rights-of-way across lands of the United States as are designated by the officer of the United States in charge of the lands; shall keep the areas so designated clear of new growth, all refuse, and inflammable material to the satisfaction of such officer; shall trim all branches of trees in contact with or liable to contact the transmission lines; shall cut and remove all dead or leaning trees which might fall in contact with the transmission lines; and shall take such other precautions against fire as may be required by such officer. No fires for the burning of waste material shall be set except with the prior written consent of the officer of the United States in charge of the lands as to time and place.
Article 34	The Licensee shall cooperate with the United States in the disposal by the United States, under the Act of July 31, 1947, 61 Stat. 681, as amended (30 U.S.C. sec. 601, et seq.), of mineral and vegetative materials from lands of the United States occupied by the project or any part thereof: <u>Provided</u> , That such disposal has been authorized by the

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	Commission and that it does not unreasonably interfere with the occupancy of such lands by the Licensee for the purposes of the license: <u>Provided further</u> , That in the event of disagreement, any question of unreasonable interference shall be determined by the Commission after notice and opportunity for hearing.
Article 35	If the Licensee shall cause or suffer essential project property to be removed or destroyed or to become unfit for use, without adequate replacement, or shall abandon or discontinue good faith operation of the project or refuse or neglect to comply with the terms of the license and the lawful orders of the Commission mailed to the record address of the Licensee or its agent, the Commission will deem it to be the intent of the Licensee to surrender the license. The Commission, after notice and opportunity for hearing, may require the Licensee to remove any or all structures, equipment and power lines within the project boundary and to take any such other action necessary to restore the project waters, lands, and facilities remaining within the project boundary to a condition satisfactory to the United States agency having jurisdiction over its lands or the Commission's authorized representative, as appropriate, or to provide for the continued operation and maintenance of nonpower facilities and fulfill such other obligations under the license as the Commission may prescribe. In addition, the Commission in its discretion, after notice and opportunity for hearing, may also agree to the surrender of the license when the Commission, for the reasons recited herein, deems it to be the intent of the Licensee to surrender the license.
Article 36	The right of the Licensee and of its successors and assigns to use or occupy waters over which the United States has jurisdiction, or lands of the United States under the license, for the purpose of maintaining the project works or otherwise, shall absolutely cease at the end of the license period, unless the Licensee has obtained a new license pursuant to the then existing laws and regulations, or an annual license under the terms and conditions of this license.
Article 37	The terms and conditions expressly set forth in the license shall not be construed as impairing any terms and conditions of the Federal Power Act which are not expressly set forth herein.
Article 38	The Licensees shall file with the Commission's authorized representative and Director, Office of Electric Power Regulation, one copy each of the contract plans and specifications prior to the start of construction. The Director, Office of Electric Power Regulation, may require such appropriate changes to the plans and specifications as necessary to assure a safe and adequate project.
Article 39	The Licensees shall install such instrumentation and other devices as may be necessary for monitoring the performance of project structures. The plan of instrumentation and a schedule of recording instrument readings shall be furnished to the Commission. The Licensees shall furnish periodically to the Commission, as may be requested by the Commission's authorized representative, a report and analysis of the instrument readings.
Article 40	The Licensees shall, in good faith and with due diligence, prosecute construction of the project facilities and shall complete such construction not later than December 31, 1985, except that construction of the San Luis Obispo facility should be completed not later than December 31, 1987.
Article 42	The Licensees shall submit to the Commission for the Alamo power plant an economic analysis and revised Exhibit L drawings, and shall not commence construction until the Commission has approved the revised Exhibit L drawings.
Article 43	The Licensees shall coordinate the final design and operation plans of project facilities with the District Engineer, United States Army Engineer District, Los Angeles, California,

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	for compatibility with Corps of Engineers' plans to assure maximum practicable joint benefits in the Santa Clara and Santa Ana River basins.																																
Article 44	The Licensees shall file a revised Exhibits K, L, and M: (1) within one year of the date of issuance of this license for the constructed project facilities, and (2) for the unconstructed power facilities, within one year after their completion.																																
Article 45	The Licensees shall pay to the United States the following annual charges effective the date of this order is issued: A. For the purpose of reimbursing the United States for the cost of administration of Part I of the Act, a reasonable annual charge as determined by the Commission in accordance with the provisions of its Regulations, in effect from time to time. (1) The State of California Department of Water Resources. The authorized installed capacity is 354,700 kilowatts effective the first day of the month in which the Alamo Power Drop Development and Mojave Siphon Development were removed from the licensed project. (2) City of Los Angeles Department of Water and Power. The authorized installed capacity for such purpose is 1,700,000 horsepower as summarized in Table 2 for the on-line date of each unit. Table 2 Installed Capacity for Annual Charges Purposes FERC Project No. 2426 <table border="1" data-bbox="375 1031 1382 1423"> <thead> <tr> <th>Unit No.</th> <th>On-line Date</th> <th>Installed Capacity (kW)</th> <th>Installed Capacity (horsepower)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>07-11-73</td> <td>212,500</td> <td>283,333.3</td> </tr> <tr> <td>2</td> <td>07-09-74</td> <td>212,500</td> <td>283,333.3</td> </tr> <tr> <td>3</td> <td>07-13-76</td> <td>212,500</td> <td>283,333.3</td> </tr> <tr> <td>4</td> <td>06-16-77</td> <td>212,500</td> <td>283,333.3</td> </tr> <tr> <td>5</td> <td>12-16-77</td> <td>212,500</td> <td>283,333.3</td> </tr> <tr> <td>6</td> <td>08-11-78</td> <td>212,500</td> <td>283,333.3</td> </tr> <tr> <td colspan="2"></td> <td>Total</td> <td>1,700,000</td> </tr> </tbody> </table> (B) For the purpose of recompensing the United States for the use, occupancy and enjoyment of its lands, exclusive of transmission line rights-of-way, an amount as may be determined from time to time pursuant to the Commission's Regulations. (1) State of California Department of Water Resources: 5,002.87 acres. (2) City of Los Angeles Department of Water and Power: 155.00 acres. (C) For the purpose of recompensing the United States for the use, occupancy and enjoyment of its lands for transmission line rights-of-way, an amount as may be determined from time to time pursuant to the Commission's Regulations. (1) State of California Department of Water Resources: 49.40 acres. (2) City of Los Angeles Department of Water and Power: 138.23 acres.	Unit No.	On-line Date	Installed Capacity (kW)	Installed Capacity (horsepower)	1	07-11-73	212,500	283,333.3	2	07-09-74	212,500	283,333.3	3	07-13-76	212,500	283,333.3	4	06-16-77	212,500	283,333.3	5	12-16-77	212,500	283,333.3	6	08-11-78	212,500	283,333.3			Total	1,700,000
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Article 46	The Commission reserves the right to determine what additional transmission facilities, if any, shall be included in this license as part of the project.
Article 47	The Licensees shall continue to consult with the California Department of Parks and Recreation and arrange for its archeologist to determine the extent of any archeological and historical survey and salvage excavation necessary, prior to construction, and cooperate in any way needed to assure such survey and salvage operations are conducted and completed prior to any future construction and/or flooding, whichever is applicable. Upon completion of any archeological survey and/or salvage, reports of such activities or findings shall be filed with the Commission and the Heritage Conservation and Recreation Service of the U.S. Department of the Interior.
Article 48	The Licensees shall consult with appropriate Federal and State agencies and professional land use planners in developing plans to blend project facilities including transmission lines into the natural environs, and shall exercise care to ensure that project construction and maintenance activities cause minimal adverse effects on scenic values. Following completion of construction at each project site, Licensees shall clean up each area and dispose of all rubbish, trash, unused construction materials, temporary structures and other debris and materials and take such other measures needed to restore the scenic values of the project areas, to the satisfaction of the Commission's authorized representative.
Article 49	The Licensees shall, following consultation with appropriate Federal, State, and local agencies, file for Commission review its plans for the preservation and enhancement of the environment as it may be affected by the design and location of project works including transmission lines, giving appropriate consideration to recognized guidelines for protecting the environment and beneficial uses, including wildlife, of the transmission line rights-of-way.
Article 50	The Licensees shall, within two years from the date of issuance of this order, file for Commission approval a revised Exhibit R which conforms to Section 4.41 Exhibit R of the Commission Regulations under the Federal Power Act. The revised Exhibit R shall consider, among other things, the need for: (1) camping facilities, a visitor center, and other facilities to provide for the optimum level of recreational development at Pyramid Lake; (2) construction and development of the proposed Frenchman Flat Reservoir and its associated recreational facilities; and (3) recreational development of the Upper Castaic area for camping, picnicking, and other associated recreation activities, specifically excluding any use by the public of the water surface or subsurface of Elderberry Forebay.
Article 51	The Licensees shall, within two years from the issuance of this order, file for Commission approval a revised Exhibit S which conforms to Section 4.41 Exhibit S of the Commission Regulations under the Federal Power Act. The revised Exhibit S shall include, but not be limited to (1) the results of studies conducted to determine the effect of the project's operation on the fishery resources of project waters, including bioassay procedures conducted by the Licensees, in consultation with the U.S. Fish and Wildlife Service and the California Department of Fish and Game, to minimize the impact of the use of algicides in project reservoirs, by determining the application rate that would protect non-target organisms where widespread applications of algicide are planned; (2) a specific plan, including construction schedules and costs, if any, for implementing any mitigative or enhancement measures recommended by the study for the maintenance and protection of the fisheries resource of the project waters; (3) the results of a study to be conducted in cooperation with the "Condor Recovery Team", to determine the effects of the project's construction, operation and maintenance on the endangered California Condor and its critical habitat in the Pyramid Reservoir and Piru Creek areas; and (4)



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	detailed plans for any measures necessary to mitigate the loss of wildlife resources due to construction and operation of the project, including transmission line rights-of-way. Such plans shall include a description of lands, if any, which may be reserved for wildlife mitigation purposes.
Article 52	<p>Stream releases from Pyramid Dam into Piru Creek shall match natural surface inflow into Pyramid Lake to the extent operationally feasible and consistent with safety requirements, as further described in the following guidelines:</p> <ul style="list-style-type: none"> <li>• Natural inflow to Pyramid Lake will be released into Piru Creek at a rate of up to about 18,000 cubic feet per second (cfs), which is the maximum safe, designed release from Pyramid Dam. The exact maximum safe release depends on the lake surface water elevation at the time of the release.</li> <li>• Storm releases from Pyramid Dam into Piru Creek may be held back at less than 18,000 cfs if higher releases are deemed a threat to life, safety, or property at Pyramid Dam or downstream of the dam.</li> <li>• The licensees may elect to appropriate inflow to Pyramid Lake above the safe release flows under the provisions of its existing water rights.</li> <li>• Up to 3,150 acre-feet of State Water Project water would be delivered to United Water Conservation District via middle Piru Creek (from Pyramid Dam) between November 1 and the end of February of each water year. During this period, water deliveries may be made over a period of a few days, ramping flows up and down to simulate the hydrograph of a typical storm event, or they may be released more gradually over a longer period.</li> <li>• Releases from Pyramid Dam could be increased by up to 50 cfs for short periods to exercise the Pyramid Dam radial gate and stream release valves; test emergency power sources; conduct tests mandated by the Commission; or meet other short-term operational or maintenance requirements. No such testing would take place between March 15 and June 15. Testing would also be avoided to the extent possible between June 16 and July 31. Tests may be conducted at any time between August 1 and March 14, provided that flows do not increase by more than 50 cfs above current base flows during the event and that the event does not last longer than 15 minutes. Scheduled tests requiring larger releases or lasting longer than 15 minutes would require prior notification to the U.S. Fish and Wildlife Service (FWS). Unscheduled releases due to equipment failure or emergency situations must be reported to the FWS no later than three business days after the event.</li> <li>• The gaging station on upper Piru Creek (located north of Pyramid Lake) provides 24-hour averages; therefore, instantaneous peak stream releases may be attenuated. Unlike the natural inflow hydrograph, which typically peaks sharply, the stream release hydrograph of middle Piru Creek may be attenuated.</li> <li>• A multiplier is used to account for those portions of Pyramid Lake watershed that are not tributaries of upper Piru Creek and Cañada de los Alamos upstream of their respective gaging stations. This may result in some deviations for individual storm events due to localized variations in storm water intensity.</li> <li>• Because of operational constraints, the stream release hydrograph of middle Piru Creek would typically gage measured inflow. The valves at Pyramid Dam can be adjusted for release flows of less than 3 cfs; however, the precise measurement of released flows less than 3 cfs may not be possible due to operational constraints of the dam's gaging instrumentation.</li> </ul>
Article 53	The Licensees, for the purpose of assessing the quality of the aquatic environment in project reservoirs and in streams below project reservoirs, shall conduct water quality monitoring programs at selected representative locations within the project reservoirs

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	<p>and in Piru Creek and West Fork-Mojave River below the project reservoirs. The monitoring program shall be developed after consultation with the Fish and Wildlife Service of the U.S; Department of the Interior, U.S. Forest Service, and the California Department of Fish and Game. Monitoring shall continue for a minimum period of five years. Sampling shall be done at least once each month and shall include temperature and dissolved oxygen profiles, and physical, mineral, nutrient, and phytoplankton measurements as deemed necessary through consultation with the above agencies. Insofar as possible, this program may be implemented through the existing water quality monitoring programs being conducted in project reservoirs.</p> <p>Following the conclusion of the study, a final report shall be filed with the Commission showing the findings of this program together with the recommendations of the Licensees and the cooperating agencies for any further studies or proposals for maintenance or improvement of the aquatic environment of the reservoirs and/or stream reaches below the project dams as shown to be desirable. The Commission reserves the right, after notice and opportunity for hearing, to require additional studies and require such reasonable changes in the project and its operation as may be found necessary or appropriate to maintain or enhance the aquatic environment, consistent with the primary purpose of the project.</p>
Article 54	<p>The Licensees shall provide without charge to the Forest Service, a permanent water source (pipe and valve) at locations near the Osito Canyon Spoil Area and the south portal of the Angeles Tunnel, the exact locations to be agreed upon between the Licensees and the Forest Service. Water from these sources shall be made available throughout the year for fire suppression, wildlife management, and recreational purposes. The Licensees and the Forest Service shall determine the quantities of water to be delivered. In the event the Licensees and Forest Service cannot agree on release quantities and/or schedules for such releases, the Commission reserves the right to determine quantities and/or schedules.</p>
Article 55	<p>The Licensees shall, in cooperation with the Forest Service, provide for post-operational studies to determine the effects of the Castaic pumped storage operation on the stability of the Pyramid Reservoir shoreline, and shall take appropriate corrective actions, where necessary, to protect any affected recreational facilities and the natural resource values of the shoreline.</p>
Article 56	<p>The Licensees shall make available to the Forest Service upon request, water in an amount equal in volume to the subterranean water captured by the San Bernardino Tunnel groundwater system. The quantity of water to be delivered shall be determined by the Licensees and the Forest Service. In the event an agreement cannot be reached between the parties, the Commission reserves the right to determine such quantities, after notice and opportunity for hearing.</p>
Article 57	<p>The Licensees shall consult with the U.S. Forest Service to determine measures which are necessary to minimize the impact on, or to restore Federal lands disturbed by stripping, grading, excavating or other associated activities attributed to the construction of the project. Where practicable, disturbed areas shall be restored by utilizing accepted landscaping methods and revegetative measures. A plan specifying such landscaping methods and revegetative measures to be taken, shall be filed with the Commission within two years from the date of issuance of this order.</p>
Article 58	<p>The Licensees in the interest of providing public recreation shall maintain Silverwood Lake and Pyramid Reservoir surface elevations at the highest, most practicable levels commensurate with other project purposes during the summer recreation season. The Licensee shall, within two years of the date of issuance of this order, file with the Commission its operational plan for reservoir surface elevation maintenance.</p>

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Article 59	Licensees shall file with the Commission, implement, and modify when appropriate, an emergency action plan designed to provide an early warnings to upstream and/or downstream inhabitants and property owners if there should be an impending or actual sudden release of water caused by an accident to, or failure of, project structures. Such plan, to be submitted within one year of the date of issuance of the license, shall include, but not be limited to, instructions to be provided on a continuing basis to operators and attendants for actions they are to take in the event of an emergency; detailed and documented plans for notifying law enforcement agents, appropriate Federal, State, and local agencies, operators of water-related facilities, and those residents and owners of properties that could be endangered; actions that would be taken to reduce the inflow to the reservoir, if such is possible, by limiting the outflow from upstream dams or control structures; and actions to reduce downstream flows by controlling the outflow from dams located on tributaries to the stream on which the project is located. Licensees shall also submit a summary of the study used as a basis for determining the areas that may be affected by such an emergency occurrence, including criteria and assumptions used. Licensees shall monitor any changes in upstream or downstream conditions which may influence possible flows or affect areas susceptible to damage, and shall promptly make and file with the Commission appropriate changes in such emergency action plan.
Article 60	The Licensees shall, to the satisfaction of the Commission's authorized representative, install and operate such signs, lights, sirens or other devices below the powerhouses to warn the public of fluctuations in flow from the project, and shall install such signs, lights and other safety devices above the powerhouse intakes and spillways as may be reasonably needed to protect the public in its recreational use of the project lands and waters.
Article 61	The Licensee, Department of Water Resources, shall consult and cooperate with owners and operators of gas and oil pipelines requiring relocation as a result of the construction of the Pyramid Reservoir to minimize the possibility of interferences with either the pipelines or project operation. To the extent that lands of the National Forests will be utilized for the relocation of the pipelines, necessary permission must be obtained from the United States Forest Service. To the extent that the relocated pipelines will cross project lands of the Licensees, written approval for these rights-of-way must be obtained in accordance with Article 5 as modified by Article 44. In the event that no agreement is reached which will allow satisfactory pipeline and project operations, the Commission retains authority to consider and resolve all issues subject to its jurisdiction which are not resolved relating to conflicts between project and pipeline operations, after notice and opportunity for a further hearing.
Article 62	The operations of the Licensees, so far as they affect the use of waters of navigable waterways and the use, storage, and discharge of waters of the streams affected by the project, shall at all times be controlled by such reasonable rules and regulations as the Secretary of the Army may prescribe in the interests of navigation, and as the Commission may prescribe for the protection of life, health, and property, reasonably consistent with the purposes of the project.
Article 63	The Licensees shall permit the agency of the United States having jurisdiction over the lands affected, or persons or corporations authorized by the United States and having no alternate water supply, to use water for fire suppression purposes from any stream, conduit or body of water, natural or artificial, used by the Licensees in the operation of the project works covered by the License. The Licensees shall also permit the aforesaid agency of the United States to use water for recreation purposes up to the amount allocated to recreation by the Licensees in their recreation plans. The Licensee may

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	require the payment of reasonable charges by the agency using project water for recreation pursuant to this article.
Article 64	Licensees shall file with the Commission the actual dates of commencement of commercial operation of each existing generating unit, and each new unit as it becomes operational. The dates of commercial operation of existing units shall be filed within 6 months of the date of issuance of this license.
Article 65	<p>(a) In accordance with the provisions of this article, the Licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain other types of use and occupancy, without prior Commission approval. The Licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the Licensee shall also have continuing responsibility to supervise and control the uses and occupancies for which it grants permission, and to monitor the use of, and ensure compliance with the covenants of the instrument of conveyance for, any interests that it has conveyed, under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the Licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the Licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, cancelling the permission to use and occupy the project lands and waters and requiring the removal of any noncomplying structures and facilities.</p> <p>(b) The types of use and occupancy of project lands and waters for which the Licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities; and (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline. To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the Licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The Licensee shall also ensure, to the satisfaction of the Commission's authorized representative, that the uses and occupancies for which it grants permissions are maintained in good repair and comply with applicable State and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the Licensee shall: (1) inspect the site of the proposed construction, (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site, and (3) determine that the proposed construction is needed and would not change the basic contour of the reservoir shoreline. To implement this paragraph (b), the Licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the Licensee's costs of administering the permit program. The Commission reserves the right to require the Licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modifications of those standards, guidelines, or procedures.</p> <p>(c) The Licensee may convey easements or rights-of-way across, or leases of, project lands for: (1) replacement, expansion, realignment, or maintenance of bridges and roads for which all necessary State and Federal approvals have been obtained; (2) storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone</p>

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	<p>distribution cables or major electric distribution lines (69-kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir. No later than January 31 of each year, the Licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.</p> <p>(d) The Licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary State and Federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary Federal and State water quality certificates or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary Federal and State approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 watercraft at a time and are located at least one-half mile from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from the edge of the project reservoir at normal maximum surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year. At least 45 days before conveying any interest in project lands under this paragraph (d), the Licensee must file a letter to the Director, Office of Electric Power Regulation, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G or K map may be used), the nature of the proposed use, the identity of any Federal or State agency official consulted, and any Federal or State approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the Licensee to file an application for prior approval, the Licensee may convey the intended interest at the end of that period.</p> <p>(e) The following additional conditions apply to any intended conveyance under paragraphs (c) or (d) of this article:</p> <p>(1) Before conveying the interest, the Licensee shall consult with Federal and State fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.</p> <p>(2) Before conveying the interest, the Licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved Exhibit R or approved report on recreational resources of an Exhibit E; or, if the project does not have an approved Exhibit R or approved report on recreational resources, that the lands to be conveyed do not have recreational value.</p> <p>(3) The instrument of conveyance must include covenants running with the land adequate to ensure that: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; and (ii) the grantee shall take all reasonable precautions to ensure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project.</p> <p>(4) The Commission reserves the right to require the Licensee to take reasonable remedial action to correct any violation of the terms and conditions of this article, for the</p>

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	<p>protection and enhancement of the project's scenic, recreational, and other environmental values.</p> <p>(f) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon approval of revised Exhibit G or K drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project shall be consolidated for consideration when revised Exhibit G or K drawings would be filed for approval for other purposes.</p>
Article 69	<p>The Licensee shall within six months of completion of construction of the Mojave Siphon Powerplant file in accordance with the Commission's rules and regulations revised Exhibit F drawings showing the project as-built.</p>
Article 301	<p><i>(Devil Canyon only; as added by 41 FERC ¶ 62,301)</i>. The licensee shall commence construction of project works within two years from the issuance date of this order and shall complete construction of the project within four years from the issuance date of this order.</p> <p><i>(Mojave Siphon only; as added by 51 FERC ¶ 62,090)</i>. The licensee shall begin construction of the amended project works within 2 years and shall complete construction of the project within 4 years from the issuance date of this order. This article supersedes both article 70 of the Order Amending License (Major) issued August 12, 1982 (20 FERC ¶ 62,266), and paragraph (A) of the Order Granting Extension Of Time for the deadline for completing project construction until July 31, 1990, issued June 14, 1988.</p>
Article 302	<p><i>(Devil Canyon only; as added by 41 FERC ¶ 62,301)</i>. The licensee shall at least 60 days prior to start of construction, submit one copy to the Commission's Regional Director and two copies to the Director, Division of Inspections, of the final contract drawings and specifications for pertinent features of the project, such as water retention structures, powerhouse, and water conveyance structures. The Director, Division of Inspections, may require changes in the plans and specifications to assure a safe and adequate project.</p> <p><i>(Mojave Siphon only; as added by 51 FERC ¶ 62,090)</i>. At least 60 days before starting construction, the licensee shall submit one copy to the Commission's Regional Director and two copies to the Director of the Division of Inspections and Dam Safety, of the final contract drawings and specifications for pertinent features of the project, such as water-retention structures, all necessary transmission facilities, the powerhouse, and water conveyance structures. The Director of the Division of Inspections and Dam Safety, may require changes in the plans and specifications.</p>
Article 303	<p><i>(Devil Canyon only; as added by 41 FERC ¶ 62,301)</i>. The licensee shall review and approve the design of contractor-designed cofferdams and deep excavations prior to the start of construction and shall ensure that construction of cofferdams and deep excavations is consistent with the approved design. At least 30 days prior to start of construction of the cofferdam, the licensee shall submit to the Commission's Regional Director and Director, Division of Inspections, one copy each of the approved cofferdam construction drawings and specifications and the letter(s) of approval.</p> <p><i>(Mojave Siphon only; as added by 51 FERC ¶ 62,090)</i>. Within 90 days after completing construction, the licensee shall file for the Commission approval revised exhibits A, F,</p>

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	and G to describe and show the amended project as built. This article supersedes article 71 of the order amending license issued August 12, 1982 (20 FERC ¶ 62,266).
Article 304	<i>(Devil Canyon only; as added by 41 FERC ¶ 62,301)</i> . The licensee shall within 90 days of completion of construction of the amended Devil Canyon Powerplant file, for approval by Commission, revised Exhibits A, F, and G to describe and show the amended Devil Canyon Powerplant as built.
Article 305	The licensee shall prior to implementing the subsurface exploration program of the afterbay site submit for review to the San Francisco Regional Director and the Director, Division of Dam Safety and Inspections, details on the proposed program. Among other things the plan should be fully developed specifying the number of borings, location, and type of testing proposed for the soil samples.
Article 306	The licensee shall commence construction of the amended project within two years from the issuance date of this order and shall complete construction of the project within four years from the issuance date of this order.
Article 307	The licensee shall, 60 days after the transfer of land from the Bureau of Land Management to the City of San Bernardino, file with the Commission a copy of the executed transfer showing the change of land ownership. Additionally, the licensee shall file documentation showing that the licensee has obtained all easements necessary to construct the Second Afterbay.
Article 308	The licensee shall, at least 60 days prior to start of construction, submit one copy to the Commission's Regional Director and two copies to the Director, Division of Dam Safety and Inspections of the final contract drawings and specifications for pertinent features of the project such as water retention structures, powerhouse, and water conveyance structures. At least 30 days before submitting the plans and specifications a supporting design report showing the final design of the project water retaining and conveyance features should be submitted for review. Included in the design report should be copies of the boring logs of the second afterbay site, the engineers evaluation of the subsurface investigation, stability analysis of the cut slopes under all credible loading conditions, final design details of the reservoir underdrain system and the design details for all water retaining and conveyance structures. The licensee shall not commence construction of any project structure until the design report and plans and specifications have been reviewed by the Commission. The Director, Division of Dam Safety and Inspections, may require changes in the plans and specifications to assure a safe and adequate project.
Article 401	<p><i>(Devil Canyon only; as added by 41 FERC ¶ 62,301)</i>. The licensee, after consultation with the California Department of Fish and Game (DFG), shall develop a plan to monitor project-induced fish mortality at the Devil Canyon Hydroelectric Project. Within 4 months after the date of issuance of the license amendment, the licensee shall file for Commission approval a copy of the monitoring plan and a schedule for filing the results of the monitoring program. The Commission reserves the right to require modifications to the plan and to the schedule.</p> <p>The results of the monitoring shall be submitted to the Commission according to the approved schedule, with the comments from DFG on the results. If the results of the monitoring show that project operation adversely affects the fish resources of Silverwood Lake, the licensee also shall file for Commission approval measures, to include but not be limited to modifications to project structures and operation or other compensatory measures such as fish stocking, that would minimize or compensate for project-induced adverse effects on fish resources. Comments from the DFG must be included in this filing. The Commission reserves the right to require changes to the proposed measures.</p>

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	<p><i>(Mojave Siphon only; as added by 51 FERC ¶ 62,090).</i> The erosion control plan consisting of the last two paragraphs of page 2 of additional information that includes diverting runoff from excavated areas, conveying flows down lined channels or pipes, installation of an underground drainage system around the power plant, and lining roadside ditches to carry runoff to culverts under the roadway, dated August 16, 1989, is approved and made part of this license and shall be expanded and implemented with the following modifications.</p> <p>Along with final plans and specifications required by Article 302, the licensee shall file a modified plan to control erosion, prevent slope instability, and minimize the quantity of sediment resulting from project construction and operation. The plan shall include: (1) a description of the actual site conditions; (2) detailed descriptions, design drawings, and specific topographic locations of all control measures, and (3) provisions for protecting and stabilizing cutslopes and spoil piles. The plan shall incorporate recommendations made by the Soil Conservation Service in a letter dated August 16, 1989. For areas to be revegetated, the plan shall (1) identify species mix, (2) seeding rate, (3) mulch, and (4) soil amendments. The Commission may require changes to the plan to ensure adequate protection of the environmental, scenic, and cultural values of the project area.</p>
Article 402	<p>The licensee shall install, operate, and maintain warning signs and a siren to warn boaters and bank fishermen of sudden increases in discharge from the existing chute, proposed as the project bypass facility, at least 90 days before starting project operation. Within 60 days after completing installation of the system, the licensee shall file with the Commission, as-built drawings of the warning system that show the location and design of the warning signs and siren system.</p>
Article 403	<p>The licensee shall implement the revegetation plan providing for the restoration of upland vegetative cover and wildlife habitat, consisting of pages 3 through 6, line 12, in the additional information dated August 16, 1989. The measures shall be implemented according to the schedule outlined in the plan. The licensee shall file with the Commission a monitoring report on the success of revegetation 3 years after completion of construction. If revegetation is not successful, the licensee shall include in the monitoring report, for Commission approval, additional proposed mitigative measures, prepared after consulting with the U.S. Fish and Wildlife Service, the Soil Conservation Service, and the California Department of Fish and Game, to ensure the success of revegetation. Comments of the consulted agencies shall be included with the measures.</p>
Article 404	<p>The licensee, after consulting with the U.S. Fish and Wildlife Service, the Soil Conservation Service, and the California Department of Fish and Game, and at least 90 days before starting any project related land-disturbing, land-clearing, or spoil-producing activities, shall file for Commission approval a plan for in-kind riparian habitat replacement.</p> <p>The replacement vegetation shall provide the equivalent value to wildlife as lost habitat due to project construction.</p> <p>The plan shall include: (1) maps showing the location of all replacement habitat, site boundaries, size of each site, and physical and habitat features; (2) a description of planting methods, fertilization and irrigation requirements, and a planting schedule; (3) a description of the soil and substrate conditions at the replacement sites; (4) a monitoring program that includes goals and criteria for successful establishment of riparian vegetation, sampling procedures, and reporting requirements; (5) procedures to implement if monitoring reveals that establishment of vegetation is not successful; and (6) an implementation schedule that provides for habitat replacement as soon as possible. Agency comments shall be included in the filing.</p>



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	The Commission reserves the right to require changes to the plan. The licensee shall not start any land-clearing, land-disturbing, or spoil-producing activities until the Commission approves the plan.
Article 405	<p>The licensee, after consultation with the U.S. Fish and Wildlife Service and the California Department of Fish and Game, shall survey: (1) areas comprising potential habitat for the Mojave tarweed (<i>Hemizonia mohavensis</i>) within and adjacent to the construction corridor of the second barrel crossing Horsethief Canyon and Creek; and (2) riparian areas affected by project construction for the western pond turtle (<i>Clemmys marmorata</i>). The licensee shall file the survey results with the Commission at least 90 days before starting any project-related landclearing, land-disturbing, or spoil-producing activities. If the survey shows Mojave tarweed or the western pond turtle exists in areas that potentially will be disturbed by construction activities, the licensee shall include with the survey results, for Commission approval, a plan for protecting the plant and/or turtle, prepared after consulting with the U.S. Fish and Wildlife Service and the California Department of Fish and Game. The plan shall evaluate mitigating any loss of the tarweed by transplanting or seed propagation and shall include provisions for capturing and returning any pond turtles that may be found. Comments from the consulted agencies shall be included with the plan.</p> <p>The Commission reserves the right to require changes to the plan. The licensee shall not start any land-clearing, land-disturbing, or spoil-producing activities until the Commission approves the plan.</p>
Article 406	<p>The licensee, after consultation with the California State Historic Preservation Officer (SHPO) and San Bernardino County (County), and before starting any land-disturbing, land-clearing, or spoil-producing activities associated with construction of the project, shall implement the cultural resources management plan to avoid and protect archeological sites filed with the Commission on January 10, 1990.</p> <p>Within 3 years after the date of this order, the licensee shall file copies of: (1) reports prepared on excavations and other activities identified in the plan to mitigate and avoid impacts to archeological sites, and (2) letters from the SHPO and the County commenting on the adequacy of the reports to ensure avoidance and protection of these sites. The plan shall adhere to the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation.</p> <p>The licensee shall make funds available in a reasonable amount for implementing the cultural resources management plan, conducting avoidance and mitigative work, and documenting these activities in reports. If the licensee, the SHPO, and the County cannot agree on the amount of money to be spent for these activities, the Commission reserves the right to require the licensee to conduct the necessary work at the licensee's own expense.</p>
Article 407	<p>The licensee shall resurvey site CA-SBR-501 using current recordation standards should site CA-SBR-501 be exposed when Silverwood Lake is lowered as authorized in this order. The results of the new survey shall be filed with the Commission and the California State Historic Preservation Officer (SHPO).</p> <p>If the licensee discovers any previously unidentified archaeological or historic sites during the course of constructing or developing project works or other facilities at the project, the licensee shall stop all land-clearing and land-disturbing activities in the vicinity of the sites, shall consult with the SHPO, and shall file, for Commission approval, a cultural resources management plan prepared by a qualified specialist. The management plan shall include the following: (1) a description of each discovered property, indicating whether it is listed on or eligible to be listed on the National Register of Historic Places, (2) a description of the potential effect on each discovered property,</p>

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	(3) proposed measures for avoiding or mitigating effects, (4) documentation of the nature and extent of consultation, and (5) a schedule for mitigating effects and conducting additional studies. The Commission reserves the right to require changes to the plan.
Article 408	The licensee must use gray-brown earth tones consistent with the local desert colors on all exterior surfaces of the powerhouse, as described on page 6 of the applicant's response to request for additional information, dated November 20, 1989. This color scheme must also be used on the exterior surfaces of all other licensed structures.
Article 409	The licensee, after consultation with the California Department of Fish and Game and U.S. Fish and Wildlife Service and within 90 days from the issuance of this order, shall file for Commission approval a detailed revegetation plan for the 225-acre second afterbay site. The plan shall include, but not be limited to, the recommendations of the FWS for a revegetation plan, as stated in the letter dated October 31, 1988, from Nancy Kaufman to Viju Patel, CA Department of Water Resources. If the licensee does not agree with any of the FWS' recommendations, the licensee shall provide an explanation of the reasons for not agreeing with the recommendation(s). The comments of the consulted agencies shall be included with the plan. The Commission reserves the right to require changes to the plan.
Article 410	The licensee shall continue consultation with the City of San Bernardino and San Bernardino County to develop a plan to mitigate for the loss of the Pinecrest Air Park hanglider landing site. The plan shall be filed for Commission approval within 1 year from the issuance date of this order and shall include comments from the consulted agencies. The Commission reserves the right to require changes to the plan.
Article 411	<p>The mitigative measures on pages E-4 through E-6, E-8 and E-9 of the application for amendment of license filed on January 23, 1989, pertaining to vegetation, wildlife, soil erosion, surface water drainage, and fish are approved. The licensee, within 90 days of the issuance date of this order, shall file, for Commission approval, an implementation plan for the approved mitigative measures. The plan shall include, but not be limited to, a map showing the location of measures and an implementation schedule. The Commission reserves the right to require changes to the plan.</p> <p><a href="#">[Actions to implement Article 411 were filed with the Commission as follows: Request to modify Article 411 filed on October 7, 1996 and approved by 77 FERC ¶ 62,138 (1996). (A) Article 411 of the Order Amending License, issued July 23, 1990, is amended to delete the requirement for artificial wildlife drinkers.]</a></p>
Article 412	The licensee shall retain, prior to the start of construction, a qualified biologist (designated the bald eagle biologist) to perform and supervise all work required to implement the incidental take terms and conditions contained in the U.S. Fish and Wildlife Service's (FWS) biological opinion dated September 26, 1994. The bald eagle biologist shall be approved by the FWS.
Article 413	<p>Blasting shall be minimized to the maximum extent possible. The following restrictions on blasting apply for the duration of all construction authorized by this order:</p> <p><i>From November 15 to July 15</i></p> <ol style="list-style-type: none"> <li>1. The licensee shall not exceed four blasting events per day between 10:00am and 3:00pm.</li> <li>2. When blasting is performed at a depth of less than 20 feet, the licensee shall use blast mats, earth padding, or other similar devices or methods, as necessary, to reduce the effects of blasting.</li> </ol>

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	<p>3. Restriction number 1 in this Ordering Paragraph is waived should blasting be performed at or below 20 feet deep where such blasting does not cause ground vibrations greater than 0.02 inch per second as measured by a blast seismograph installed near the Miller Canyon arm bald eagle nest.</p> <p>4. All blasting restrictions in this Ordering Paragraph are waived should the licensee's bald eagle biologist, in consultation with the U.S. Fish and Wildlife Service (FWS), determine that all nesting bald eagles are absent from Silverwood Lake for at least 7 days and are not expected to return that season, and other non-nesting bald eagles are not using areas within 0.5 mile of any blasting.</p> <p><i>From July 16 to November 14</i></p> <p>No blasting restrictions.</p> <p>The licensee shall keep adequate records of each blasting event including: date, time, depth, and resulting seismograph readings. These records shall be presented to Commission and FWS representatives upon request.</p>
Article 414	<p>The following restriction on night lighting shall apply for the duration of all construction authorized by this order:</p> <p><i>From November 15 to July 15</i></p> <p>Night lighting shall be used in a manner to prevent the direct illumination of non-work areas to the extent possible. The licensee shall use screens, shades, and other devices as necessary, and shall place lights as low as possible, to direct light onto work areas and access roads only. To the extent possible, lighting shall point away from the Miller Canyon arm bald eagle nest and any roosting areas, and generators used for lighting shall be placed on the west side of the project site.</p> <p><i>From July 16 to November 14</i></p> <p>No night lighting restrictions.</p>
Article 415	<p>Within 60 days from the date of this order, the licensee shall file a plan with the Commission for implementing the U.S. Fish and Wildlife Service's (FWS) terms and conditions numbers 3, 4, 7, 8, and 9, contained in its biological opinion dated September 26, 1994. This plan is for Commission approval. The licensee shall consult with the FWS while developing the plan and shall obtain FWS comments on the plan prior to filing it with the Commission. The Commission reserves the right to make changes to the plan.</p>
Article 417	<p>To the extent possible, breeding bald eagles at Silverwood Lake shall be trapped and fitted with biotelemetry transmitters at the first possible opportunity between: November 15, 1995 and January 15, 1996; and November 15, 1996 and January 15, 1997. Breeding bald eagles shall not be trapped outside of the above dates, unless determined permissible by the licensee's bald eagle biologist in consultation with the U.S. Fish and Wildlife Service (FWS). The licensee shall use a biotelemetry transmitter approved by the FWS which is accurate to within 6,000 feet of true location.</p> <p>Should any breeding bald eagles be fitted with biotelemetry transmitters during the period specified in this Ordering Paragraph, the licensee shall track these eagles bi-weekly using the Argos Data Collection and Location System (satellite tracking) or other system approved by the FWS for four years beyond the date of each eagle being fitted with a transmitter. The FWS shall be notified within 10 days of any transmitter-fitted bald eagle not located after 45 days.</p> <p>A monitoring report with the licensee's bi-weekly data shall be submitted to the FWS every 6 months starting from the date the first bald eagle is fitted with a transmitter. This report shall contain: (1) a description of how many eagles were trapped and fitted with transmitters, (2) the location and movements of eagles fitted with transmitters, giving latitude and longitude, and (3) maps showing bi-weekly data, as appropriate. The due</p>

<b>License Article</b>	<b>Summary of Article Subject</b>
	date for submitting monitoring reports with the FWS shall be adjusted, to the extent possible, to coincide with the due date of any other required bald eagle monitoring reports. At the end of the four-year monitoring period (on December 31 of that year), the licensee shall submit a final monitoring report to the FWS and the Commission which compiles and summarizes all data collected.

STATE OF CALIFORNIA  
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY  
STATE WATER RESOURCES CONTROL BOARD

ORDER WQ 2009-0007

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In the Matter of Petitions for Reconsideration of Water Quality Certification for the

**RE-OPERATION OF PYRAMID DAM FOR  
THE CALIFORNIA AQUEDUCT HYDROELECTRIC PROJECT  
FEDERAL ENERGY REGULATORY COMMISSION PROJECT NO. 2426**

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SOURCE: Piru Creek

COUNTY: Los Angeles and Ventura Counties

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**ORDER PARTIALLY GRANTING PETITION FOR RECONSIDERATION AND  
AUTHORIZING ISSUANCE OF REVISED WATER QUALITY CERTIFICATION**

BY THE BOARD:

**1.0 INTRODUCTION**

California Trout, Inc. and Friends of the River (collectively, Petitioner) petition the State Water Resources Control Board (State Water Board) for reconsideration of the State Water Board Executive Director's certification of a proposed amendment to the Federal Energy Regulatory Commission (FERC) license for FERC hydroelectric Project 2426 (Project) as complying with the requirements of section 401 of the Clean Water Act (33 U.S.C. § 1341). The State Water Board finds that portions of the petition for reconsideration have merit, and thus modifies the certification as described below, and approves the certification as modified. (Cal. Code Regs., tit. 23, § 3869.)

## **2.0 FACTUAL BACKGROUND**

The California Department of Water Resources (DWR) and the City of Los Angeles (collectively Applicant or Licensee) applied to FERC for an amendment to the current license for FERC Project No. 2426 on March 17, 2005. FERC Project No. 2426 includes a number of hydroelectric developments that are situated along the length of the California Aqueduct. The application for the license amendment only addresses operation of Pyramid Dam and associated impacts to the 18-mile reach of Piru Creek between Pyramid Dam and Lake Piru. Lake Piru is a non-Project facility operated by United Water Conservation District.

Amendments to the FERC license requested in Applicant's application included the modification of minimum flow requirements for Piru Creek below Pyramid Dam that were required under Article 52 and Exhibit S of the existing FERC license, directing Applicant to establish and maintain a year-round trout fishery. After the United States Fish and Wildlife Service (FWS) informed Applicant that the flow regime was adversely affecting the arroyo toad (*Bufo californicus*), a species listed as endangered under the federal Endangered Species Act, Applicant requested the license amendment to avoid incidental take of the arroyo toad. The requested license amendment incorporates an operating schedule Applicant developed in consultation with FWS, the California Department of Fish and Game (DFG), the U.S. Department of Agriculture, the United States Forest Service (Forest Service), and other interested agencies and parties.

On February 10, 2005, prior to submittal of the application for a license amendment, Licensee submitted a request to FERC for a temporary waiver from the minimum flow releases under FERC license Article 52. FERC approved the temporary waiver on April 12, 2005, and DWR has since that date been operating Pyramid Dam flow releases to simulate natural flow conditions using the same operating guidelines that would be implemented under the license amendment.

The DWR water right at Pyramid Dam is authorized under Water Right Permit 18709 (Application 25988) issued by the State Water Board. Permit 18709 is for year-round storage of 55,000 acre-feet of water collected from Piru Creek. Pyramid Dam is also designated as a point of rediversion under various permits and licenses held by DWR that authorize water to be

conveyed through the California Aqueduct for distribution at various facilities. Fish and wildlife enhancement is an authorized purpose of use under Water Right Permit 18709, but the permit does not include any requirements for minimum flows in Piru Creek.<sup>1</sup>

Before FERC may issue a new license, Applicant must obtain water quality certification under section 401 of the Clean Water Act from the State Water Board. (33 U.S.C. § 1341.) The State Water Board must certify that the Project will comply with the applicable provisions of the Clean Water Act, including water quality standards set forth in the Water Quality Control Plan for the Los Angeles Regional Water Quality Control Board (Basin Plan). (*Ibid.*) The State Water Board must analyze the overall effect of the Project license amendment on water quality and include conditions in the certification, if necessary, to adequately protect the designated beneficial uses identified in the Basin Plan.<sup>2</sup>

The State Water Board Executive Director certified the license amendment on December 9, 2008. On January 7, 2009, the State Water Board received a petition for reconsideration and request for stay from Petitioner, pursuant to California Code of Regulations, title 23, section 3867. Petitioner requests that the State Water Board revoke the certification, prepare a subsequent or supplemental Environmental Impact Report (EIR), and adopt the conditions recommended in the petition. Petitioner also requests a stay on the certification pending a decision on reconsideration, pursuant to California Code of Regulations, title 23, section 3869, subdivision (d). A notice regarding the petition was issued by the State Water Board on January 30, 2009, that included a request for comments or responses to the petition to be received within 20 days. Comment letters were received before the end of the 20-day period from the following parties:

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<sup>1</sup> In Water Right Decision 1586 (1982) the State Water Board approved applications for the appropriation of water from the Santa Clara River and its tributaries, including Application 25988. Permit 18709 included conditions requiring DWR to fund and make water available for a steelhead study to be conducted by the Department of Fish and Game, and reserved jurisdiction to adopt new permit conditions upon the completion of the study. The study identified the need for fish passage facilities and minimum flows below another project approved in Decision 1586, the United Water Conservation District's Vern Freeman Diversion Dam, but concluded that ample flow is available in the system for upstream and downstream migration without the need to release water from the other projects approved in Decision 1586. Based on the results of the study, the State Water Board amended the permit for the Vern Freeman Diversion Dam to require bypass flows and a fish ladder, and deleted the study requirements and reservation of jurisdiction from Permit 18709. (State Water Board Order WR 87-8.)

<sup>2</sup> The existing beneficial uses identified for Piru Creek in the Basin Plan include: agricultural supply (AGR); industrial process supply (PROC); groundwater recharge (GWR); water contact recreation (REC-1); non-contact water recreation (REC-2); warm freshwater habitat (WARM); cold freshwater habitat (COLD); wildlife habitat (WILD); rare, threatened, or endangered species (RARE); and spawning, reproduction, and/or early development for fish (SPWN).

- United States Fish and Wildlife Service
- California Department of Water Resources
- Dr. Samuel Sweet
- State Water Contractors, Inc.

Three late comment letters were received after the end of the 20-day period from the following parties:

- United Water Conservation District
- Land Protection Partners on behalf of Friends of the River and California Trout, Inc.  
(2 letters)

Because the State Water Board is providing an opportunity for comment on a draft order before it adopts a final order, and the comments would be timely for that purpose, the State Water Board has considered the three late comment letters.

### **3.0 APPLICABLE LAW**

An interested person may petition the State Water Board for reconsideration of an action or failure to act. (Cal. Code Regs., tit. 23, § 3867.) Following a petition for reconsideration, the State Water Board may

- (1) refuse to reconsider the action or failure to act if the petition fails to raise substantial issues that are appropriate for reconsideration;
- (2) deny the petition upon a finding that the original action or failure to act was appropriate and proper;
- (3) set aside or modify, if possible, the previous action or take new appropriate action; or
- (4) direct the executive director to take appropriate action.

(Cal. Code Regs., tit. 23, § 3869, subd. (a).)



## **4.0 ARGUMENTS AND DISCUSSION**

### **4.1 The 401 Certification did not Violate the Clean Water Act or other State and Federal Water Quality Requirements**

Petitioner contends that the certification fails to include conditions necessary to protect the beneficial uses of Piru Creek, to meet the water quality objectives in the Basin Plan, and to satisfy antidegradation requirements. For the reasons set forth in sections 4.1.1 through 4.1.3, the State Water Board concludes these contentions are without merit.

#### **4.1.1 The 401 Certification protects the beneficial uses of Piru Creek**

The State Water Board may deny or condition certification as necessary to comply with applicable water quality standards. (Wat. Code, § 13160; Cal Code Regs., tit. 23, §§ 3837, subd. (b)(1) & 3859, subd. (a). See generally *PUD No. 1 v. Washington Department of Ecology* (1994) 511 U.S. 700, 704-705 [water quality standards include designated uses, criteria, and antidegradation requirements]; see also Wat. Code, § 13050, subds. (f) & (h) [the Porter-Cologne Water Quality Control Act uses the terms beneficial use and objectives instead of designated use and criteria].) Petitioner claims that a report by Land Protection Partners (LPP) that accompanied the petition shows that the certification conditions are insufficient to protect the beneficial uses for Piru Creek for a number of reasons. The report recommends an alternative flow schedule that includes the following requirements:

- From the first winter storm to March 15, a volume of water equivalent to that which flows into Pyramid Lake shall be released from it, within the operational constraints of Pyramid Dam.
- At a period of at least once every five to seven years, a release event of significant volume adequate to produce scouring flows must be implemented if such flows do not occur naturally from rainfall events.
- Any water deliveries shall take place during the winter period (November to February) and be released to emulate the flows of a winter storm in volume and timing.
- From March 15 through August 31, water shall be released at a minimum of 15 cubic feet per second (cfs) or natural inflows to Pyramid Lake, whichever is greater, then decreased by 1 cfs every 2 days between September 1 and September 20 to achieve and maintain a 5 cfs minimum flow from September 20 until the first winter storm.

- Flows shall be increased gradually to meet the 15 cfs flows in March during years when flows are less than 15 cfs leading up to March 15.

The State Water Board finds that the report fails to provide substantial support for the assertion that the certification conditions are insufficient to protect the beneficial uses for Piru Creek.

First, the report alleges that the elimination of minimum summer instream flows may actually hurt the arroyo toad by eliminating shallow pool conditions necessary for successful breeding, forcing the toads to share the remaining deeper pools with predatory bullfrogs.

Dr. Samuel S. Sweet, a professor in the Department of Ecology, Evolution and Marine Biology at the University of California, Santa Barbara, has conducted the majority of life history studies of arroyo toads, which occurred primarily in the Los Padres National Forest. Dr. Sweet has authored several reports on the ecology and status of arroyo toads for the Forest Service and describes the major characteristics of arroyo toad breeding pools in a 1992 report<sup>3</sup> as, “proximity to sandy terrace habitat; minimal current; majority of pool < 1 inch deep; substrate of sand, gravel, or pebbles; gently sloping shoreline, or central bar; and bordering vegetation low or set back such that most of the pool is open to the sky.” Based on this description of breeding habitat, under a scenario of gradually diminishing summer flows (i.e., without the 15 cfs minimum called for by Petitioner), arroyo toads would not be expected to inhabit the deeper pools where bullfrogs are more likely to occur. Furthermore, it is unlikely that absence of the enhanced summer flow advocated by the Petitioner would result in elimination of breeding pools during the breeding season. According to the FWS Recovery Plan for the arroyo toad,<sup>4</sup> arroyo toads may begin breeding as early as January in Southern California (late March in the northern portion of their range), with peak metamorphosis from larval to juvenile life stages occurring from late April to mid-May (late June to mid-July in the north). While breeding activity may continue as late as July, depending upon the condition of the female, a lack of augmented summer flows would not eliminate the low flow, shallow pools favored by the arroyo toad as breeding habitat.

FWS also addresses the impact minimum summer stream flows of 15 cfs would likely have on arroyo toad habitat in Piru Creek in its comment letter as follows:

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<sup>3</sup> Sweet, S. S. (1992) Initial report on the ecology and status of the arroyo toad (*Bufo microscaphus californicus*) on the Los Padres National Forest of southern California, with management recommendations and technical Appendix. U. S. Department of Agriculture, Forest Service, Los Padres National Forest.

<sup>4</sup> USFWS (1999) Arroyo southwestern toad (*Bufo microscaphus californicus*) recovery plan. Portland, Oregon.

Maintaining summer flows at 15 cfs would channelize segments of Piru Creek that would otherwise be shallow pools and open sand and gravel flood terraces. The steady release of water would create entrenched channels with encroaching vegetation and would give opportunities for non-native predators (e.g., largemouth bass (*Micropterus salmoides*), green sunfish (*Lepomis cyanellus*), crayfish (*Procambarus clarkii*), and bullfrogs (*Rana catesbeiana*)) to proliferate by expanding habitat for these species within Piru Creek.

These comments offer a convincing argument against the 15 cfs summer flows. The State Water Board finds that elimination of minimum summer instream flows would not harm the arroyo toad, and that adopting the alternative flow schedule recommended by Petitioner would harm the arroyo toad.

The petition further alleges that California red-legged frog (CRLF) larvae may require breeding pools as late as June or July. While it is true that some CRLF may require breeding pools in June or July (the species historically has been found over a substantial portion of the state at elevations that range from sea level to about 5,000 feet), information contained in the FWS CRLF Recovery Plan<sup>5</sup> states that most adult frogs lay their eggs in March and that eggs develop into tadpoles 20 to 22 days later. CRLF tadpoles typically metamorphose into juveniles 11 to 20 weeks after becoming tadpoles and inhabit shallow water (10 to 20 inches) prior to metamorphosis. The gradual reduction of instream flow during the summer that is expected to occur under the current certification conditions would not eliminate this shallow water habitat. Moreover, according to Cook,<sup>6</sup> the timing of metamorphosis in red-legged frogs “is an important adaptation to California’s Mediterranean climate, where ephemeral water bodies hydrate in the winter and are dry by late summer or fall.” Consequently, restoration of a more natural flow regime in Piru Creek is not expected to harm any CRLF that may be present.

The petition contends that under the alternative flow regime described above:

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<sup>5</sup> USFWS (2002) Recovery plan for the California red-legged frog (*Rana aurora draytonii*). Portland, Oregon.

<sup>6</sup> Cook, D. (1997) Biology of the California red-legged frog: a synopsis. Transactions of the Western Section of the Wildlife Society 33:79-82.

- a) the flow regime would be sufficient to sustain native trout populations and coldwater fish habitat;
- b) scouring (from winter flows) would preserve essential arroyo toad breeding habitat by eliminating vegetation and exotic plant species on the banks of the creek;
- c) summer instream flows would help buffer arroyo toad and CRLF from adverse impacts of bullfrogs by creating a sufficient variety and number of pools and habitat so reproduction of the native species is maximized and the species are able to segregate into their preferred habitats;
- d) an adaptive management program would ensure that adverse impacts of the license amendment would be mitigated; and
- e) removal of adult bullfrogs from arroyo toad breeding habitat would be a more effective method of dealing with this invasive predator than reducing summer instream flows.

The winter flows called for in Petitioner's proposal are largely the same as those contained in the water quality certification, and the modifications Petitioner would make to the winter flow regime<sup>7</sup> are not necessary to protect beneficial uses. The alternative flow regime's provision for augmented summer flow releases and the adaptive management program proposed by the Petitioner would not be appropriate for several reasons. As stated previously, maintaining summer instream flows would channelize segments of Piru Creek, would promote the encroachment of vegetation, and would not necessarily segregate native species, but may in fact provide opportunities for non-native predators to proliferate. The adaptive management program, which includes selectively removing adult bullfrogs from arroyo toad breeding habitat during the breeding season, implies the need for intensive, long-term management actions that, as FWS notes in its comment letter on the petition, would not be consistent with the goals of the Endangered Species Act. Moreover, no evidence or supporting information is provided in the Petitioner's report to support the claim that maintaining summer instream flows would create a sufficient variety and number of pools to maximize arroyo toad reproduction while also segregating native and non-native species.

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<sup>7</sup> The alternative flow regime in the petition includes a provision for additional winter flow releases "of significant volume adequate to produce scouring flows" that would be implemented at a period of at least once every five to seven years, if such flows do not occur naturally from rain events.

Additionally, there is insufficient evidence or data to support Petitioner's claim that the alternative flow regime is well suited to support native trout populations. The LPP report states that summer flows are beneficial to native fish based on a study that focuses on Putah Creek, which is located in a very different environmental setting in northern California. On Putah Creek, releases during the summer of stored water that would otherwise be exported from the watershed serve to compensate, in part, for major reductions in pre-project winter flows. (Cf. State Water Board Decision 869 (1957) at pp. 11-14 [discussing effects of the Solano Project on streamflows and groundwater recharge].) In contrast, the FERC license amendment seeks to restore the natural flow regime to which the fish are adapted. In fact, comments filed by the National Marine Fisheries Service (NOAA Fisheries) on the Draft EIR state that the Project would have overall beneficial effects on populations of native rainbow trout by restoring natural migration flow opportunities, reducing non-native aquatic predators, and restoring natural fluvial geomorphic processes.

The State Board also agrees with comments made by FWS and Dr. Sweet that the provision for sediment replenishment below Pyramid Dam included in the Petitioner's proposal is unnecessary and not supported scientifically. Most of the arroyo toad habitat is located in the lower half of the Project reach below the confluence with tributaries that provide a source of sediment. FWS field observations have provided additional documentation showing that sufficient sediment input occurs locally (i.e., from the middle Piru Creek tributaries). Additionally, DWR's EIR states that channel degradation is an ongoing process under the current condition, and although importation of sediment by truck was investigated, it was determined to be impractical.

#### **4.1.2 The certification provides reasonable assurance that the project will comply with numerical water quality objectives**

Petitioner next argues that the certification requires reconsideration because the State Water Board "failed to ensure that the Project would not violate numerical water quality standards for temperature and dissolved oxygen" and claims that, "the State Board did not include any conditions in the 401 certification that address the violation of water quality standards that will result from this Project." (Petition, p. 10.)

The Petition does not explain how the proposed changes would affect dissolved oxygen or temperature levels, but rather cites to previous letters submitted by Petitioner to the State Water

Board. (Nov. 2, 2007 letter p. 9-10; Dec. 4, 2008 letter p. 2.) These letters in turn cite to the DWR EIR and the FERC Environmental Assessment (EA).

#### 4.1.2.1 Temperature

The Basin Plan objectives for temperature are as follows

- Discharges of wastewater can cause unnatural and/or rapid changes in the temperature of receiving waters that can adversely affect aquatic life.
- The ***natural receiving water temperature*** of all regional waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. Alterations that are allowed must meet the requirements below.
- For waters designated WARM, water temperature shall not be altered by more than 5°F ***above the natural temperature***. At no time shall these WARM-designated waters be raised above 80°F ***as a result of waste discharges***.
- For waters designated COLD, water temperature shall not be altered by more than 5°F ***above the natural temperature***.

(Basin Plan, p. 3-16 (emphasis added).)

The portions of the EIR and EA to which Petitioner cites acknowledge that temperature will likely increase, particularly between June and September, as a result of the Project. (FERC EA p. 54.) The EA also acknowledges that even with flows as high as 27 cfs, instantaneous water temperature occasionally exceeded 80°F. (FERC EA p. 16-17.) Petitioner fails to note, however, that those same sections of the EA point out that under the Project, “water temperatures are likely to be equal to or slightly lower than those that would be experienced under natural conditions without the project. Thermal stratification, which is common in reservoirs such as Pyramid Lake, would cause the discharge water to be cooler than the natural inflow to Pyramid Lake during the warmest parts of the year.” (FERC EA, p. 54.) As further recognized in the EA, water temperatures are not expected to exceed those that occurred under natural conditions, thus the Basin Plan objectives are unlikely to be exceeded. (FERC EA, p. 54.) By their language, the objectives (as cited above) only apply to alteration of natural receiving water temperature.

Furthermore, temperatures above 80°F only violate the Basin Plan objectives where they are “a result of waste discharges.” Temperatures in excess of 80°F may be a result of waste

discharges in a scenario, unlike here, where warmer water is being discharged into a colder body of water. Where the discharge is the entire natural flow of the creek, and the temperature of the discharge is no higher than what would occur under natural conditions, high temperatures are not “a result” of the discharge. Any increase in summer temperatures as compared to the flow regime under FERC license Article 52 is not caused by the discharge, but by the fact that the discharge is no longer augmenting flows to a rate more than would occur naturally. The objective, which applies generally to all discharges in the region, including municipal and industrial discharges, cannot reasonably be construed to require dischargers to increase the volume of their discharges to prevent naturally occurring low flow conditions from resulting in temperatures in excess of 80°F.

For these reasons, the Project, by its nature, complies with water quality standards for temperature.

#### 4.1.2.2 Dissolved oxygen

The Basin Plan objectives for dissolved oxygen are as follows

- At a minimum, the mean annual dissolved oxygen concentration of all waters shall be greater than 7 mg/L, and no single determination shall be less than 5.0 mg/L, **except when natural conditions cause lesser concentrations.**
- The dissolved oxygen content of all surface waters designated as WARM shall not be depressed below 5 mg/L **as a result of waste discharges.**
- The dissolved oxygen content of all surface waters designated as COLD shall not be depressed below 6 mg/L **as a result of waste discharges.**
- The dissolved oxygen content of all surface waters designated as both COLD and SPWN shall not be depressed below 7 mg/L **as a result of waste discharges.**

(Basin Plan, p. 3-11 (emphasis added).)

As with temperature, as discussed above, any reduction in dissolved oxygen concentration as a result of this Project will occur because “natural conditions cause lesser concentrations,” and not “as a result” of waste discharges. (DWR EIR, p. 3-72.) Again, the Project complies with dissolved oxygen objectives.

#### **4.1.3 The certification does not violate state and federal antidegradation policies**

Warm (WARM) and cold (COLD) freshwater habitats are both beneficial uses of the creek, as are wildlife habitat (WILD) and rare, threatened, or endangered species (RARE). (LARQCB, Los Angeles Basin Plan 2-2 (1994).)

The federal antidegradation policy requires, in pertinent part, that:

- (1) Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.
- (2) Where the quality of the waters exceed levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water, that quality shall be maintained and protected, unless the State finds that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully.

(40 C.F.R. § 131.12(a).)

State policy for water quality control requires that where water quality is better than required by the applicable Basin Plan objectives, that water quality will be maintained unless it has been demonstrated that a change: 1) is consistent with the maximum benefit to the people of the State, 2) does not unreasonably affect present and anticipated beneficial uses of the waters, and 3) does not result in water quality less than that prescribed in the Basin Plan. ([State Water Board Resolution 68-16](#); see also [State Water Board Order WQ 86-17](#) [State Water Board Resolution 68-16 incorporates the federal antidegradation policy as applied to situations where the federal antidegradation policy is applicable].)

The federal antidegradation policy and State Water Board Resolution 68-16 apply to reductions in water quality. (See [State Water Board Decision 1631](#) (1994) at p. 151.) This includes consideration of changes that have already occurred, if they occurred after the state and federal policies took effect, but have not been reviewed for consistency with those policies. (See *id.* at pp. 151-152 [“The federal antidegradation policy applies to reductions in water quality which occurred or threatened to occur after the policy was adopted.”]) Where the approval under consideration involves both beneficial and adverse changes in water quality, the State or Regional Water Board considering the approval reviews whether the adverse changes are consistent with antidegradation policies. Accordingly, this section evaluates whether reducing



summer instream flows to naturally occurring flows is consistent with the federal antidegradation policy and State Water Board Resolution 68-16.<sup>8</sup>

The proposed change in flows serves important social and environmental development. Water development and water conservation projects may be considered to be important social and economic developments that justify a lowering of water quality. (See Wat. Code, § 13000.) Similarly, environmental protection may constitute important social development, justifying a change in water quality, even if no other social or economic benefits to the community are demonstrated. (See Letter from William R. Attwater to Regional Water Board Executive Officers, *Federal Antidegradation Policy* (Sept. 7, 1987) [http://www.waterboards.ca.gov/water\\_issues/programs/tmdl/records/state\\_board/2003/ref1948.pdf](http://www.waterboards.ca.gov/water_issues/programs/tmdl/records/state_board/2003/ref1948.pdf).) It would be inconsistent with the policies of the Clean Water Act and the Porter-Cologne Water Quality Control Act if economic concerns could warrant reductions in water quality, but conflicting water quality concerns could not. Thus, for example, if a discharge point is moved to less sensitive waters, the improvement in water quality at the original discharge point may justify the reduction in water quality at the new discharge point. (*Ibid.*)

Similarly, where there are two conflicting uses, the quality of water for one use may be reduced where the change improves water quality for the other, in appropriate circumstances. Improvement to one beneficial use offset by detriment to another less sensitive use is valid in much the same way that movement of a discharge to less sensitive waters is permissible. (See 40 C.F.R. § 131.11(a)(1).) Absent the ability to balance conflicting uses in this way, it would be difficult to synthesize the requirements for Clean Water Act water quality standards. (See 40 C.F.R. §§ 131.11, 131.12.) Furthermore, if the law did not permit changes in water quality to protect endangered species where those changes would adversely affect other species, the State Water Board's only available course of action would be to permit continued take of the species and then remove the RARE use from the creek once the species went extinct. This

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<sup>8</sup> Arguably, even the changes in summer instream flows are not reductions in water quality. As noted above, NOAA Fisheries commented on the Draft EIR that the Project would have beneficial effects on populations of native rainbow trout for reasons that include reducing non-native aquatic predation. The NOAA Fisheries comments were addressed to the overall effect of the modified flow regime, however, including the effects of higher winter flows. Moreover, the changes in water quality during the summer involve both benefits, through reduction in predation by non-native species, and adverse changes, through reductions in the area with flows and temperatures suitable for trout. Because this order concludes that any reductions in water quality are consistent with antidegradation requirements, it is not necessary to determine whether antidegradation requirements apply, or should be considered inapplicable based on the view that the changes in water quality are improvements, not reductions.

would be inconsistent with the basic purposes of the Clean Water Act and the federal Endangered Species Act. (See 33 U.S.C. § 1251(a); 16 U.S.C. § 1531.)<sup>9</sup>

Piru Creek is designated for multiple uses, including habitat for fish (COLD) and habitat for endangered toads (RARE). To the extent the scientific evidence indicates that these uses require conflicting parameters,<sup>10</sup> the State Water Board should adopt certification conditions that protect the species that are more vulnerable to harm from changes in flow or other water quality conditions. Changing flows to protect the arroyo toad may have a detrimental effect on trout, but this must be weighed against the harm that would be caused to the arroyo toad by maintaining flows for trout. Assuming that we must choose between the two species, the proper course is to protect the more sensitive native endangered toad rather than the non-endangered trout. (40 C.F.R. 131.11(a)(1) [“For waters with multiple use designations, the criteria shall support the most sensitive use.”].)<sup>11</sup> Protecting the more sensitive use maximizes the benefit to the people of the State. It is a reasonable use of the water – indeed, a contrary pattern of usage would be unreasonable. It will not result in water quality less than prescribed in the Basin Plan.<sup>12</sup> While the certification may not fully protect trout for the entire reach in which they now live, Petitioner does not assert that the fish will not be able to migrate to other locations (including Lake Piru) when conditions in the creek reach are not suitable. For these reasons, the conditions under the certification comply with the antidegradation law. (State Water Board Resolution 68-16; 40 C.F.R § 131.12.)

In approving issuance of the certification, the State Water Board is protecting all beneficial uses, and allowing reductions in the water quality supporting one use only to the extent necessary to improve water quality for another more sensitive use. Consistent with the federal antidegradation policy, the certification protects instream beneficial uses, and any reductions in

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<sup>9</sup> In its comment letter on the petition, the FWS stated its intention to uphold its responsibility to protect the arroyo toad under the Endangered Species Act should the State Water Board certify a project that would cause take of the species.

<sup>10</sup> Where protection of both species is possible, both should be protected. While this will not be possible under the regime proposed by Petitioner (see section 4.1.1, *supra*), it is possible under the regime proposed by Applicant (see section 4.2.1.2, *post*).

<sup>11</sup> According to NMFS, no steelhead are present in Piru Creek. (Letter from NMFS to FERC, Appendix B to the Petition for Reconsideration, p. 5.) Although there is habitat appropriate for steelhead, and evidence that trout in the creek are derived from steelhead populations breeding below the dams or prior to their construction, the creek does not have access seaward to support an anadromous fishery. If conditions were to change such that passage was possible, it might constitute cause to reopen the certification under condition 19 of the certification.

<sup>12</sup> See section 4.1.2, *supra*, for discussion of particular standards.

enhanced water quality for trout provided by flows in excess of natural conditions are necessary to accommodate the preservation of the arroyo toad, an endangered species dependent on the water quality conditions provided for under the certification. Consistent with State Water Board Resolution 68-16, the certification is consistent with the Basin Plan and with the maximum benefit of the people of the state. By contrast, Petitioner's alternative flow regime would not meet state and federal water quality requirements because it would not protect the most sensitive uses. (40 C.F.R. 131.11(a)(1).)

#### **4.2 The State Water Board's Actions Comply with the California Environmental Quality Act (CEQA)**

##### **4.2.1 Petitioner's arguments are not new information or changed circumstances requiring the preparation of a subsequent or supplemental EIR**

DWR issued a final EIR in February 2005 entitled *Environmental Impact Report for the Simulation of Natural Flows in Middle Piru Creek* (State Clearinghouse No. 2004051123). DWR circulated the draft EIR for public comment, including submission of copies to the State Clearinghouse for distribution to state agencies (including the State Water Board, Division of Water Rights) before applying for water quality certification by the State Water Board.<sup>13</sup> As a responsible agency, the State Water Board relies on the EIR prepared by the lead agency, DWR, but makes its own determination as to whether and with what conditions to approve the

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<sup>13</sup> The certification incorrectly stated that the State Water Board was not consulted as a responsible agency. Although DWR did not identify the State Water Board as a responsible agency, the State Water Board was included among the agencies that received copies of DWR's notice of preparation and Draft EIR from the State Clearinghouse. The modifications to the certification made by this order include deletion of the statement that the State Water Board was not consulted.

project, taking into consideration the information provided in the lead agency's EIR. (Pub. Resources Code, §§ 21080.1, subd. (a), 21167.2, see *id.* §§ 21002.1, subd. (d).)<sup>14</sup>

The Guidelines for Implementation of the California Environmental Quality Act (Cal. Code Regs., tit. 15, § 15000 et seq. (CEQA Guidelines)) specify that after an EIR has been certified, a subsequent EIR is not required unless the lead agency first “determines, on the basis of substantial evidence in the light of the whole record” that CEQA Guidelines, section 15162 applies. (See also CEQA Guidelines, § 15052 [a shift in lead agency designation, where a responsible agency considering an approval assumes the role of lead agency, may occur if a subsequent EIR is required under section 15162]; CEQA Guidelines, § 15053 [allowing use of a supplemental EIR where a subsequent EIR would otherwise be required, but only minor additions or changes are needed].)

Petitioner argues that under CEQA Guidelines section 15162, “the State Water Board must prepare a subsequent or supplemental EIR to analyze any changed circumstances and new information that was not available at the time the EIR was certified.” Contrary to Petitioner's assertion, a subsequent or supplemental EIR is not required simply because there is a changed circumstance or new information. Section 15162 sets other limitations that substantially restrict the circumstances under which changed circumstances or new information may require the preparation of a subsequent or supplemental EIR.

A subsequent or supplemental EIR is not required for changed circumstances unless those changes are substantial and will require major revisions to the EIR due to the involvement of

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<sup>14</sup> Petitioner argues that the State Water Board cannot issue the certification if it determines the EIR prepared by DWR is inadequate. (Petition, p. 11.) To the extent Petitioner is arguing that a subsequent or supplemental EIR may be required simply because a responsible agency determines that the lead agency's EIR was inadequate at the time it was certified, the argument is based on a misreading of the regulation on which Petitioner relies.

Petitioner points to section 15096, subdivision (a), which provides that a responsible agency complies with CEQA “by considering the EIR or negative declaration prepared by the lead agency and by reaching its own conclusions on whether and how to approve the project.” This means that the responsible agency decides for itself whether and on what conditions to approve the project, based on the lead agency's environmental document and other information in the record. (See also Cal. Code Regs., tit. 14, § 15096, subd. (h).) It does not mean that the responsible agency second guesses the lead agency's certification of the adequacy of the environmental document, and decides whether or not to approve the project based on the adequacy of the environmental document, instead of making its decision based on the merits of the project or the environmental impacts of the project as identified in the lead agency's environmental document.

Except where substantial changes or new information requires a subsequent or supplemental environmental document under Public Resources Code section 21166, Public Resources Code section 21167.2, the State Water Board, when acting as responsible agency, is required to conclusively presume a lead agency's EIR is adequate once the time to challenge the lead agency's approval has expired.

new significant environmental effects or a substantial increase in the severity of previously identified significant environmental effects. (CEQA Guidelines, § 15162, subd. (a)(2).)

A subsequent or supplemental EIR is not required for new information unless that information is of substantial importance and it was not and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified. (*Id.*, § 15162(a)(3).) In addition, the new information must show:

- (1) the project will have one or more significant effects not discussed in the certified EIR;
- (2) significant effects previously examined will be substantially more severe than shown in the EIR;
- (3) mitigation measures previously found not to be feasible would in fact be feasible; or
- (4) mitigation measures or alternatives that are considerably different than those analyzed in the EIR would substantially reduce significant effects on the environment.

(*Ibid.*)

The information provided by Petitioner does not meet these requirements, as discussed in the following sections.

#### **4.2.1.1 Information provided by petitioner**

The Petitioner submits the following information, asserting that it fulfills the requirements of section 15162 of the CEQA Guidelines. (Petition, p. 12.)

- A 2006 study conducted for the California Department of Fish and Game (DFG) entitled “Population structure and ancestry of *O. mykiss* populations in South-Central California based on genetic analysis of microsatellite data”, authored by Derek Girman and John Carlos Garza, that demonstrates that juvenile trout collected in middle and upper Piru Creek are genetically related to steelhead.
- A report entitled “Middle Piru Creek Arroyo Toad (*Bufo californicus*) Clutch Surveys 2005”, prepared by Nancy Sandburg for the California Department of Water Resources in 2006 (Sandburg Report), that describes the results of arroyo toad monitoring activities conducted in middle Piru Creek during the spring and summer of 2005.

- Recent studies and reports that were submitted as attachments to a December 4, 2008 letter to the Deputy Director for Water Rights prior to issuance of the certification that describe water management and the impact of climate change on water resources in California that includes the following documents:
  - Kiparsky and Gleick (2003) “Climate Change and California Water Resources: A Survey and Summary of the Literature”;
  - California Climate Change Center (2006) “Our Changing Climate”;
  - DWR (2008) “Managing an Uncertain Future”; and
  - State of California (2008) “The State Water Project Delivery Reliability Report”.
  
- A publication released in November 2008 by California Trout entitled, “SOS: California's Native Fish Crisis”, that is based on a peer-reviewed study authored by Dr. Peter Moyle, Dr. Joshua Israel and Sabra Purdy entitled, “Salmon, Steelhead and Trout in California: Status of an Emblematic Fauna.” These reports describe the life history and current status of 32 native salmonid species located throughout California and the many factors that have led to their steep decline. The reports also provide recommendations for management actions to address the decline. Both reports were included in the December 4, 2008 submittal to the Deputy Director for Water Rights.
  
- A report entitled “Alternate Flow Regime to Protect Rare Native Species in Middle Piru Creek (Los Angeles and Ventura Counties, California)”, prepared by Land Protection Partners (LPP), that describes the alternate flow regime proposed by the Petitioner and presents an analysis of its impact to native species that inhabit middle Piru Creek.

**4.2.1.2 The 2006 DFG study showing that trout are related to native steelhead in Piru Creek is not new information requiring a subsequent or supplemental EIR**

The 2006 DFG study examines the genetic population structure and ancestry of central and southern California wild trout populations based on samples collected at 20 sites within five coastal drainage basins extending from Monterey Bay south to Ventura County. In the vicinity of the Project reach, fish samples were collected in the Piru Creek drainage at three locations: (1) Lockwood Creek, (2) Piru Creek at Gold Hill (the latter two located above Pyramid Dam), and (3) Frenchman’s Flat, located below Pyramid Dam. Fish samples were also collected downstream of Santa Felicia Dam at two locations on tributaries to the Santa Clara River and from the Fillmore Hatchery, the origin of the trout stocked in Piru Creek. In general, the study found basin-specific lineages that indicated similarity among fish collected both above and below dams in each of the five drainage basins included in the study. The study also found that the trout population in the Santa Clara River (which includes Piru Creek) was the most distinct of the populations in the five basins. The authors suggest this is a consequence of greater

influence of hatchery introgression on these populations, which tended to cluster more closely with the Fillmore Hatchery trout samples.

The Petitioner claims that these results are new information requiring a subsequent or supplemental EIR. The information contained in the 2006 DFG study is not entirely new, however. (See CEQA Guidelines, § 15162, subd. (a)(3) [new information must be of substantial importance].) Comments submitted by NOAA Fisheries on the draft EIR mentioned preliminary results from the DFG study indicating that “native rainbow trout in the middle reaches of Piru Creek are closely related to other trout populations in the Santa Clara River with access to the ocean.” Furthermore, the possibility that remnant populations of native steelhead exist in middle Piru Creek was acknowledged as “conceivable” in DWR’s Final Environmental Impact Report (FEIR) in response to comments submitted by California Trout. (DWR FEIR, Appendix A, p. 8.) A study confirming the existence of conditions that the EIR already recognizes as possible and does not dismiss as speculative or unlikely does not amount to new information of substantial importance requiring preparation of a subsequent or supplemental EIR. (See CEQA Guidelines, § 15162, subd. (a)(3).)

Finally, NOAA Fisheries stated in a January 11, 2005 comment letter on the draft EIR that “the proposal to change the Pyramid Reservoir operations to more closely simulate the natural variability of stream flows within the middle reaches of Piru Creek, while intended primarily to restore habitat conditions for the federally endangered Arroyo toad (*Bufo californicus*), is generally compatible with and complementary to NOAA Fisheries’ on-going efforts to recover historic steelhead populations in the Piru/Santa Clara River drainages.” If restoration to natural conditions will be beneficial to recovery of steelhead, the presence of remnant steelhead populations it is not a significant impact warranting a subsequent EIR. (CEQA Guidelines, § 15162, subd. (a)(3)(A)&(B).)

#### **4.2.1.3 Information in the Sandburg Report concerning the arroyo toad and CRLF is not new information warranting a subsequent EIR**

The Sandburg Report presents the results of monthly arroyo toad breeding surveys conducted in the spring and summer of 2005 following high flood flows during the previous winter. 2005 was the first year that DWR released winter flows from Pyramid Dam based on a strategy similar to the flow provisions contained in the water quality certification. The report describes how higher-than-normal winter flows flushed silt and encroaching vegetation from the stream

channel, thereby creating more and better habitat for arroyo toad breeding. These higher flows extended later into the spring and summer than is typical due to greater than average rainfall in the vicinity of middle Piru Creek (48.4 inches in 2005 vs. 19.6 inches for an average year). The changes in habitat brought on by the high winter flows resulted in exceptional breeding activity, with high numbers of arroyo toad egg clutches (145-165 clutches) observed in the lower portion of the Project reach between Lake Piru and Ruby Canyon (approximately three miles).

Petitioner's claim that the Sandburg Report supports their proposal for enhanced summer flows is not substantiated. First, it is not appropriate to consider only one year of arroyo toad breeding data as justification for the flow regime proposed by the Petitioner, especially when the data cover the first year of a new flow regime that included the higher winter flows that the Sandburg Report credits for enhanced habitat. Second, while it is true that the breeding surveys conducted by Nancy Sandburg in 2005 indicated successful arroyo toad reproduction during a year with consistently high summer flows, a more recent breeding survey also conducted by Nancy Sandburg in 2007 shows successful arroyo toad breeding (106 clutches observed) during a year characterized by low rainfall and resulting low summer flows. The 2007 report goes on to state that prior to natural flow simulation beginning in 2005, arroyo toad habitat conditions were degraded as a result of augmented, sustained summer flows, irregular releases, and decreased winter flows, resulting in total annual clutch counts of 12, 0, and 13 clutches respectively in 2002, 2003, and 2004. Moreover, while the 2007 report concludes that winter high flows appear to be the most important factor in maintaining appropriate habitat conditions for arroyo toad breeding and foraging, the report also concludes that lower summer flows are a necessary complement to retard riparian and aquatic vegetative growth and reduce the presence and reproduction of arroyo toad predators.

With respect to the presence of larvae of the threatened California red-legged frog detected in the project reach in 2005, the threats to red-legged frogs identified by FWS for the habitat unit that encompasses the Project reach include predation by non-native species, e.g. bullfrogs. The simulated natural flow regime described in the water quality certification would lead to the continued reduction of bullfrog populations within middle Piru Creek, thereby enhancing habitat for the California red-legged frog. The EIR concludes that, "if present, no significant impacts to [red-legged frogs] would be expected to occur from implementation of the proposed project." (DWR EIR, p. 3-35.) In light of this statement's inclusion in the EIR, the new information confirming presence of red-legged frogs does not show any significant effect not discussed in



the EIR. Consequently, the information contained in the 2005 Sandburg Report does not justify preparation of additional CEQA documentation. (See CEQA Guidelines, § 15162, subd. (a)(3)(A).)

#### **4.2.1.4 Changes due to global warming do not require a subsequent EIR**

Petitioner contends that changes in the amount and timing of rainfall in California have changed the circumstances under which the project will operate.<sup>15</sup> Petitioner does not demonstrate, however, that information of substantial importance concerning climate change was not available at the time DWR's EIR was prepared. Both the existence of climate change and the potential for effects on California water supplies were well known in February 2005, when the final EIR was certified. (See, e.g., Kiparsky & Glick, *Climate Change and California Water Resources: A Survey and Summary of the Literature* (2003) included in California Trout's December 4, 2008 submittal.)

Petitioner's argument amounts to a complaint that the original DWR EIR did not adequately analyze the impacts of climate change. But the time to challenge perceived deficiencies in the DWR EIR has long since passed, and an attempt to do so now is untimely. (Pub. Resources Code, §§ 21167, 21167.2.) A subsequent or supplemental EIR may be required based on changes in the project, changed circumstances or new information that could not reasonably have been analyzed in the original EIR. (See *id.* § 21166; CEQA Guidelines, § 15162.) Except where the approval under consideration by the State Water Board involves activities outside the scope of the project considered in the lead agency's EIR, a circumstance not present here, the State Water Board as responsible agency cannot require preparation of a subsequent or supplemental EIR to correct alleged deficiencies in the lead agency's EIR that were known or should have been known at the time the lead agency certified the EIR. (Pub. Resources Code, § 21167.2.)

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<sup>15</sup>Petitioner does not explain how this general information is relevant to conditions under which this certification will apply. Petitioner refers to changes in California in general, without identifying any information concerning rainfall in the general location of the project. Nor does Petitioner provide any information relevant to how soon these changes in amount and timing of rainfall are likely will occur. The water quality certification being challenged by Petitioner will be in effect for a limited period. The certification is for an amendment to a FERC license. The license itself expires in 2022, after which a new certification will be required for relicensing, although FERC may issue annual licenses if relicensing proceedings are not completed within that period.

**4.2.1.5 The 2008 California Trout report by investigators at UC Davis on the status of salmonids in California is not new information warranting a subsequent EIR**

The Southern California steelhead distinct population segment was first listed by NOAA Fisheries as endangered under the Endangered Species Act in 1997, a status that NOAA Fisheries reaffirmed in 2006. Most, if not all, of the factors that have led to the widespread decline in native steelhead populations in California that are discussed in the 2008 California Trout report were known at the time the EIR was written. For example, when the initial status review of west coast steelhead was completed in 1996, a supplemental document was released by NOAA Fisheries entitled “Factors for Decline: A Supplement to the Notice of Determination for West Coast Steelhead under the Endangered Species Act.” This document provided a thorough review of factors that have led to the decline of steelhead and covered virtually all of the same concerns that are brought up in the 2008 report published by California Trout. While the California Trout report may contain additional specifics regarding the effects of human activity on native steelhead, it does not amount to new information that was not known and could not have been known with reasonable diligence in 2005. (CEQA Guidelines, § 15162, subd. (a)(3).)

**4.2.1.6 The Land Protection Partners report about breeding habits and needs of the arroyo toad is not new information warranting a subsequent EIR**

The Land Protection Partners report submitted by the Petitioner presents an analysis of the impacts of the flow regime contained in the water quality certification and the alternate flow regime proposed by the Petitioner on the arroyo toad and other sensitive amphibian and reptile species, native fishes, exotic predators and exotic plants. It begins with an assessment of impacts to arroyo toads associated with the release of winter flows based, in part, on a comparison between Piru Creek and the Santa Margarita watershed, located near Camp Pendleton in San Diego County, followed by an assessment of the impact that eliminating augmented summer flows has on sensitive species. The report asserts that the reduction in summer flows will lead to greater depredation of arroyo toads by bullfrogs and will eliminate or decrease arroyo toad recruitment during dry years. The report then discusses the Petitioner’s alternate flow regime and describes the rationale for selecting 15 cfs as the summer flow target, which is based on the 75<sup>th</sup> percentile flow from a 17-year stream gage record for Piru Creek at Bucks Creek above Pyramid Lake. The report claims that scientific literature and observations on Piru Creek show that additional summer water releases benefit sensitive native species. The report then describes the adaptive management and mitigation measures proposed by the

Petitioner, which include sediment replenishment in the upper portion of the reach below Pyramid Dam and selective removal of adult bullfrogs from arroyo toad breeding habitat during the breeding season.

In general, Petitioner's claim that the report contains new and previously unavailable information about arroyo toad breeding habits is unsubstantiated, since the report makes observations regarding the characteristics of suitable arroyo toad breeding habitat that are similar to observations found in previously published reports on the topic. (See, e.g., Sweet, S., Initial Report on the Ecology and Status of the Arroyo Toad (*Bufo microscaphus californicus*) on the Los Padres National Forest of Southern California, with Management Recommendations (1992); USFWS, Arroyo Southwestern Toad (*Bufo microscaphus californicus*) Recovery Plan (1999).) The report's claim that the elimination of augmented summer flows in Piru Creek will decrease or eliminate arroyo toad recruitment during dry years is contradicted by previous field-based research by various authors (including Dr. Samuel Sweet) and by the breeding surveys discussed above that were conducted in middle Piru Creek in spring and summer of 2007, a year for which precipitation was characterized as significantly below average in Southern California.<sup>16</sup> There is nothing provided in the LPP report to support the claim that additional summer water releases as proposed by petitioner would benefit sensitive native species.

Thus, much of the information in the report is not of substantial importance, but is cumulative of other information about arroyo toad habitat that was already available when the EIR was certified. To the extent that the report's claims are new – specifically the claim that elimination of augmented summer flows will decrease arroyo toad recruitment – the new information is unpersuasive in light of other, more thorough scientific reports in the record. Under section 15162 of the CEQA Guidelines, a subsequent or supplemental EIR is not required simply because a new report claims that new or substantially more severe environmental impacts will occur -- there must be new information that “shows” those impacts will occur. (CEQA Guidelines, section 15162, subd. (a)(3).)

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<sup>16</sup> DWR Bulletin 120 for May 2007 states that October through April (seasonal) precipitation in the South Coast Region was only 30 percent of normal for the 2006-2007 water year.

#### **4.2.1.7 Imposition of monitoring requirements does not establish that there are unmitigated impacts**

Petitioner contends that the State Water Board's inclusion of a monitoring requirement in the certification, requiring DWR to conduct annual breeding surveys of the arroyo toad, amounts to an admission that the project will adversely affect the arroyo toad and a deferral of mitigation for those impacts. There is no legal or factual basis for this argument. The monitoring requirement cited by Petitioner is a water quality monitoring requirement, adopted under the Porter Cologne Water Quality Control Act, not a mitigation monitoring requirement or other condition adopted to meet the requirements of CEQA (Compare Wat. Code, § 13381 with Pub. Resources Code, § 21081.6.)

As part of water quality certification, the State Water Board may require monitoring, studies, or other information “as may be reasonably required.” (Wat. Code, § 13383.) There is no requirement that there be a potential for adverse environmental impacts within the meaning of CEQA before the State Water Board may impose these requirements. These requirements may be established for water quality purposes, which include restoring water quality, not just avoiding adverse impacts of a project within the meaning of CEQA. (Compare Wat. Code, §§ 13000 [attain the highest level of water quality which is feasible], 33 U.S.C. § 1251 [restore and maintain the integrity of the nation’s waters] with CEQA Guidelines, § 15382, subd. (g) [defining significant effect on the environment as a substantial, or potentially substantial, “adverse change” in the physical environment].) Thus, even in the absence of any potential adverse change from a modified flow regime – or even where, as here, the flow regime will improve conditions for the arroyo toad – the State Water Board may require monitoring, studies, or other information for other reasons. These include obtaining information that may provide the basis for further adjustments in the flow regime if those adjustments would provide greater benefit. Monitoring and reporting may also be imposed to provide background information on water quality conditions, to evaluate the effectiveness of measures established to improve water quality, or for other reasonable purposes. Establishing monitoring conditions or other requirements for providing additional information simply acknowledges that there is a benefit in obtaining additional information, and that under the circumstances it is not unreasonable to require the regulated entity to provide that information. As the certification condition notes, “Monitoring for . . . listed . . . species . . . is included to better understand how implementation of

the Project affects these species and will allow for collection of information about their status in middle Piru Creek.”

#### **4.2.2 Because the certification does not include appropriate CEQA findings, the State Water Board will amend the certification to make those findings**

The EIR found significant impacts from alteration of drainage patterns resulting in erosion, exposure of people to danger caused by flooding, and reduced angling opportunities. (EIR, p. ES-5 & ES-6.) Petitioner accurately notes that the certification as issued did not include findings on these impacts as required by CEQA Guidelines sections 15091 and 15096, subdivision (h).<sup>17</sup> The certification will be amended to include the following findings.

The EIR identified three significant impacts from the project.

**Impact H-3:** The proposed project could alter the existing drainage pattern in a manner which would result in erosion and lead to potential damage to existing infrastructure.

To mitigate this impact to a less than significant level, the State Water Board will include Mitigation Measure H-3 from the EIR, as modified to ensure that the measure is enforceable by the State Water Board, as a condition of the certification to avoid erosion damage to infrastructure, as follows:

DWR shall perform an engineering analysis to determine the potential for expected releases to damage Old Highway 99, the Old Highway 99 bridges, utilities, and other infrastructure in or adjacent to the channel, and shall submit the analysis for approval by the Deputy Director for Water Rights no later than one year from issuance of the FERC license amendment. DWR shall make any revisions to the engineering analysis that are required by the Deputy Director for Water Rights, within the period specified by the Deputy Director for Water Rights. In accordance with section 4.2.3 of this order, concerning the mitigation monitoring program, the engineering analysis shall be used as a basis for establishing procedures and guidelines for monitoring erosion at infrastructure during flood releases. DWR shall monitor erosion at key potential infrastructure damage areas during large flow releases and temporarily curtail releases

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<sup>17</sup> It should be noted that while Petitioner properly raises concerns about the lack of findings in the original certification, the alternative flow regime recommended by Petitioner would not serve to avoid or mitigate impacts from erosion or exposure of people to danger caused by flooding. Like the flow regime approved by the certification, Petitioner’s alternative flow regime would provide for high flows at times those high flows would occur naturally, to the extent consistent with the operational constraints of Pyramid Dam.

should the monitoring determine the infrastructure to be at risk. If the monitoring program determines that the infrastructure is at risk, DWR shall submit plans for engineered erosion protection for approval by the Deputy Director for Water Rights, and install engineered erosion protection as approved by the Deputy Director for Water Rights.

**Impact H-8:** The proposed project could expose people or structures to a risk of loss, injury or death involving flooding, including flooding as a result of the failure of a dam.

To mitigate this impact to a less than significant level, the State Water Board will include Mitigation Measure H-8 from the EIR, as modified to ensure that the measure is enforceable by the State Water Board, as a condition of the certification, as follows:

DWR shall work with the USFS and landowners to develop a warning system and signage program to warn the public of dangerously high flows in middle Piru Creek, and shall submit the proposed warning system and signage program for approval by the Deputy Director for Water Rights within one year of the date of this order or within one month after issuance of the FERC license amendment, whichever occurs first. DWR shall make any revisions to the warning system and signage program that are required by the Deputy Director for Water Rights within the period specified by the Deputy Director for Water Rights. DWR shall implement the warning system and signage program as approved by the Deputy Director. In accordance with section 4.2.3 of this order, concerning the mitigation monitoring program, DWR will inspect signage at least annually and repair or replace warning signs as needed.

**Impact R-3:** The impact to recreational opportunities for anglers identified in the EIR results from the reduction in naturally reproducing trout that is expected to occur.

The EIR identifies Mitigation Measure R-3, which involves stocking some or all of an additional 1000 pounds of trout in Piru Creek in the upper portion of the reach in addition to the 3,000 pounds that DFG typically stocks at Frenchman's Flat, to mitigate this impact to a less than significant level. Implementation of this measure is within the responsibility and jurisdiction of DFG and potentially other public agencies, and not the State Water Board.

DFG's fish stocking program has been challenged in litigation based on claims of harm to native trout and amphibians, and a court order requires DFG to complete an EIR on its stocking program. The court asked DFG to negotiate with the plaintiffs in the litigation to seek an agreement as to where fish stocking may continue pending completion of the EIR, which DFG anticipates will be completed in 2010. DFG and the plaintiffs reached an agreement setting criteria for where fish stocking may continue. Based on those criteria, DFG prepared a list of streams where fish stocking would continue and where it would be discontinued. Piru Creek is listed as a stream where fish will not be stocked, meaning that the fish stocking at Frenchman's Flat will be discontinued until after the program is reevaluated based on the EIR. In view of the environmental and legal concerns with respect to fish planting in stream reaches with native amphibian populations and DFG's decision to stop fish planting on Piru Creek, the State Water Board finds that expanding fish planting on Piru Creek as mitigation for the modification of instream flow requirements approved by this certification is infeasible.<sup>18</sup>

The additional fish stocking proposed in Mitigation Measure R-3 would occur upstream of a physical barrier that typically prevents fish stocked at Frenchman's Flat from moving upstream. Fish caught upstream of this barrier were believed to be from a naturally reproducing population, and the reach is currently managed as a catch-and-release area.<sup>19</sup> While the EIR concludes that Mitigation Measure R-3 would mitigate impacts on recreational angling opportunities to less than significant levels, implementation of Mitigation Measure R-3 would be inconsistent with the option of managing the upper portion of the reach as a fishery based on a naturally reproducing population.

The EIR also includes another option, labeled Alternative 2: Reversion to FERC License 2426 Article 52 Flow Requirements, which would avoid adverse impacts on recreational opportunities for anglers. Alternative 2 would return to the flow release schedule used prior to the temporary waiver from FERC. This alternative is not feasible due to impacts to the endangered arroyo

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<sup>18</sup> This finding is based on the information currently available to the State Water Board and the need to complete the water quality certification process within a reasonable period. After completing the EIR on its fish stocking program and evaluating the effects of fish stocking on Piru Creek, DFG may reinstate fish stocking at Frenchman's Flat or expand fish stocking to include the upper portion of the reach if DFG determines that the action is consistent with protection of endangered species and is otherwise appropriate.

<sup>19</sup> The Draft EIR states that DFG fishery biologists had recently determined that trout located above the barrier were of the same genetic stock as trout released at Frenchman's Flat. However, in light of more recent evidence contained in the 2006 DFG study showing that trout collected in Piru Creek at Frenchman's Flat are genetically similar to trout collected at other locations in the Santa Clara River basin, the mitigation measure proposed in the EIR to plant trout above the passage barrier may no longer be appropriate.

toad. Alternative 2 would not achieve the primary purpose of the proposed project, which is to revise the stream release schedule from Pyramid Dam to avoid the incidental take of the endangered arroyo toad due to water releases into middle Piru Creek. In addition, Alternative 2 is infeasible because it does not meet state and federal water quality requirements. By failing to establish a flow regime protective of the arroyo toad, Alternative 2 would not protect the most sensitive uses. (40 C.F.R. 131.11(a)(1).)

Petitioner's alternative flow regime could serve to mitigate lost recreational opportunities for anglers, but is infeasible for the same reasons that Alternative 2 is infeasible. Higher flows that might provide better angling opportunities would adversely affect the endangered arroyo toad, which would violate water quality requirements and be inconsistent with the policies of the federal Endangered Species Act.

Petitioner's alternative flow regime poses an additional problem. Because it would maintain high winter flows consistent with natural inflows to Pyramid Lake, while requiring higher than natural releases from Pyramid Lake at other times of the year, Petitioner's alternative flow regime would require releases from Pyramid Lake in excess of the total natural inflow. The water for these additional deliveries would necessarily come from water discharged into Pyramid Lake from the California Aqueduct, meaning that the additional flows required by Petitioner's alternative flow regime would come at the expense of higher diversions from the Delta or reduced water deliveries in the State Water Project service area. As discussed above, restoration of natural conditions will be beneficial to steelhead recovery. If the artificially high flows between March 15 and August 31 called for by Petitioner's alternative flow regime were provided by increased Delta diversions, the potential for adverse impacts on species in the Delta would greatly outweigh benefits to recreational angling in Piru Creek. (See, generally, Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (2006) at p. 5.) If these flows were made available through reduced State Water Project deliveries, the benefits to the recreational trout fishery would be outweighed by the adverse social and economic impacts of reduced deliveries.<sup>20</sup>

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<sup>20</sup> See, for example, Howitt, R.E, MacEwan, D and Medellín-Azuara, J. (2009) Economic impacts of reductions in Delta exports on Central Valley agriculture. Giannini Foundation of Agricultural Economics Agricultural and Resource Economics Update, Vol. 12, No. 3.



#### **4.2.3. Mitigation Monitoring or Reporting Requirements**

Section 15097 of the CEQA Guidelines requires that when a public agency makes a finding that it has adopted mitigation measures to avoid or reduce the adverse impacts of a project, the public agency shall adopt a mitigation monitoring or reporting requirement.

In section 4.2.2 above, the State Water Board adopts mitigation measures for Impact H-3 and Impact H-8. The monitoring or reporting requirements for these impacts are as follows:

##### Monitoring or reporting requirement for impact H-3:

DWR shall complete an engineering analysis for infrastructure adjacent to Piru Creek and make any revisions required by the Deputy Director for Water Rights, as required in section 4.2.2 above. DWR shall develop procedures and guidelines to monitor erosion based on the engineering analysis within the specified timeframes of the analysis as approved by the Deputy Director for Water Rights, and submit those procedures and guidelines to the Deputy Director for approval. DWR will implement those procedures and guidelines as approved by the Deputy Director for Water Rights, including monitoring erosion at key areas during large flow releases, and installing and maintaining engineered erosion protection as needed in at risk areas. Engineered erosion protection will be monitored following large storm events, defined as storm events that generate flows of 1,000 cfs or more in upper Piru Creek, to determine whether erosion damage has occurred. If damage has occurred, DWR will notify the Forest Service and FWS.

DWR shall prepare and submit to the Deputy Director for Water Rights annual reports that include the results of the monitoring and document the installation of any engineered erosion protection as approved by the Deputy Director. Annual reports shall be submitted by October 1 of each year after the procedures and guidelines to monitor erosion are approved by the Deputy Director for Water Rights.

##### Monitoring or reporting requirement for impact H-8:

DWR shall develop a warning system and signage program to warn the public of dangerously high flows in middle Piru Creek and shall implement the system and program as approved by the Deputy Director for Water Rights, as provided in section 4.2.2 above. DWR shall inspect the signage at least annually and repair or replace warning signs as needed.

DWR shall prepare and submit to the Deputy Director for Water Rights annual reports that document the implementation of the warning system and signage program, including the results of inspections and the repair or replacement of warning signs. Annual reports shall be submitted by October 1 of each year after the warning system and signage program are approved by the Deputy Director for Water Rights. DWR shall provide a copy of the report to the Forest Service.

#### **4.2.4. Statement of Overriding Considerations**

As discussed in Section 4.2.1 above, the EIR found that all of the adverse impacts of the project could be mitigated to a less than significant level. The State Water Board has adopted the mitigation necessary to mitigate impacts H-3 and H-8. With respect to impact R-3, however, the State Water Board found that that specific legal and environmental concerns make it infeasible to adopt the mitigation measure or alternative identified in the final EIR that would avoid or mitigate this impact. Because the State Water Board concludes that the project should proceed even though this impact will not be mitigated, the State Water Board makes this finding of overriding considerations:

The revised stream release schedule provided by the project is reasonably necessary to avoid the incidental take of the endangered arroyo toad. In addition to substantially improving habitat for the arroyo toad, the more natural water flow schedule provided by the project is consistent with state and federal water quality requirements and is compatible with NOAA Fisheries' ongoing efforts to recover historic steelhead populations in the Piru Creek/Santa Clara River drainages. The fish and wildlife and water quality benefits of the project outweigh the adverse impacts on recreational angling opportunities.

#### **5.0 STAY**

At the same time that Petitioner requested reconsideration, it also requested a stay of the certification during the pendency of the petition for reconsideration. As the reconsideration process is complete, the issue of whether to issue a stay is moot.

**6.0 CONCLUSION**

For the reasons discussed above, the petition for reconsideration is granted in part. The certification will be amended to incorporate the necessary CEQA findings, along with the conditions of approval and mitigation monitoring and reporting requirements necessary to effectuate those findings. As amended by this order, the certification is appropriate and proper.

**ORDER**

**IT IS HEREBY ORDERED that** the certification of the amendment to FERC License No. 2426 for purposes of compliance with section 401 of the Clean Water Act is amended and attached to this order.

**CERTIFICATION**


The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on August 4, 2009.

AYE: Chairman Charles R. Hoppin  
Vice Chair Frances Spivy-Weber  
Board Member Arthur G. Baggett, Jr.  
Board Member Tam M. Doduc

NAY: None

ABSENT: None

ABSTAIN: None

  
\_\_\_\_\_  
Jeanine Townsend  
Clerk to the Board

Attachment

STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD

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In the Matter of Water Quality Certification for the  
**RE-OPERATION OF PYRAMID DAM FOR  
THE CALIFORNIA AQUEDUCT HYDROELECTRIC PROJECT  
FEDERAL ENERGY REGULATORY COMMISSION PROJECT NO. 2426**

SOURCE: Piru Creek

COUNTY: Los Angeles and Ventura Counties

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**Introduction**

The California Department of Water Resources (DWR) and the City of Los Angeles (collectively Licensee) applied to the Federal Energy Regulatory Commission (FERC) on March 17, 2005 for an amendment to the current FERC license for the reoperation of Pyramid Dam (Project), a part of the California Aqueduct Hydroelectric Project, FERC Project No. 2426. FERC Project No. 2426 includes a number of hydroelectric developments that are situated along the length of the California Aqueduct. The application for the license amendment only addresses operation of Pyramid Dam and associated impacts to the 18 mile reach of Piru Creek between Pyramid Dam and Lake Piru. Lake Piru is a non-Project facility operated by United Water Conservation District. A map of the Project vicinity is shown in Attachment A. DWR utilizes Piru Creek for conveyance of State Water Project (SWP) water to its long term contractors. Between 1996 and 2002, total annual outflow at Pyramid Lake ranged between approximately 10,000 – 70,000 acre-feet of water.

Amendments to the FERC license requested in Licensee's application include the modification of minimum flow requirements for Piru Creek below Pyramid Dam required under Article 52 and Exhibit S of the current FERC license, which require Licensee to establish and maintain a year-round trout fishery. DWR requested the license amendment to avoid incidental take of the arroyo toad (*Bufo californicus*), a species listed by the United States Fish and Wildlife Service (FWS) as endangered under the Endangered Species Act. Prior to submittal of the application for a license amendment, Licensee submitted a request to FERC for a temporary waiver from the minimum flow releases under FERC license Article 52 on February 10, 2005. FERC approved the temporary waiver on April 12, 2005. Consequently, DWR has already begun operating Pyramid Dam flow releases to simulate natural flow conditions using the same operating guidelines that will be implemented under the requested license amendment.

The DWR water right at Pyramid Dam and Lake Piru is authorized under Water Right Permit 18709 (Application 25988) issued by the State Water Resources Control Board (State Water Board) and documentation is recorded with the Division of Water Rights (Division). Water Right Permit 18709 is for year round storage of 55,000 acre-feet of water collected from Piru Creek. The beneficial uses of water identified in Permit 18709 are irrigation; domestic; municipal; industrial; water quality; recreational; fish and wildlife preservation and enhancement; and incidental power generation. Lake Piru is also designated as a point of rediversion under various permits and licenses held by DWR that authorize water to be conveyed through the California Aqueduct for distribution at various facilities.

Before FERC can issue a license amendment for the Project, Licensee must obtain water quality certification under section 401 of the Clean Water Act from the State Water Board. (33 U.S.C. § 1341.) The State Water Board must certify that the Project will comply with the applicable provisions of the Clean Water Act, including water quality standards set forth in the Water Quality Control Plan for the California Regional Water Quality Control Board, Los Angeles Region (Basin Plan). The State Water Board must analyze the overall effect of the Project license amendment on water quality and include conditions in the certification, if necessary, to adequately protect the designated beneficial uses identified in the Basin Plan.

### **Water Quality Certification Conditions**

#### **Operational Guidelines to Simulate Natural Hydrology**

Article 52 of the current FERC license dictates a continuous minimum stream flow release below Pyramid Dam of 5 cubic feet per second (cfs) from November 16 through April 30, and 10 cfs from May 1 through November 15. This article also includes a requirement for release of additional flow up to 25 cfs from Pyramid Dam into Piru Creek, depending upon the predicted maximum air temperature in the Project area. Additional requirements related to the maintenance of stream flow for the purpose of maintaining a year-round trout fishery are contained in Exhibit S of the current license.

In 2003, FWS expressed concern about higher than natural perennial stream flows in Piru Creek and their impacts to the endangered arroyo toad population that is known to inhabit middle Piru Creek, which is the reach between Lake Piru and Pyramid Dam. These concerns included the effects of increased summer stream flows on non-native species that prey on the toads, such as bullfrogs and crayfish. Additionally, the natural scouring events that are necessary to maintain arroyo toad habitat and that would normally occur during winter storm events are prevented due to the flow management practices under the current license conditions. In communicating their concerns about impacts to arroyo toads, the FWS provided recommendations for managing water releases in Piru Creek that are compatible with survival and recovery of the arroyo toad. These recommendations have been incorporated into the operational scheme proposed by DWR in its license amendment application to FERC.

DWR will operate Pyramid Dam to reflect natural flow conditions by releasing flows from Pyramid Lake to middle Piru Creek at a rate up to approximately 18,000 cfs, which is the maximum volume of water that can be safely released from Pyramid Dam. Inflow to Pyramid Lake will be measured at existing gauging stations that are located above Pyramid Lake on upper Piru Creek and Cañada de los Alamos. A multiplier will be used to account for portions of the Pyramid Lake watershed that are not tributary to either upper Piru Creek or Cañada de los Alamos. Due to operational constraints, the stream release into middle Piru Creek at Pyramid Dam will typically lag measured inflow by approximately one day. Implementation of the proposed project will result in greater volumes of water passing through middle Piru Creek during the rainy season (typically November through April). During the dry season (May through October), flows in middle Piru Creek will gradually diminish in response to decreasing surface water inflow to Pyramid Lake. On rare occasions during dry years, inflow to Pyramid Lake may be reduced to zero.

### **Radial Gate Testing**

Sudden increases or decreases in stream flows can be disruptive to aquatic organisms, especially when they occur during critical life history stages. For this reason, short-term increases in flow to middle Piru Creek associated with testing of the radial gates, stream release valves, or other requirements to test equipment at Pyramid Dam are prohibited between March 15 and June 15 and will be avoided to the extent possible between June 16 and July 31. Scheduled tests that require releases that last longer than 15 minutes will require prior notification to the FWS. This allows the radial gates at Pyramid Dam to be exercised, and provides for testing equipment, as mandated by FERC or other agencies, that would otherwise increase flows by up to 50 cfs for short periods of time.

### **Monitoring Requirements**

Monitoring for federally listed threatened and endangered species and for California species of special concern within the Project area is included to better understand how implementation of the Project affects these species and will allow for collection of information about their status in middle Piru Creek. DWR will develop a monitoring plan that includes annual breeding surveys for federally listed arroyo toads and that may also include surveys for California red-legged frogs, and for two California species of special concern: Southwestern pond turtles and Two-striped garter snakes. The monitoring plan may also need to include surveys for exotic species known to occur in middle Piru Creek, such as bullfrogs and crayfish, which are known to prey upon arroyo toads.

## WATER QUALITY CERTIFICATION FOR FEDERAL PERMIT OR LICENSE

BY THE EXECUTIVE DIRECTOR:

1. The federal Clean Water Act (33 U.S.C. §§ 1251 *et seq.*) was enacted “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” (33 U.S.C. § 1251(a).) Section 401 of the Clean Water Act (33 U.S.C. §1341) requires every applicant for a federal license or permit which may result in a discharge into navigable waters to provide the licensing or permitting federal agency with certification that the project will be in compliance with specified provisions of the Clean Water Act, including water quality standards and implementation plans promulgated pursuant to section 303 of the Clean Water Act (33 U.S.C. § 1313). Section 401 of the Clean Water Act directs the agency responsible for certification to prescribe effluent limitations and other limitations necessary to ensure compliance with the Clean Water Act and with any other appropriate requirement of state law. Section 401 further provides that state certification conditions shall become conditions of any federal license or permit for the project.
2. The State Water Board is the State agency responsible for certification in California. (Wat. Code, § 13160.) The State Water Board has delegated this function to the Executive Director by regulation. (Cal. Code Regs., tit. 23, § 3838, subd. (a).)
3. The California Regional Water Quality Control Boards have adopted, and the State Water Board and the US Environmental Protection Agency have approved, water quality control plans (Basin Plans) for each watershed basin in the State. The Basin Plans designate the beneficial uses of waters within each watershed basin and water quality objectives designed to protect those uses. Section 303 of the Clean Water Act requires the states to develop and adopt water quality standards. (33 U.S.C. § 1313.) The beneficial uses together with the water quality objectives that are contained in the basin plans constitute state water quality standards under section 303. The State Water Board has also considered the existing water quality conditions and Project related controllable factors.
4. The Los Angeles Regional Water Quality Control Board (Los Angeles Board), has adopted the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, which identifies industrial service and process supply; agricultural supply; groundwater recharge; freshwater replenishment; water contact recreation; non-contact recreation; warm freshwater habitat; cold freshwater habitat; wildlife habitat; rare, threatened or endangered species habitat; spawning, reproduction, and/or early development habitat; and wetland habitat as existing beneficial uses for Piru Creek between Pyramid Lake and Lake Piru. Additionally, municipal and domestic supply is identified as a potential beneficial use.
5. On June 12, 2008, FERC issued the final environmental assessment (Final EA) for the Project, pursuant to the requirements of the National Environmental Policy Act. The Final EA presents an evaluation of the Project, addresses potential environmental impacts, and includes responses to comments received on the draft

environmental assessment. The Final EA also includes a Finding of No Significant Impact (FONSI).

6. DWR is the lead agency for the Project for purposes of the California Environmental Quality Act (CEQA). (Pub. Resources Code, §§ 21000 *et seq.*) DWR released a Notice of Preparation of a draft environmental impact report (EIR) on May 19, 2004 and held a public scoping meeting on June 17, 2004 in Santa Clarita. DWR subsequently released a draft EIR entitled *The Simulation of Natural Flows in Middle Piru Creek* in November 2004 (State Clearinghouse No. 2004051123) and held a public comment meeting in December 2004. A Final EIR was released in January 2005. The Final EIR was certified by the Director of DWR and a Notice of Determination was filed with the State Office of Planning and Research on February 15, 2005. DWR incorporated conditions into the Project designed to protect the environment.
7. The State Water Board, as a responsible agency under CEQA, has reviewed and considered the documents produced by DWR to support the environmental review required for the issuance of the Section 401 Water Quality Certification. The State Water Board will file a Notice of Determination within five days from the issuance of this amended certification.
8. DWR found three significant impacts that were disclosed in the EIR. These are designated as Impact H-3: alteration of drainage patterns resulting in erosion; Impact H-8: exposure of people to danger caused by flooding; and Impact R-3: reduced angling opportunities. (Final EIR, p. ES-5 & ES-6.) Mitigation measures that will reduce the severity of impacts to less than significant are included as conditions of this certification for Impacts H-3 and H-8. With respect to impact R-3, the State Water Board order approving this amended certification makes findings that alternatives and mitigation measures that would avoid or mitigate this impact are infeasible, and makes a finding of overriding considerations.



**ACCORDINGLY, BASED ON ITS INDEPENDENT REVIEW OF THE RECORD, THE STATE WATER BOARD CERTIFIES THAT THE OPERATION OF THE CALIFORNIA AQUEDUCT HYDROELECTRIC PROJECT BY THE CALIFORNIA DEPARTMENT OF WATER RESOURCES AND THE CITY OF LOS ANGELES UNDER AN AMENDED LICENSE ISSUED BY FERC** will comply with sections 301, 302, 303, 306 and 307 of the Clean Water Act, and with applicable provisions of state law, provided that the California Department of Water Resources complies with the following terms and conditions:

1. Pyramid Dam Stream Flow Conditions

Stream releases from Pyramid Dam into Piru Creek shall match natural inflow into Pyramid Lake to the extent operationally feasible and consistent with safety requirements, as described in the following guidelines:

- A. Natural inflow to Pyramid Lake will be released into middle Piru Creek at a rate up to approximately 18,000 cfs, which is the maximum safe designed release from Pyramid Dam.
- B. Storm releases into middle Piru Creek may be held back at less than the maximum safe designed release of 18,000 cfs if higher releases are deemed a threat to life, safety, or property at Pyramid Dam or downstream of the dam.
- C. DWR may elect to appropriate inflow to Pyramid Lake above the safe release flows under the provisions of its existing water rights.
- D. Up to 3,150 acre feet of State Water Project water may be delivered to United Water Conservation District via middle Piru Creek between November 1 and the end of February of each water year. During this period, water deliveries may be made over a period of a few days, ramping flows up and down to simulate the hydrograph of a typical storm event, or they may be released more gradually over a longer period.
- E. Radial Gate Testing

Releases into middle Piru Creek may be increased for short periods of time to exercise the Pyramid Dam radial gate and stream release valves, to test emergency power sources, to conduct tests mandated by FERC, or to meet short-term operational or maintenance requirements. No such testing will be scheduled between March 15 and June 15. Testing will also be avoided to the extent possible between June 16 and July 31. When testing is conducted, flows shall not increase by more than 50 cfs above current base flows and release events shall not last longer than 15 minutes. Scheduled tests that require larger releases or last longer than 15 minutes require prior notification to the FWS. Unscheduled releases due to equipment failure or emergency situations must be reported to the FWS no later than three business days after the event.

- F. All flow requirements of this certification are subject to temporary modification if required by equipment malfunction, emergency conditions or law enforcement activity, or critical electric system emergency beyond the control of the Licensee. The Licensee shall provide advance notification to the FWS prior to any temporary modification, when possible. If advance notification is not possible because an event is unforeseeable, Licensee shall notify the FWS no later than 48 hours from the time that any temporary modification has occurred.

2. Arroyo Toad and Sensitive Species Monitoring Condition

Within one year of issuance of the license amendment, DWR shall file with FERC a plan approved by the Deputy Director for Water Rights for annual breeding surveys of the arroyo toad in middle Piru Creek. Monitoring shall occur, at a minimum, in the lower portion of middle Piru Creek between Lake Piru and Ruby Canyon (a distance of approximately 2 to 3 miles) and shall be conducted by a qualified biologist with experience in identifying arroyo toad larvae and tadpoles. An annual monitoring report shall be submitted to the Deputy Director by October 1 of each year that includes the results of the breeding surveys as well as flow data to document daily releases at Pyramid Dam. If three years of monitoring indicate that the arroyo toad population has shown improvement under the flow modifications identified in this certification, DWR, upon consultation with the State Water Board and FWS, may modify the monitoring frequency required to demonstrate the presence of arroyo toads.

3. Mitigation for the potential increased erosion and damage to existing infrastructure.

DWR shall perform an engineering analysis to determine the potential for expected flow releases to damage Old Highway 99, the Old Highway 99 bridges, utilities, and other infrastructure in or adjacent to the channel, and submit the analysis for approval by the Deputy Director for Water Rights no later than one year from issuance of the FERC license amendment.

- DWR shall make any revisions to the engineering analysis that are required by the Deputy Director for Water Rights, within the period specified by the Deputy Director for Water Rights.
- DWR shall develop procedures and guidelines to monitor erosion based on the engineering analysis within the specified timeframes of the analysis as approved by the Deputy Director for Water Rights, and submit those procedures and guidelines to the Deputy Director for Water Rights for approval.
- DWR shall implement those procedures and guidelines as approved by the Deputy Director for Water Rights, including monitoring erosion at key areas during large flow releases.
- If the monitoring program determines that the infrastructure is at risk, DWR shall temporarily curtail releases, and submit plans for engineered erosion protection for approval by the Deputy Director for Water Rights.

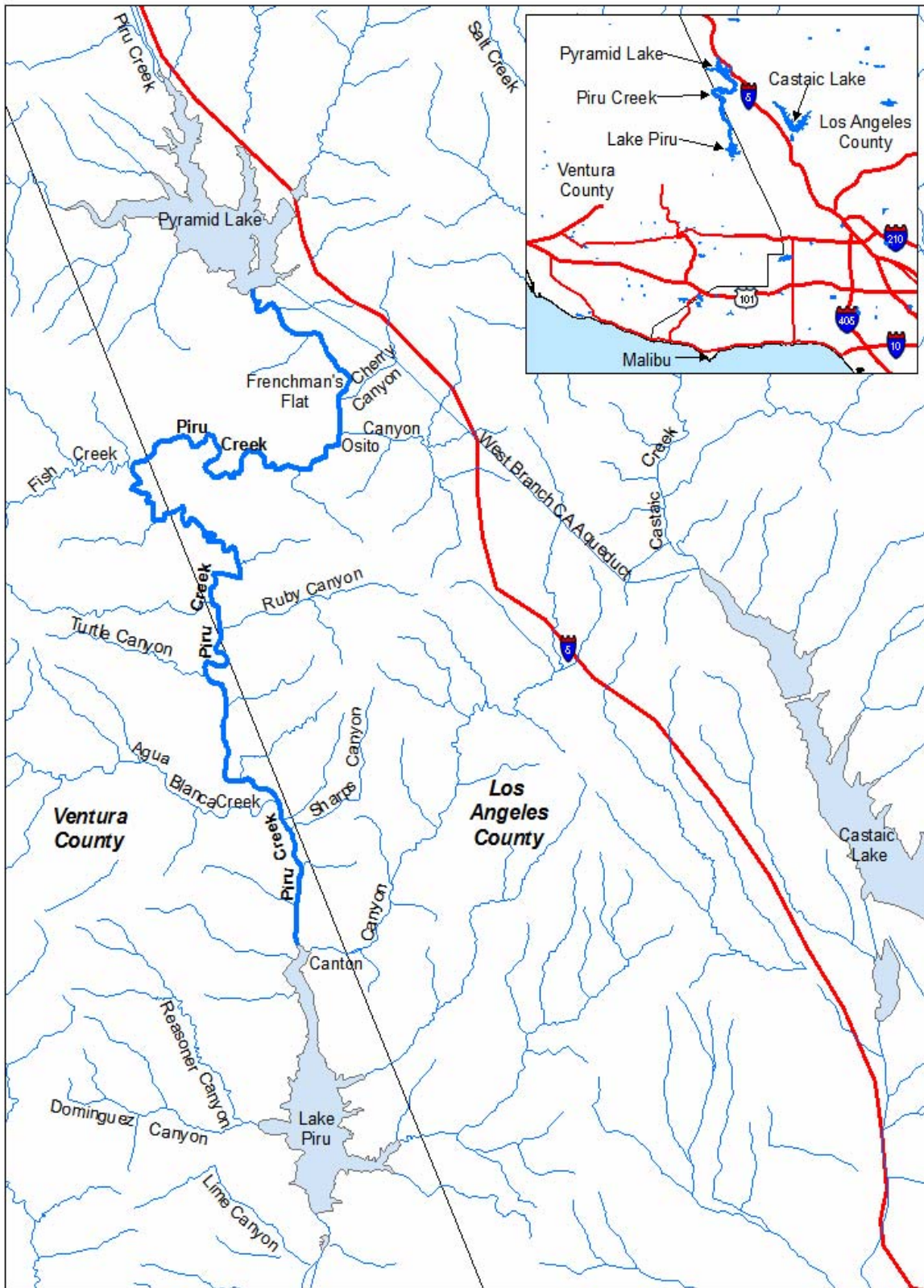
- DWR shall monitor engineered erosion protection following large storm events, defined as storm events that generate flows of 1,000 cfs or more in upper Piru Creek, to determine whether erosion damage has occurred. If damage has occurred, DWR will notify the Forest Service and the FWS.
  - DWR shall prepare and submit to the Deputy Director for Water Rights annual reports that includes the results of monitoring under this condition and documents the installation of any engineered erosion protection as approved by the Deputy Director for Water Rights. Annual reports shall be submitted by October 1 of each year after the procedures and guidelines to monitor erosion are approved by the Deputy Director for Water Rights.
4. Mitigation for the potential to expose people or structures to a risk of loss, injury or death due to flooding, including flooding as a result of the failure of a dam.

DWR shall work with the USFS and landowners to develop a warning system and signage program to warn the public of dangerously high flows in middle Piru Creek.

- DWR shall submit the proposed warning system and signage program for approval by the Deputy Director for Water Rights within one year of the date of this order or within one month after issuance of the FERC license amendment, whichever occurs first.
  - DWR shall make any revisions to the warning system and signage program that are required by the Deputy Director for Water Rights, within the period specified by the Deputy Director for Water Rights.
  - DWR shall implement the warning system and signage program as approved by the Deputy Director for Water Rights.
  - DWR shall inspect the signage at least annually and repair or replace warning signs as needed.
  - DWR shall prepare and submit to the Deputy Director for Water Rights annual reports that documents the implementation of the warning system and signage program, including the results of inspections and the repair or replacement of warning signs. Annual reports shall be submitted by October 1 of each year after the warning system and signage program are approved by the Deputy Director for Water Rights, with copies provided to the Forest Service.
5. This certification is contingent on compliance with all applicable requirements of the Los Angeles Board Basin Plan, except as may be modified by the specific conditions in this certification.
6. Notwithstanding any more specific conditions in this certification, the Project shall be operated in a manner consistent with all water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control

7. Licensee must submit any change to the California Aqueduct Hydroelectric Project that affects the operation of Pyramid Dam that would have a significant or material effect on the findings, conclusions, or conditions of this certification to the Deputy Director for prior review and written approval.
8. DWR shall provide State Water Board staff access to Project sites to document compliance with this certification.
9. The authorization to operate the Project pursuant to this certification is conditioned upon payment of all applicable fees for review and processing of the application for water quality certification and administering the State's water quality certification program, including but not limited to: timely payment of any annual fees or similar charges that may be imposed by future statutes or regulations for the State's reasonable costs of a program to monitor and oversee compliance with conditions of water quality certification.
10. This certification is not intended and shall not be construed to apply to issuance of any FERC license or FERC license amendment other than the FERC license amendment specifically identified in the Licensee's application for certification.
11. This certification does not authorize any act which results in the taking of a threatened or endangered species or any act which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish & G. Code §§ 2050 *et seq.*) or the federal Endangered Species Act (16 U.S.C. §§ 1531 *et seq.*). If a take will result from any act authorized under this certification or water rights held by the Licensee, the Licensee shall obtain authorization for the take prior to any construction or operation of the Project. The Licensee shall be responsible for meeting all requirements of the applicable Endangered Species Act for the Project authorized under this certification.
12. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions provided for under applicable state or federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification.
13. In response to a suspected violation of any condition of this certification, the State Water Board may require the holder of any federal permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring reports the State Water Board deems appropriate, provided that the burden, including costs,

14. In response to any violation of the conditions of this certification, the State Water Board may add to or modify the conditions of this certification as appropriate to ensure compliance.
15. DWR must submit any change to the Project operation that would have a significant or material effect on the findings, conclusions, or conditions of this certification, to the Deputy Director for prior and written approval.
16. This certification is subject to modification upon administrative or judicial review, including review and amendment pursuant to Water Code section 13330 and California Code of Regulations, title 23, division 3, chapter 28, article 6 (commencing with § 3867).
17. The State Water Board reserves authority to modify this certification if monitoring results indicate that continued operation of the Project will violate water quality objectives or impair the beneficial uses of Piru Creek.
18. The State Water Board may add to or modify the conditions of this certification, as appropriate, to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.
19. The State Water Board may add to or modify the conditions of this certification as appropriate to coordinate the operations of this Project and other hydrologically connected water development projects, where coordination of operations is reasonably necessary to achieve water quality standards or protect beneficial uses of water.
20. The State Water Board shall provide notice and an opportunity for hearing in exercising its authority under conditions 17, 18, and 19 above.



**Attachment A**

## **Appendix F**

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### ***Custom USDA Soils Resource Reports***

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United States  
Department of  
Agriculture

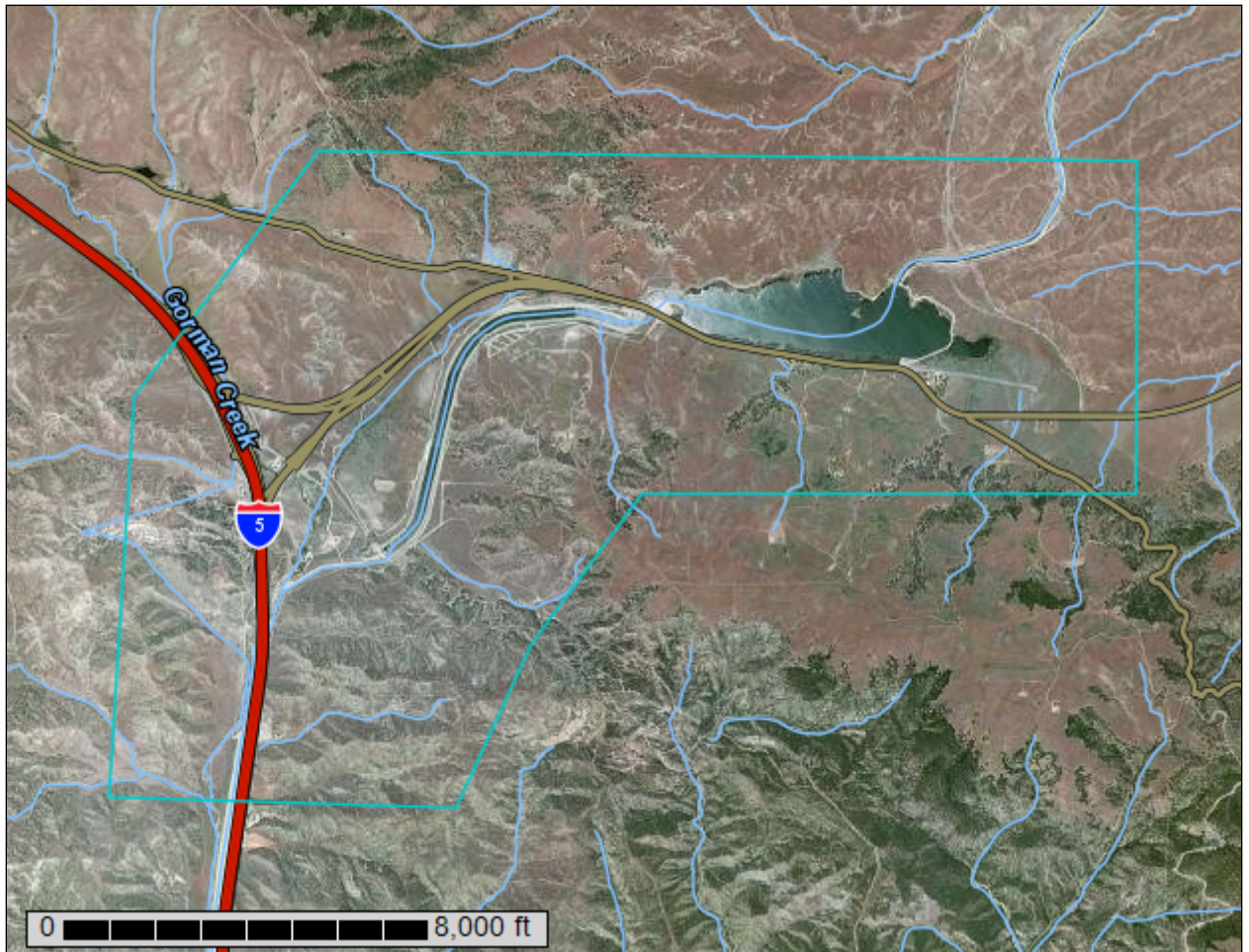
**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for Angeles National Forest Area, California, and Antelope Valley Area, California

## Quail Lake and Lower Quail Canal



# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# **How Soil Surveys Are Made**

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

## Custom Soil Resource Report

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

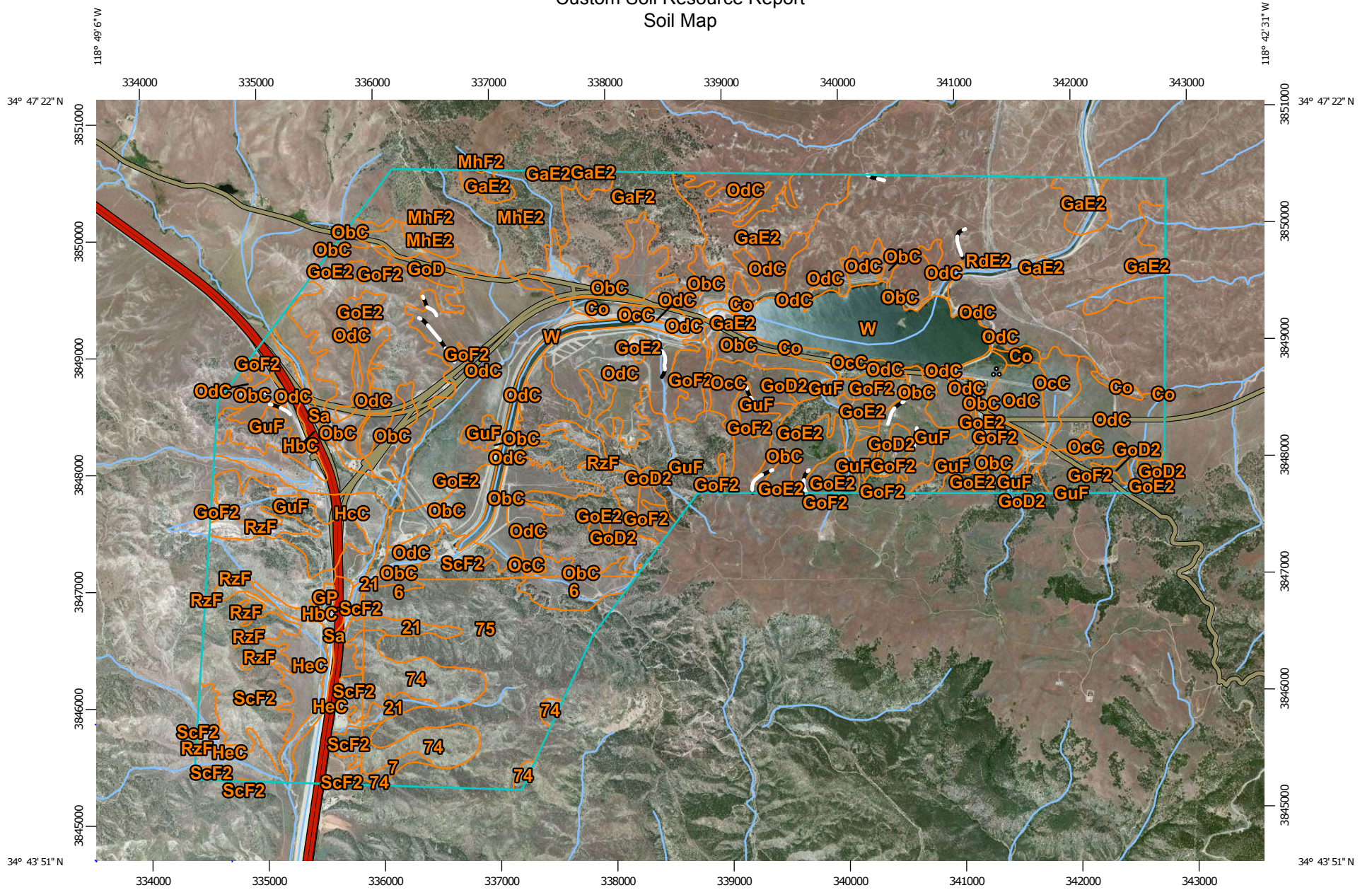
# Soil Map

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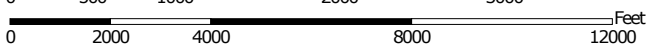
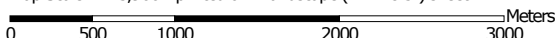
The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report

## Soil Map



Map Scale: 1:45,900 if printed on A landscape (11" x 8.5") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84







### MAP LEGEND


**Area of Interest (AOI)**

 Area of Interest (AOI)




















**Soils**




 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

**Special Point Features**






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Angeles National Forest Area, California  
 Survey Area Data: Version 9, Sep 18, 2015

Soil Survey Area: Antelope Valley Area, California  
 Survey Area Data: Version 8, Sep 17, 2015

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 3, 2010—Aug 31, 2010

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Angeles National Forest Area, California (CA776)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
6	Typic Haploxerafals, 3 to 50 percent slopes	58.9	0.8%
7	Hanford family, 3 to 25 percent slopes	13.5	0.2%
21	Riverwash	43.5	0.6%
74	Trigo-Calleguas families-Rock outcrop complex, 60 to 100 percent slopes	175.9	2.4%
75	Trigo-Calleguas families-Haploxerafals complex, 30 to 70 percent slopes	513.1	7.0%
<b>Subtotals for Soil Survey Area</b>		<b>804.9</b>	<b>11.0%</b>
<b>Totals for Area of Interest</b>		<b>7,293.8</b>	<b>100.0%</b>

Antelope Valley Area, California (CA675)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Co	Chino loam	63.5	0.9%
GaE2	Gaviota rocky sandy loam, 15 to 30 percent slopes, eroded	302.2	4.1%
GaF2	Gaviota rocky sandy loam, 30 to 50 percent slopes, eroded	202.2	2.8%
GoD	Gorman sandy loam, 9 to 15 percent slopes	22.3	0.3%
GoD2	Gorman sandy loam, 9 to 15 percent slopes, eroded	94.3	1.3%
GoE2	Gorman sandy loam, 15 to 30 percent slopes, eroded	146.4	2.0%
GoF2	Gorman sandy loam, 30 to 50 percent slopes, eroded	743.1	10.2%
GP	Gravel pits	7.0	0.1%
GuF	Gullied land	721.3	9.9%
HbC	Hanford coarse sandy loam, 2 to 9 percent slopes	130.2	1.8%
HcC	Hanford sandy loam, 2 to 9 percent slopes	88.3	1.2%
HeC	Hanford sandy loam, calcareous variant, 2 to 9 percent slopes	231.0	3.2%
MhE2	Millsholm rocky loam, 15 to 30 percent slopes, eroded	22.7	0.3%
MhF2	Millsholm rocky loam, 30 to 50 percent slopes, eroded	263.1	3.6%
ObC	Oak Glen sandy loam, 2 to 9 percent slopes	579.8	7.9%

## Custom Soil Resource Report

<b>Antelope Valley Area, California (CA675)</b>			
<b>Map Unit Symbol</b>	<b>Map Unit Name</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
OcC	Oak Glen gravelly sandy loam, 2 to 9 percent slopes	107.1	1.5%
OdC	Oak Glen loam, 2 to 9 percent slopes	1,037.7	14.2%
RdE2	Ramona sandy loam, 9 to 30 percent slopes, eroded	841.9	11.5%
RzF	Rough broken land	100.6	1.4%
Sa	Sandy alluvial land	67.3	0.9%
ScF2	Saugus loam, 30 to 50 percent slopes, eroded	401.4	5.5%
W	Water	315.4	4.3%
<b>Subtotals for Soil Survey Area</b>		<b>6,489.0</b>	<b>89.0%</b>
<b>Totals for Area of Interest</b>		<b>7,293.8</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

## Custom Soil Resource Report

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Angeles National Forest Area, California

### 6—Typic Haploxeralfs, 3 to 50 percent slopes

#### Map Unit Setting

*National map unit symbol:* hm7m  
*Elevation:* 2,450 to 3,400 feet  
*Mean annual precipitation:* 11 to 16 inches  
*Mean annual air temperature:* 55 to 64 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Typic haploxeralfs and similar soils:* 90 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Typic Haploxeralfs

##### Setting

*Landform:* Terraces  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Riser  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Alluvium derived from sedimentary rock

##### Typical profile

*H1 - 0 to 10 inches:* gravelly loam  
*H2 - 10 to 36 inches:* gravelly clay loam  
*H3 - 36 to 59 inches:* weathered bedrock

##### Properties and qualities

*Slope:* 3 to 50 percent  
*Depth to restrictive feature:* 15 to 50 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Low (about 4.9 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* C

#### Minor Components

##### Mollic haploxerolls

*Percent of map unit:* 10 percent

## 7—Hanford family, 3 to 25 percent slopes

### Map Unit Setting

*National map unit symbol:* hm80  
*Elevation:* 2,700 to 4,400 feet  
*Mean annual precipitation:* 11 to 15 inches  
*Mean annual air temperature:* 55 to 64 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Hanford family and similar soils:* 75 percent  
*Minor components:* 25 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Hanford Family

#### Setting

*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Riser  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Alluvium derived from granite

#### Typical profile

*H1 - 0 to 13 inches:* sandy loam  
*H2 - 13 to 36 inches:* fine sandy loam, sandy loam  
*H2 - 13 to 36 inches:* sandy loam  
*H3 - 36 to 60 inches:*

#### Properties and qualities

*Slope:* 3 to 25 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* High (about 10.7 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* A

### Minor Components

#### Typic haploxeralfs

*Percent of map unit:* 5 percent

#### Vista family

*Percent of map unit:* 5 percent

#### Trigo family

*Percent of map unit:* 5 percent

#### Hanford family

*Percent of map unit:* 5 percent

#### Riverwash

*Percent of map unit:* 5 percent

*Landform:* Channels

## 21—Riverwash

### Map Unit Setting

*National map unit symbol:* hm6p

*Elevation:* 1,800 to 4,800 feet

*Mean annual precipitation:* 14 to 30 inches

*Mean annual air temperature:* 55 to 64 degrees F

*Frost-free period:* 150 to 200 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Riverwash:* 75 percent

*Minor components:* 25 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Riverwash

#### Setting

*Landform:* Alluvial flats

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Concave

*Across-slope shape:* Convex

*Parent material:* Alluvium

#### Typical profile

*H1 - 0 to 60 inches:* extremely stony coarse sand

#### Properties and qualities

*Slope:* 2 to 10 percent

*Percent of area covered with surface fragments:* 25.0 percent

*Natural drainage class:* Excessively drained

*Runoff class:* Very low

## Custom Soil Resource Report

*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)

*Frequency of flooding:* Frequent

*Available water storage in profile:* Very low (about 0.6 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8w

### **Minor Components**

#### **Hanford family**

*Percent of map unit:* 7 percent

#### **Vista family**

*Percent of map unit:* 6 percent

#### **Capistrano family**

*Percent of map unit:* 6 percent

#### **Tujunga family**

*Percent of map unit:* 6 percent

## **74—Trigo-Calleguas families-Rock outcrop complex, 60 to 100 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hm87

*Elevation:* 2,200 to 3,730 feet

*Mean annual precipitation:* 14 to 20 inches

*Mean annual air temperature:* 55 to 64 degrees F

*Frost-free period:* 150 to 200 days

*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Trigo family and similar soils:* 35 percent

*Calleguas family and similar soils:* 30 percent

*Rock outcrop:* 25 percent

*Minor components:* 10 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Trigo Family**

#### **Setting**

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Residuum weathered from sandstone



## Custom Soil Resource Report

### Typical profile

*H1 - 0 to 8 inches:* silt loam  
*H2 - 8 to 16 inches:* gravelly silt loam, gravelly loam  
*H2 - 8 to 16 inches:* weathered bedrock  
*H3 - 16 to 59 inches:*

### Properties and qualities

*Slope:* 60 to 100 percent  
*Depth to restrictive feature:* 3 to 19 inches to paralithic bedrock  
*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 3.97 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Low (about 3.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

## Description of Calleguas Family

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone

### Typical profile

*H1 - 0 to 4 inches:* silt loam  
*H2 - 4 to 11 inches:* silt loam  
*H3 - 11 to 15 inches:* weathered bedrock

### Properties and qualities

*Slope:* 60 to 100 percent  
*Depth to restrictive feature:* 6 to 19 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 15 percent  
*Available water storage in profile:* Very low (about 1.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

### **Description of Rock Outcrop**

#### **Setting**

*Landform:* Scarps  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone

#### **Typical profile**

*H1 - 0 to 10 inches:* unweathered bedrock

#### **Properties and qualities**

*Slope:* 60 to 100 percent  
*Depth to restrictive feature:* 0 inches to paralithic bedrock  
*Natural drainage class:* Excessively drained  
*Runoff class:* Very high

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8e

### **Minor Components**

#### **Rubble land**

*Percent of map unit:* 4 percent

#### **Unnamed, colluvial soils**

*Percent of map unit:* 3 percent

#### **Trigo family, fine textured**

*Percent of map unit:* 3 percent

## **75—Trigo-Calleguas families-Haploxeralfs complex, 30 to 70 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hm88  
*Elevation:* 2,400 to 4,000 feet  
*Mean annual precipitation:* 14 to 20 inches  
*Mean annual air temperature:* 55 to 64 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Trigo family and similar soils:* 35 percent  
*Calleguas family and similar soils:* 30 percent  
*Haploxeralfs and similar soils:* 15 percent

## Custom Soil Resource Report

*Minor components: 15 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Trigo Family

#### Setting

*Landform: Mountains*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Mountainflank*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Parent material: Residuum weathered from sandstone*

#### Typical profile

*H1 - 0 to 8 inches: silt loam*

*H2 - 8 to 16 inches: gravelly silt loam, gravelly loam*

*H2 - 8 to 16 inches: weathered bedrock*

*H3 - 16 to 59 inches:*

#### Properties and qualities

*Slope: 30 to 70 percent*

*Depth to restrictive feature: 3 to 19 inches to paralithic bedrock*

*Natural drainage class: Somewhat excessively drained*

*Runoff class: High*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high  
(0.57 to 3.97 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water storage in profile: Low (about 3.3 inches)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 7e*

*Hydrologic Soil Group: D*

### Description of Calleguas Family

#### Setting

*Landform: Mountains*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Mountainflank*

*Down-slope shape: Convex*

*Across-slope shape: Convex*

*Parent material: Residuum weathered from sandstone*

#### Typical profile

*H1 - 0 to 4 inches: silt loam*

*H2 - 4 to 11 inches: silt loam*

*H3 - 11 to 15 inches: weathered bedrock*

#### Properties and qualities

*Slope: 30 to 70 percent*

*Depth to restrictive feature: 6 to 19 inches to paralithic bedrock*

*Natural drainage class: Well drained*

*Runoff class: High*

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high  
(0.57 to 1.98 in/hr)*

## Custom Soil Resource Report

*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 15 percent  
*Available water storage in profile:* Very low (about 1.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

### Description of Haploxeralfs

#### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone

#### Typical profile

*H1 - 0 to 6 inches:* gravelly loam  
*H2 - 6 to 15 inches:* gravelly clay loam, gravelly sandy clay loam  
*H2 - 6 to 15 inches:* unweathered bedrock  
*H3 - 15 to 19 inches:*

#### Properties and qualities

*Slope:* 30 to 70 percent  
*Depth to restrictive feature:* 7 to 19 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Low (about 3.3 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

### Minor Components

#### Osito family

*Percent of map unit:* 3 percent

#### Unnamed, moderately deep soils

*Percent of map unit:* 3 percent

#### Modesto family

*Percent of map unit:* 3 percent

#### Rock outcrop

*Percent of map unit:* 2 percent

## Custom Soil Resource Report

### **Vertic xerochrepts**

*Percent of map unit: 2 percent*

### **Caperton family**

*Percent of map unit: 2 percent*

## Antelope Valley Area, California

### Co—Chino loam

#### Map Unit Setting

*National map unit symbol:* hcdd

*Elevation:* 3,100 feet

*Mean annual precipitation:* 8 to 20 inches

*Mean annual air temperature:* 61 to 64 degrees F

*Frost-free period:* 230 to 340 days

*Farmland classification:* Prime farmland if irrigated and drained

#### Map Unit Composition

*Chino and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Chino

##### Setting

*Landform:* Valleys

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from granite

##### Typical profile

*H1 - 0 to 16 inches:* loam

*H2 - 16 to 60 inches:* silty clay loam

##### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Excessively drained

*Runoff class:* Medium

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

*Depth to water table:* About 16 inches

*Frequency of flooding:* Rare

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 10 percent

*Salinity, maximum in profile:* Slightly saline to strongly saline (4.0 to 16.0 mmhos/cm)

*Available water storage in profile:* Moderate (about 7.6 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 2w

*Land capability classification (nonirrigated):* 4w

*Hydrologic Soil Group:* C/D

*Ecological site:* WET MEADOW 9-20" (R019XD067CA)

#### Minor Components

##### Unnamed

*Percent of map unit:* 10 percent

## Custom Soil Resource Report

### **Hanford**

*Percent of map unit: 2 percent*

### **Mocho**

*Percent of map unit: 1 percent*

### **Sorrento**

*Percent of map unit: 1 percent*

### **Unnamed**

*Percent of map unit: 1 percent*

*Landform: Drainageways*

## **GaE2—Gaviota rocky sandy loam, 15 to 30 percent slopes, eroded**

### **Map Unit Setting**

*National map unit symbol: hcdk*

*Elevation: 100 to 4,000 feet*

*Mean annual precipitation: 8 to 20 inches*

*Mean annual air temperature: 45 to 61 degrees F*

*Frost-free period: 110 to 275 days*

*Farmland classification: Not prime farmland*

### **Map Unit Composition**

*Gaviota and similar soils: 90 percent*

*Minor components: 10 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Gaviota**

#### **Setting**

*Landform: Hills*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Side slope*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Parent material: Residuum weathered from sandstone*

#### **Typical profile**

*H1 - 0 to 14 inches: sandy loam*

*H2 - 14 to 17 inches: unweathered bedrock*

#### **Properties and qualities**

*Slope: 15 to 30 percent*

*Depth to restrictive feature: 10 to 20 inches to lithic bedrock*

*Natural drainage class: Well drained*

*Runoff class: Very high*

*Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 5.95 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

## Custom Soil Resource Report

*Frequency of ponding:* None

*Available water storage in profile:* Very low (about 1.7 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7e

*Hydrologic Soil Group:* D

*Ecological site:* SHALLOW LOAMY 9-20" (R019XD066CA)

### **Minor Components**

#### **Millsholm**

*Percent of map unit:* 4 percent

#### **Rock outcrop**

*Percent of map unit:* 3 percent

#### **Unnamed**

*Percent of map unit:* 3 percent

*Landform:* Drainageways

## **GaF2—Gaviota rocky sandy loam, 30 to 50 percent slopes, eroded**

### **Map Unit Setting**

*National map unit symbol:* hccl

*Elevation:* 100 to 4,000 feet

*Mean annual precipitation:* 8 to 20 inches

*Mean annual air temperature:* 45 to 61 degrees F

*Frost-free period:* 110 to 275 days

*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Gaviota and similar soils:* 90 percent

*Minor components:* 10 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Gaviota**

#### **Setting**

*Landform:* Hills

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Residuum weathered from sandstone

#### **Typical profile**

*H1 - 0 to 14 inches:* sandy loam

*H2 - 14 to 17 inches:* unweathered bedrock

#### **Properties and qualities**

*Slope:* 30 to 50 percent



## Custom Soil Resource Report

*Depth to restrictive feature:* 10 to 20 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low (0.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Very low (about 1.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D  
*Ecological site:* SHALLOW LOAMY 9-20" (R019XD066CA)

### Minor Components

#### Millsholm

*Percent of map unit:* 5 percent

#### Rock outcrop

*Percent of map unit:* 2 percent

#### Saugus

*Percent of map unit:* 2 percent

#### Unnamed

*Percent of map unit:* 1 percent  
*Landform:* Drainageways

## GoD—Gorman sandy loam, 9 to 15 percent slopes

### Map Unit Setting

*National map unit symbol:* hcdq  
*Elevation:* 4,000 to 4,500 feet  
*Mean annual precipitation:* 15 inches  
*Mean annual air temperature:* 55 degrees F  
*Frost-free period:* 210 to 240 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Gorman and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Gorman

#### Setting

*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Concave

## Custom Soil Resource Report

*Across-slope shape:* Concave  
*Parent material:* Alluvium derived from granite

### Typical profile

*H1 - 0 to 43 inches:* sandy loam  
*H2 - 43 to 84 inches:* sandy clay loam

### Properties and qualities

*Slope:* 9 to 15 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Moderate (about 8.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* B  
*Ecological site:* LOAMY 9-20" (R020XE024CA)

### Minor Components

#### Unnamed

*Percent of map unit:* 10 percent

#### Oak glen

*Percent of map unit:* 4 percent

#### Unnamed

*Percent of map unit:* 1 percent  
*Landform:* Drainageways

## GoD2—Gorman sandy loam, 9 to 15 percent slopes, eroded

### Map Unit Setting

*National map unit symbol:* hcdr  
*Elevation:* 4,000 to 4,500 feet  
*Mean annual precipitation:* 15 inches  
*Mean annual air temperature:* 55 degrees F  
*Frost-free period:* 210 to 240 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Gorman and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Gorman

### Setting

*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Alluvium derived from granite

### Typical profile

*H1 - 0 to 30 inches:* sandy loam  
*H2 - 30 to 60 inches:* sandy clay loam

### Properties and qualities

*Slope:* 9 to 15 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Moderate (about 8.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* C  
*Ecological site:* LOAMY 9-20" (R020XE024CA)

## Minor Components

### Unnamed

*Percent of map unit:* 10 percent

### Oak glen

*Percent of map unit:* 4 percent

### Unnamed

*Percent of map unit:* 1 percent  
*Landform:* Drainageways

## GoE2—Gorman sandy loam, 15 to 30 percent slopes, eroded

### Map Unit Setting

*National map unit symbol:* hcds  
*Elevation:* 4,000 to 4,500 feet  
*Mean annual precipitation:* 15 inches  
*Mean annual air temperature:* 55 degrees F

## Custom Soil Resource Report

*Frost-free period:* 210 to 240 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Gorman and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Gorman

#### Setting

*Landform:* Alluvial fans

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Concave

*Across-slope shape:* Convex

*Parent material:* Alluvium derived from granite

#### Typical profile

*H1 - 0 to 43 inches:* sandy loam

*H2 - 43 to 60 inches:* sandy clay loam

#### Properties and qualities

*Slope:* 15 to 30 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Moderate (about 8.1 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 4e

*Land capability classification (nonirrigated):* 6e

*Hydrologic Soil Group:* B

*Ecological site:* LOAMY 9-20" (R020XE024CA)

### Minor Components

#### Unnamed

*Percent of map unit:* 10 percent

#### Oak glen

*Percent of map unit:* 4 percent

#### Unnamed

*Percent of map unit:* 1 percent

*Landform:* Drainageways

## **GoF2—Gorman sandy loam, 30 to 50 percent slopes, eroded**

### **Map Unit Setting**

*National map unit symbol:* hcdt  
*Elevation:* 4,000 to 4,500 feet  
*Mean annual precipitation:* 15 inches  
*Mean annual air temperature:* 55 degrees F  
*Frost-free period:* 210 to 240 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Gorman and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Gorman**

#### **Setting**

*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Alluvium derived from granite

#### **Typical profile**

*H1 - 0 to 25 inches:* sandy loam  
*H2 - 25 to 60 inches:* sandy clay loam

#### **Properties and qualities**

*Slope:* 30 to 50 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Moderate (about 8.5 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* C  
*Ecological site:* LOAMY 9-20" (R020XE024CA)

### Minor Components

#### Unnamed

*Percent of map unit: 10 percent*

#### Oak glen

*Percent of map unit: 4 percent*

#### Unnamed

*Percent of map unit: 1 percent*

*Landform: Drainageways*

### GP—Gravel pits

#### Map Unit Composition

*Gravel pits: 100 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Gravel Pits

##### Setting

*Landform position (two-dimensional): Toeslope*

*Landform position (three-dimensional): Tread*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: Sandy and gravelly alluvium*

### GuF—Gullied land

#### Map Unit Composition

*Gullied land: 90 percent*

*Minor components: 10 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Gullied Land

##### Setting

*Landform position (two-dimensional): Backslope*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Parent material: Residuum*

##### Typical profile

*H1 - 0 to 60 inches: variable*

##### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 8*

### Minor Components

#### Gorman

*Percent of map unit:* 3 percent

#### Ramona

*Percent of map unit:* 3 percent

#### Seridan

*Percent of map unit:* 3 percent

#### Unnamed

*Percent of map unit:* 1 percent

*Landform:* Drainageways

## HbC—Hanford coarse sandy loam, 2 to 9 percent slopes

### Map Unit Setting

*National map unit symbol:* hcf2

*Elevation:* 2,600 to 4,200 feet

*Mean annual precipitation:* 9 to 12 inches

*Mean annual air temperature:* 63 degrees F

*Frost-free period:* 200 to 250 days

*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Hanford and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Hanford

#### Setting

*Landform:* Alluvial fans

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from granite

#### Typical profile

*H1 - 0 to 8 inches:* coarse sandy loam

*H2 - 8 to 39 inches:* sandy loam, coarse sandy loam

*H2 - 8 to 39 inches:* gravelly loamy coarse sand, gravelly coarse sandy loam

*H3 - 39 to 70 inches:*

*H3 - 39 to 70 inches:*

#### Properties and qualities

*Slope:* 2 to 9 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)

## Custom Soil Resource Report

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Very high (about 13.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2e

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* A

*Ecological site:* LOAMY 9-20" (R019XD064CA)

### Minor Components

#### Greenfield

*Percent of map unit:* 8 percent

#### Ramona

*Percent of map unit:* 5 percent

#### Unnamed

*Percent of map unit:* 2 percent

## HcC—Hanford sandy loam, 2 to 9 percent slopes

### Map Unit Setting

*National map unit symbol:* hcf5

*Elevation:* 2,600 to 4,200 feet

*Mean annual precipitation:* 9 to 12 inches

*Mean annual air temperature:* 63 degrees F

*Frost-free period:* 200 to 250 days

*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Hanford and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Hanford

#### Setting

*Landform:* Alluvial fans

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from granite

#### Typical profile

*H1 - 0 to 8 inches:* sandy loam

*H2 - 8 to 70 inches:* fine sandy loam, sandy loam

*H2 - 8 to 70 inches:*



## Custom Soil Resource Report

### Properties and qualities

*Slope:* 2 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Very high (about 14.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* A  
*Ecological site:* LOAMY 9-20" (R019XD064CA)

### Minor Components

#### Greenfield

*Percent of map unit:* 10 percent

#### Unnamed

*Percent of map unit:* 5 percent

## HeC—Hanford sandy loam, calcareous variant, 2 to 9 percent slopes

### Map Unit Setting

*National map unit symbol:* hcf7  
*Elevation:* 2,800 to 3,000 feet  
*Mean annual precipitation:* 10 inches  
*Mean annual air temperature:* 63 degrees F  
*Frost-free period:* 220 to 260 days  
*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Hanford variant and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Hanford Variant

#### Setting

*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium derived from granite

## Custom Soil Resource Report

### Typical profile

*H1 - 0 to 16 inches:* sandy loam  
*H2 - 16 to 36 inches:* fine sandy loam, coarse sandy loam  
*H2 - 16 to 36 inches:* sandy loam  
*H3 - 36 to 56 inches:* sandy loam, coarse sandy loam  
*H4 - 56 to 80 inches:*  
*H4 - 56 to 80 inches:*

### Properties and qualities

*Slope:* 2 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 10 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Moderate (about 8.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* A  
*Ecological site:* LOAMY 9-20" (R019XD064CA)

### Minor Components

#### Unnamed

*Percent of map unit:* 10 percent

#### Hanford

*Percent of map unit:* 5 percent

## MhE2—Millsholm rocky loam, 15 to 30 percent slopes, eroded

### Map Unit Setting

*National map unit symbol:* hcfs  
*Elevation:* 300 to 4,000 feet  
*Mean annual precipitation:* 8 to 50 inches  
*Mean annual air temperature:* 45 to 63 degrees F  
*Frost-free period:* 110 to 330 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Millsholm and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Millsholm

### Setting

*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from sedimentary rock

### Typical profile

*H1 - 0 to 16 inches:* loam  
*H2 - 16 to 20 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* 10 to 20 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low (0.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Very low (about 2.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* D  
*Ecological site:* SHALLOW LOAMY 9-20" (R019XD066CA)

## Minor Components

### Rock outcrop

*Percent of map unit:* 5 percent

### Gaviota

*Percent of map unit:* 5 percent

### Unnamed

*Percent of map unit:* 3 percent  
*Landform:* Drainageways

### Castaic

*Percent of map unit:* 2 percent

## MhF2—Millsholm rocky loam, 30 to 50 percent slopes, eroded

### Map Unit Setting

*National map unit symbol:* hcft  
*Elevation:* 300 to 4,000 feet  
*Mean annual precipitation:* 8 to 50 inches

## Custom Soil Resource Report

*Mean annual air temperature:* 45 to 63 degrees F  
*Frost-free period:* 110 to 330 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Millsholm and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Millsholm

#### Setting

*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from sedimentary rock

#### Typical profile

*H1 - 0 to 16 inches:* loam  
*H2 - 16 to 20 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 30 to 50 percent  
*Depth to restrictive feature:* 10 to 20 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low (0.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Very low (about 2.6 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* D  
*Ecological site:* SHALLOW LOAMY 9-20" (R019XD066CA)

### Minor Components

#### Rock outcrop

*Percent of map unit:* 5 percent

#### Unnamed

*Percent of map unit:* 5 percent

#### Castaic

*Percent of map unit:* 3 percent

#### Gaviota

*Percent of map unit:* 1 percent

#### Unnamed

*Percent of map unit:* 1 percent  
*Landform:* Drainageways

## ObC—Oak Glen sandy loam, 2 to 9 percent slopes

### Map Unit Setting

*National map unit symbol:* hcg1  
*Elevation:* 3,400 to 5,200 feet  
*Mean annual precipitation:* 15 to 25 inches  
*Mean annual air temperature:* 55 degrees F  
*Frost-free period:* 175 to 200 days  
*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Oak glen and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Oak Glen

#### Setting

*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium derived from granite

#### Typical profile

*H1 - 0 to 32 inches:* sandy loam  
*H2 - 32 to 60 inches:* fine sandy loam, sandy loam, coarse sandy loam  
*H2 - 32 to 60 inches:*  
*H2 - 32 to 60 inches:*

#### Properties and qualities

*Slope:* 2 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Very high (about 13.9 inches)

#### Interpretive groups

*Land capability classification (irrigated):* 2e  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* A  
*Ecological site:* LOAMY 9-20" (R020XE024CA)

**Minor Components**

**Hanford**

*Percent of map unit:* 10 percent

**Unnamed**

*Percent of map unit:* 5 percent

**OcC—Oak Glen gravelly sandy loam, 2 to 9 percent slopes**

**Map Unit Setting**

*National map unit symbol:* hcg2

*Elevation:* 3,400 to 5,200 feet

*Mean annual precipitation:* 15 to 25 inches

*Mean annual air temperature:* 55 degrees F

*Frost-free period:* 175 to 200 days

*Farmland classification:* Prime farmland if irrigated

**Map Unit Composition**

*Oak glen and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Oak Glen**

**Setting**

*Landform:* Alluvial fans

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from granite

**Typical profile**

*H1 - 0 to 32 inches:* gravelly sandy loam

*H2 - 32 to 60 inches:* gravelly fine sandy loam, gravelly sandy loam, gravelly coarse sandy loam

*H2 - 32 to 60 inches:*

*H2 - 32 to 60 inches:*

**Properties and qualities**

*Slope:* 2 to 9 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* High (about 10.4 inches)

## Custom Soil Resource Report

### Interpretive groups

*Land capability classification (irrigated): 2e*

*Land capability classification (nonirrigated): 3e*

*Hydrologic Soil Group: A*

*Ecological site: LOAMY 9-20" (R020XE024CA)*

### Minor Components

#### Unnamed

*Percent of map unit: 10 percent*

#### Oak glen

*Percent of map unit: 5 percent*

## OdC—Oak Glen loam, 2 to 9 percent slopes

### Map Unit Setting

*National map unit symbol: hcg4*

*Elevation: 3,400 to 5,200 feet*

*Mean annual precipitation: 15 to 25 inches*

*Mean annual air temperature: 55 degrees F*

*Frost-free period: 175 to 200 days*

*Farmland classification: Prime farmland if irrigated*

### Map Unit Composition

*Oak glen and similar soils: 85 percent*

*Minor components: 15 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Oak Glen

#### Setting

*Landform: Alluvial fans*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Tread*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: Alluvium derived from granite*

#### Typical profile

*H1 - 0 to 40 inches: loam*

*H2 - 40 to 60 inches: fine sandy loam, sandy loam, coarse sandy loam*

*H2 - 40 to 60 inches:*

*H2 - 40 to 60 inches:*

#### Properties and qualities

*Slope: 2 to 9 percent*

*Depth to restrictive feature: More than 80 inches*

*Natural drainage class: Well drained*

*Runoff class: Medium*

## Custom Soil Resource Report

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Very high (about 13.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2e

*Land capability classification (nonirrigated):* 3e

*Hydrologic Soil Group:* B

*Ecological site:* LOAMY 9-20" (R020XE024CA)

### Minor Components

#### Unnamed

*Percent of map unit:* 10 percent

#### Oak glen

*Percent of map unit:* 5 percent

## RdE2—Ramona sandy loam, 9 to 30 percent slopes, eroded

### Map Unit Setting

*National map unit symbol:* hcgm

*Elevation:* 2,700 to 3,900 feet

*Mean annual precipitation:* 9 to 12 inches

*Mean annual air temperature:* 63 degrees F

*Frost-free period:* 210 to 240 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Ramona and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Ramona

#### Setting

*Landform:* Terraces

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Alluvium derived from granite

#### Typical profile

*H1 - 0 to 12 inches:* sandy loam

*H2 - 12 to 23 inches:* fine sandy loam

*H3 - 23 to 90 inches:* sandy clay loam



## Custom Soil Resource Report

### Properties and qualities

*Slope:* 9 to 30 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Moderate (about 8.2 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4e

*Land capability classification (nonirrigated):* 6e

*Hydrologic Soil Group:* C

*Ecological site:* LOAMY 9-20" (R019XD064CA)

### Minor Components

#### Vernalis

*Percent of map unit:* 5 percent

#### Gullied land

*Percent of map unit:* 5 percent

#### Unnamed

*Percent of map unit:* 4 percent

#### Unnamed

*Percent of map unit:* 1 percent

*Landform:* Drainageways

## RzF—Rough broken land

### Map Unit Setting

*National map unit symbol:* hch4

*Mean annual precipitation:* 14 inches

*Mean annual air temperature:* 61 degrees F

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Rough broken land:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Rough Broken Land

#### Setting

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

## Custom Soil Resource Report

*Down-slope shape:* Concave  
*Across-slope shape:* Concave

### Typical profile

*H1 - 0 to 60 inches:* variable

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8

### Minor Components

#### Gullied land

*Percent of map unit:* 5 percent

#### Badlands

*Percent of map unit:* 5 percent

#### Rock outcrop

*Percent of map unit:* 4 percent

#### Unnamed

*Percent of map unit:* 1 percent  
*Landform:* Flood plains

## Sa—Sandy alluvial land

### Map Unit Setting

*National map unit symbol:* hch5  
*Mean annual precipitation:* 14 inches  
*Mean annual air temperature:* 61 degrees F  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Sandy alluvial land:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Sandy Alluvial Land

#### Setting

*Landform:* Flood plains  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium

#### Typical profile

*H1 - 0 to 10 inches:* sand  
*H2 - 10 to 30 inches:* stratified sand to loam  
*H3 - 30 to 60 inches:* stratified gravelly sand to gravelly loam

## Custom Soil Resource Report

### Properties and qualities

*Slope:* 0 to 2 percent

*Natural drainage class:* Excessively drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)

*Depth to water table:* About 10 inches

*Frequency of flooding:* Frequent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Moderate (about 6.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7w

*Hydrologic Soil Group:* B

*Ecological site:* SANDY 9-20" (R020XE025CA)

### Minor Components

#### Riverwash

*Percent of map unit:* 10 percent

*Landform:* Drainageways

#### Unnamed

*Percent of map unit:* 5 percent

## ScF2—Saugus loam, 30 to 50 percent slopes, eroded

### Map Unit Setting

*National map unit symbol:* hch8

*Elevation:* 600 to 2,500 feet

*Mean annual precipitation:* 14 to 20 inches

*Mean annual air temperature:* 63 degrees F

*Frost-free period:* 275 to 300 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Saugus and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Saugus

#### Setting

*Landform:* Hills

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Weakly consolidated alluvium

## Custom Soil Resource Report

### Typical profile

*H1 - 0 to 15 inches:* loam

*H2 - 15 to 42 inches:* loam, sandy loam

*H2 - 15 to 42 inches:* weathered bedrock

*H3 - 42 to 46 inches:*

### Properties and qualities

*Slope:* 30 to 50 percent

*Depth to restrictive feature:* 40 to 60 inches to paralithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Very low (0.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* High (about 9.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7e

*Hydrologic Soil Group:* B

*Ecological site:* LOAMY 9-20" (R019XD064CA)

### Minor Components

#### Gaviota

*Percent of map unit:* 5 percent

#### Rough broken land

*Percent of map unit:* 5 percent

#### Balcom

*Percent of map unit:* 3 percent

#### Castaic

*Percent of map unit:* 2 percent

## W—Water

### Map Unit Composition

*Water:* 100 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Water

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8

# **Soil Information for All Uses**

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## **Soil Properties and Qualities**

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

## **Soil Erosion Factors**

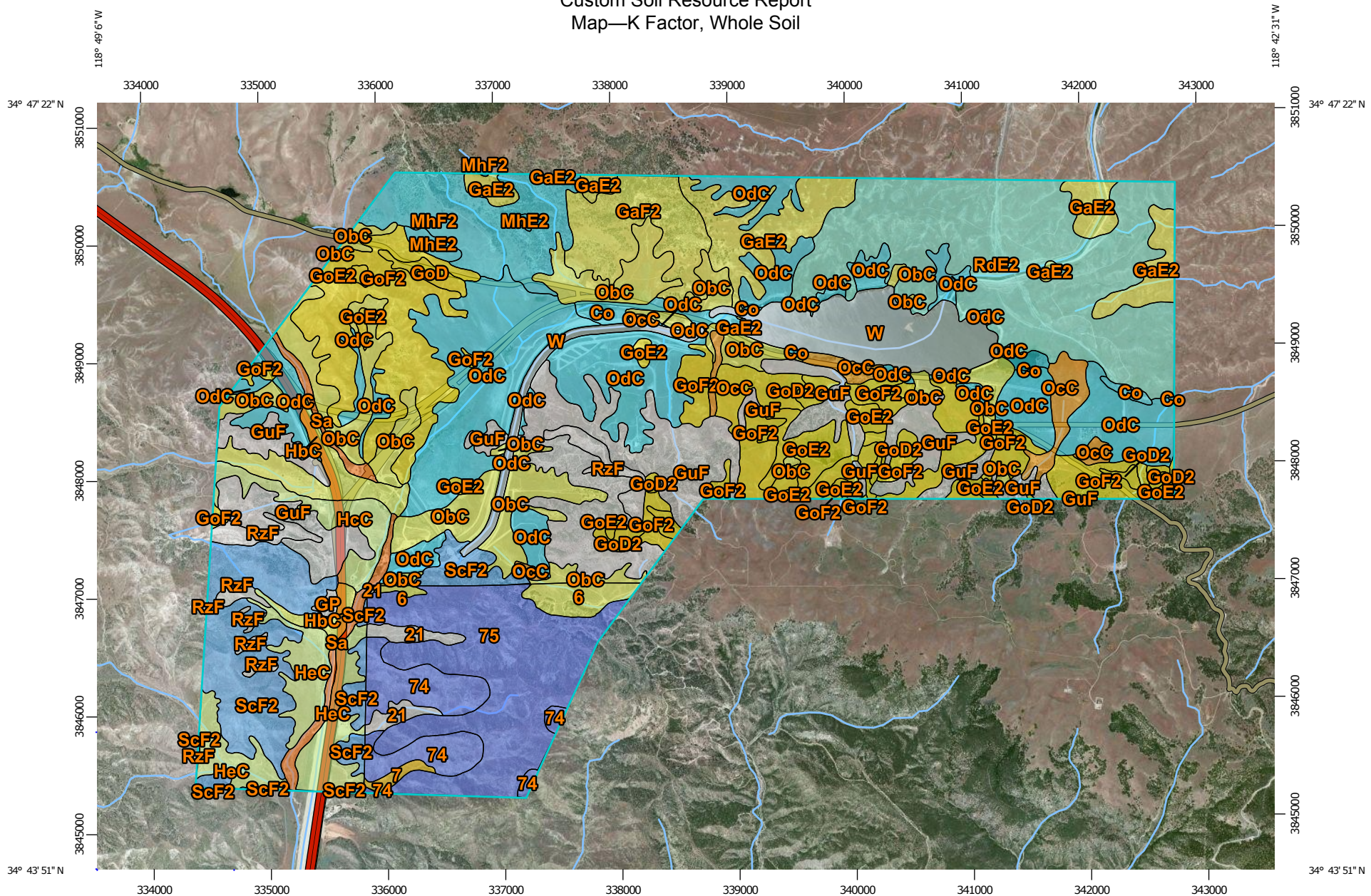
Soil Erosion Factors are soil properties and interpretations used in evaluating the soil for potential erosion. Example soil erosion factors can include K factor for the whole soil or on a rock free basis, T factor, wind erodibility group and wind erodibility index.

### **K Factor, Whole Soil**

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Custom Soil Resource Report  
Map—K Factor, Whole Soil



Map Scale: 1:45,900 if printed on A landscape (11" x 8.5") sheet.

0 500 1000 2000 3000 Meters

0 2000 4000 8000 12000 Feet


Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84



# Custom Soil Resource Report
















## MAP LEGEND

### Area of Interest (AOI)







 Area of Interest (AOI)










### Soils

#### Soil Rating Polygons
















-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

#### Soil Rating Lines








-  .02
-  .05
-  .10
-  .15
-  .17
-  .20

-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

#### Soil Rating Points

-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

#### Water Features

-  Streams and Canals
- Transportation**
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads
- Background**
-  Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Angeles National Forest Area, California  
 Survey Area Data: Version 9, Sep 18, 2015

Soil Survey Area: Antelope Valley Area, California  
 Survey Area Data: Version 8, Sep 17, 2015

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 3, 2010—Aug 31, 2010

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

**Table—K Factor, Whole Soil**

<b>K Factor, Whole Soil— Summary by Map Unit — Angeles National Forest Area, California (CA776)</b>				
<b>Map unit symbol</b>	<b>Map unit name</b>	<b>Rating</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
6	Typic Haploxerafls, 3 to 50 percent slopes	.20	58.9	0.8%
7	Hanford family, 3 to 25 percent slopes	.15	13.5	0.2%
21	Riverwash		43.5	0.6%
74	Trigo-Calleguas families-Rock outcrop complex, 60 to 100 percent slopes	.49	175.9	2.4%
75	Trigo-Calleguas families-Haploxerafls complex, 30 to 70 percent slopes	.49	513.1	7.0%
<b>Subtotals for Soil Survey Area</b>			<b>804.9</b>	<b>11.0%</b>
<b>Totals for Area of Interest</b>			<b>7,293.8</b>	<b>100.0%</b>

<b>K Factor, Whole Soil— Summary by Map Unit — Antelope Valley Area, California (CA675)</b>				
<b>Map unit symbol</b>	<b>Map unit name</b>	<b>Rating</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
Co	Chino loam	.37	63.5	0.9%
GaE2	Gaviota rocky sandy loam, 15 to 30 percent slopes, eroded	.20	302.2	4.1%
GaF2	Gaviota rocky sandy loam, 30 to 50 percent slopes, eroded	.20	202.2	2.8%
GoD	Gorman sandy loam, 9 to 15 percent slopes	.17	22.3	0.3%
GoD2	Gorman sandy loam, 9 to 15 percent slopes, eroded	.17	94.3	1.3%
GoE2	Gorman sandy loam, 15 to 30 percent slopes, eroded	.17	146.4	2.0%
GoF2	Gorman sandy loam, 30 to 50 percent slopes, eroded	.17	743.1	10.2%
GP	Gravel pits		7.0	0.1%
GuF	Gullied land		721.3	9.9%
HbC	Hanford coarse sandy loam, 2 to 9 percent slopes	.20	130.2	1.8%
HcC	Hanford sandy loam, 2 to 9 percent slopes	.24	88.3	1.2%
HeC	Hanford sandy loam, calcareous variant, 2 to 9 percent slopes	.24	231.0	3.2%



## Custom Soil Resource Report

<b>K Factor, Whole Soil— Summary by Map Unit — Antelope Valley Area, California (CA675)</b>				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
MhE2	Millsholm rocky loam, 15 to 30 percent slopes, eroded	.37	22.7	0.3%
MhF2	Millsholm rocky loam, 30 to 50 percent slopes, eroded	.37	263.1	3.6%
ObC	Oak Glen sandy loam, 2 to 9 percent slopes	.20	579.8	7.9%
OcC	Oak Glen gravelly sandy loam, 2 to 9 percent slopes	.10	107.1	1.5%
OdC	Oak Glen loam, 2 to 9 percent slopes	.37	1,037.7	14.2%
RdE2	Ramona sandy loam, 9 to 30 percent slopes, eroded	.32	841.9	11.5%
RzF	Rough broken land		100.6	1.4%
Sa	Sandy alluvial land	.05	67.3	0.9%
ScF2	Saugus loam, 30 to 50 percent slopes, eroded	.43	401.4	5.5%
W	Water		315.4	4.3%
<b>Subtotals for Soil Survey Area</b>			<b>6,489.0</b>	<b>89.0%</b>
<b>Totals for Area of Interest</b>			<b>7,293.8</b>	<b>100.0%</b>

### Rating Options—K Factor, Whole Soil

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

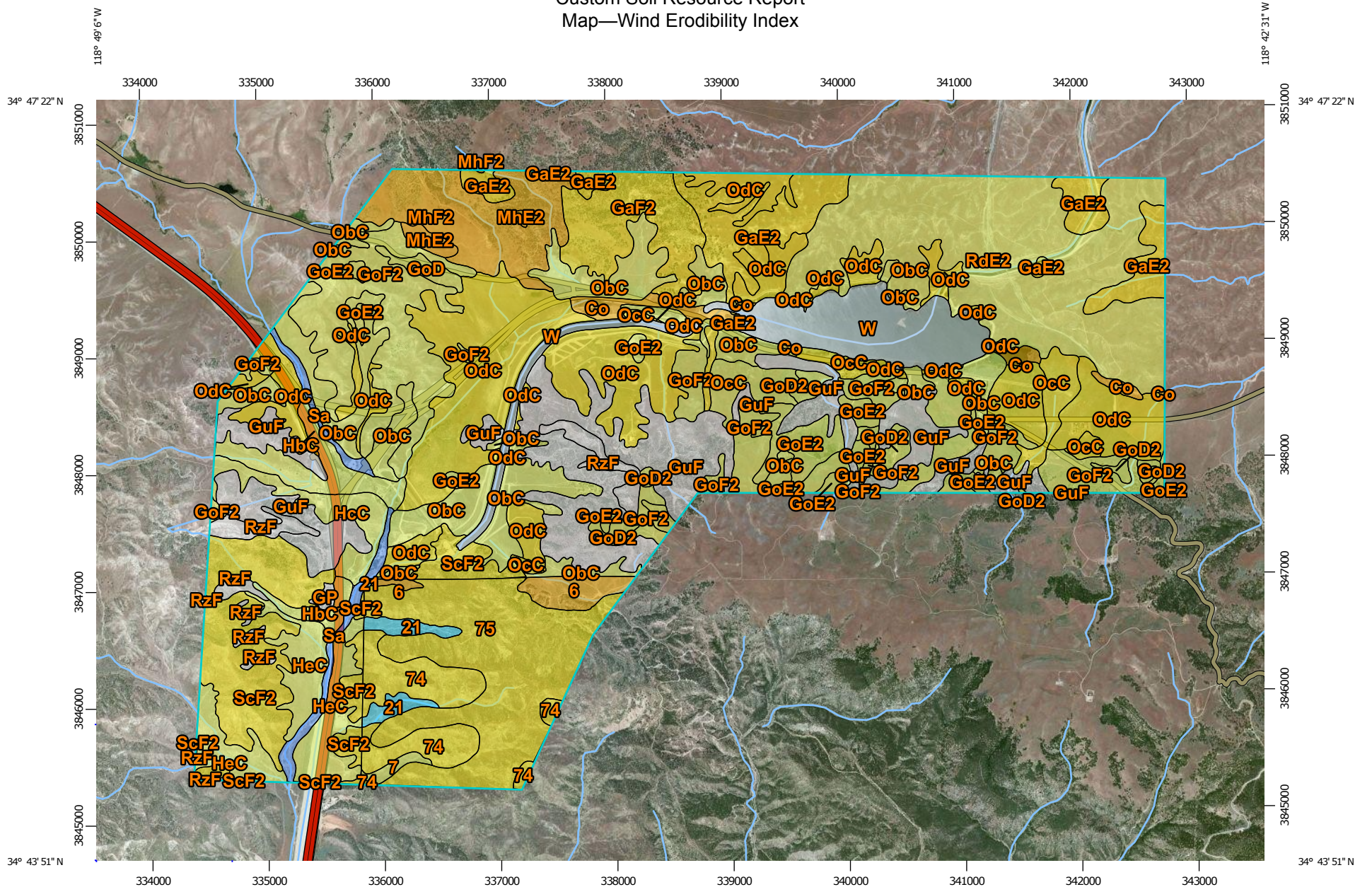
*Tie-break Rule:* Higher

*Layer Options (Horizon Aggregation Method):* Surface Layer (Not applicable)

### Wind Erodibility Index

The wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

# Custom Soil Resource Report Map—Wind Erodibility Index
















































Map Scale: 1:45,900 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

### MAP LEGEND

<b>Area of Interest (AOI)</b>			250
	Area of Interest (AOI)		310
<b>Soils</b>			Not rated or not available
<b>Soil Rating Polygons</b>			
	0	<b>Soil Rating Points</b>	
	38		0
	48		38
	56		48
	86		56
	134		86
	160		134
	180		160
	220		180
	250		220
	310		250
	Not rated or not available		310
	Not rated or not available		Not rated or not available
<b>Soil Rating Lines</b>			
	0	<b>Water Features</b>	
	38		Streams and Canals
	48	<b>Transportation</b>	
	56		Rails
	86		Interstate Highways
	134		US Routes
	160		Major Roads
	180		Local Roads
	220	<b>Background</b>	
			Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
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Soil Survey Area: Antelope Valley Area, California  
 Survey Area Data: Version 8, Sep 17, 2015

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Custom Soil Resource Report

**Table—Wind Erodibility Index**

<b>Wind Erodibility Index— Summary by Map Unit — Angeles National Forest Area, California (CA776)</b>				
<b>Map unit symbol</b>	<b>Map unit name</b>	<b>Rating (tons per acre per year)</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
6	Typic Haploxeralfs, 3 to 50 percent slopes	48	58.9	0.8%
7	Hanford family, 3 to 25 percent slopes	86	13.5	0.2%
21	Riverwash	180	43.5	0.6%
74	Trigo-Calleguas families-Rock outcrop complex, 60 to 100 percent slopes	56	175.9	2.4%
75	Trigo-Calleguas families-Haploxeralfs complex, 30 to 70 percent slopes	56	513.1	7.0%
<b>Subtotals for Soil Survey Area</b>			<b>804.9</b>	<b>11.0%</b>
<b>Totals for Area of Interest</b>			<b>7,293.8</b>	<b>100.0%</b>

<b>Wind Erodibility Index— Summary by Map Unit — Antelope Valley Area, California (CA675)</b>				
<b>Map unit symbol</b>	<b>Map unit name</b>	<b>Rating (tons per acre per year)</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
Co	Chino loam	48	63.5	0.9%
GaE2	Gaviota rocky sandy loam, 15 to 30 percent slopes, eroded	56	302.2	4.1%
GaF2	Gaviota rocky sandy loam, 30 to 50 percent slopes, eroded	56	202.2	2.8%
GoD	Gorman sandy loam, 9 to 15 percent slopes	86	22.3	0.3%
GoD2	Gorman sandy loam, 9 to 15 percent slopes, eroded	86	94.3	1.3%
GoE2	Gorman sandy loam, 15 to 30 percent slopes, eroded	86	146.4	2.0%
GoF2	Gorman sandy loam, 30 to 50 percent slopes, eroded	86	743.1	10.2%
GP	Gravel pits		7.0	0.1%
GuF	Gullied land		721.3	9.9%
HbC	Hanford coarse sandy loam, 2 to 9 percent slopes	86	130.2	1.8%
HcC	Hanford sandy loam, 2 to 9 percent slopes	86	88.3	1.2%

Custom Soil Resource Report

Wind Erodibility Index— Summary by Map Unit — Antelope Valley Area, California (CA675)				
Map unit symbol	Map unit name	Rating (tons per acre per year)	Acres in AOI	Percent of AOI
HeC	Hanford sandy loam, calcareous variant, 2 to 9 percent slopes	86	231.0	3.2%
MhE2	Millsholm rocky loam, 15 to 30 percent slopes, eroded	48	22.7	0.3%
MhF2	Millsholm rocky loam, 30 to 50 percent slopes, eroded	48	263.1	3.6%
ObC	Oak Glen sandy loam, 2 to 9 percent slopes	86	579.8	7.9%
OcC	Oak Glen gravelly sandy loam, 2 to 9 percent slopes	56	107.1	1.5%
OdC	Oak Glen loam, 2 to 9 percent slopes	56	1,037.7	14.2%
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RzF	Rough broken land		100.6	1.4%
Sa	Sandy alluvial land	220	67.3	0.9%
ScF2	Saugus loam, 30 to 50 percent slopes, eroded	56	401.4	5.5%
W	Water		315.4	4.3%
<b>Subtotals for Soil Survey Area</b>			<b>6,489.0</b>	<b>89.0%</b>
<b>Totals for Area of Interest</b>			<b>7,293.8</b>	<b>100.0%</b>

**Rating Options—Wind Erodibility Index**

*Units of Measure:* tons per acre per year

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher

# References

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Agriculture

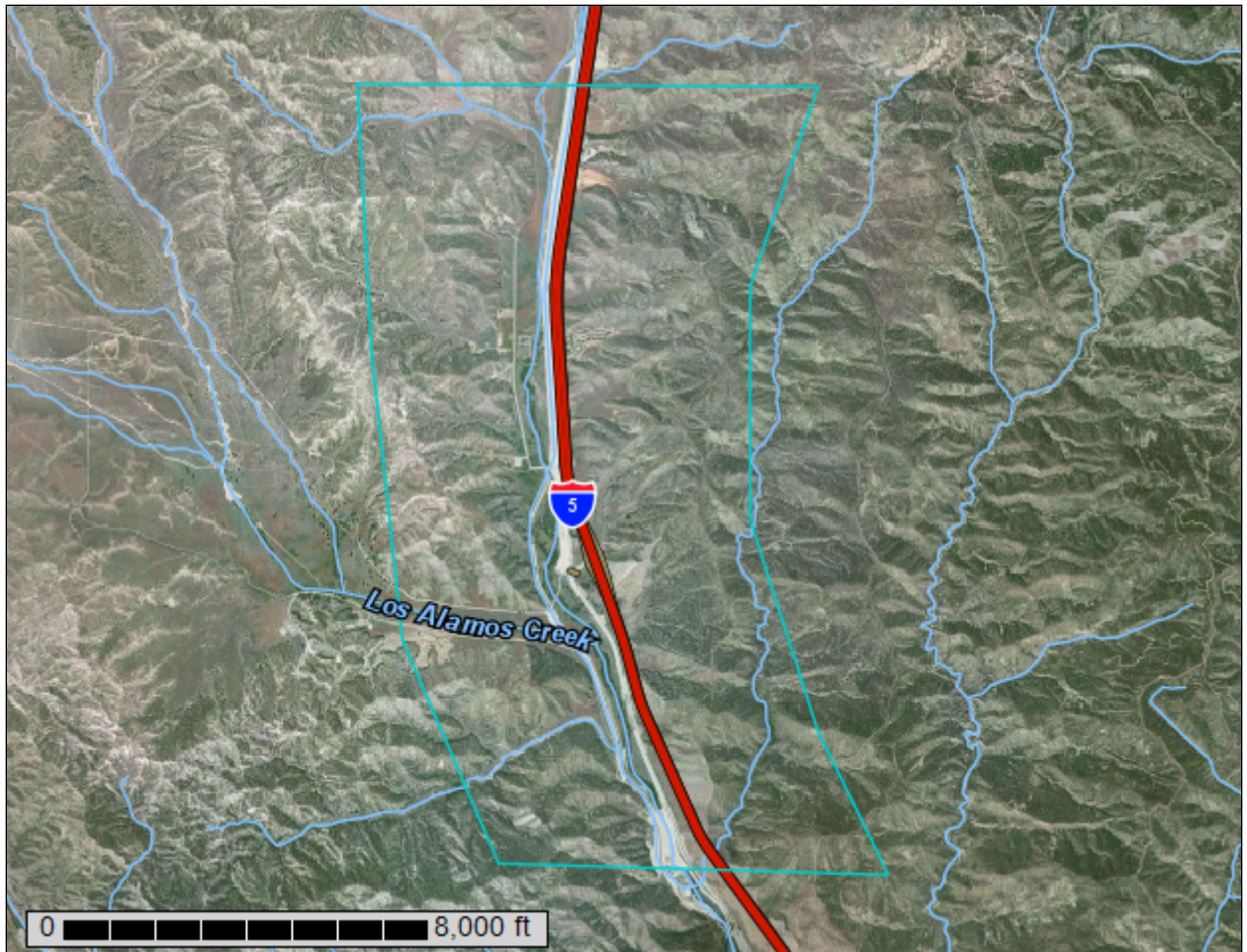
**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for Angeles National Forest Area, California, and Antelope Valley Area, California

## Peace Valley





# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# **How Soil Surveys Are Made**

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

## Custom Soil Resource Report

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

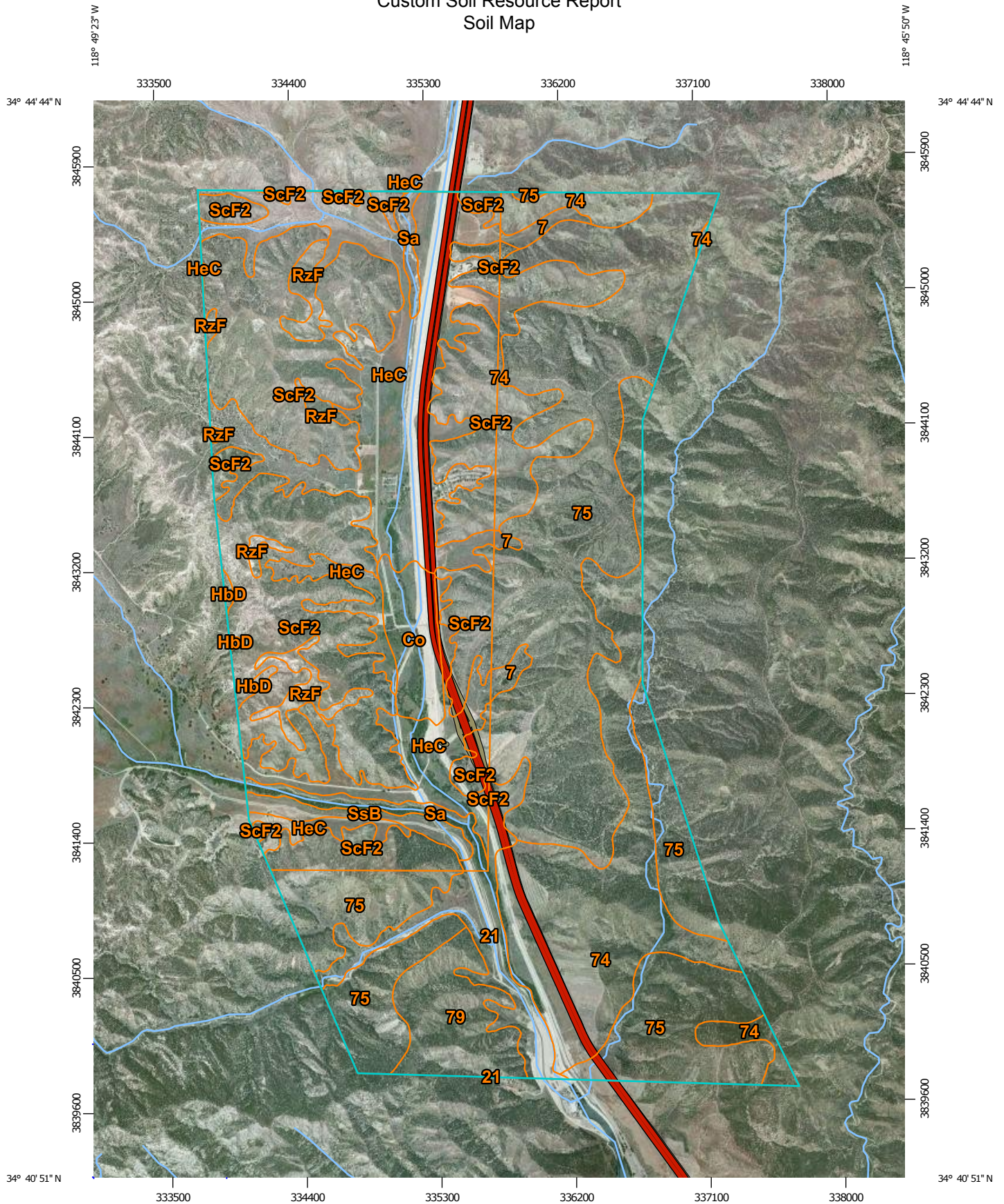
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

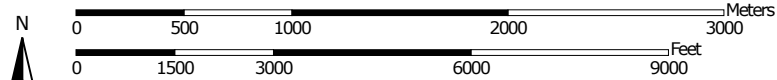
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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map



Map Scale: 1:35,000 if printed on A portrait (8.5" x 11") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

# Custom Soil Resource Report


## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)


### Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

### Special Point Features

 Blowout

 Borrow Pit


 Clay Spot


 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water


 Perennial Water

 Rock Outcrop


 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole


 Slide or Slip


 Sodic Spot


 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot


 Other

 Special Line Features

### Water Features

 Streams and Canals


### Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Angeles National Forest Area, California  
 Survey Area Data: Version 9, Sep 18, 2015

Soil Survey Area: Antelope Valley Area, California  
 Survey Area Data: Version 8, Sep 17, 2015

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 3, 2010—Aug 31, 2010

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



## Map Unit Legend

Angeles National Forest Area, California (CA776)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
7	Hanford family, 3 to 25 percent slopes	28.7	0.7%
21	Riverwash	141.7	3.3%
74	Trigo-Calleguas families-Rock outcrop complex, 60 to 100 percent slopes	670.1	15.6%
75	Trigo-Calleguas families-Haploxerafls complex, 30 to 70 percent slopes	1,279.2	29.7%
79	Trigo-Lodo families-Haploxerolls, warm complex, 50 to 90 percent slopes	140.6	3.3%
<b>Subtotals for Soil Survey Area</b>		<b>2,260.3</b>	<b>52.6%</b>
<b>Totals for Area of Interest</b>		<b>4,300.3</b>	<b>100.0%</b>

Antelope Valley Area, California (CA675)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Co	Chino loam	86.0	2.0%
HbD	Hanford coarse sandy loam, 9 to 15 percent slopes	10.4	0.2%
HeC	Hanford sandy loam, calcareous variant, 2 to 9 percent slopes	709.5	16.5%
RzF	Rough broken land	81.0	1.9%
Sa	Sandy alluvial land	57.5	1.3%
ScF2	Saugus loam, 30 to 50 percent slopes, eroded	1,056.9	24.6%
SsB	Sorrento loam, 2 to 5 percent slopes	38.7	0.9%
<b>Subtotals for Soil Survey Area</b>		<b>2,040.0</b>	<b>47.4%</b>
<b>Totals for Area of Interest</b>		<b>4,300.3</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape,

## Custom Soil Resource Report

however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and

## Custom Soil Resource Report

relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Angeles National Forest Area, California

### 7—Hanford family, 3 to 25 percent slopes

#### Map Unit Setting

*National map unit symbol:* hm80  
*Elevation:* 2,700 to 4,400 feet  
*Mean annual precipitation:* 11 to 15 inches  
*Mean annual air temperature:* 55 to 64 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Hanford family and similar soils:* 75 percent  
*Minor components:* 25 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Hanford Family

##### Setting

*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Riser  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Alluvium derived from granite

##### Typical profile

*H1 - 0 to 13 inches:* sandy loam  
*H2 - 13 to 36 inches:* fine sandy loam, sandy loam  
*H2 - 13 to 36 inches:* sandy loam  
*H3 - 36 to 60 inches:*

##### Properties and qualities

*Slope:* 3 to 25 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* High (about 10.7 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* A

#### Minor Components

##### Typic haploxeralfs

*Percent of map unit:* 5 percent

##### Vista family

*Percent of map unit:* 5 percent

**Trigo family**

*Percent of map unit: 5 percent*

**Hanford family**

*Percent of map unit: 5 percent*

**Riverwash**

*Percent of map unit: 5 percent*

*Landform: Channels*

**21—Riverwash**

**Map Unit Setting**

*National map unit symbol: hm6p*

*Elevation: 1,800 to 4,800 feet*

*Mean annual precipitation: 14 to 30 inches*

*Mean annual air temperature: 55 to 64 degrees F*

*Frost-free period: 150 to 200 days*

*Farmland classification: Not prime farmland*

**Map Unit Composition**

*Riverwash: 75 percent*

*Minor components: 25 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Riverwash**

**Setting**

*Landform: Alluvial flats*

*Landform position (two-dimensional): Toeslope*

*Landform position (three-dimensional): Talf*

*Down-slope shape: Concave*

*Across-slope shape: Convex*

*Parent material: Alluvium*

**Typical profile**

*H1 - 0 to 60 inches: extremely stony coarse sand*

**Properties and qualities**

*Slope: 2 to 10 percent*

*Percent of area covered with surface fragments: 25.0 percent*

*Natural drainage class: Excessively drained*

*Runoff class: Very low*

*Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)*

*Frequency of flooding: Frequent*

*Available water storage in profile: Very low (about 0.6 inches)*

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 8w*

**Minor Components**

**Hanford family**

*Percent of map unit: 7 percent*

**Vista family**

*Percent of map unit: 6 percent*

**Capistrano family**

*Percent of map unit: 6 percent*

**Tujunga family**

*Percent of map unit: 6 percent*

**74—Trigo-Calleguas families-Rock outcrop complex, 60 to 100 percent slopes**

**Map Unit Setting**

*National map unit symbol: hm87*

*Elevation: 2,200 to 3,730 feet*

*Mean annual precipitation: 14 to 20 inches*

*Mean annual air temperature: 55 to 64 degrees F*

*Frost-free period: 150 to 200 days*

*Farmland classification: Not prime farmland*

**Map Unit Composition**

*Trigo family and similar soils: 35 percent*

*Calleguas family and similar soils: 30 percent*

*Rock outcrop: 25 percent*

*Minor components: 10 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Trigo Family**

**Setting**

*Landform: Mountains*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Mountainflank*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Parent material: Residuum weathered from sandstone*

**Typical profile**

*H1 - 0 to 8 inches: silt loam*

*H2 - 8 to 16 inches: gravelly silt loam, gravelly loam*

*H2 - 8 to 16 inches: weathered bedrock*

*H3 - 16 to 59 inches:*

**Properties and qualities**

*Slope: 60 to 100 percent*

*Depth to restrictive feature: 3 to 19 inches to paralithic bedrock*

## Custom Soil Resource Report

*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 3.97 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Low (about 3.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

### Description of Calleguas Family

#### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone

#### Typical profile

*H1 - 0 to 4 inches:* silt loam  
*H2 - 4 to 11 inches:* silt loam  
*H3 - 11 to 15 inches:* weathered bedrock

#### Properties and qualities

*Slope:* 60 to 100 percent  
*Depth to restrictive feature:* 6 to 19 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 15 percent  
*Available water storage in profile:* Very low (about 1.8 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

### Description of Rock Outcrop

#### Setting

*Landform:* Scarps  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone

**Typical profile**

*H1 - 0 to 10 inches: unweathered bedrock*

**Properties and qualities**

*Slope: 60 to 100 percent*

*Depth to restrictive feature: 0 inches to paralithic bedrock*

*Natural drainage class: Excessively drained*

*Runoff class: Very high*

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 8e*

**Minor Components**

**Rubble land**

*Percent of map unit: 4 percent*

**Unnamed, colluvial soils**

*Percent of map unit: 3 percent*

**Trigo family, fine textured**

*Percent of map unit: 3 percent*

**75—Trigo-Calleguas families-Haploxeralfs complex, 30 to 70 percent slopes**

**Map Unit Setting**

*National map unit symbol: hm88*

*Elevation: 2,400 to 4,000 feet*

*Mean annual precipitation: 14 to 20 inches*

*Mean annual air temperature: 55 to 64 degrees F*

*Frost-free period: 150 to 200 days*

*Farmland classification: Not prime farmland*

**Map Unit Composition**

*Trigo family and similar soils: 35 percent*

*Calleguas family and similar soils: 30 percent*

*Haploxeralfs and similar soils: 15 percent*

*Minor components: 15 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Trigo Family**

**Setting**

*Landform: Mountains*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Mountainflank*

*Down-slope shape: Concave*



## Custom Soil Resource Report

*Across-slope shape:* Concave

*Parent material:* Residuum weathered from sandstone

### Typical profile

*H1 - 0 to 8 inches:* silt loam

*H2 - 8 to 16 inches:* gravelly silt loam, gravelly loam

*H2 - 8 to 16 inches:* weathered bedrock

*H3 - 16 to 59 inches:*

### Properties and qualities

*Slope:* 30 to 70 percent

*Depth to restrictive feature:* 3 to 19 inches to paralithic bedrock

*Natural drainage class:* Somewhat excessively drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 3.97 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Low (about 3.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7e

*Hydrologic Soil Group:* D

## Description of Calleguas Family

### Setting

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Residuum weathered from sandstone

### Typical profile

*H1 - 0 to 4 inches:* silt loam

*H2 - 4 to 11 inches:* silt loam

*H3 - 11 to 15 inches:* weathered bedrock

### Properties and qualities

*Slope:* 30 to 70 percent

*Depth to restrictive feature:* 6 to 19 inches to paralithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 15 percent

*Available water storage in profile:* Very low (about 1.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7e

*Hydrologic Soil Group:* D

## Description of Haploxeralfs

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone

### Typical profile

*H1 - 0 to 6 inches:* gravelly loam  
*H2 - 6 to 15 inches:* gravelly clay loam, gravelly sandy clay loam  
*H2 - 6 to 15 inches:* unweathered bedrock  
*H3 - 15 to 19 inches:*

### Properties and qualities

*Slope:* 30 to 70 percent  
*Depth to restrictive feature:* 7 to 19 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Low (about 3.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

## Minor Components

### Osito family

*Percent of map unit:* 3 percent

### Unnamed, moderately deep soils

*Percent of map unit:* 3 percent

### Modesto family

*Percent of map unit:* 3 percent

### Rock outcrop

*Percent of map unit:* 2 percent

### Vertic xerochrepts

*Percent of map unit:* 2 percent

### Caperton family

*Percent of map unit:* 2 percent

## **79—Trigo-Lodo families-Haploxerolls, warm complex, 50 to 90 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hm8c  
*Elevation:* 2,500 to 4,000 feet  
*Mean annual precipitation:* 15 to 21 inches  
*Mean annual air temperature:* 55 to 64 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Trigo family and similar soils:* 45 percent  
*Lodo family and similar soils:* 25 percent  
*Haploxerolls, warm, and similar soils:* 15 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Trigo Family**

#### **Setting**

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from sandstone

#### **Typical profile**

*H1 - 0 to 8 inches:* silt loam  
*H2 - 8 to 16 inches:* gravelly silt loam, gravelly loam  
*H2 - 8 to 16 inches:* weathered bedrock  
*H3 - 16 to 20 inches:*

#### **Properties and qualities**

*Slope:* 50 to 90 percent  
*Depth to restrictive feature:* 3 to 19 inches to paralithic bedrock  
*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 3.97 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Low (about 3.3 inches)

## Custom Soil Resource Report

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7e

*Hydrologic Soil Group:* D

### Description of Lodo Family

#### Setting

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Concave

*Across-slope shape:* Convex

*Parent material:* Residuum weathered from schist

#### Typical profile

*H1 - 0 to 17 inches:* gravelly loam

*H2 - 17 to 21 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 50 to 90 percent

*Depth to restrictive feature:* 6 to 19 inches to lithic bedrock

*Natural drainage class:* Somewhat excessively drained

*Runoff class:* Medium

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 5.95 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Very low (about 2.2 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7e

*Hydrologic Soil Group:* D

### Description of Haploxerolls, Warm

#### Setting

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Colluvium derived from sandstone and/or colluvium derived from schist

#### Typical profile

*H1 - 0 to 10 inches:* gravelly loam

*H2 - 10 to 60 inches:* very gravelly loam, very gravelly sandy loam

*H2 - 10 to 60 inches:* weathered bedrock

*H3 - 60 to 64 inches:*

#### Properties and qualities

*Slope:* 50 to 90 percent

*Depth to restrictive feature:* 60 to 60 inches to paralithic bedrock

*Natural drainage class:* Well drained

## Custom Soil Resource Report

*Runoff class:* Medium

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* High (about 10.3 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7e

*Hydrologic Soil Group:* A

### **Minor Components**

#### **Rock outcrop**

*Percent of map unit:* 5 percent

#### **Mollic haploxeralfs**

*Percent of map unit:* 5 percent

#### **Caperton family**

*Percent of map unit:* 5 percent

## Antelope Valley Area, California

### Co—Chino loam

#### Map Unit Setting

*National map unit symbol:* hcdd

*Elevation:* 3,100 feet

*Mean annual precipitation:* 8 to 20 inches

*Mean annual air temperature:* 61 to 64 degrees F

*Frost-free period:* 230 to 340 days

*Farmland classification:* Prime farmland if irrigated and drained

#### Map Unit Composition

*Chino and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Chino

##### Setting

*Landform:* Valleys

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from granite

##### Typical profile

*H1 - 0 to 16 inches:* loam

*H2 - 16 to 60 inches:* silty clay loam

##### Properties and qualities

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Excessively drained

*Runoff class:* Medium

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

*Depth to water table:* About 16 inches

*Frequency of flooding:* Rare

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 10 percent

*Salinity, maximum in profile:* Slightly saline to strongly saline (4.0 to 16.0 mmhos/cm)

*Available water storage in profile:* Moderate (about 7.6 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 2w

*Land capability classification (nonirrigated):* 4w

*Hydrologic Soil Group:* C/D

*Ecological site:* WET MEADOW 9-20" (R019XD067CA)

#### Minor Components

##### Unnamed

*Percent of map unit:* 10 percent

## Custom Soil Resource Report

### **Hanford**

*Percent of map unit: 2 percent*

### **Mocho**

*Percent of map unit: 1 percent*

### **Sorrento**

*Percent of map unit: 1 percent*

### **Unnamed**

*Percent of map unit: 1 percent*

*Landform: Drainageways*

## **HbD—Hanford coarse sandy loam, 9 to 15 percent slopes**

### **Map Unit Setting**

*National map unit symbol: hcf3*

*Elevation: 2,600 to 4,200 feet*

*Mean annual precipitation: 9 to 12 inches*

*Mean annual air temperature: 63 degrees F*

*Frost-free period: 200 to 250 days*

*Farmland classification: Farmland of statewide importance*

### **Map Unit Composition**

*Hanford and similar soils: 85 percent*

*Minor components: 15 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Hanford**

#### **Setting**

*Landform: Alluvial fans*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Tread*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: Alluvium derived from granite*

#### **Typical profile**

*H1 - 0 to 8 inches: coarse sandy loam*

*H2 - 8 to 39 inches: sandy loam, coarse sandy loam*

*H2 - 8 to 39 inches: gravelly loamy coarse sand, gravelly coarse sandy loam*

*H3 - 39 to 70 inches:*

*H3 - 39 to 70 inches:*

#### **Properties and qualities**

*Slope: 9 to 15 percent*

*Depth to restrictive feature: More than 80 inches*

*Natural drainage class: Well drained*

*Runoff class: Low*

*Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)*

## Custom Soil Resource Report

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Very high (about 13.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* 3e

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* A

*Ecological site:* LOAMY 9-20" (R019XD064CA)

### Minor Components

#### Unnamed

*Percent of map unit:* 5 percent

#### Ramona

*Percent of map unit:* 5 percent

#### Greenfield

*Percent of map unit:* 5 percent

## HeC—Hanford sandy loam, calcareous variant, 2 to 9 percent slopes

### Map Unit Setting

*National map unit symbol:* hcf7

*Elevation:* 2,800 to 3,000 feet

*Mean annual precipitation:* 10 inches

*Mean annual air temperature:* 63 degrees F

*Frost-free period:* 220 to 260 days

*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Hanford variant and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Hanford Variant

#### Setting

*Landform:* Alluvial fans

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from granite

#### Typical profile

*H1 - 0 to 16 inches:* sandy loam

*H2 - 16 to 36 inches:* fine sandy loam, coarse sandy loam

*H2 - 16 to 36 inches:* sandy loam



## Custom Soil Resource Report

*H3 - 36 to 56 inches:* sandy loam, coarse sandy loam

*H4 - 56 to 80 inches:*

*H4 - 56 to 80 inches:*

### Properties and qualities

*Slope:* 2 to 9 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 10 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Moderate (about 8.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2e

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* A

*Ecological site:* LOAMY 9-20" (R019XD064CA)

### Minor Components

#### Unnamed

*Percent of map unit:* 10 percent

#### Hanford

*Percent of map unit:* 5 percent

## RzF—Rough broken land

### Map Unit Setting

*National map unit symbol:* hch4

*Mean annual precipitation:* 14 inches

*Mean annual air temperature:* 61 degrees F

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Rough broken land:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Rough Broken Land

#### Setting

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Concave

*Across-slope shape:* Concave

## Custom Soil Resource Report

### Typical profile

*H1 - 0 to 60 inches: variable*

### Interpretive groups

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 8*

### Minor Components

#### Gullied land

*Percent of map unit: 5 percent*

#### Badlands

*Percent of map unit: 5 percent*

#### Rock outcrop

*Percent of map unit: 4 percent*

#### Unnamed

*Percent of map unit: 1 percent*

*Landform: Flood plains*

## Sa—Sandy alluvial land

### Map Unit Setting

*National map unit symbol: hch5*

*Mean annual precipitation: 14 inches*

*Mean annual air temperature: 61 degrees F*

*Farmland classification: Not prime farmland*

### Map Unit Composition

*Sandy alluvial land: 85 percent*

*Minor components: 15 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Sandy Alluvial Land

#### Setting

*Landform: Flood plains*

*Landform position (two-dimensional): Footslope*

*Landform position (three-dimensional): Tread*

*Down-slope shape: Linear*

*Across-slope shape: Linear*

*Parent material: Alluvium*

#### Typical profile

*H1 - 0 to 10 inches: sand*

*H2 - 10 to 30 inches: stratified sand to loam*

*H3 - 30 to 60 inches: stratified gravelly sand to gravelly loam*

#### Properties and qualities

*Slope: 0 to 2 percent*

## Custom Soil Resource Report

*Natural drainage class:* Excessively drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* About 10 inches  
*Frequency of flooding:* Frequent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Moderate (about 6.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7w  
*Hydrologic Soil Group:* B  
*Ecological site:* SANDY 9-20" (R020XE025CA)

### Minor Components

#### Riverwash

*Percent of map unit:* 10 percent  
*Landform:* Drainageways

#### Unnamed

*Percent of map unit:* 5 percent

## ScF2—Saugus loam, 30 to 50 percent slopes, eroded

### Map Unit Setting

*National map unit symbol:* hch8  
*Elevation:* 600 to 2,500 feet  
*Mean annual precipitation:* 14 to 20 inches  
*Mean annual air temperature:* 63 degrees F  
*Frost-free period:* 275 to 300 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Saugus and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Saugus

#### Setting

*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Weakly consolidated alluvium

#### Typical profile

*H1 - 0 to 15 inches:* loam  
*H2 - 15 to 42 inches:* loam, sandy loam

## Custom Soil Resource Report

*H2 - 15 to 42 inches: weathered bedrock*

*H3 - 42 to 46 inches:*

### **Properties and qualities**

*Slope: 30 to 50 percent*

*Depth to restrictive feature: 40 to 60 inches to paralithic bedrock*

*Natural drainage class: Well drained*

*Runoff class: High*

*Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water storage in profile: High (about 9.3 inches)*

### **Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 7e*

*Hydrologic Soil Group: B*

*Ecological site: LOAMY 9-20" (R019XD064CA)*

### **Minor Components**

#### **Gaviota**

*Percent of map unit: 5 percent*

#### **Rough broken land**

*Percent of map unit: 5 percent*

#### **Balcom**

*Percent of map unit: 3 percent*

#### **Castaic**

*Percent of map unit: 2 percent*

## **SsB—Sorrento loam, 2 to 5 percent slopes**

### **Map Unit Setting**

*National map unit symbol: hchh*

*Elevation: 80 to 1,800 feet*

*Mean annual precipitation: 12 to 20 inches*

*Mean annual air temperature: 64 degrees F*

*Frost-free period: 200 to 300 days*

*Farmland classification: Prime farmland if irrigated*

### **Map Unit Composition**

*Sorrento and similar soils: 85 percent*

*Minor components: 15 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Sorrento

### Setting

*Landform:* Alluvial fans  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Mixed alluvium

### Typical profile

*H1 - 0 to 7 inches:* loam  
*H2 - 7 to 72 inches:* loam

### Properties and qualities

*Slope:* 2 to 5 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Low  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 10 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* High (about 9.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2e  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* B

## Minor Components

### Metz

*Percent of map unit:* 5 percent

### Mocho

*Percent of map unit:* 5 percent

### Yolo

*Percent of map unit:* 5 percent

# **Soil Information for All Uses**

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## **Soil Properties and Qualities**

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

## **Soil Erosion Factors**

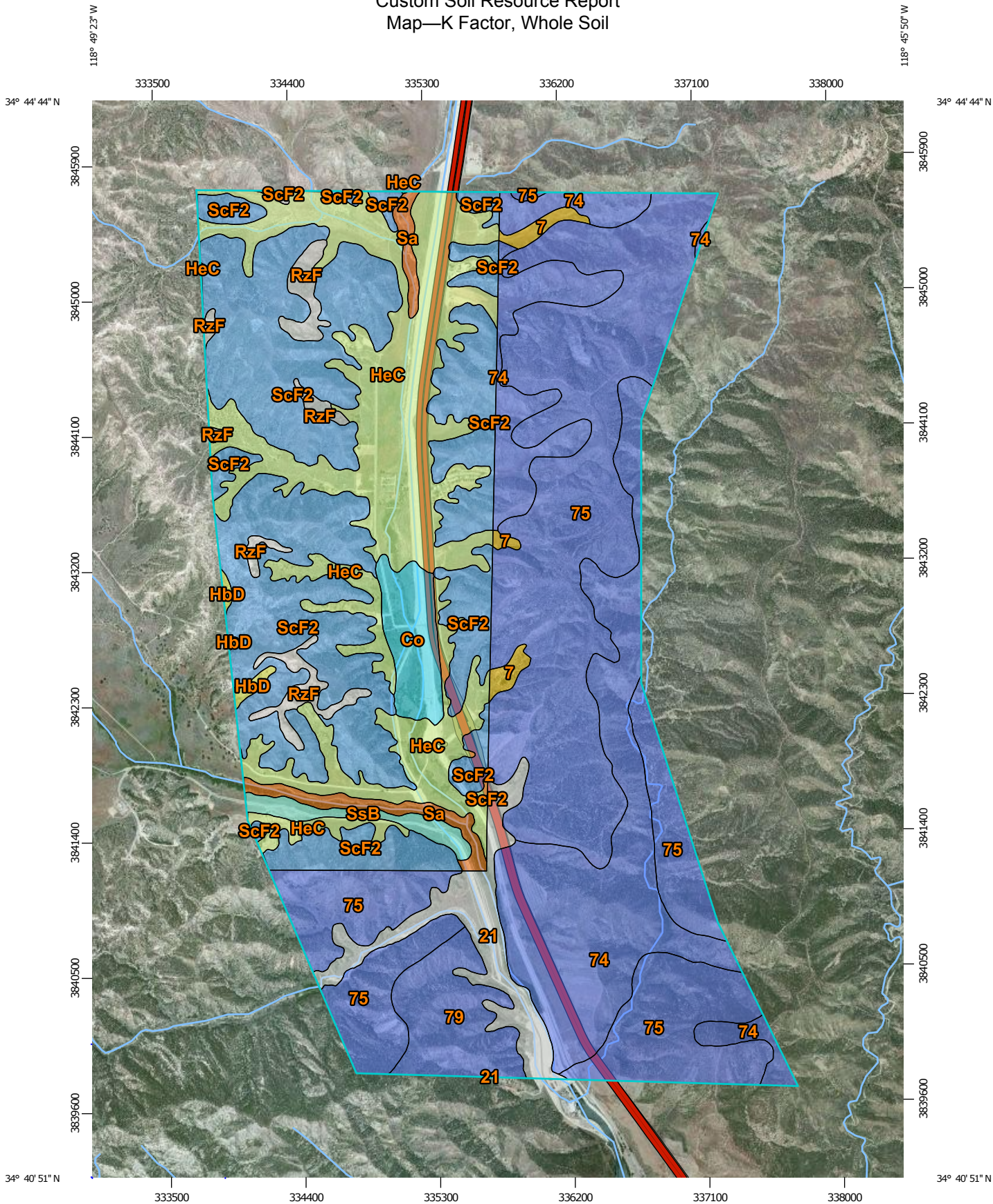
Soil Erosion Factors are soil properties and interpretations used in evaluating the soil for potential erosion. Example soil erosion factors can include K factor for the whole soil or on a rock free basis, T factor, wind erodibility group and wind erodibility index.

### **K Factor, Whole Soil**

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

# Custom Soil Resource Report Map—K Factor, Whole Soil



Map Scale: 1:35,000 if printed on A portrait (8.5" x 11") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

# Custom Soil Resource Report
















## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)










### Soils

#### Soil Rating Polygons
















-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

#### Soil Rating Lines








-  .02
-  .05
-  .10
-  .15
-  .17
-  .20

-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

#### Soil Rating Points

-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

#### Water Features

-  Streams and Canals
- Transportation**
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads
- Background**
-  Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Angeles National Forest Area, California  
 Survey Area Data: Version 9, Sep 18, 2015

Soil Survey Area: Antelope Valley Area, California  
 Survey Area Data: Version 8, Sep 17, 2015

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 3, 2010—Aug 31, 2010

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



**Table—K Factor, Whole Soil**

<b>K Factor, Whole Soil— Summary by Map Unit — Angeles National Forest Area, California (CA776)</b>				
<b>Map unit symbol</b>	<b>Map unit name</b>	<b>Rating</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
7	Hanford family, 3 to 25 percent slopes	.15	28.7	0.7%
21	Riverwash		141.7	3.3%
74	Trigo-Calleguas families-Rock outcrop complex, 60 to 100 percent slopes	.49	670.1	15.6%
75	Trigo-Calleguas families-Haploxerafls complex, 30 to 70 percent slopes	.49	1,279.2	29.7%
79	Trigo-Lodo families-Haploxerolls, warm complex, 50 to 90 percent slopes	.49	140.6	3.3%
<b>Subtotals for Soil Survey Area</b>			<b>2,260.3</b>	<b>52.6%</b>
<b>Totals for Area of Interest</b>			<b>4,300.3</b>	<b>100.0%</b>

<b>K Factor, Whole Soil— Summary by Map Unit — Antelope Valley Area, California (CA675)</b>				
<b>Map unit symbol</b>	<b>Map unit name</b>	<b>Rating</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
Co	Chino loam	.37	86.0	2.0%
HbD	Hanford coarse sandy loam, 9 to 15 percent slopes	.20	10.4	0.2%
HeC	Hanford sandy loam, calcareous variant, 2 to 9 percent slopes	.24	709.5	16.5%
RzF	Rough broken land		81.0	1.9%
Sa	Sandy alluvial land	.05	57.5	1.3%
ScF2	Saugus loam, 30 to 50 percent slopes, eroded	.43	1,056.9	24.6%
SsB	Sorrento loam, 2 to 5 percent slopes	.32	38.7	0.9%
<b>Subtotals for Soil Survey Area</b>			<b>2,040.0</b>	<b>47.4%</b>
<b>Totals for Area of Interest</b>			<b>4,300.3</b>	<b>100.0%</b>

**Rating Options—K Factor, Whole Soil**

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher

*Layer Options (Horizon Aggregation Method):* Surface Layer (Not applicable)

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United States  
Department of  
Agriculture

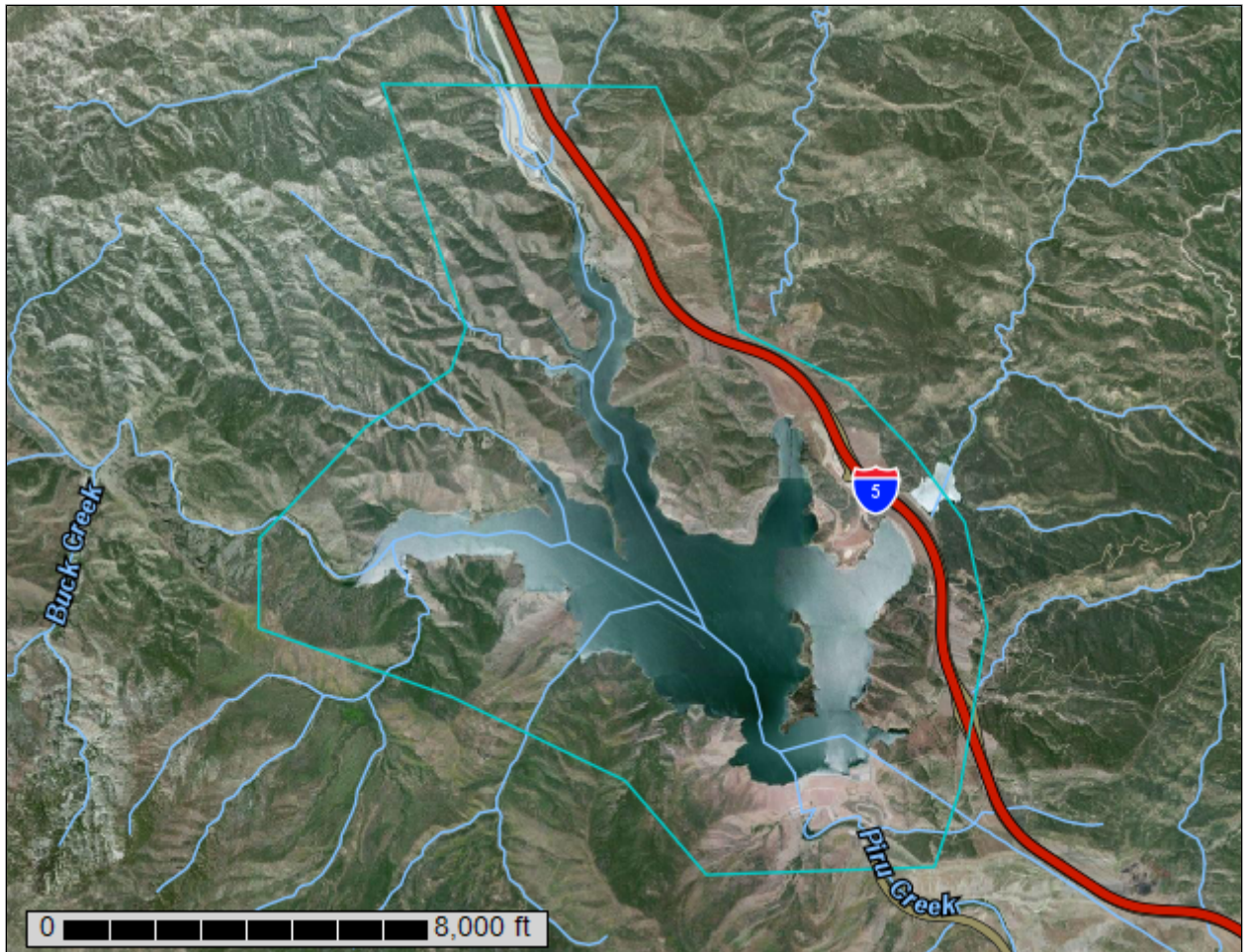
**NRCS**

Natural  
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Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for Angeles National Forest Area, California, and Los Padres National Forest Area, California

## Pyramid Dam and Lake



# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# **How Soil Surveys Are Made**

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the



## Custom Soil Resource Report

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

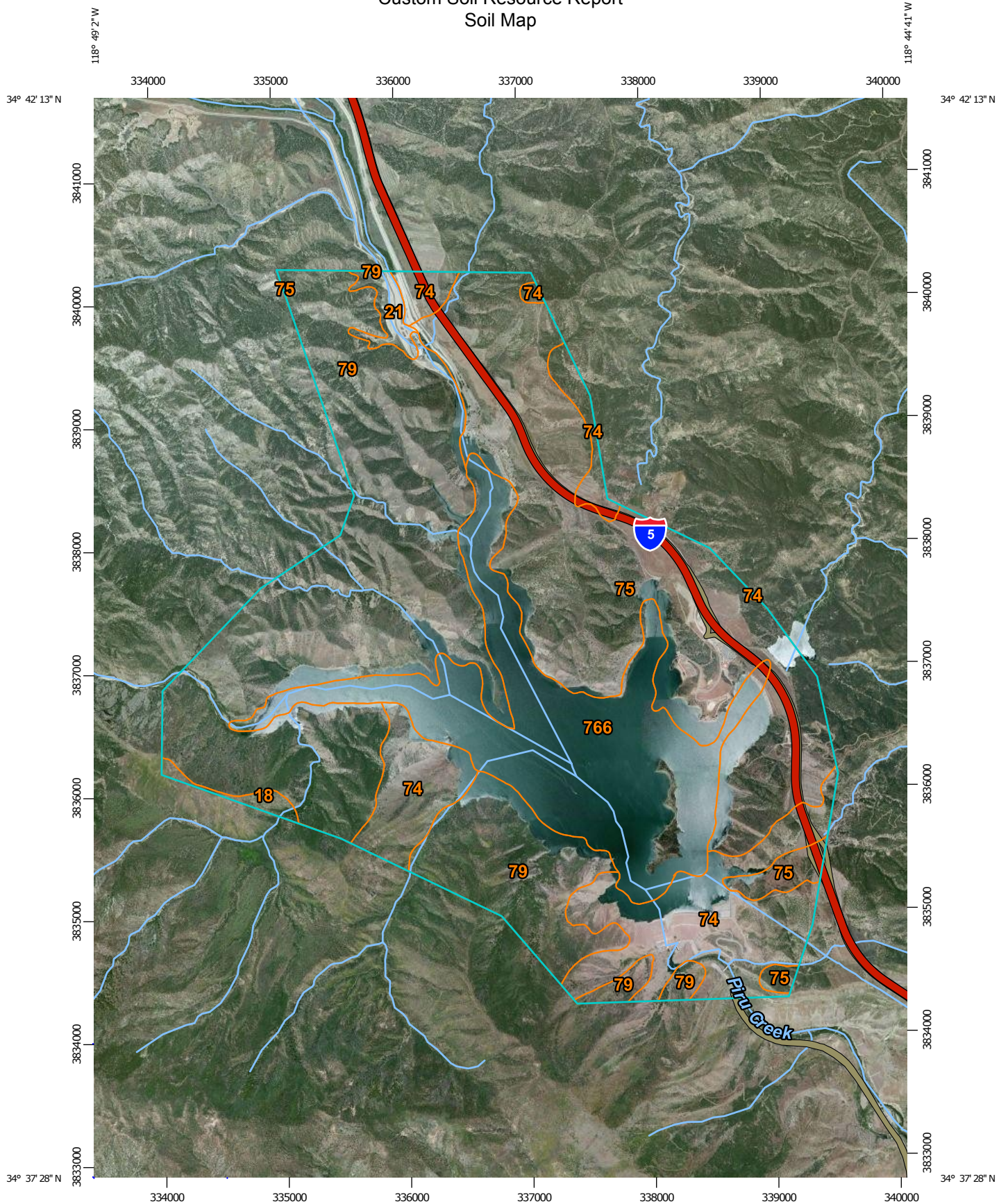
After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

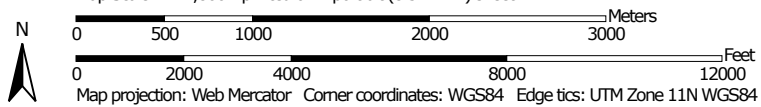
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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map



Map Scale: 1:42,800 if printed on A portrait (8.5" x 11") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

# Custom Soil Resource Report

## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)


### Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

### Special Point Features

 Blowout

 Borrow Pit


 Clay Spot


 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water


 Perennial Water

 Rock Outcrop


 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole


 Slide or Slip


 Sodic Spot


 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

### Water Features

 Streams and Canals


### Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Angeles National Forest Area, California  
 Survey Area Data: Version 9, Sep 18, 2015

Soil Survey Area: Los Padres National Forest Area, California  
 Survey Area Data: Version 7, Sep 3, 2015

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 3, 2010—Aug 31, 2010

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Angeles National Forest Area, California (CA776)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
21	Riverwash	44.9	0.9%
74	Trigo-Calleguas families-Rock outcrop complex, 60 to 100 percent slopes	690.2	14.1%
75	Trigo-Calleguas families-Haploxerafls complex, 30 to 70 percent slopes	1,399.2	28.5%
79	Trigo-Lodo families-Haploxerolls, warm complex, 50 to 90 percent slopes	1,839.1	37.5%
766	Water	910.7	18.5%
<b>Subtotals for Soil Survey Area</b>		<b>4,884.1</b>	<b>99.5%</b>
<b>Totals for Area of Interest</b>		<b>4,909.8</b>	<b>100.0%</b>

Los Padres National Forest Area, California (CA772)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
18	Lodo-Modjeska-Botella families association, 10 to 70 percent slopes	25.6	0.5%
<b>Subtotals for Soil Survey Area</b>		<b>25.6</b>	<b>0.5%</b>
<b>Totals for Area of Interest</b>		<b>4,909.8</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a

## Custom Soil Resource Report

particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Angeles National Forest Area, California

### 21—Riverwash

#### Map Unit Setting

*National map unit symbol:* hm6p  
*Elevation:* 1,800 to 4,800 feet  
*Mean annual precipitation:* 14 to 30 inches  
*Mean annual air temperature:* 55 to 64 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Riverwash:* 75 percent  
*Minor components:* 25 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Riverwash

##### Setting

*Landform:* Alluvial flats  
*Landform position (two-dimensional):* Toeslope  
*Landform position (three-dimensional):* Talf  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Alluvium

##### Typical profile

*H1 - 0 to 60 inches:* extremely stony coarse sand

##### Properties and qualities

*Slope:* 2 to 10 percent  
*Percent of area covered with surface fragments:* 25.0 percent  
*Natural drainage class:* Excessively drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)  
*Frequency of flooding:* Frequent  
*Available water storage in profile:* Very low (about 0.6 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8w

#### Minor Components

##### Hanford family

*Percent of map unit:* 7 percent

##### Vista family

*Percent of map unit:* 6 percent

##### Capistrano family

*Percent of map unit:* 6 percent

##### Tujunga family

*Percent of map unit:* 6 percent

## **74—Trigo-Calleguas families-Rock outcrop complex, 60 to 100 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hm87  
*Elevation:* 2,200 to 3,730 feet  
*Mean annual precipitation:* 14 to 20 inches  
*Mean annual air temperature:* 55 to 64 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Trigo family and similar soils:* 35 percent  
*Calleguas family and similar soils:* 30 percent  
*Rock outcrop:* 25 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Trigo Family**

#### **Setting**

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from sandstone

#### **Typical profile**

*H1 - 0 to 8 inches:* silt loam  
*H2 - 8 to 16 inches:* gravelly silt loam, gravelly loam  
*H2 - 8 to 16 inches:* weathered bedrock  
*H3 - 16 to 59 inches:*

#### **Properties and qualities**

*Slope:* 60 to 100 percent  
*Depth to restrictive feature:* 3 to 19 inches to paralithic bedrock  
*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 3.97 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Low (about 3.3 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D



## Description of Calleguas Family

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone

### Typical profile

*H1 - 0 to 4 inches:* silt loam  
*H2 - 4 to 11 inches:* silt loam  
*H3 - 11 to 15 inches:* weathered bedrock

### Properties and qualities

*Slope:* 60 to 100 percent  
*Depth to restrictive feature:* 6 to 19 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 15 percent  
*Available water storage in profile:* Very low (about 1.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

## Description of Rock Outcrop

### Setting

*Landform:* Scarps  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone

### Typical profile

*H1 - 0 to 10 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 60 to 100 percent  
*Depth to restrictive feature:* 0 inches to paralithic bedrock  
*Natural drainage class:* Excessively drained  
*Runoff class:* Very high

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8e

**Minor Components**

**Rubble land**

*Percent of map unit: 4 percent*

**Unnamed, colluvial soils**

*Percent of map unit: 3 percent*

**Trigo family, fine textured**

*Percent of map unit: 3 percent*

**75—Trigo-Calleguas families-Haploxeralfs complex, 30 to 70 percent slopes**

**Map Unit Setting**

*National map unit symbol: hm88*

*Elevation: 2,400 to 4,000 feet*

*Mean annual precipitation: 14 to 20 inches*

*Mean annual air temperature: 55 to 64 degrees F*

*Frost-free period: 150 to 200 days*

*Farmland classification: Not prime farmland*

**Map Unit Composition**

*Trigo family and similar soils: 35 percent*

*Calleguas family and similar soils: 30 percent*

*Haploxeralfs and similar soils: 15 percent*

*Minor components: 15 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Trigo Family**

**Setting**

*Landform: Mountains*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Mountainflank*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Parent material: Residuum weathered from sandstone*

**Typical profile**

*H1 - 0 to 8 inches: silt loam*

*H2 - 8 to 16 inches: gravelly silt loam, gravelly loam*

*H2 - 8 to 16 inches: weathered bedrock*

*H3 - 16 to 59 inches:*

**Properties and qualities**

*Slope: 30 to 70 percent*

*Depth to restrictive feature: 3 to 19 inches to paralithic bedrock*

## Custom Soil Resource Report

*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 3.97 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Low (about 3.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

## Description of Calleguas Family

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone

### Typical profile

*H1 - 0 to 4 inches:* silt loam  
*H2 - 4 to 11 inches:* silt loam  
*H3 - 11 to 15 inches:* weathered bedrock

### Properties and qualities

*Slope:* 30 to 70 percent  
*Depth to restrictive feature:* 6 to 19 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 15 percent  
*Available water storage in profile:* Very low (about 1.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

## Description of Haploxeralfs

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone

## Custom Soil Resource Report

### Typical profile

*H1 - 0 to 6 inches:* gravelly loam  
*H2 - 6 to 15 inches:* gravelly clay loam, gravelly sandy clay loam  
*H2 - 6 to 15 inches:* unweathered bedrock  
*H3 - 15 to 19 inches:*

### Properties and qualities

*Slope:* 30 to 70 percent  
*Depth to restrictive feature:* 7 to 19 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Low (about 3.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

### Minor Components

#### Osito family

*Percent of map unit:* 3 percent

#### Unnamed, moderately deep soils

*Percent of map unit:* 3 percent

#### Modesto family

*Percent of map unit:* 3 percent

#### Rock outcrop

*Percent of map unit:* 2 percent

#### Vertic xerochrepts

*Percent of map unit:* 2 percent

#### Caperton family

*Percent of map unit:* 2 percent

## 79—Trigo-Lodo families-Haploxerolls, warm complex, 50 to 90 percent slopes

### Map Unit Setting

*National map unit symbol:* hm8c  
*Elevation:* 2,500 to 4,000 feet  
*Mean annual precipitation:* 15 to 21 inches

## Custom Soil Resource Report

*Mean annual air temperature:* 55 to 64 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Trigo family and similar soils:* 45 percent  
*Lodo family and similar soils:* 25 percent  
*Haploxerolls, warm, and similar soils:* 15 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Trigo Family

#### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from sandstone

#### Typical profile

*H1 - 0 to 8 inches:* silt loam  
*H2 - 8 to 16 inches:* gravelly silt loam, gravelly loam  
*H2 - 8 to 16 inches:* weathered bedrock  
*H3 - 16 to 20 inches:*

#### Properties and qualities

*Slope:* 50 to 90 percent  
*Depth to restrictive feature:* 3 to 19 inches to paralithic bedrock  
*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 3.97 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Low (about 3.3 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

### Description of Lodo Family

#### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from schist

#### Typical profile

*H1 - 0 to 17 inches:* gravelly loam  
*H2 - 17 to 21 inches:* unweathered bedrock

## Custom Soil Resource Report

### Properties and qualities

*Slope:* 50 to 90 percent  
*Depth to restrictive feature:* 6 to 19 inches to lithic bedrock  
*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Very low (about 2.2 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

## Description of Haploxerolls, Warm

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Colluvium derived from sandstone and/or colluvium derived from schist

### Typical profile

*H1 - 0 to 10 inches:* gravelly loam  
*H2 - 10 to 60 inches:* very gravelly loam, very gravelly sandy loam  
*H2 - 10 to 60 inches:* weathered bedrock  
*H3 - 60 to 64 inches:*

### Properties and qualities

*Slope:* 50 to 90 percent  
*Depth to restrictive feature:* 60 to 60 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* High (about 10.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* A

## Minor Components

### Rock outcrop

*Percent of map unit:* 5 percent

### Mollic haploxeralfs

*Percent of map unit:* 5 percent

**Caperton family**

*Percent of map unit: 5 percent*

**766—Water**

**Map Unit Composition**

*Water: 100 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Water**

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 8*

## Los Padres National Forest Area, California

### 18—Lodo-Modjeska-Botella families association, 10 to 70 percent slopes

#### Map Unit Setting

*National map unit symbol:* hm54  
*Elevation:* 1,300 to 5,800 feet  
*Mean annual precipitation:* 14 to 22 inches  
*Mean annual air temperature:* 57 to 64 degrees F  
*Frost-free period:* 250 to 300 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Modjeska family and similar soils:* 30 percent  
*Lodo family and similar soils:* 30 percent  
*Botella family and similar soils:* 20 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Lodo Family

##### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from sandstone

##### Typical profile

*H1 - 0 to 7 inches:* sandy loam  
*H2 - 7 to 16 inches:* gravelly sandy loam  
*H3 - 16 to 26 inches:* unweathered bedrock

##### Properties and qualities

*Slope:* 10 to 70 percent  
*Depth to restrictive feature:* 15 to 20 inches to lithic bedrock  
*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Very low (about 1.8 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

#### Description of Modjeska Family

##### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank



## Custom Soil Resource Report

*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from granodiorite

### Typical profile

*H1 - 0 to 13 inches:* sandy loam  
*H2 - 13 to 27 inches:* extremely gravelly sandy loam, very gravelly sandy loam  
*H2 - 13 to 27 inches:* unweathered bedrock  
*H3 - 27 to 31 inches:*

### Properties and qualities

*Slope:* 10 to 70 percent  
*Depth to restrictive feature:* 20 to 40 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Low (about 3.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* B

## Description of Botella Family

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from sandstone

### Typical profile

*H1 - 0 to 9 inches:* sandy loam  
*H2 - 9 to 40 inches:* gravelly sandy loam, gravelly sandy clay loam  
*H2 - 9 to 40 inches:* unweathered bedrock  
*H3 - 40 to 44 inches:*

### Properties and qualities

*Slope:* 10 to 70 percent  
*Depth to restrictive feature:* 40 to 60 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Moderate (about 8.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* A

## Custom Soil Resource Report

### **Minor Components**

#### **Rock outcrop**

*Percent of map unit: 7 percent*

#### **Oak glen family**

*Percent of map unit: 7 percent*

#### **Chualar family**

*Percent of map unit: 6 percent*

# **Soil Information for All Uses**

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## **Soil Properties and Qualities**

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

## **Soil Erosion Factors**

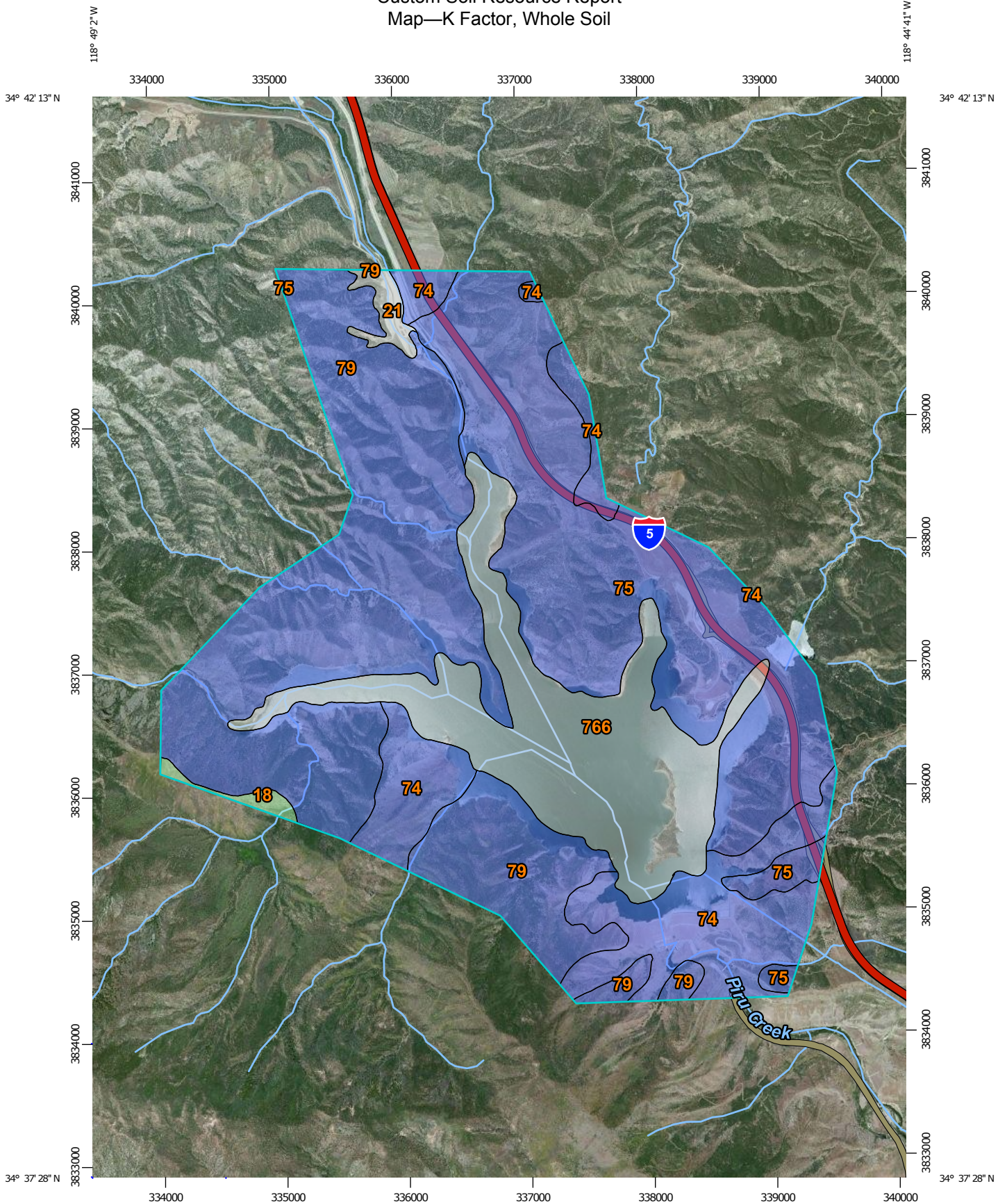
Soil Erosion Factors are soil properties and interpretations used in evaluating the soil for potential erosion. Example soil erosion factors can include K factor for the whole soil or on a rock free basis, T factor, wind erodibility group and wind erodibility index.

### **K Factor, Whole Soil**

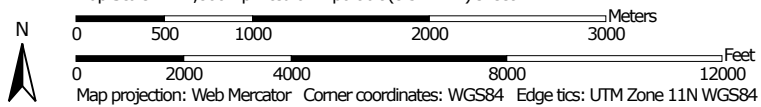
Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

# Custom Soil Resource Report Map—K Factor, Whole Soil



Map Scale: 1:42,800 if printed on A portrait (8.5" x 11") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

# Custom Soil Resource Report
















## MAP LEGEND

### Area of Interest (AOI)






 Area of Interest (AOI)










### Soils

#### Soil Rating Polygons
















-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

#### Soil Rating Lines








-  .02
-  .05
-  .10
-  .15
-  .17
-  .20

-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

#### Soil Rating Points

-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

#### Water Features

-  Streams and Canals
- Transportation**
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads
- Background**
-  Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Angeles National Forest Area, California  
 Survey Area Data: Version 9, Sep 18, 2015

Soil Survey Area: Los Padres National Forest Area, California  
 Survey Area Data: Version 7, Sep 3, 2015

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 3, 2010—Aug 31, 2010

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

**Table—K Factor, Whole Soil**

<b>K Factor, Whole Soil— Summary by Map Unit — Angeles National Forest Area, California (CA776)</b>				
<b>Map unit symbol</b>	<b>Map unit name</b>	<b>Rating</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
21	Riverwash		44.9	0.9%
74	Trigo-Calleguas families- Rock outcrop complex, 60 to 100 percent slopes	.49	690.2	14.1%
75	Trigo-Calleguas families- Haploxeralfs complex, 30 to 70 percent slopes	.49	1,399.2	28.5%
79	Trigo-Lodo families- Haploxerolls, warm complex, 50 to 90 percent slopes	.49	1,839.1	37.5%
766	Water		910.7	18.5%
<b>Subtotals for Soil Survey Area</b>			<b>4,884.1</b>	<b>99.5%</b>
<b>Totals for Area of Interest</b>			<b>4,909.8</b>	<b>100.0%</b>

<b>K Factor, Whole Soil— Summary by Map Unit — Los Padres National Forest Area, California (CA772)</b>				
<b>Map unit symbol</b>	<b>Map unit name</b>	<b>Rating</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
18	Lodo-Modjeska-Botella families association, 10 to 70 percent slopes	.28	25.6	0.5%
<b>Subtotals for Soil Survey Area</b>			<b>25.6</b>	<b>0.5%</b>
<b>Totals for Area of Interest</b>			<b>4,909.8</b>	<b>100.0%</b>

**Rating Options—K Factor, Whole Soil**

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher

*Layer Options (Horizon Aggregation Method):* Surface Layer (Not applicable)

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## Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\\_054242](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242)

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053624](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624)

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_052290.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf)





United States  
Department of  
Agriculture

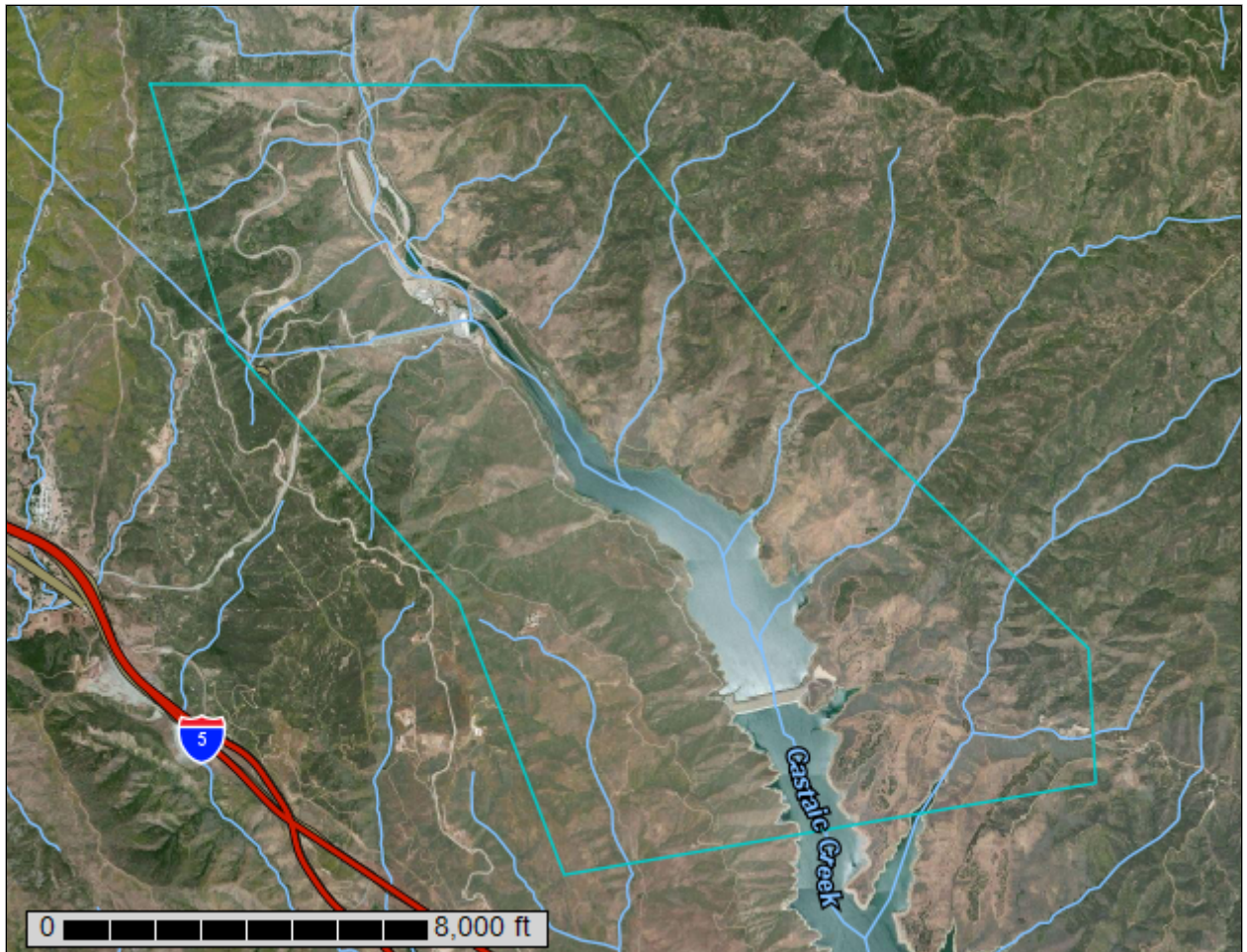
**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for Angeles National Forest Area, California, and Antelope Valley Area, California

## Castaic-Elderberry



# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<http://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# **How Soil Surveys Are Made**

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

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individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

# Soil Map

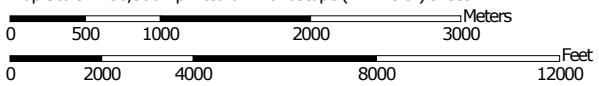
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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

# Custom Soil Resource Report Soil Map



Map Scale: 1:50,300 if printed on A landscape (11" x 8.5") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84




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## MAP LEGEND


### Area of Interest (AOI)

 Area of Interest (AOI)


### Soils


 Soil Map Unit Polygons


 Soil Map Unit Lines


 Soil Map Unit Points

### Special Point Features

 Blowout


 Borrow Pit


 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water


 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole

 Slide or Slip


 Sodic Spot

 Spoil Area

 Stony Spot


 Very Stony Spot

 Wet Spot


 Other

 Special Line Features

### Water Features

 Streams and Canals


### Transportation

 Rails


 Interstate Highways

 US Routes

 Major Roads

 Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Angeles National Forest Area, California  
 Survey Area Data: Version 9, Sep 18, 2015

Soil Survey Area: Antelope Valley Area, California  
 Survey Area Data: Version 8, Sep 17, 2015

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 3, 2010—Aug 31, 2010

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Angeles National Forest Area, California (CA776)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
19	Trigo family-Calcixerollic Xerochrepts-Vista family complex, 30 to 70 percent slopes	27.0	0.5%
21	Riverwash	149.7	2.6%
26	Stonyford-Millsholm families complex, 30 to 70 percent slopes	1,195.7	21.0%
74	Trigo-Calleguas families-Rock outcrop complex, 60 to 100 percent slopes	361.1	6.3%
75	Trigo-Calleguas families-Haploxerafals complex, 30 to 70 percent slopes	589.2	10.3%
82	Vertic Xerochrepts, 5 to 50 percent slopes	1.4	0.0%
316	Rock outcrop-Chilao family-Haploxerolls, warm association, 15 to 120 percent slopes	99.8	1.8%
714	Trigo-Millsholm families-Rock outcrop complex, 45 to 90 percent slopes	0.1	0.0%
CzC	Cortina cobbly sandy loam, 2 to 9 percent slopes	37.7	0.7%
<b>Subtotals for Soil Survey Area</b>		<b>2,461.7</b>	<b>43.2%</b>
<b>Totals for Area of Interest</b>		<b>5,697.8</b>	<b>100.0%</b>

Antelope Valley Area, California (CA675)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CmE	Castaic-Balcom silty clay loams, 15 to 30 percent slopes	97.5	1.7%
CmF	Castaic-Balcom silty clay loams, 30 to 50 percent slopes	846.7	14.9%
CmF2	Castaic-Balcom silty clay loams, 30 to 50 percent slopes, eroded	103.9	1.8%
CnG3	Castaic and Saugus soils, 30 to 65 percent slopes, severely eroded	99.5	1.7%
CyA	Cortina sandy loam, 0 to 2 percent slopes	15.0	0.3%
CzC	Cortina cobbly sandy loam, 2 to 9 percent slopes	27.4	0.5%

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<b>Antelope Valley Area, California (CA675)</b>			
<b>Map Unit Symbol</b>	<b>Map Unit Name</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
MhE2	Millsholm rocky loam, 15 to 30 percent slopes, eroded	34.5	0.6%
MhF2	Millsholm rocky loam, 30 to 50 percent slopes, eroded	1,406.6	24.7%
RcD	Ramona coarse sandy loam, 9 to 15 percent slopes	5.0	0.1%
Sa	Sandy alluvial land	37.5	0.7%
W	Water	554.5	9.7%
YoC	Yolo loam, 2 to 9 percent slopes	8.0	0.1%
<b>Subtotals for Soil Survey Area</b>		<b>3,236.1</b>	<b>56.8%</b>
<b>Totals for Area of Interest</b>		<b>5,697.8</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that

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have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Angeles National Forest Area, California

### 19—Trigo family-Calcixerollic Xerochrepts-Vista family complex, 30 to 70 percent slopes

#### Map Unit Setting

*National map unit symbol:* hm6n  
*Elevation:* 430 to 2,200 feet  
*Mean annual precipitation:* 12 to 22 inches  
*Mean annual air temperature:* 55 to 64 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Trigo family and similar soils:* 35 percent  
*Calcixerollic xerochrepts and similar soils:* 30 percent  
*Vista family and similar soils:* 20 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Trigo Family

##### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from sandstone and shale

##### Typical profile

*A - 0 to 3 inches:* loam  
*C - 3 to 17 inches:* gravelly sandy loam  
*Cr - 17 to 21 inches:* weathered bedrock

##### Properties and qualities

*Slope:* 30 to 70 percent  
*Depth to restrictive feature:* 3 to 19 inches to paralithic bedrock  
*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Very low (about 2.0 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

#### Description of Calcixerollic Xerochrepts

##### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope

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*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone and shale

### Typical profile

*H1 - 0 to 5 inches:* clay loam  
*H2 - 5 to 39 inches:* clay loam, loam  
*H2 - 5 to 39 inches:* weathered bedrock  
*H3 - 39 to 59 inches:*

### Properties and qualities

*Slope:* 30 to 70 percent  
*Depth to restrictive feature:* 15 to 42 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 5 percent  
*Available water storage in profile:* Very high (about 12.4 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* C

## Description of Vista Family

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone and shale

### Typical profile

*A - 0 to 9 inches:* sandy loam  
*B1 - 9 to 29 inches:* sandy loam  
*B2 - 29 to 50 inches:* sandy loam  
*C - 50 to 60 inches:* gravelly coarse sandy loam  
*Cr - 60 to 79 inches:* bedrock

### Properties and qualities

*Slope:* 30 to 70 percent  
*Depth to restrictive feature:* 60 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Moderate (about 6.9 inches)

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### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7e

*Hydrologic Soil Group:* A

### Minor Components

#### Rock outcrop

*Percent of map unit:* 4 percent

#### Modesto family

*Percent of map unit:* 4 percent

#### Millsholm family

*Percent of map unit:* 4 percent

#### Trigo family, silt loam surface

*Percent of map unit:* 3 percent

## 21—Riverwash

### Map Unit Setting

*National map unit symbol:* hm6p

*Elevation:* 1,800 to 4,800 feet

*Mean annual precipitation:* 14 to 30 inches

*Mean annual air temperature:* 55 to 64 degrees F

*Frost-free period:* 150 to 200 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Riverwash:* 75 percent

*Minor components:* 25 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Riverwash

#### Setting

*Landform:* Alluvial flats

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Concave

*Across-slope shape:* Convex

*Parent material:* Alluvium

#### Typical profile

*H1 - 0 to 60 inches:* extremely stony coarse sand

#### Properties and qualities

*Slope:* 2 to 10 percent

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*Percent of area covered with surface fragments:* 25.0 percent  
*Natural drainage class:* Excessively drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* High to very high (5.95 to 19.98 in/hr)  
*Frequency of flooding:* Frequent  
*Available water storage in profile:* Very low (about 0.6 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8w

### **Minor Components**

#### **Hanford family**

*Percent of map unit:* 7 percent

#### **Vista family**

*Percent of map unit:* 6 percent

#### **Capistrano family**

*Percent of map unit:* 6 percent

#### **Tujunga family**

*Percent of map unit:* 6 percent

## **26—Stonyford-Millsholm families complex, 30 to 70 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hm6r  
*Elevation:* 1,800 to 3,700 feet  
*Mean annual precipitation:* 16 to 20 inches  
*Mean annual air temperature:* 55 to 64 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Stonyford family and similar soils:* 50 percent  
*Millsholm family and similar soils:* 30 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Stonyford Family**

#### **Setting**

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from sandstone



## Custom Soil Resource Report

### Typical profile

*H1 - 0 to 5 inches:* gravelly clay loam  
*H2 - 5 to 19 inches:* gravelly clay loam  
*H3 - 19 to 29 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 30 to 70 percent  
*Depth to restrictive feature:* 10 to 20 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Very low (about 2.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

## Description of Millsholm Family

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone

### Typical profile

*H1 - 0 to 5 inches:* clay loam  
*H2 - 5 to 17 inches:* clay loam  
*H3 - 17 to 27 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 30 to 70 percent  
*Depth to restrictive feature:* 12 to 19 inches to lithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Low (about 3.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

**Minor Components**

**Rock outcrop**

*Percent of map unit: 4 percent*

**Modesto family**

*Percent of map unit: 4 percent*

**Typic haploxeralfs**

*Percent of map unit: 4 percent*

**Exchequer family**

*Percent of map unit: 4 percent*

**Lodo family**

*Percent of map unit: 4 percent*

**74—Trigo-Calleguas families-Rock outcrop complex, 60 to 100 percent slopes**

**Map Unit Setting**

*National map unit symbol: hm87*

*Elevation: 2,200 to 3,730 feet*

*Mean annual precipitation: 14 to 20 inches*

*Mean annual air temperature: 55 to 64 degrees F*

*Frost-free period: 150 to 200 days*

*Farmland classification: Not prime farmland*

**Map Unit Composition**

*Trigo family and similar soils: 35 percent*

*Calleguas family and similar soils: 30 percent*

*Rock outcrop: 25 percent*

*Minor components: 10 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Trigo Family**

**Setting**

*Landform: Mountains*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Mountainflank*

*Down-slope shape: Concave*

*Across-slope shape: Concave*

*Parent material: Residuum weathered from sandstone*

**Typical profile**

*H1 - 0 to 8 inches: silt loam*

*H2 - 8 to 16 inches: gravelly silt loam, gravelly loam*

*H2 - 8 to 16 inches: weathered bedrock*

*H3 - 16 to 59 inches:*

## Custom Soil Resource Report

### Properties and qualities

*Slope:* 60 to 100 percent  
*Depth to restrictive feature:* 3 to 19 inches to paralithic bedrock  
*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 3.97 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Low (about 3.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

### Description of Calleguas Family

#### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone

#### Typical profile

*H1 - 0 to 4 inches:* silt loam  
*H2 - 4 to 11 inches:* silt loam  
*H3 - 11 to 15 inches:* weathered bedrock

### Properties and qualities

*Slope:* 60 to 100 percent  
*Depth to restrictive feature:* 6 to 19 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high (0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 15 percent  
*Available water storage in profile:* Very low (about 1.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

### Description of Rock Outcrop

#### Setting

*Landform:* Scarps  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Convex

## Custom Soil Resource Report

*Across-slope shape:* Convex

*Parent material:* Residuum weathered from sandstone

### **Typical profile**

*H1 - 0 to 10 inches:* unweathered bedrock

### **Properties and qualities**

*Slope:* 60 to 100 percent

*Depth to restrictive feature:* 0 inches to paralithic bedrock

*Natural drainage class:* Excessively drained

*Runoff class:* Very high

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8e

### **Minor Components**

#### **Rubble land**

*Percent of map unit:* 4 percent

#### **Unnamed, colluvial soils**

*Percent of map unit:* 3 percent

#### **Trigo family, fine textured**

*Percent of map unit:* 3 percent

## **75—Trigo-Calleguas families-Haploxeralfs complex, 30 to 70 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hm88

*Elevation:* 2,400 to 4,000 feet

*Mean annual precipitation:* 14 to 20 inches

*Mean annual air temperature:* 55 to 64 degrees F

*Frost-free period:* 150 to 200 days

*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Trigo family and similar soils:* 35 percent

*Calleguas family and similar soils:* 30 percent

*Haploxeralfs and similar soils:* 15 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Trigo Family**

#### **Setting**

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

## Custom Soil Resource Report

*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from sandstone

### Typical profile

*H1 - 0 to 8 inches:* silt loam  
*H2 - 8 to 16 inches:* gravelly silt loam, gravelly loam  
*H2 - 8 to 16 inches:* weathered bedrock  
*H3 - 16 to 59 inches:*

### Properties and qualities

*Slope:* 30 to 70 percent  
*Depth to restrictive feature:* 3 to 19 inches to paralithic bedrock  
*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 3.97 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Low (about 3.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* D

## Description of Calleguas Family

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from sandstone

### Typical profile

*H1 - 0 to 4 inches:* silt loam  
*H2 - 4 to 11 inches:* silt loam  
*H3 - 11 to 15 inches:* weathered bedrock

### Properties and qualities

*Slope:* 30 to 70 percent  
*Depth to restrictive feature:* 6 to 19 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 15 percent  
*Available water storage in profile:* Very low (about 1.8 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

## Custom Soil Resource Report

*Land capability classification (nonirrigated): 7e*  
*Hydrologic Soil Group: D*

### Description of Haploxeralfs

#### Setting

*Landform: Mountains*  
*Landform position (two-dimensional): Backslope*  
*Landform position (three-dimensional): Mountainflank*  
*Down-slope shape: Concave*  
*Across-slope shape: Convex*  
*Parent material: Residuum weathered from sandstone*

#### Typical profile

*H1 - 0 to 6 inches: gravelly loam*  
*H2 - 6 to 15 inches: gravelly clay loam, gravelly sandy clay loam*  
*H2 - 6 to 15 inches: unweathered bedrock*  
*H3 - 15 to 19 inches:*

#### Properties and qualities

*Slope: 30 to 70 percent*  
*Depth to restrictive feature: 7 to 19 inches to lithic bedrock*  
*Natural drainage class: Well drained*  
*Runoff class: Very high*  
*Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)*  
*Depth to water table: More than 80 inches*  
*Frequency of flooding: None*  
*Frequency of ponding: None*  
*Available water storage in profile: Low (about 3.3 inches)*

#### Interpretive groups

*Land capability classification (irrigated): None specified*  
*Land capability classification (nonirrigated): 7e*  
*Hydrologic Soil Group: D*

### Minor Components

#### Osito family

*Percent of map unit: 3 percent*

#### Unnamed, moderately deep soils

*Percent of map unit: 3 percent*

#### Modesto family

*Percent of map unit: 3 percent*

#### Rock outcrop

*Percent of map unit: 2 percent*

#### Vertic xerochrepts

*Percent of map unit: 2 percent*

#### Caperton family

*Percent of map unit: 2 percent*

## 82—Vertic Xerochrepts, 5 to 50 percent slopes

### Map Unit Setting

*National map unit symbol:* hm8f  
*Elevation:* 2,200 to 4,000 feet  
*Mean annual precipitation:* 19 to 22 inches  
*Mean annual air temperature:* 55 to 64 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Vertic xerochrepts and similar soils:* 75 percent  
*Minor components:* 25 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Vertic Xerochrepts

#### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Footslope  
*Landform position (three-dimensional):* Mountainbase  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Residuum weathered from calcareous shale

#### Typical profile

*H1 - 0 to 8 inches:* silty clay  
*H2 - 8 to 30 inches:* channery silty clay, silty clay  
*H2 - 8 to 30 inches:* weathered bedrock  
*H3 - 30 to 34 inches:*

#### Properties and qualities

*Slope:* 5 to 50 percent  
*Depth to restrictive feature:* 18 to 45 inches to paralithic bedrock  
*Natural drainage class:* Moderately well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 10 percent  
*Available water storage in profile:* Moderate (about 7.8 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e

*Hydrologic Soil Group: D*

**Minor Components**

**Unnamed, deep, well developed soil**

*Percent of map unit: 13 percent*

**Osito family**

*Percent of map unit: 12 percent*

**316—Rock outcrop-Chilao family-Haploxerolls, warm association, 15 to 120 percent slopes**

**Map Unit Setting**

*National map unit symbol: hm6z*

*Elevation: 430 to 5,500 feet*

*Mean annual precipitation: 11 to 30 inches*

*Mean annual air temperature: 55 to 64 degrees F*

*Frost-free period: 150 to 200 days*

*Farmland classification: Not prime farmland*

**Map Unit Composition**

*Rock outcrop: 40 percent*

*Chilao family and similar soils: 35 percent*

*Haploxerolls, warm, and similar soils: 15 percent*

*Minor components: 10 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Rock Outcrop**

**Setting**

*Landform: Mountains*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Mountainflank*

*Down-slope shape: Concave*

*Across-slope shape: Convex*

*Parent material: Residuum weathered from granodiorite*

**Typical profile**

*R - 0 to 10 inches: unweathered bedrock*

**Properties and qualities**

*Slope: 15 to 120 percent*

*Depth to restrictive feature: 0 inches to lithic bedrock*

*Natural drainage class: Excessively drained*

*Runoff class: Very high*

**Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 8e*



## Description of Chilao Family

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from granodiorite

### Typical profile

*A - 0 to 5 inches:* gravelly loam  
*C - 5 to 18 inches:* very cobbly loam, very gravelly loam, very gravelly sandy loam  
*C - 5 to 18 inches:* weathered bedrock  
*C - 5 to 18 inches:*  
*C - 18 to 28 inches:*

### Properties and qualities

*Slope:* 15 to 85 percent  
*Depth to restrictive feature:* 6 to 19 inches to paralithic bedrock  
*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Low (about 4.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8e  
*Hydrologic Soil Group:* D

## Description of Haploxerolls, Warm

### Setting

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainbase  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Colluvium

### Typical profile

*A - 0 to 10 inches:* gravelly loam  
*C - 10 to 60 inches:* very gravelly loam, very gravelly sandy loam  
*C - 10 to 60 inches:* weathered bedrock  
*Cr - 60 to 70 inches:*

### Properties and qualities

*Slope:* 15 to 85 percent  
*Depth to restrictive feature:* 60 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None

## Custom Soil Resource Report

*Frequency of ponding:* None

*Available water storage in profile:* High (about 10.3 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8e

*Hydrologic Soil Group:* A

### **Minor Components**

#### **Shortcut family**

*Percent of map unit:* 2 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Concave

*Across-slope shape:* Convex

#### **Exchequer family**

*Percent of map unit:* 2 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Concave

*Across-slope shape:* Convex

#### **Lodo family**

*Percent of map unit:* 2 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Concave

*Across-slope shape:* Concave

#### **Hanford family**

*Percent of map unit:* 2 percent

*Landform:* Alluvial fans

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Riser

*Down-slope shape:* Concave

*Across-slope shape:* Convex

#### **Modjeska family**

*Percent of map unit:* 1 percent

*Landform:* Terraces

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Riser

*Down-slope shape:* Concave

*Across-slope shape:* Convex

#### **Vista family**

*Percent of map unit:* 1 percent

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Concave

*Across-slope shape:* Concave

## **714—Trigo-Millsholm families-Rock outcrop complex, 45 to 90 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hm82  
*Elevation:* 1,800 to 4,200 feet  
*Mean annual precipitation:* 15 to 21 inches  
*Mean annual air temperature:* 55 to 64 degrees F  
*Frost-free period:* 150 to 200 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Trigo family and similar soils:* 45 percent  
*Millsholm families and similar soils:* 20 percent  
*Rock outcrop:* 15 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Trigo Family**

#### **Setting**

*Landform:* Mountains  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Mountainflank  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from sandstone

#### **Typical profile**

*H1 - 0 to 8 inches:* silt loam  
*H2 - 8 to 16 inches:* gravelly silt loam, gravelly loam  
*H2 - 8 to 16 inches:* weathered bedrock  
*H3 - 16 to 20 inches:*

#### **Properties and qualities**

*Slope:* 45 to 90 percent  
*Depth to restrictive feature:* 3 to 19 inches to paralithic bedrock  
*Natural drainage class:* Somewhat excessively drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 3.97 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Low (about 3.3 inches)

## Custom Soil Resource Report

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7e

*Hydrologic Soil Group:* D

### Description of Millsholm Families

#### Setting

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Concave

*Across-slope shape:* Convex

*Parent material:* Residuum weathered from sandstone

#### Typical profile

*H1 - 0 to 5 inches:* clay loam

*H2 - 5 to 17 inches:* clay loam

*H3 - 17 to 21 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 45 to 90 percent

*Depth to restrictive feature:* 12 to 19 inches to lithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Low (about 3.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7e

*Hydrologic Soil Group:* D

### Description of Rock Outcrop

#### Setting

*Landform:* Mountains

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Mountainflank

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Residuum weathered from sandstone

#### Typical profile

*H1 - 0 to 4 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 45 to 90 percent

*Depth to restrictive feature:* 0 inches to lithic bedrock

*Natural drainage class:* Excessively drained

*Runoff class:* Very high

### Interpretive groups

*Land capability classification (irrigated):* None specified

## Custom Soil Resource Report

*Land capability classification (nonirrigated): 8e*

### Minor Components

**Modesto, mod deep family**

*Percent of map unit: 7 percent*

**Osito family**

*Percent of map unit: 7 percent*

**Chilao family, mod deep**

*Percent of map unit: 6 percent*

## CzC—Cortina cobbly sandy loam, 2 to 9 percent slopes

### Map Unit Setting

*National map unit symbol: v5jh*

*Elevation: 30 to 2,400 feet*

*Mean annual precipitation: 12 to 40 inches*

*Mean annual air temperature: 61 to 63 degrees F*

*Frost-free period: 275 to 300 days*

*Farmland classification: Not prime farmland*

### Map Unit Composition

*Cortina and similar soils: 85 percent*

*Minor components: 15 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Cortina

#### Setting

*Landform: Alluvial fans*

*Landform position (two-dimensional): Backslope*

*Landform position (three-dimensional): Tread*

*Down-slope shape: Concave*

*Across-slope shape: Convex*

*Parent material: Alluvium derived from sedimentary rock*

#### Typical profile

*H1 - 0 to 6 inches: cobbly sandy loam*

*H2 - 6 to 60 inches: stratified very cobbly sandy loam to very gravelly sandy loam*

#### Properties and qualities

*Slope: 2 to 9 percent*

*Depth to restrictive feature: More than 80 inches*

*Natural drainage class: Excessively drained*

*Runoff class: Low*

*Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)*

*Depth to water table: More than 80 inches*

## Custom Soil Resource Report

*Frequency of flooding:* Rare

*Frequency of ponding:* None

*Available water storage in profile:* Very low (about 2.8 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* 4s

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* A

*Ecological site:* SANDY 9-20" (R019XD065CA)

### **Minor Components**

#### **Metz**

*Percent of map unit:* 10 percent

#### **Unnamed**

*Percent of map unit:* 4 percent

#### **Unnamed**

*Percent of map unit:* 1 percent

*Landform:* Drainageways

## Antelope Valley Area, California

### CmE—Castaic-Balcom silty clay loams, 15 to 30 percent slopes

#### Map Unit Setting

*National map unit symbol:* hcd7  
*Elevation:* 50 to 2,500 feet  
*Mean annual precipitation:* 15 inches  
*Mean annual air temperature:* 61 to 63 degrees F  
*Frost-free period:* 280 to 300 days  
*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Castaic and similar soils:* 50 percent  
*Balcom and similar soils:* 40 percent  
*Minor components:* 10 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Castaic

##### Setting

*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from sedimentary rock

##### Typical profile

*H1 - 0 to 9 inches:* silty clay loam  
*H2 - 9 to 26 inches:* silty clay loam  
*H3 - 26 to 30 inches:* weathered bedrock

##### Properties and qualities

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* 22 to 40 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 3 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Low (about 4.6 inches)

##### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* C  
*Ecological site:* CLAYEY 9-20" (R019XD063CA)

## Description of Balcom

### Setting

*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from sedimentary rock

### Typical profile

*H1 - 0 to 10 inches:* silty clay loam  
*H2 - 10 to 28 inches:* silty clay loam  
*H3 - 28 to 32 inches:* weathered bedrock

### Properties and qualities

*Slope:* 15 to 30 percent  
*Depth to restrictive feature:* 20 to 40 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low (0.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 10 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Low (about 5.0 inches)

### Interpretive groups

*Land capability classification (irrigated):* 4e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* C  
*Ecological site:* CLAYEY 9-20" (R019XD063CA)

## Minor Components

### Saugus

*Percent of map unit:* 9 percent

### Unnamed

*Percent of map unit:* 1 percent  
*Landform:* Drainageways

## CmF—Castaic-Balcom silty clay loams, 30 to 50 percent slopes

### Map Unit Setting

*National map unit symbol:* hcd8  
*Elevation:* 50 to 2,500 feet  
*Mean annual precipitation:* 15 inches  
*Mean annual air temperature:* 61 to 63 degrees F



## Custom Soil Resource Report

*Frost-free period:* 280 to 300 days

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Castaic and similar soils:* 50 percent

*Balcom and similar soils:* 40 percent

*Minor components:* 10 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Castaic

#### Setting

*Landform:* Hills

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Residuum weathered from sedimentary rock

#### Typical profile

*H1 - 0 to 11 inches:* silty clay loam

*H2 - 11 to 28 inches:* silty clay loam

*H3 - 28 to 32 inches:* weathered bedrock

#### Properties and qualities

*Slope:* 30 to 50 percent

*Depth to restrictive feature:* 22 to 40 inches to paralithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum in profile:* 3 percent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water storage in profile:* Low (about 5.0 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6e

*Hydrologic Soil Group:* C

*Ecological site:* CLAYEY 9-20" (R019XD063CA)

### Description of Balcom

#### Setting

*Landform:* Hills

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Residuum weathered from sedimentary rock

#### Typical profile

*H1 - 0 to 10 inches:* silty clay loam

*H2 - 10 to 28 inches:* silty clay loam

## Custom Soil Resource Report

*H3 - 28 to 32 inches: weathered bedrock*

### **Properties and qualities**

*Slope: 30 to 50 percent*

*Depth to restrictive feature: 20 to 40 inches to paralithic bedrock*

*Natural drainage class: Well drained*

*Runoff class: Very high*

*Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Calcium carbonate, maximum in profile: 10 percent*

*Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)*

*Available water storage in profile: Low (about 5.0 inches)*

### **Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 6e*

*Hydrologic Soil Group: C*

*Ecological site: CLAYEY 9-20" (R019XD063CA)*

### **Minor Components**

#### **Gaviota**

*Percent of map unit: 4 percent*

#### **Saugus**

*Percent of map unit: 3 percent*

#### **Unnamed**

*Percent of map unit: 3 percent*

*Landform: Drainageways*

## **CmF2—Castaic-Balcom silty clay loams, 30 to 50 percent slopes, eroded**

### **Map Unit Setting**

*National map unit symbol: hcd9*

*Elevation: 50 to 2,500 feet*

*Mean annual precipitation: 15 inches*

*Mean annual air temperature: 61 to 63 degrees F*

*Frost-free period: 280 to 300 days*

*Farmland classification: Not prime farmland*

### **Map Unit Composition**

*Castaic and similar soils: 50 percent*

*Balcom and similar soils: 40 percent*

*Minor components: 10 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Castaic

### Setting

*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from sedimentary rock

### Typical profile

*H1 - 0 to 9 inches:* silty clay loam  
*H2 - 9 to 26 inches:* silty clay loam  
*H3 - 26 to 30 inches:* weathered bedrock

### Properties and qualities

*Slope:* 30 to 50 percent  
*Depth to restrictive feature:* 22 to 40 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 3 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Low (about 4.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* C  
*Ecological site:* CLAYEY 9-20" (R019XD063CA)

## Description of Balcom

### Setting

*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from sedimentary rock

### Typical profile

*H1 - 0 to 7 inches:* silty clay loam  
*H2 - 7 to 25 inches:* silty clay loam  
*H3 - 25 to 29 inches:* weathered bedrock

### Properties and qualities

*Slope:* 30 to 50 percent  
*Depth to restrictive feature:* 20 to 40 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low (0.00 in/hr)  
*Depth to water table:* More than 80 inches

## Custom Soil Resource Report

*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 10 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Low (about 4.5 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* C  
*Ecological site:* CLAYEY 9-20" (R019XD063CA)

### Minor Components

#### Saugus

*Percent of map unit:* 4 percent

#### Gaviota

*Percent of map unit:* 3 percent

#### Unnamed

*Percent of map unit:* 3 percent  
*Landform:* Drainageways

## CnG3—Castaic and Saugus soils, 30 to 65 percent slopes, severely eroded

### Map Unit Setting

*National map unit symbol:* hcdc  
*Elevation:* 50 to 2,500 feet  
*Mean annual precipitation:* 14 to 20 inches  
*Mean annual air temperature:* 61 to 63 degrees F  
*Frost-free period:* 280 to 300 days  
*Farmland classification:* Not prime farmland

### Map Unit Composition

*Castaic and similar soils:* 45 percent  
*Saugus and similar soils:* 35 percent  
*Minor components:* 20 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Castaic

#### Setting

*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from sedimentary rock

## Custom Soil Resource Report

### Typical profile

*H1 - 0 to 9 inches:* silty clay loam  
*H2 - 9 to 26 inches:* silty clay loam  
*H3 - 26 to 30 inches:* weathered bedrock

### Properties and qualities

*Slope:* 30 to 65 percent  
*Depth to restrictive feature:* 22 to 40 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* Very high  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum in profile:* 3 percent  
*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Available water storage in profile:* Low (about 4.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* C

## Description of Saugus

### Setting

*Landform:* Hills  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Parent material:* Residuum weathered from sedimentary rock

### Typical profile

*H1 - 0 to 8 inches:* loam  
*H2 - 8 to 40 inches:* loam, sandy loam  
*H2 - 8 to 40 inches:* weathered bedrock  
*H3 - 40 to 44 inches:*

### Properties and qualities

*Slope:* 30 to 50 percent  
*Depth to restrictive feature:* 35 to 60 inches to paralithic bedrock  
*Natural drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low (0.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* High (about 9.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* B

**Minor Components**

**Balcom**

*Percent of map unit:* 10 percent

**Unnamed**

*Percent of map unit:* 10 percent

*Landform:* Drainageways

**CyA—Cortina sandy loam, 0 to 2 percent slopes**

**Map Unit Setting**

*National map unit symbol:* hcdf

*Elevation:* 30 to 2,400 feet

*Mean annual precipitation:* 8 to 40 inches

*Mean annual air temperature:* 61 to 64 degrees F

*Frost-free period:* 275 to 300 days

*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

*Cortina and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Cortina**

**Setting**

*Landform:* Alluvial fans

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium derived from sedimentary rock

**Typical profile**

*H1 - 0 to 12 inches:* sandy loam

*H2 - 12 to 28 inches:* very gravelly sandy loam

*H3 - 28 to 60 inches:* very cobbly sandy loam

**Properties and qualities**

*Slope:* 0 to 2 percent

*Depth to restrictive feature:* More than 80 inches

*Natural drainage class:* Excessively drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* Occasional

*Frequency of ponding:* None

*Available water storage in profile:* Low (about 3.7 inches)

**Interpretive groups**

*Land capability classification (irrigated): 4s*  
*Land capability classification (nonirrigated): 4e*  
*Hydrologic Soil Group: A*  
*Ecological site: SANDY 9-20" (R019XD065CA)*

**Minor Components**

**Metz**

*Percent of map unit: 10 percent*

**Unnamed**

*Percent of map unit: 4 percent*

**Unnamed**

*Percent of map unit: 1 percent*  
*Landform: Drainageways*

**CzC—Cortina cobbly sandy loam, 2 to 9 percent slopes**

**Map Unit Setting**

*National map unit symbol: hcdh*  
*Elevation: 30 to 2,400 feet*  
*Mean annual precipitation: 12 to 40 inches*  
*Mean annual air temperature: 61 to 63 degrees F*  
*Frost-free period: 275 to 300 days*  
*Farmland classification: Not prime farmland*

**Map Unit Composition**

*Cortina and similar soils: 85 percent*  
*Minor components: 15 percent*  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Cortina**

**Setting**

*Landform: Alluvial fans*  
*Landform position (two-dimensional): Backslope*  
*Landform position (three-dimensional): Tread*  
*Down-slope shape: Concave*  
*Across-slope shape: Convex*  
*Parent material: Alluvium derived from sedimentary rock*

**Typical profile**

*H1 - 0 to 6 inches: cobbly sandy loam*  
*H2 - 6 to 60 inches: stratified very cobbly sandy loam to very gravelly sandy loam*

**Properties and qualities**

*Slope: 2 to 9 percent*  
*Depth to restrictive feature: More than 80 inches*  
*Natural drainage class: Excessively drained*

## Custom Soil Resource Report

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* Rare

*Frequency of ponding:* None

*Available water storage in profile:* Very low (about 2.8 inches)

### **Interpretive groups**

*Land capability classification (irrigated):* 4s

*Land capability classification (nonirrigated):* 7s

*Hydrologic Soil Group:* A

*Ecological site:* SANDY 9-20" (R019XD065CA)

### **Minor Components**

#### **Metz**

*Percent of map unit:* 10 percent

#### **Unnamed**

*Percent of map unit:* 4 percent

#### **Unnamed**

*Percent of map unit:* 1 percent

*Landform:* Drainageways

## **MhE2—Millsholm rocky loam, 15 to 30 percent slopes, eroded**

### **Map Unit Setting**

*National map unit symbol:* hcfs

*Elevation:* 300 to 4,000 feet

*Mean annual precipitation:* 8 to 50 inches

*Mean annual air temperature:* 45 to 63 degrees F

*Frost-free period:* 110 to 330 days

*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Millsholm and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Millsholm**

#### **Setting**

*Landform:* Hills

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Residuum weathered from sedimentary rock

#### **Typical profile**

*H1 - 0 to 16 inches:* loam



## Custom Soil Resource Report

*H2 - 16 to 20 inches: unweathered bedrock*

### **Properties and qualities**

*Slope: 15 to 30 percent*

*Depth to restrictive feature: 10 to 20 inches to lithic bedrock*

*Natural drainage class: Well drained*

*Runoff class: Very high*

*Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)*

*Depth to water table: More than 80 inches*

*Frequency of flooding: None*

*Frequency of ponding: None*

*Available water storage in profile: Very low (about 2.6 inches)*

### **Interpretive groups**

*Land capability classification (irrigated): None specified*

*Land capability classification (nonirrigated): 6e*

*Hydrologic Soil Group: D*

*Ecological site: SHALLOW LOAMY 9-20" (R019XD066CA)*

### **Minor Components**

#### **Rock outcrop**

*Percent of map unit: 5 percent*

#### **Gaviota**

*Percent of map unit: 5 percent*

#### **Unnamed**

*Percent of map unit: 3 percent*

*Landform: Drainageways*

#### **Castaic**

*Percent of map unit: 2 percent*

## **MhF2—Millsholm rocky loam, 30 to 50 percent slopes, eroded**

### **Map Unit Setting**

*National map unit symbol: hcft*

*Elevation: 300 to 4,000 feet*

*Mean annual precipitation: 8 to 50 inches*

*Mean annual air temperature: 45 to 63 degrees F*

*Frost-free period: 110 to 330 days*

*Farmland classification: Not prime farmland*

### **Map Unit Composition**

*Millsholm and similar soils: 85 percent*

*Minor components: 15 percent*

*Estimates are based on observations, descriptions, and transects of the mapunit.*

## Description of Millsholm

### Setting

*Landform:* Hills

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Residuum weathered from sedimentary rock

### Typical profile

*H1 - 0 to 16 inches:* loam

*H2 - 16 to 20 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 30 to 50 percent

*Depth to restrictive feature:* 10 to 20 inches to lithic bedrock

*Natural drainage class:* Well drained

*Runoff class:* Very high

*Capacity of the most limiting layer to transmit water (Ksat):* Very low (0.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water storage in profile:* Very low (about 2.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6e

*Hydrologic Soil Group:* D

*Ecological site:* SHALLOW LOAMY 9-20" (R019XD066CA)

## Minor Components

### Rock outcrop

*Percent of map unit:* 5 percent

### Unnamed

*Percent of map unit:* 5 percent

### Castaic

*Percent of map unit:* 3 percent

### Gaviota

*Percent of map unit:* 1 percent

### Unnamed

*Percent of map unit:* 1 percent

*Landform:* Drainageways

## **RcD—Ramona coarse sandy loam, 9 to 15 percent slopes**

### **Map Unit Setting**

*National map unit symbol:* hcgl  
*Elevation:* 2,700 to 3,900 feet  
*Mean annual precipitation:* 9 to 12 inches  
*Mean annual air temperature:* 63 degrees F  
*Frost-free period:* 210 to 240 days  
*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Ramona and similar soils:* 85 percent  
*Minor components:* 15 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Ramona**

#### **Setting**

*Landform:* Terraces  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Parent material:* Alluvium derived from granite

#### **Typical profile**

*H1 - 0 to 20 inches:* coarse sandy loam  
*H2 - 20 to 31 inches:* fine sandy loam  
*H3 - 31 to 90 inches:* sandy clay loam

#### **Properties and qualities**

*Slope:* 9 to 15 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high (0.20 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* Moderate (about 7.8 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* 3e  
*Land capability classification (nonirrigated):* 4e  
*Hydrologic Soil Group:* C  
*Ecological site:* LOAMY 9-20" (R019XD064CA)

### Minor Components

#### Greenfield

*Percent of map unit:* 5 percent

#### Hanford

*Percent of map unit:* 5 percent

#### Unnamed

*Percent of map unit:* 4 percent

#### Unnamed

*Percent of map unit:* 1 percent

*Landform:* Drainageways

## Sa—Sandy alluvial land

### Map Unit Setting

*National map unit symbol:* hch5

*Mean annual precipitation:* 14 inches

*Mean annual air temperature:* 61 degrees F

*Farmland classification:* Not prime farmland

### Map Unit Composition

*Sandy alluvial land:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Sandy Alluvial Land

#### Setting

*Landform:* Flood plains

*Landform position (two-dimensional):* Footslope

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Alluvium

#### Typical profile

*H1 - 0 to 10 inches:* sand

*H2 - 10 to 30 inches:* stratified sand to loam

*H3 - 30 to 60 inches:* stratified gravelly sand to gravelly loam

#### Properties and qualities

*Slope:* 0 to 2 percent

*Natural drainage class:* Excessively drained

*Runoff class:* Very low

*Capacity of the most limiting layer to transmit water (Ksat):* High (1.98 to 5.95 in/hr)

*Depth to water table:* About 10 inches

*Frequency of flooding:* Frequent

*Salinity, maximum in profile:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

## Custom Soil Resource Report

*Available water storage in profile:* Moderate (about 6.1 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 7w

*Hydrologic Soil Group:* B

*Ecological site:* SANDY 9-20" (R020XE025CA)

### Minor Components

#### Riverwash

*Percent of map unit:* 10 percent

*Landform:* Drainageways

#### Unnamed

*Percent of map unit:* 5 percent

## W—Water

### Map Unit Composition

*Water:* 100 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Water

#### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 8

## YoC—Yolo loam, 2 to 9 percent slopes

### Map Unit Setting

*National map unit symbol:* hcj9

*Elevation:* 30 to 400 feet

*Mean annual precipitation:* 16 to 22 inches

*Mean annual air temperature:* 61 degrees F

*Frost-free period:* 240 to 300 days

*Farmland classification:* Prime farmland if irrigated

### Map Unit Composition

*Yolo and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Yolo

#### Setting

*Landform:* Alluvial fans

*Landform position (two-dimensional):* Backslope

## Custom Soil Resource Report

*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Concave  
*Across-slope shape:* Convex  
*Parent material:* Alluvium derived from sedimentary rock

### Typical profile

*H1 - 0 to 18 inches:* loam  
*H2 - 18 to 72 inches:* loam

### Properties and qualities

*Slope:* 2 to 9 percent  
*Depth to restrictive feature:* More than 80 inches  
*Natural drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately high to high  
(0.57 to 1.98 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water storage in profile:* High (about 9.6 inches)

### Interpretive groups

*Land capability classification (irrigated):* 2e  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* B  
*Ecological site:* LOAMY 9-20" (R019XD064CA)

### Minor Components

#### Metz

*Percent of map unit:* 5 percent

#### Sorrento

*Percent of map unit:* 5 percent

#### Unnamed

*Percent of map unit:* 5 percent

# **Soil Information for All Uses**

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## **Soil Properties and Qualities**

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

## **Soil Erosion Factors**

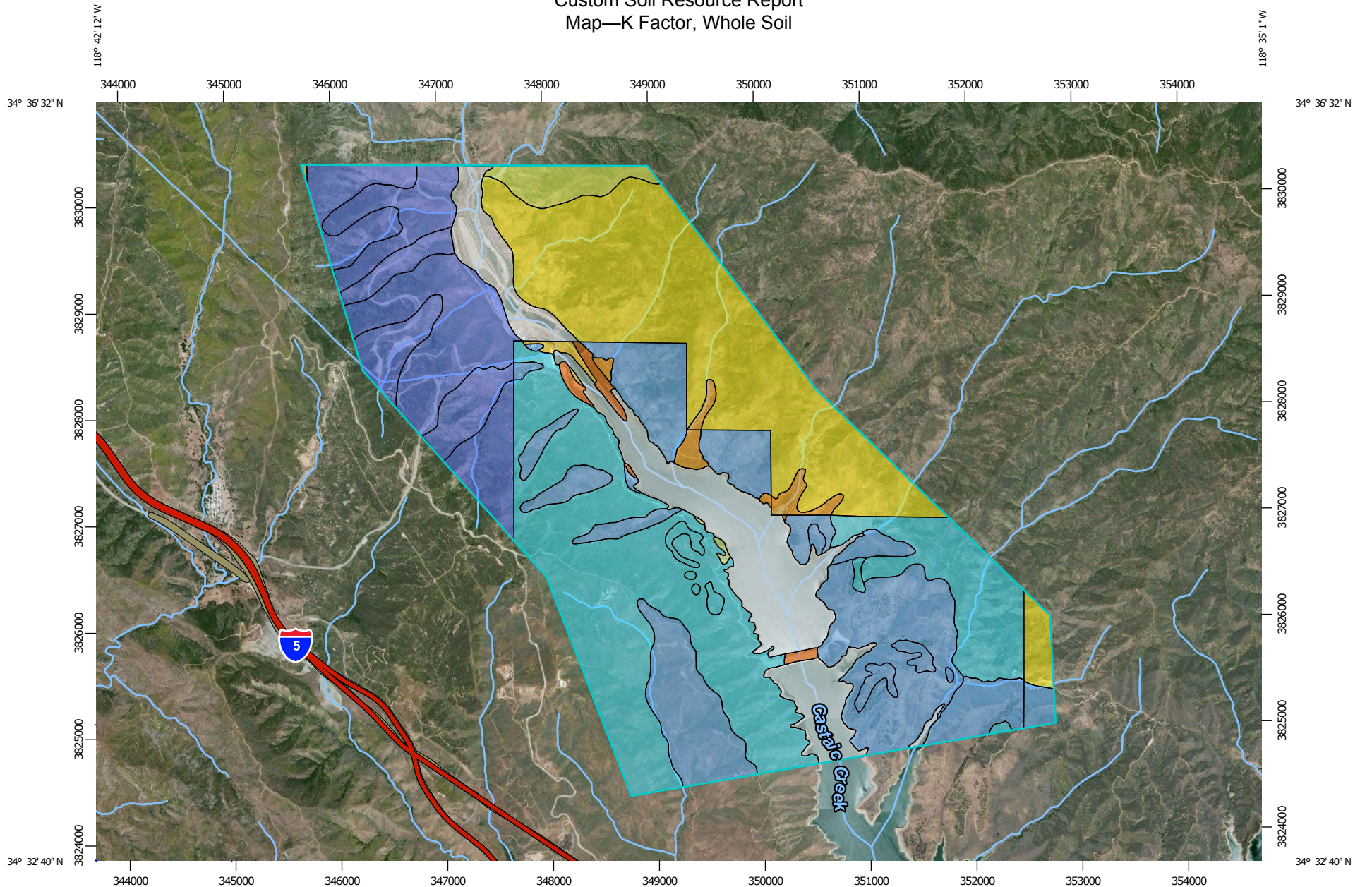
Soil Erosion Factors are soil properties and interpretations used in evaluating the soil for potential erosion. Example soil erosion factors can include K factor for the whole soil or on a rock free basis, T factor, wind erodibility group and wind erodibility index.

### **K Factor, Whole Soil**

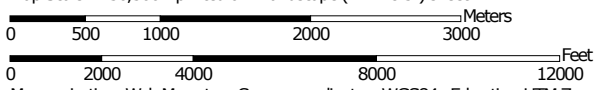
Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

# Custom Soil Resource Report Map—K Factor, Whole Soil



Map Scale: 1:50,300 if printed on A landscape (11" x 8.5") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84



# Custom Soil Resource Report
















## MAP LEGEND

### Area of Interest (AOI)






 Area of Interest (AOI)










### Soils

#### Soil Rating Polygons
















-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

#### Soil Rating Lines








-  .02
-  .05
-  .10
-  .15
-  .17
-  .20

-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

#### Soil Rating Points

-  .02
-  .05
-  .10
-  .15
-  .17
-  .20
-  .24
-  .28
-  .32
-  .37
-  .43
-  .49
-  .55
-  .64
-  Not rated or not available

#### Water Features

-  Streams and Canals
- Transportation**
-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads
- Background**
-  Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Angeles National Forest Area, California  
 Survey Area Data: Version 9, Sep 18, 2015

Soil Survey Area: Antelope Valley Area, California  
 Survey Area Data: Version 8, Sep 17, 2015

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 3, 2010—Aug 31, 2010

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

**Table—K Factor, Whole Soil**

<b>K Factor, Whole Soil— Summary by Map Unit — Angeles National Forest Area, California (CA776)</b>				
<b>Map unit symbol</b>	<b>Map unit name</b>	<b>Rating</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
19	Trigo family-Calcixerollic Xerochrepts-Vista family complex, 30 to 70 percent slopes	.43	27.0	0.5%
21	Riverwash		149.7	2.6%
26	Stonyford-Millsholm families complex, 30 to 70 percent slopes	.17	1,195.7	21.0%
74	Trigo-Calleguas families-Rock outcrop complex, 60 to 100 percent slopes	.49	361.1	6.3%
75	Trigo-Calleguas families-Haploxerafs complex, 30 to 70 percent slopes	.49	589.2	10.3%
82	Vertic Xerochrepts, 5 to 50 percent slopes	.20	1.4	0.0%
316	Rock outcrop-Chilao family-Haploxerolls, warm association, 15 to 120 percent slopes	.20	99.8	1.8%
714	Trigo-Millsholm families-Rock outcrop complex, 45 to 90 percent slopes	.49	0.1	0.0%
CzC	Cortina cobbly sandy loam, 2 to 9 percent slopes	.10	37.7	0.7%
<b>Subtotals for Soil Survey Area</b>			<b>2,461.7</b>	<b>43.2%</b>
<b>Totals for Area of Interest</b>			<b>5,697.8</b>	<b>100.0%</b>

<b>K Factor, Whole Soil— Summary by Map Unit — Antelope Valley Area, California (CA675)</b>				
<b>Map unit symbol</b>	<b>Map unit name</b>	<b>Rating</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
CmE	Castaic-Balcom silty clay loams, 15 to 30 percent slopes	.43	97.5	1.7%
CmF	Castaic-Balcom silty clay loams, 30 to 50 percent slopes	.43	846.7	14.9%
CmF2	Castaic-Balcom silty clay loams, 30 to 50 percent slopes, eroded	.43	103.9	1.8%
CnG3	Castaic and Saugus soils, 30 to 65 percent slopes, severely eroded	.43	99.5	1.7%
CyA	Cortina sandy loam, 0 to 2 percent slopes	.15	15.0	0.3%

## Custom Soil Resource Report

<b>K Factor, Whole Soil— Summary by Map Unit — Antelope Valley Area, California (CA675)</b>				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CzC	Cortina cobbly sandy loam, 2 to 9 percent slopes	.10	27.4	0.5%
MhE2	Millsholm rocky loam, 15 to 30 percent slopes, eroded	.37	34.5	0.6%
MhF2	Millsholm rocky loam, 30 to 50 percent slopes, eroded	.37	1,406.6	24.7%
RcD	Ramona coarse sandy loam, 9 to 15 percent slopes	.24	5.0	0.1%
Sa	Sandy alluvial land	.05	37.5	0.7%
W	Water		554.5	9.7%
YoC	Yolo loam, 2 to 9 percent slopes	.43	8.0	0.1%
<b>Subtotals for Soil Survey Area</b>			<b>3,236.1</b>	<b>56.8%</b>
<b>Totals for Area of Interest</b>			<b>5,697.8</b>	<b>100.0%</b>

### Rating Options—K Factor, Whole Soil

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

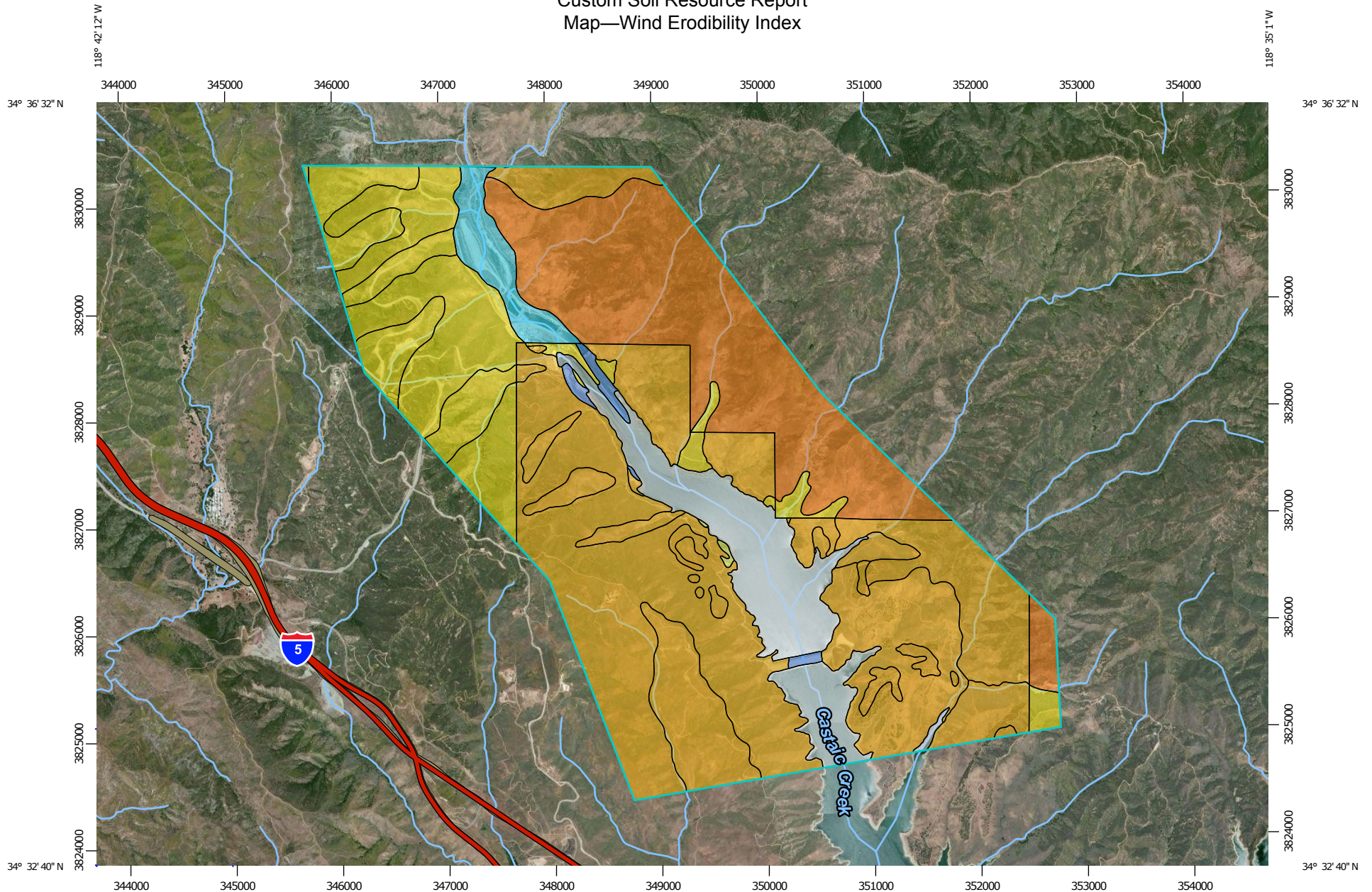
*Tie-break Rule:* Higher

*Layer Options (Horizon Aggregation Method):* Surface Layer (Not applicable)

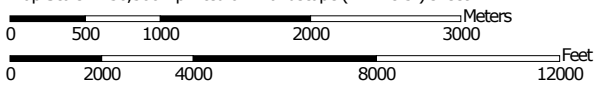
### Wind Erodibility Index

The wind erodibility index is a numerical value indicating the susceptibility of soil to wind erosion, or the tons per acre per year that can be expected to be lost to wind erosion. There is a close correlation between wind erosion and the texture of the surface layer, the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence wind erosion.

# Custom Soil Resource Report Map—Wind Erodibility Index















































Map Scale: 1:50,300 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84



### MAP LEGEND

<b>Area of Interest (AOI)</b>			250
	Area of Interest (AOI)		310
<b>Soils</b>			Not rated or not available
<b>Soil Rating Polygons</b>			
	0		0
	38		38
	48		48
	56		56
	86		86
	134		134
	160		160
	180		180
	220		220
	250		250
	310		310
	Not rated or not available		Not rated or not available
<b>Soil Rating Lines</b>			
	0		Streams and Canals
	38	<b>Transportation</b>	
	48		Rails
	56		Interstate Highways
	86		US Routes
	134		Major Roads
	160		Local Roads
	180	<b>Background</b>	
	220		Aerial Photography

### MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: Web Mercator (EPSG:3857)

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This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Angeles National Forest Area, California  
 Survey Area Data: Version 9, Sep 18, 2015

Soil Survey Area: Antelope Valley Area, California  
 Survey Area Data: Version 8, Sep 17, 2015

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 3, 2010—Aug 31, 2010

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Custom Soil Resource Report

**Table—Wind Erodibility Index**

<b>Wind Erodibility Index— Summary by Map Unit — Angeles National Forest Area, California (CA776)</b>				
<b>Map unit symbol</b>	<b>Map unit name</b>	<b>Rating (tons per acre per year)</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
19	Trigo family-Calixerollic Xerochrepts-Vista family complex, 30 to 70 percent slopes	56	27.0	0.5%
21	Riverwash	180	149.7	2.6%
26	Stonyford-Millsholm families complex, 30 to 70 percent slopes	38	1,195.7	21.0%
74	Trigo-Calleguas families-Rock outcrop complex, 60 to 100 percent slopes	56	361.1	6.3%
75	Trigo-Calleguas families-Haploxerafls complex, 30 to 70 percent slopes	56	589.2	10.3%
82	Vertic Xerochrepts, 5 to 50 percent slopes	86	1.4	0.0%
316	Rock outcrop-Chilao family-Haploxerolls, warm association, 15 to 120 percent slopes	48	99.8	1.8%
714	Trigo-Millsholm families-Rock outcrop complex, 45 to 90 percent slopes	56	0.1	0.0%
CzC	Cortina cobbly sandy loam, 2 to 9 percent slopes	56	37.7	0.7%
<b>Subtotals for Soil Survey Area</b>			<b>2,461.7</b>	<b>43.2%</b>
<b>Totals for Area of Interest</b>			<b>5,697.8</b>	<b>100.0%</b>

<b>Wind Erodibility Index— Summary by Map Unit — Antelope Valley Area, California (CA675)</b>				
<b>Map unit symbol</b>	<b>Map unit name</b>	<b>Rating (tons per acre per year)</b>	<b>Acres in AOI</b>	<b>Percent of AOI</b>
CmE	Castaic-Balcom silty clay loams, 15 to 30 percent slopes	48	97.5	1.7%
CmF	Castaic-Balcom silty clay loams, 30 to 50 percent slopes	48	846.7	14.9%
CmF2	Castaic-Balcom silty clay loams, 30 to 50 percent slopes, eroded	48	103.9	1.8%
CnG3	Castaic and Saugus soils, 30 to 65 percent slopes, severely eroded	48	99.5	1.7%

Custom Soil Resource Report

Wind Erodibility Index— Summary by Map Unit — Antelope Valley Area, California (CA675)				
Map unit symbol	Map unit name	Rating (tons per acre per year)	Acres in AOI	Percent of AOI
CyA	Cortina sandy loam, 0 to 2 percent slopes	56	15.0	0.3%
CzC	Cortina cobbly sandy loam, 2 to 9 percent slopes	56	27.4	0.5%
MhE2	Millsholm rocky loam, 15 to 30 percent slopes, eroded	48	34.5	0.6%
MhF2	Millsholm rocky loam, 30 to 50 percent slopes, eroded	48	1,406.6	24.7%
RcD	Ramona coarse sandy loam, 9 to 15 percent slopes	86	5.0	0.1%
Sa	Sandy alluvial land	220	37.5	0.7%
W	Water		554.5	9.7%
YoC	Yolo loam, 2 to 9 percent slopes	48	8.0	0.1%
<b>Subtotals for Soil Survey Area</b>			<b>3,236.1</b>	<b>56.8%</b>
<b>Totals for Area of Interest</b>			<b>5,697.8</b>	<b>100.0%</b>

**Rating Options—Wind Erodibility Index**

*Units of Measure:* tons per acre per year

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher

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United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2\\_053374](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/home/?cid=nrcs142p2_053374)

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. <http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/landuse/rangepasture/?cid=stelprdb1043084>



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## **Appendix G**

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### ***Section 4.0 Tables***

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**Table G-1. Summary of Water Quality Objectives for Inland Surface Waters in the Los Angeles and Lahontan Basin Plan**

Parameter	Summary of Water Quality Objectives
Non-degradation Objective	<p><u>Lahontan</u>: Whenever the existing quality of water is better than the quality of water established in this Basin Plan as objectives (both narrative and numerical), such existing quality shall be maintained unless appropriate findings are made under the policy.</p> <p><u>Los Angeles</u>: Whenever the existing quality of water is better than the quality established in policies as of the date on which such policies become effective, such existing high quality will be maintained until it has been demonstrated to the State that any change will be consistent with maximum benefit to the people of the State, will not reasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies.</p>
Unionized Ammonia	<p>Lahontan and Los Angeles: Ammonia concentrations shall not exceed the values listed in Basin Plan Tables 3-1 to 3-4 derived from EPA ammonia criteria for freshwater and based on temperature and pH conditions.</p> <p><u>Lahontan</u>: Separate objectives for temperature and pH values not listed in Basin Plan Tables 3-1 to 3-3; objectives are calculated from for one-hour and four-day averages are determined using equations (Page 3-3 and Page 3-4 of the Basin Plan).</p> <p><u>Los Angeles</u>: Additional objectives for freshwater four-day objective (2.5 times the 30-day average objective) based on pH, temperature and presence/absence of early life stage fish; for inland surface waters not characteristic of freshwater (one-hour average and four-day average based on fixed concentrations of un-ionized ammonia at which four-day average concentration of un-ionized ammonia not to exceed 0.035 mg/L and one-hour average concentration not to exceed 0.233 mg/L); and inland surface waters characteristic of freshwater (not to exceed the values calculated for appropriate instream conditions of Basin Plan Tables 3-1 to 3-3).</p>
Coliform Bacteria	<p><u>Lahontan</u>: Waters shall not contain concentrations of coliform organisms attributable to anthropogenic sources, including human and livestock wastes. The fecal coliform concentration during any 30-day period shall not exceed a log mean of 20/100 ml, nor shall more than 10 percent of all samples collected during any 30-day period exceed 40/100 ml.</p> <p><u>Los Angeles</u>:</p> <p>In Fresh Waters Designated for Water Contact Recreation</p> <ol style="list-style-type: none"> <li>1. Geometric Mean Limits - <i>E.coli</i> density shall not exceed 126/100 ml.</li> <li>2. Single Sample Limits - <i>E.coli</i> density shall not exceed 235/100 ml.</li> </ol> <p>In Fresh Waters Designated for Limited Contact Recreation</p> <ol style="list-style-type: none"> <li>1. Geometric Mean Limits - <i>E.coli</i> density shall not exceed 126/100 ml.</li> <li>2. Single Sample Limits - <i>E.coli</i> density shall not exceed 576 / 100 ml.</li> </ol> <p>In waters designated for non-water contact recreation and not designated for water contact recreation, the fecal coliform concentration shall not exceed a log mean of 2,000/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 percent of samples collected during any 30-day period exceed 4,000/100 ml.</p>

**Table G-1. Summary of Water Quality Objectives for Inland Surface Waters in the Los Angeles and Lahontan Basin Plan (continued)**

Parameter	Summary of Water Quality Objectives
Biostimulatory Substances	Lahontan and Los Angeles: Waters shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect the water for beneficial uses.
Chemical Constituents	<p>Lahontan and Los Angeles: Waters designated as Municipal and Domestic Supply shall not contain concentrations of chemical constituents in excess of the maximum contaminant level or secondary maximum contaminant level based upon drinking water standards specified in CCR Title 22. Waters designated as Agricultural Supply shall not contain concentrations of chemical constituents in amounts that adversely affect the water for beneficial uses (i.e., agricultural purposes). Waters shall not contain concentrations of chemical constituents in amounts that adversely affect the water for beneficial uses.</p> <p>Lahontan: Waters designated as AGR shall not contain concentrations of chemical constituents in amounts that adversely affect the water for beneficial uses (i.e., agricultural purposes)</p>
Total Residual Chlorine	<p><u>Lahontan</u>: For the protection of aquatic life, total chlorine residual shall not exceed either a median value of 0.002 mg/L or a maximum value of 0.003 mg/L.</p> <p><u>Los Angeles</u>: Chlorine residual shall not be present in surface water discharges at concentrations that exceed 0.1 mg/L and shall not persist in receiving waters at any concentration that causes impairment of beneficial uses.</p>
DO	<p><u>Lahontan</u>: The dissolved oxygen concentration, as percent saturation, shall not be depressed by more than 10 percent, nor shall the minimum dissolved oxygen concentration be less than 80 percent of saturation. Waters designated as Cold Freshwater Habitat shall have a minimum 30 day mean DO of 6.5 mg/L; for Warm Freshwater Habitat, the minimum 30 day mean shall be at 5.5 mg/L (Basin Plan Table 3-6).</p> <p><u>Los Angeles</u>: At a minimum (see specifics below), the mean annual dissolved oxygen concentration of all waters shall be greater than 7 mg/L, and no single determination shall be less than 5 mg/L, except when natural conditions cause lesser concentrations.</p> <p>The dissolved oxygen content of all surface waters designated as Warm Freshwater Habitat shall not be depressed below 5 mg/L as a result of waste discharges.</p> <p>The dissolved oxygen content of all surface waters designated as Cold Freshwater Habitat shall not be depressed below 6 mg/L as a result of waste discharges.</p> <p>The dissolved oxygen content of all surface waters designated as both Cold Freshwater Habitat and Spawning, Reproduction, and/or Early Development shall not be depressed below 7 mg/L as a result of waste discharges.</p>
Color	Lahontan and Los Angeles: Waters shall be free of coloration that causes nuisance or adversely affects the water for beneficial uses.
Exotic Vegetation	<u>Los Angeles</u> : Exotic vegetation shall not be introduced around stream courses to the extent that such growth causes nuisance or adversely affects beneficial uses.

**Table G-1. Summary of Water Quality Objectives for Inland Surface Waters in the Los Angeles and Lahontan Basin Plan (continued)**

Parameter	Summary of Water Quality Objectives
Floating Materials	<p><u>Lahontan and Los Angeles:</u> Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect the water for beneficial uses.</p> <p><u>Lahontan:</u> For natural high-quality waters, the concentrations of floating material shall not be altered to the extent that such alterations are discernable at the 10 percent significance level.</p>
Methylene Blue Activated Substances (MBAS)	<p><u>Los Angeles:</u> Waters shall not have MBAS concentrations greater than 0.5 mg/L in waters designated Municipal and Domestic Supply.</p>
Nitrogen	<p><u>Los Angeles:</u> Waters shall not exceed 10 mg/L nitrogen as nitrate-nitrogen plus nitrite-nitrogen (NO<sub>3</sub>-N + NO<sub>2</sub>-N), 45 mg/L as nitrate (NO<sub>3</sub>), 10 mg/L as nitrate-nitrogen (NO<sub>3</sub>-N), 1 mg/L as nitrite-nitrogen (NO<sub>2</sub>-N), or as otherwise designated in Table 3-10.</p>
Oil and Grease	<p><u>Lahontan and Los Angeles:</u> Waters shall not contain oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water that cause nuisance or otherwise adversely affect the water for beneficial uses.</p> <p><u>Lahontan:</u> For natural high-quality waters, the concentration of oils, greases, or other film or coat-generating substances shall not be altered.</p>
Nondegradation of Aquatic Communities and Populations	<p><u>Lahontan:</u> All wetlands shall be free from substances attributable to wastewater or other discharges that produce adverse physiological responses in humans, animals, or plants, or that lead to the presence of undesirable or nuisance aquatic life. All wetlands shall be free from activities that would substantially impair the biological community as it naturally occurs due to physical, chemical, and hydrologic processes.</p>
Pesticides	<p><u>Lahontan:</u> Pesticide concentrations, individually or collectively, shall not exceed the lowest detectable levels, using the most recent detection procedures available.</p> <p><u>Los Angeles:</u> No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses.</p> <p><u>Lahontan and Los Angeles:</u> There shall not be an increase in pesticide concentrations found in bottom sediments. There shall be no detectable increase in bioaccumulation of pesticides in aquatic life. Waters designated as Municipal and Domestic Supply shall not contain concentrations of pesticides or herbicides in excess of the limiting concentrations specified in Table 64444-A of Section 64444 (Organic Chemicals) of CCR Title 22.</p>

**Table G-1. Summary of Water Quality Objectives for Inland Surface Waters in the Los Angeles and Lahontan Basin Plan (continued)**

Parameter	Summary of Water Quality Objectives
pH	<p>Lahontan: In fresh waters with designated beneficial uses of Cold Freshwater Habitat or Warm Freshwater Habitat, changes in normal ambient pH levels shall not exceed 0.5 pH units. For all other waters of the Region, the pH shall not be depressed below 6.5 nor raised above 8.5. The RWQCB recognizes that some waters of the Region may have natural pH levels outside of the 6.5 to 8.5 range. Compliance with the pH objective for these waters will be determined on a case-by-case basis.</p> <p>Los Angeles: The pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharges. Ambient pH levels shall not be changed more than 0.5 units from natural conditions as a result of waste discharge.</p>
Polychlorinated Biphenyls	<p><u>Los Angeles</u>: Pass-through or uncontrollable discharges to waters of the Region, or at locations where the waste can subsequently reach water of the Region, are limited to 70 pg/L (30 day average) for protection of human health and 14 ng/L and 30 ng/L (daily average) to protect aquatic life in inland fresh waters and estuarine waters respectively.</p>
Radioactivity	<p><u>Lahontan</u>: Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life. Waters designated as Municipal and Domestic Supply shall not contain concentrations of radionuclides in excess of the limits specified in Table 4 of Section 64443 (Radioactivity) of CCR Title 22.</p> <p><u>Los Angeles</u>: Waters designated for use as Municipal and Domestic Supply shall not contain concentrations of radionuclides in excess of the limits specified in Table 64442 of Section 64442 (Gross Alpha Particle Activity, Radium-226, Radium-228, and Uranium) and Table 64443 of Section 64443 (Beta Particle and Photon Radioactivity) of CCR Title 22.</p>
Sediment	<p>Lahontan: The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect the water for beneficial uses.</p>
Settleable Materials	<p>Lahontan: Waters shall not contain substances in concentrations that result in deposition of material that causes nuisance or that adversely affects the water for beneficial uses. For natural high-quality waters, the concentration of settleable materials shall not be raised by more than 0.1 milliliter per liter.</p> <p>Los Angeles: Waters shall not contain suspended or settleable material in concentrations that cause nuisance or adversely affect beneficial uses.</p>
Suspended Materials	<p><u>Lahontan</u>: Waters shall not contain suspended materials in concentrations that cause nuisance or that adversely affect the water for beneficial uses. For natural high-quality waters, the concentration of total suspended materials shall not be altered to the extent that such alterations are discernible at the 10 percent significance level.</p> <p><u>Los Angeles</u>: Waters shall not contain suspended or settleable material in concentrations that cause nuisance or adversely affect beneficial uses.</p>

**Table G-1. Summary of Water Quality Objectives for Inland Surface Waters in the Los Angeles and Lahontan Basin Plan (continued)**

Parameter	Summary of Water Quality Objectives
Taste and Odor	<p>Lahontan and Los Angeles: Waters shall not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish or other edible products of aquatic origin, that cause nuisance, or that adversely affect the water for beneficial uses.</p> <p><u>Lahontan</u>: For natural high-quality waters, the taste and odor shall not be altered.</p>
Temperature	<p>Lahontan and Los Angeles: The natural receiving water temperature of all waters shall not be altered unless it can be demonstrated to the satisfaction of the RWQCB that such an alteration in temperature does not adversely affect the water for beneficial uses. For waters designated Warm Freshwater Habitat, water temperature shall not be altered by more than 5 degrees Fahrenheit (5°F) above or below the natural temperature.</p> <p><u>Lahontan</u>: For waters designated Cold Freshwater Habitat, the temperature shall not be altered.</p> <p><u>Los Angeles</u>: For waters designated Cold Freshwater Habitat, water temperature shall not be altered by more than 5°F above the natural temperature.</p>
Toxicity	<p>Lahontan and Los Angeles: All waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life.</p>
Turbidity	<p>Lahontan and Los Angeles: Waters shall be free of changes in turbidity that cause nuisance or adversely affect the water for beneficial uses.</p> <p><u>Lahontan</u>: Increases in turbidity shall not exceed natural levels by more than 10 percent.</p> <p><u>Los Angeles</u>: Where natural turbidity is between 0 and 50 NTU, increases shall not exceed 20 percent. Where natural turbidity is greater than 50 NTU, increases shall not exceed 10 percent.</p>

Source: California RWQCB Lahontan Region 1995 and California RWQCB Los Angeles Region 1994, DWR 2015c.

Key:

CCR = California Code of Regulations

DO = dissolved oxygen

EPA = United States Environmental Protection Agency

MBAS = Methylene Blue Activated Substances

mg/L = milligrams per liter

mL = milliliters

NTU = Nephelometric Turbidity Unit

RWQCB = Regional Water Quality Control Board



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**Table G-2. Special Status Plant Species Evaluated for Potential Occurrence in the Project Area**

Common Name/ Scientific Name	Status <sup>1</sup>	Flowering Period	Elevation Range (feet)	Habitats <sup>2</sup>	Potential for Occurrence in the Project Area
Mt. Pinos Onion ( <i>Allium howellii</i> var. <i>clokeyi</i> )	1B.3, LPNF	April - June	4265 - 6070	<ul style="list-style-type: none"> <li>• Meadows and seeps (edges)</li> <li>• Pinyon and juniper woodland</li> </ul>	Potential habitat exists.
California Androsace ( <i>Androsace elongata</i> ssp. <i>acuta</i> )	4.2	March - June	492 - 3937	<ul style="list-style-type: none"> <li>• Chaparral</li> <li>• Cismontane woodland</li> <li>• Coastal scrub</li> <li>• Meadows and seeps</li> <li>• Pinyon and juniper woodland</li> <li>• Valley and foothill grassland</li> </ul>	Potential habitat exists. Potential to occur in upland areas surrounding Quail Lake and Pyramid Lake (DWR 2014, Environmental Science Associates 2014a).
Horn's Milk-vetch ( <i>Astragalus hornii</i> var. <i>hornii</i> )	1B.1	May – October	197 – 2789	<ul style="list-style-type: none"> <li>• Lake margins with alkaline soils</li> <li>• Meadows and seeps</li> <li>• Playas</li> </ul>	Potential habitat exists. Potential to occur in wetland areas surrounding Pyramid Lake (DWR 2014, Environmental Science Associates 2014).
Round-leaved Filaree ( <i>California macrophylla</i> )	1B.2, BLM	March - May	49 - 3937	<ul style="list-style-type: none"> <li>• Cismontane woodland (clay soils)</li> <li>• Valley and foothill grassland (clay soils)</li> </ul>	CNDDDB occurrences in Lebec, La Liebre Ranch, Whitaker Peak, and Warm Springs Mountain quadrangles. Potential to occur in upland areas surrounding Quail Lake (DWR 2014, Environmental Science Associates 2014a).
Catalina Mariposa Lily ( <i>Calochortus catalinae</i> )	4.2	February - June	49 - 2297	<ul style="list-style-type: none"> <li>• Chaparral</li> <li>• Cismontane woodland</li> <li>• Coastal scrub</li> <li>• Valley and foothill grassland</li> </ul>	Potential habitat exists.
Club-haired Mariposa Lily ( <i>Calochortus clavatus</i> var. <i>clavatus</i> )	4.3, ANF, LPNF	March - June	246 - 4265	Typically occurs on serpentinite, clay, rocky in: <ul style="list-style-type: none"> <li>• Chaparral</li> <li>• Cismontane woodland</li> <li>• Coastal scrub</li> <li>• Valley and foothill grassland</li> </ul>	Potential habitat exists. Potential to occur in upland areas surrounding Pyramid Lake (DWR 2014, Environmental Science Associates 2014).
Slender Mariposa Lily ( <i>Calochortus clavatus</i> var. <i>gracilis</i> )	1B.2, ANF, LPNF, BLM	March - November	1050 - 3281	<ul style="list-style-type: none"> <li>• Chaparral</li> <li>• Coastal scrub</li> <li>• Valley and foothill grassland</li> </ul>	CNDDDB occurrences in Black Mountain, Liebre Mountain, Newhall, Whitaker Peak, and Warm Springs Mountain quadrangles. Specifically identified by CNDDDB as occurring near the southwestern end of Elderberry Forebay. Potential to occur in upland areas surrounding Quail Lake and Pyramid Lake (DWR 2014, Environmental Science Associates 2014a).
Late-flowered Mariposa Lily ( <i>Calochortus fimbriatus</i> )	1B.3, ANF, LPNF	June - August	902 - 6250	Often occurs on serpentinite soils in <ul style="list-style-type: none"> <li>• Chaparral</li> <li>• Cismontane woodland</li> <li>• Riparian woodland</li> </ul>	Potential habitat exists. Potential to occur in upland areas surrounding Quail Lake (DWR 2014, Environmental Science Associates 2014a).
Palmer's Mariposa Lily ( <i>Calochortus palmeri</i> var. <i>palmeri</i> )	1B.2, ANF, LPNF, SBNF	April - July	2329 - 7841	Mesic areas, including <ul style="list-style-type: none"> <li>• Chaparral</li> <li>• Lower montane coniferous forest</li> <li>• Meadows and seeps</li> </ul>	CNDDDB occurrences in Liebre Mountain, La Liebre Ranch, and Whitaker Peak quadrangles. Potential to occur in upland areas surrounding Quail Lake (DWR 2014, Environmental Science Associates 2014a).

**Table G-2. Special Status Plant Species Evaluated for Potential Occurrence in the Project Area (continued)**

Common Name/ Scientific Name	Status <sup>1</sup>	Flowering Period	Elevation Range (feet)	Habitats <sup>2</sup>	Potential for Occurrence in the Project Area
Plummer's Mariposa Lily ( <i>Calochortus plummerae</i> )	4.2	May - July	328 - 5577	Granitic, rocky soils in • Chaparral • Cismontane woodland • Coastal scrub • Lower montane coniferous forest • Valley and foothill grassland	Potential habitat exists. Potential to occur in upland areas surrounding Pyramid Lake (DWR 2014, Environmental Science Associates 2014a).
Peirson's Morning-glory ( <i>Calystegia peirsonii</i> )	4.2	April - June	98 - 4921	• Chaparral • Cismontane woodland • Coastal scrub • Lower montane coniferous forest • Valley and foothill grassland	CNDDDB occurrences in Whitaker Peak quadrangles. Specifically mapped by CNDDDB in Project boundary in Castaic Creek area upstream of Castaic Powerplant. Potential to occur in upland areas surrounding Quail Lake and Pyramid Lake (DWR 2014, Environmental Science Associates 2014a).
Mt. Gleason Paintbrush ( <i>Castilleja gleasonii</i> )	1B.2, CR, ANF, BLM	May - September	3806 - 7119	• Chaparral • Lower montane coniferous forest • Pinyon and juniper woodland	CNDDDB occurrences Liebre Mountain quadrangle.
Island Mountain-mahogany ( <i>Cercocarpus betuloides</i> var. <i>blancheae</i> )	4.3	February - May	98 - 1969	• Closed-cone coniferous forest • Chaparral	Potential habitat exists.
Mojave Spineflower ( <i>Chorizanthe spinosa</i> )	4.2	March - July	20 - 4265	• Mojavean desert scrub • Playas	Potential habitat exists.
Monkey-flower Savory ( <i>Clinopodium mimuloides</i> )	4.2	June - October	1001 - 5906	• Streambanks, mesic areas • Chaparral	Potential habitat exists. Potential to occur in stream bank areas in the vicinity of Pyramid Lake (DWR 2014, Environmental Science Associates 2014a).
Paniculate Tarplant ( <i>Deinandra paniculata</i> )	4.2	April - November	82 - 3084	Usually vernal mesic areas, sometimes sandy soils in • Coastal scrub • Valley and foothill grassland • Vernal pools	Potential habitat exists.
Mt. Pinos Larkspur ( <i>Delphinium parryi</i> ssp. <i>purpureum</i> )	4.3, LPNF	May - June	3281 - 8530	• Chaparral • Mojavean desert scrub • Pinyon and juniper woodland	Potential habitat exists.
Umbrella Larkspur ( <i>Delphinium umbraculorum</i> )	1B.3, LPNF	April - June	1312 - 5249	• Chaparral • Cismontane woodland	CNDDDB occurrences Lebec quadrangle.
Tehachapi Buckwheat ( <i>Eriogonum callistum</i> )	1B.1	May - July	4593 - 4921	Openings, rocky soils, and limestone areas in chaparral	Potential habitat exists.
Fort Tejon Woolly Sunflower ( <i>Eriophyllum lanatum</i> var. <i>hallii</i> )	1B.1, LPNF	May - July	3494 - 4921	• Chaparral • Cismontane woodland	CNDDDB occurrences Lebec quadrangle.
San Gabriel bedstraw ( <i>Galium grande</i> )	1B.2, ANF, BLM	January - July	1394 - 4921	• Broadleaved upland forest • Chaparral • Cismontane woodland • Lower montane coniferous forest	Potential habitat exists.

Table G-2. Special Status Plant Species Evaluated for Potential Occurrence in the Project Area (continued)

Common Name/ Scientific Name	Status <sup>1</sup>	Flowering Period	Elevation Range (feet)	Habitats <sup>2</sup>	Potential for Occurrence in the Project Area
Palmer's Grappling Hook ( <i>Harpagonella palmeri</i> )	4.2	March - May	66 - 3133	On clay soils; open grassy areas within: • Chaparral • Coastal scrub • Valley and foothill grassland	Potential habitat exists.
Newhall Sunflower ( <i>Helianthus inexpectatus</i> )	1B.1	August - October	984 - 984	Freshwater, seeps in • Marshes and swamps • Riparian woodland	Potential habitat exists.
Los Angeles Sunflower ( <i>Helianthus nuttallii</i> ssp. <i>parishii</i> )	1A	August - October	33 - 5495	• Marshes and swamps (coastal salt and freshwater)	Presumed extirpated, not likely to occur (CNPS 2015, DWR 2014, Environmental Science Associates 2014a).
Vernal Barley ( <i>Hordeum intercedens</i> )	3.2	March - June	16 - 3281	• Coastal dunes • Coastal scrub • Valley and foothill grassland (saline flats and depressions) • Vernal pools	Potential habitat exists.
Southern California Black Walnut ( <i>Juglans californica</i> )	4.2	March - August	164 - 2953	Alluvial areas in • Chaparral • Cismontane woodland • Coastal scrub • Riparian woodland	Potential habitat exists.
Fragrant Pitcher Sage ( <i>Lepechinia fragrans</i> )	4.2, ANF, SBNF	March - October	66 - 4298	• Chaparral	Potential habitat exists.
Ross' Pitcher Sage ( <i>Lepechinia rossii</i> )	1B.2, ANF, LPNF	May - September	1001 - 2592	• Chaparral	CNDDDB occurrences Whitaker Peak quadrangle.
Ocellated Humboldt Lily ( <i>Lilium humboldtii</i> ssp. <i>ocellatum</i> )	4.2	March - August	98 - 5906	Openings in: • Chaparral • Cismontane woodland • Coastal scrub • Lower montane coniferous forest • Riparian woodland	Potential habitat exists. Potential to occur in upland or riparian areas surrounding Pyramid Lake (DWR 2014, Environmental Science Associates 2014a).
Sylvan Microseris ( <i>Microseris sylvatica</i> )	4.2	March - June	148 - 4921	• Chaparral • Cismontane woodland • Pinyon and juniper woodland • Valley and foothill grassland (serpentine)	Potential habitat exists. Potential to occur in upland areas surrounding Quail Lake and Pyramid Lake (DWR 2014, Environmental Science Associates 2014a).
Tehachapi monardella ( <i>Monardella linoides</i> ssp. <i>oblonga</i> )	1B.3, LPNF	June - August	2953 - 8104	• Lower montane coniferous forest • Pinyon and juniper woodland • Upper montane coniferous forest	Potential habitat exists.
Baja Navarretia ( <i>Navarretia peninsularis</i> )	1B.2, ANF, LPNF, SBNF	May - August	4921 - 7546	Mesic. • Chaparral (openings) • Lower montane coniferous forest • Meadows and seeps • Pinyon and juniper woodland	CNDDDB occurrences Lebec quadrangle.

**Table G-2. Special Status Plant Species Evaluated for Potential Occurrence in the Project Area (continued)**

Common Name/ Scientific Name	Status <sup>1</sup>	Flowering Period	Elevation Range (feet)	Habitats <sup>2</sup>	Potential for Occurrence in the Project Area
Piute Mountains Navarretia ( <i>Navarretia setiloba</i> )	1B.1	April - July	935 - 6890	Clay or gravelly loam. • Cismontane woodland • Pinyon and juniper woodland • Valley and foothill grassland	CNDDDB occurrences Lebec quadrangle. Potential to occur in upland areas surrounding Quail Lake (DWR 2014, Environmental Science Associates 2014a).
Robbins' Nemacladus ( <i>Nemacladus secundiflorus</i> var. <i>robbinsii</i> )	1B.2, ANF, LPNF	April - June	1148 - 5577	Occurs in openings in: • Chaparral • Valley and foothill grassland	Potential habitat exists. Potential to occur in upland areas surrounding Quail Lake and Pyramid Lake (DWR 2014, Environmental Science Associates 2014a).
Short-jointed Beavertail ( <i>Opuntia basilaris</i> var. <i>brachyclada</i> )	1B.2, ANF, SBNF, BLM	April - August	1394 - 591	• Chaparral • Mojavean desert scrub • Pinyon and juniper woodland	CNDDDB occurrences Newhall quadrangle.
Bakersfield cactus ( <i>Opuntia basilaris</i> var. <i>treleasei</i> )	1B.1	April - May	394 - 4757	Sandy or gravelly areas in • Cismontane woodland • Valley and foothill grassland	Potential habitat exists. Potential to occur in upland areas surrounding Quail Lake (DWR 2014, Environmental Science Associates 2014a).
Adobe Yampah ( <i>Perideridia pringlei</i> )	4.3	April - July	984 - 5906	Serpentinite, often clay soils in: • Chaparral • Cismontane woodland • Coastal scrub • Pinyon and juniper woodland	Potential habitat exists. Potential to occur in upland areas surrounding Quail Lake and Pyramid Lake (DWR 2014, Environmental Science Associates 2014a).
Hubby's Phacelia ( <i>Phacelia hubbyi</i> )	4.2	April - July	3 - 3281	Gravelly, rocky, and talus-slope areas in • Chaparral • Coastal scrub • Valley and foothill grassland	Potential habitat exists.
Mojave Phacelia ( <i>Phacelia mohavensis</i> )	4.3	April - August	4593 - 8202	Sandy or gravelly soils in • Cismontane woodland • Lower montane coniferous forest • Meadows and seeps • Pinyon and juniper woodland	Potential habitat exists.
Chaparral Ragwort ( <i>Senecio aphanactis</i> )	2B.2	January - April	49 - 2625	Sometimes on alkaline soils in • Chaparral • Cismontane woodland • Coastal scrub	Potential habitat exists. Potential to occur in upland areas surrounding Pyramid Lake (DWR 2014, Environmental Science Associates 2014a).
San Bernardino Aster ( <i>Symphyotrichum defoliatum</i> )	1.B.2, ANF, LPNF, SBNF, BLM	July - November	7 - 6693	Near ditches, streams, springs in • Cismontane woodland • Coastal scrub • Lower montane coniferous forest • Meadows and seeps • Marshes and swamps • Valley and foothill grassland (vernally mesic)	CNDDDB occurrences Lebec quadrangle. Potential to occur in shoreline areas and adjacent wetlands of Quail Lake and Pyramid Lake (DWR 2014, Environmental Science Associates 2014a).

**Table G-2. Special Status Plant Species Evaluated for Potential Occurrence in the Project Area (continued)**

Common Name/ Scientific Name	Status <sup>1</sup>	Flowering Period	Elevation Range (feet)	Habitats <sup>2</sup>	Potential for Occurrence in the Project Area
Greata's Aster ( <i>Symphyotrichum greatae</i> )	1.B.3, BLM	June - October	984 - 6594	Mesic areas, specifically • Broadleafed upland forest • Chaparral • Cismontane woodland • Lower montane coniferous forest • Riparian woodland	CNDDDB occurrences Liebre Moutain and Whitaker Peak quadrangles. Potential to occur in upland areas surrounding Quail Lake and Pyramid Lake (DWR 2014, Environmental Science Associates 2014a).
Lemmon's Syntrichopappus ( <i>Syntrichopappus lemmonii</i> )	4.3	April - June	1640 - 6004	Sandy or gravelly soils in • Chaparral • Pinyon and juniper woodland	Potential habitat exists. Potential to occur in upland areas surrounding Pyramid Lake (DWR 2014, Environmental Science Associates 2014a).
Silvery False Lupine ( <i>Thermopsis californica</i> var. <i>argentata</i> )	4.3	April - October	2182 - 7661	• Cismontane woodland • Lower montane coniferous forest • Pinyon and juniper woodland	Potential habitat exists.

Sources: CNDDDB 2015, CNPS 2015, BLM 2015, USFS 2013

Notes:

<sup>1</sup>CNPS Status:

1A = presumed extirpated in California and either rare or extinct elsewhere

1B = rare, threatened, or endangered in California and elsewhere

2A = presumed extirpated in California, but common elsewhere

2B = rare, threatened, or endangered in California, but more common elsewhere

3 = more information is needed

4 = plants of limited distribution

Threat Ranks (number following period):

1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

<sup>2</sup>Habitats = habitats are limited the those types that occur within the Project vicinity

The following quadrangles were queried: Lebec, La Liebre Ranch, Black Mountain, Whitaker Peak, Warm Springs Mountain, Newhall, and Cobblestone Mountain

Key:

DWR = California Department of Water Resources

CR = California Rare

ANF = Angeles National Forest Sensitive Plant

LPNF = Los Padres National Forest Sensitive Plant

BLM = Bureau of Land Management

CNDDDB = California Natural Diversity Database

**Table G-3. Non-Native Invasive Plant Species with Known or Potential Occurrence in the Project Area**

Scientific Name	Common Name	Cal-IPC Rating <sup>1</sup>	CFDA Rating <sup>2</sup>	USFS <sup>3</sup>	Habitat	Potential to Occur in the Project Area
<i>Acroptilon repens</i>	Hardheads (Russian Knapweed)	Moderate	B		Various	Potential habitat exists.
<i>Ageratina adenophora</i>	Sticky Snakeroot (Eupatory, Croftonweed, Thoroughwort, Catweed, Hemp Agrimony, Sticky Agrimony, Sticky Eupatorium)	Moderate	NA		Coastal canyons, coastal scrub, slopes, riparian areas. Most invasive in coastal areas.	Potential habitat exists.
<i>Ailanthus altissima</i>	Tree Of Heaven (Chinese Sumac, Paradise-Tree, Copal-tree)	Moderate	C	ANF, LPNF	Riparian, grasslands, oak woodlands, disturbed areas	Potential habitat exists.
<i>Arctotheca calendula</i>	Capeweed (South African Capeweed; Cape Dandelion; Cape Gold)	Moderate	A		Coastal prairies, disturbed sites with exposed soil	Potential habitat exists.
<i>Arundo donax</i>	Giant Reed	High	B	ANF, LPNF	Riparian, sand dunes, wetlands, disturbed sites	Potential habitat exists.
<i>Atriplex semibaccata</i>	Australian saltbush (Berry Saltbush, Creeping Saltbush, Scrambling Berry Saltbush)	Moderate	NA	LPNF	Coastal grasslands, scrub, coastal salt marshes	Potential habitat exists.
<i>Avena barbata</i> , <i>A. fatua</i>	Slender Oat, Wild Oat	Moderate	NA	ANF, LPNF	Grasslands, coastal slopes, coastal sage scrub, disturbed, areas with sandy/poor soils	Potential habitat exists.
<i>Bassia hyssopifolia</i>	Fivehorn Smotherweed (Five-Hook Bassia, Five Horn Bassia, Hyssop-Leaved Echinopsilon, Smotherweed, Thorn Orache)	Limited	NA		Wetland areas, alkaline habitats, and disturbed places such as roadsides and fields	Potential habitat exists.
<i>Brassica nigra</i>	Black Mustard	Moderate	NA	ANF, LPNF	Grasslands, chaparral, coastal sage scrub, especially fogbelt grasslands, disturbed areas	Potential habitat exists. Reported in alluvial terraces adjacent to Middle Piru Creek (Environmental Science Associates 2014b).
<i>Brassica tournefortii</i>	Asian Mustard (Sahara Mustard, Moroccan Mustard)	High	NA		Washes, alkaline flats, coastal scrub, disturbed areas in Sonoran and Mojave deserts	Potential habitat exists.
<i>Bromus diandrus</i>	Ripgut Brome (Great Brome, Ripgut Grass)	Moderate	NA	ANF, LPNF	Coastal dunes, coastal sage scrub, grasslands	Potential habitat exists.
<i>Bromus hordeaceus</i>	Soft Brome (Soft Chess, Lopgrass)	Limited	NA		Grasslands, disturbed and open areas at low elevations	Potential habitat exists.
<i>Bromus arvensis</i> (=japonicas)	Field Brome (Japanese brome, Japanese chess)	Limited	NA		Grasslands, scrub, pinyon-juniper	Potential habitat exists.
<i>Bromus madritensis</i> ssp. <i>rubens</i>	Red Brome (Foxtail Chess)	High	NA	ANF, LPNF	Grasslands, scrub, desert scrub type conversions. Also in disturbed areas, roadsides, agricultural fields, rangelands, and forestry sites.	Potential habitat exists.
<i>Bromus tectorum</i>	Cheatgrass (Downy Brome)	High	NA	ANF, LPNF	Forest, woodland, grassland, desert, chaparral, and rangeland	Potential habitat exists.
<i>Cardaria draba</i>	Whitetop	Moderate	B	LPNF	Riparian areas and marshes	Potential habitat exists.
<i>Carduus pycnocephalus</i>	Italian Plumeless Thistle (Italian Thistle)	Moderate	C	LPNF	Grasslands, shrublands, oak woodlands, disturbed open sites, roadsides, pastures, and waste areas	Potential habitat exists.
<i>Carduus tenuiflorus</i>	Winged Plumeless Thistle	Limited	NA		Grasslands	Potential habitat exists.

**Table G-3. Non-Native Invasive Plant Species with Known or Potential Occurrence in the Project Area (continued)**

Scientific Name	Common Name	Cal-IPC Rating <sup>1</sup>	CFDA Rating <sup>2</sup>	USFS <sup>3</sup>	Habitat	Potential to Occur in the Project Area
<i>Centaurea melitensis</i>	Malta Star-Thistle (Tocalote)	Moderate	C	LPNF	Disturbed and open areas, including grasslands, open woodlands, agricultural fields, and roadsides	Potential habitat exists. Reported to be common in grasslands adjacent to Middle Piru Creek (Environmental Science Associates 2014b).
<i>Centaurea solstitialis</i>	Yellow Star-Thistle	High	C	ANF, LPNF	Open hills, grasslands, open woodlands, fields, roadsides, and rangelands	Potential habitat exists.
<i>Centaurea stoebe</i> ssp. <i>micranthos</i>	Spotted Knapweed	High	NA	ANF, LPNF	Riparian, grassland, wet meadows, forests	Potential habitat exists.
<i>Cirsium vulgare</i>	Bull Thistle	Moderate	C	LPNF	Riparian, marshes, meadows	Potential habitat exists.
<i>Conium maculatum</i>	Poison Hemlock	Moderate	NA	LPNF	Meadows and pastures, riparian and oak understory, roadsides and fields, prefers disturbed areas	Potential habitat exists.
<i>Cynara cardunculus</i>	Cardoon (Artichoke Thistle, Wild Artichoke)	Moderate	B	LPNF	Disturbed open sites, including grassland, chaparral, coastal scrub, and riparian areas	Potential habitat exists.
<i>Cynodon dactylon</i>	Bermudagrass (Couch Grass, Devil Grass, Wire Grass, Vine Grass)	Moderate	NA		Grasslands, riparian areas	Potential habitat exists.
<i>Cytisus scoparius</i>	Scotch Broom (English Broom, Common Broom)	High	C	ANF, LPNF	Coastal scrub, oak woodlands	Potential habitat exists.
<i>Dactylis glomerata</i>	Orchardgrass	Limited	NA		Pasture and various native habitats	Potential habitat exists.
<i>Descurainia sophia</i>	Herb Sophia (Flixweed; Tansy Mustard)	Limited	NA	LPNF	Roadsides, in agricultural fields, disturbed desert areas, scrub, grasslands and woodlands	Potential habitat exists.
<i>Erodium cicutarium</i>	Redstem Stork's Bill (Filaree, Redstem Filaree)	Limited	NA	--	Roadsides, grasslands, fields, and semi-desert areas	Potential habitat exists.
<i>Eucalyptus camaldulensis</i>	River Red Gum (Red Gum, Red River Gum)	Limited	NA	--	Riparian areas	Potential habitat exists.
<i>Ficus carica</i>	Edible Fig	Moderate	--	Yes	Riparian woodlands	Potential habitat present.
<i>Foeniculum vulgare</i>	Sweet Fennel (Fennel, Sweet Anise)	High	--	Yes	Grasslands, coastal scrub, riparian, and wetlands	Potential habitat present.
<i>Gazania linearis</i>	Treasure Flower (Gazania)	Moderate	NA	--	Grassland, coastal scrub, riparian areas	Potential habitat exists.
<i>Geranium dissectum</i>	Cutleaf Geranium	Limited	--	--	Disturbed areas, grasslands, and hedge banks	Potential habitat present.
<i>Hirschfeldia incana</i>	Shortpod Mustard (Mediterranean Mustard, Summer Mustard, Greek Mustard)	Moderate	--	--	Coastal scrub and grasslands	Potential habitat present.
<i>Holcus lanatus</i>	Common Velvetgrass (Yorkshire Fog)	Moderate	--	Yes	Coastal grasslands, wetlands	Potential habitat present.
<i>Hordeum marinum</i>	Seaside Barley	Moderate	NA	--	Grasslands	Potential habitat exists.
<i>Hordeum murinum</i>	Mouse Barley (Farmer's Foxtail, Foxtail Barley)	Moderate	NA	--	Grasslands	Potential habitat exists.
<i>Hypochaeris glabra</i>	Smooth Cat's Ear	Limited	--	--	Disturbed places, such as roadsides and landscaped areas, as well as grasslands, woodland, and scrub	Potential habitat present.
<i>Lepidium chalepense</i>	kochia; belvedere; belvedere-cypress; fireball; fireweed; Mexican burningbush; mock cypress	Limited	NA	--	Wet and dry grasslands, scrubs, and arid areas with alkali soils	Potential habitat exists.



**Table G-3. Non-Native Invasive Plant Species with Known or Potential Occurrence in the Project Area (continued)**

Scientific Name	Common Name	Cal-IPC Rating <sup>1</sup>	CFDA Rating <sup>2</sup>	USFS <sup>3</sup>	Habitat	Potential to Occur in the Project Area
<i>Lepidium latifolium</i>	Broadleaved Pepperweed (Perennial Pepperweed, Tall Whitetop)	High	B	LPNF	Coastal inland marshes, riparian, wetlands, grasslands, and disturbed sites	Potential habitat exists.
<i>Linaria dalmatica</i> ssp. <i>dalmatica</i>	Dalmation Toadflax	Limited	NA	LPNF	Disturbed open sites, fields, pastures, degraded rangelands, roadsides, croplands	Potential habitat exists.
<i>Lobularia maritima</i>	Sweet Alyssum (Sweet Alison, Seaside Alyssum, Seaside Lobularia)	Limited	--	--	Scrub, prairies and riparian areas	Potential habitat present.
<i>Lolium perenne</i> ssp. <i>multiflorum</i>	Italian Ryegrass	Moderate	--	Yes	Coastal scrub, grasslands	Potential habitat present.
<i>Marrubium vulgare</i>	Horehound (White Horehound)	Limited	--	--	Disturbed grasslands scrub and riparian areas	Documented in vicinity of Devil Canyon Powerplant Second Afterbay (Herzog 2004)
<i>Medicago polymorpha</i>	Burclover (Burr Medic, California Burclover)	Limited	--	Yes	Disturbed areas, including roadsides, grasslands and moist sites	Potential habitat present.
<i>Nicotiana glauca</i>	Tree Tobacco	Moderate	NA	ANF, LPNF	Disturbed soils, vacant lots, along roadsides, streamsides, and other riparian areas	Potential habitat exists.
<i>Pennisetum setaceum</i>	Crimson Fountaingrass (Purple Fountain Grass, Tender Fountain Grass)	Moderate	--	Yes	Grasslands, desert canyons, roadsides	Potential habitat present.
<i>Piptatherum miliaceum</i>	Smilgrass	Limited	--	--	Dry or moist sites in disturbed areas, along roadsides and ditches, riparian areas	Potential habitat present.
<i>Polypogon monspeliensis</i>	Annual Rabbitsfoot Grass (Rabbitfoot Polypogon, Annual Beardgrass, Rabbitfootgrass, Tawny Beardgrass)	Limited	--	--	Grasslands, common in moist to wet areas	Potential habitat present.
<i>Raphanus sativus</i>	Cultivated Radish (Wild Radish)	Limited	NA	--	Grasslands and open/disturbed areas, including roadsides and wetlands	Potential habitat exists.
<i>Robinia pseudoacacia</i>	Black Locust	Limited	NA	ANF, LPNF	Riparian, canyons, can grow on a wide range of sites, but grows best on rich, moist, limestone-derived soils. It does not do well on heavy or poorly drained soils, although it appears to be tolerant of some flooding	Potential habitat exists.
<i>Rubus armeniacus</i>	Himalayan Blackberry	High	NA	LPNF	Riparian, marshes, oak woodlands	Potential habitat exists.
<i>Rumex crispus</i>	Curly Dock	Limited	NA	--	Can grow in many habitats, including grassy places, waste ground, roadsides and near sand dunes but is primarily found in flood plains and in agricultural areas.	Potential habitat exists.
<i>Salsola paulsenii</i>	Barbwire Russian Thistle	Limited	C	--	Found throughout the Mohave Desert in California, prefers loose, sandy soils in desert scrub and disturbed areas, such as roadsides and cultivated fields	Potential habitat exists.
<i>Salsola tragus</i>	Prickly Russian Thistle (Common Saltwort, Russian Tumbleweed, Tumbleweed, Tumbling Weed, Windwitch, Witchweed, Prickly Glasswort)	Limited	C	ANF, LPNF	Agricultural areas, desert, roadsides, disturbed areas	Potential habitat exists. Reported to be common in grasslands adjacent to Middle Piru Creek (Environmental Science Associates 2014b).

**Table G-3. Non-Native Invasive Plant Species with Known or Potential Occurrence in the Project Area (continued)**

Scientific Name	Common Name	Cal-IPC Rating <sup>1</sup>	CFDA Rating <sup>2</sup>	USFS <sup>3</sup>	Habitat	Potential to Occur in the Project Area
<i>Schedonorus (=Festuca) arundinacea</i>	Tall Fescue	Moderate	--	Yes	Coastal scrub, grasslands	Potential habitat present.
<i>Schinus molle</i>	Peruvian Peppertree	Limited	NA	--	Limited to disturbed sites	Potential habitat exists.
<i>Schismus arabicus, S. barbatus</i>	Arabian Schismus, Common Mediterranean Grass	Limited	NA	LPNF	Mojave and Colorado desert shrublands and disturbed areas	Potential habitat exists.
<i>Silybum marianum</i>	Blessed Milkthistle (Milk Thistle, Variegated Thistle, Virgin Mary's Thistle, Lady's Milk, Holy Thistle, Spotted Thistle, Cabbage Thistle, Spotted Thistle, St. Mary's Thistle, White Thistle)	Limited	NA	LPNF	Disturbed, overgrazed, moist pasturelands, fencelines, and other areas	Potential habitat exists.
<i>Sinapis arvensis</i>	Charlock Mustard (Wild Mustard, Canola, Common Mustard, Crunch-Weed, Field Kale, Field Mustard, Kedlock, Rapeseed)	Limited	NA	--	Disturbed areas, including roadsides, grasslands and pastures	Potential habitat exists.
<i>Sisymbrium irio</i>	London Rocket	Moderate	NA	--	Abandoned fields, waste places, roadsides, and orchards	Potential habitat exists.
<i>Spartium junceum</i>	Spanish Broom	High	C	ANF, LPNF	Coastal scrub, grasslands, wetlands, oak woodland, roadcuts	Potential habitat exists. Reported to occur uncommonly in willow scrub along Middle Piru Creek (Environmental Science Associates 2014b).
<i>Tamarix aphylla</i>	Athel Tamarisk	Limited	NA	ANF, LPNF	Riparian areas and lake shores	Potential habitat exists.
<i>Tamarix parviflora</i>	Smallflower Tamarisk (Athel, Athel Pine, Tamarisk, Evergreen Saltcedar)	Limited	B	ANF, LPNF	Desert washes, riparian, seeps, springs, and lake shores	Potential habitat exists.
<i>Tamarix ramosissima</i>	Saltcedar (Tamarisk)	Limited	B	ANF, LPNF	Desert washes, riparian, seeps, springs, and lake shores	Potential habitat exists. Reported in various areas within the Project boundary (Castaic Creek) and along Piru Creek (Environmental Science Associates 2014b, POWER Engineers 2013)
<i>Taeniatherum [=Elymus] caput-medusae</i>	Medusahead	High	C	LPNF	Disturbed sites, grasslands, openings in chaparral and oak woodlands	Potential habitat exists.
<i>Tragopogon porrifolius</i>	Salsify (Oyster Plant)	NA	NA	LPNF	Agricultural land and in other disturbed areas	Potential habitat exists.
<i>Trifolium hirtum</i>	Rose Clover	Moderate	NA	--	Dry rangelands	Potential habitat exists.

**Table G-3. Non-Native Invasive Plant Species with Known or Potential Occurrence in the Project Area (continued)**

Scientific Name	Common Name	Cal-IPC Rating <sup>1</sup>	CFDA Rating <sup>2</sup>	USFS <sup>3</sup>	Habitat	Potential to Occur in the Project Area
<i>Verbascum thapsus</i>	Common Mullein (Woolly Mullei, Lungwort, Feltwort, Torches, Jacob's Staff, Velvetplant, Old Man's Flannel, Miner's Candle)	Limited	NA	--	Meadows, sagebrush, pinyon-juniper woodlands	Potential habitat exists.
<i>Vulpia (=Festuca) myuros</i>	Annual Fescue	Moderate	--	Yes	Coastal scrub, grasslands	Potential habitat present.

Sources: Cal-IPC 2015, CDFA 2010, USFS 2005, USFS 2015

Notes:

<sup>1</sup>Cal-IPC Ratings:

*High* - These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

*Moderate* - These species have substantial and apparent-but generally not severe-ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

*Limited* - These species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

<sup>2</sup>CDFA Ratings:

*A* - An organism of known economic importance subject to state (or commissioner when acting as a state agent) enforced action involving: eradication, quarantine regulation, containment, rejection, or other holding action.

*B* - An organism of known economic importance subject to: eradication, containment, control or other holding action at the discretion of the individual county agricultural commissioner. OR An organism of known economic importance subject to state endorsed holding action and eradication only when found in a nursery.

*C* - An organism subject to no state enforced action outside of nurseries except to retard spread. At the discretion of the county agricultural commissioner. OR An organism subject to no state enforced action except to provide for pest cleanliness in nurseries.

<sup>3</sup>Noxious or invasive plant species listed as occurring or potentially occurring on USFS land in USFS 2005 or USFS 2015.

The following quadrangles were queried: Lebec, La Liebre Ranch, Black Mountain, Whitaker Peak, Warm Springs Mountain, Newhall, and Cobblestone Mountain

Key:

ANF = Angeles National Forest

Cal-IPC = California Invasive Plant Council

CDFA = California Department of Food and Agriculture

LPNF = Los Padres National Forest

NA = Not applicable

USFS = United States Forest Service

**Table G-4. Special-Status Wildlife Species Occurring or Potentially Occurring in the Project Area**

Common Name/ Scientific Name	Status	Habitat Associations	Temporal and Spatial Distribution <sup>1</sup>	Occurrence in Project Area <sup>2</sup>
Yellow-blotched Ensatina ( <i>Ensatina eschscholtzii croceator</i> )	SSC, FSS	Occurs mostly in oak and pine woodlands, chaparral, and talus in the Tehachapi Mountains south to south to Frazier and Alamo Mountains. Found under surface objects, in rodent burrows, and other subterranean retreats.	Yearlong – BOP, COW, CSC, MCH, MCP, MHW, MHC, MRI, SMC, VFR, VOR, WTM	Three records in CNDDDB from Project vicinity (LEB quadrangle) northwest to west of Quail Lake. However, no records in Project area, which is beyond this taxon's known range.
Desert Night Lizard ( <i>Xantusia vigilis vigilis</i> )	SSC, FSS	Occurs in arid and semi-arid areas, closely associated with Joshua trees. Found in rotted stumps, under logs, leaf litter, and in rodent burrows.	Yearlong – AGS, BOP, BOW, DRI, DSW, JOT, PJN, SGR, VOW	No records.
Coast Horned Lizard ( <i>Phrynosoma blainvillii</i> )	SSC	Occurs in scrubland, grassland, coniferous woods, and broadleaf woodlands where there are openings for basking; areas with loamy or sandy soil suitable for burrowing; scattered shrubs or clumps of grass for hiding cover; and ant colonies (a primary food source). Often found on edges of arroyo bottoms, dry washes, and along dirt roads.	Yearlong – AGS, BOP, CRC, COW, CSC, JUN, MCH, MHC, PGS, VFR, VOW	21 records in CNDDDB from the Project vicinity (BMT, GRV, LEB, LLR, MTC, NEW, PIR, and WTP quadrangles), one of which is within Project area at Pyramid Lake.
Sagebrush Lizard ( <i>Sceloporus graciosus</i> )	BLM	Occurs in areas dominated by sagebrush and other shrubs, and open forest. Favors open areas with low shrubs. May be confused with western fence lizard ( <i>S. occidentalis</i> ).	Yearlong – JUN, MCH, MCP, MHW, MHC, PJN, SGB, SMC	No records.
Southern California Legless Lizard ( <i>Anniella stebbinsi</i> ) and/or Northern California Legless Lizard ( <i>A. pulchra</i> )	SSC, FSS	Because the taxonomy of California legless lizards was only recently revised, information on distribution and habitats of each species is limited. <i>A. stebbinsi</i> occurs in coastal sand dunes, sandy washes, alluvial fans, desert scrub, and chaparral, and is mostly found within the coastal plain south of the Transverse Ranges into northern Baja California. Legless lizards in extreme northwestern Los Angeles County could be <i>A. pulchra</i> or intergrades of the two species.	Yearlong – BOP, BOW, CRC, COW, CSC, DSW, MCH, PGS, VFR, VOW	Two records in CNDDDB from Project vicinity (LEB and NEW quadrangles), including record within 2 miles of Quail Lake. No records in Project area.
Southern Rubber Boa ( <i>Charina umbratica</i> )	ST, FSS	The species range is not well documented, but is known to include parts of the San Bernardino and San Jacinto Mountains. Rubber boas found in the Tehachapi Mountains south to Frazier and Alamo Mountains may represent northern rubber boa ( <i>Charina bottae</i> ) or intergrades of the two species. Found in open coniferous and oak-conifer forests.	Yearlong – MCP, MHW, MHC, MRI, SMC, VFR, WTM	No records and not included on lists for Los Padres and Angeles National Forests. See comments under 'Habitat Associations.'
Northern Three-lined Rosy Boa ( <i>Lichanura orcuttii [trivirgata]</i> )	FSS	Found in various arid and semi-arid habitats, including rocky deserts, canyons, and shrubby areas, particularly in riparian sites.	Yearlong – BAR, CRC, CSC, DRI, DSW, JOT, MCH, MCP, PJN	One record in CNDDDB from the Project vicinity (GRV quadrangle). No records in Project area.
San Bernardino Ring-necked Snake ( <i>Diadophis punctatus modestus</i> )	FSS	The species occurs in a wide variety of moist habitats including woodland openings, rocky slopes, chaparral, wet meadows, and farmland, where there is suitable surface cover.	Yearlong – AGS, BOF, BOW, CRC, COW, CSC, FEW, MCH, MCP, MHC, MRI, PAS, PGS, SMC, URB, VFR, VOW	No records.
Coast Patch-nosed Snake ( <i>Salvadora hexalepis virgultea</i> )	SSC	Occurs in coastal California from San Luis Obispo County to Baja California in coastal plain, canyons, rocky hillsides, and brushy areas. In Los Angeles County this burrowing snake occurs west of the desert.	Yearlong – AGS, BAR, BOP, BOW, CRC, COW, CSC, DRI, DW, JOT, MCH, MCP, PJN, SGB, VFR, VOW	No records.
Common Loon ( <i>Gavia immer</i> )	SSC	Winters on lakes, reservoirs, rivers, estuaries, and coastlines. Nests on lakes and other open water areas where there is minimal disturbance. Does not nest in Los Angeles County.	Winter – LAC	No records in CNDDDB from Project vicinity (which only includes nesting records). Occasional winter observations near Project (Castaic Lagoon).
American White Pelican ( <i>Pelecanus erythrorhynchos</i> )	SSC	Wintering and post-breeding pelicans occur (sometimes in large numbers) along the coast, and on lakes, reservoirs, rivers, estuaries, bays, and marshes. Rarely breeds in southern California, except along Colorado River	Summer – BAR Yearlong – LAC	No records.

**Table G-4. Special-Status Wildlife Species Occurring or Potentially Occurring in the Project Area (continued)**

Common Name/ Scientific Name	Status	Habitat Associations	Temporal and Spatial Distribution <sup>1</sup>	Occurrence in Project Area <sup>2</sup>
Least Bittern ( <i>Ixobrychus exilis</i> )	SSC, BCC	Occurs in freshwater or brackish marshes with tall, dense emergent vegetation. A secretive species that can be difficult to document.	Yearlong – FEW Summer – LAC	No records.
Redhead ( <i>Aythya americana</i> )	SSC	Winters and stops during migration in open water on lakes, ponds, and reservoirs. Nests in emergent wetlands, especially where dense cattails or tule are interspersed with open water.	Yearlong – FEW Winter – LAC	No records in CNDDDB from Project vicinity. Occasional nonbreeding observations near Project (Castaic Lagoon).
Northern Goshawk ( <i>Accipiter gentilis</i> )	FP, SSC, FSS, BCC, BLM	Year-round resident of forested habitats, particularly mature coniferous and mixed forests. Few recent records in the mountains of Southern California.	Winter – BOP, BOW, CRC, COW, MCH, SGB, VRI, VOW Yearlong – JUN, MCP, MHW, MHC, MRI, PPN, SMC	No records. Considered unlikely to occur in the BRRTP area, which substantially overlaps the Project Area (USFS, BLM and LADWP 2012).
Golden Eagle ( <i>Aquila chrysaetos</i> )	FP, BCC, BLM	Generally open country, in prairies, arctic and alpine tundra, open wooded country, and barren areas, especially in hilly or mountainous regions. Nests on cliff ledges and in large trees.	Yearlong – AGS, BAR, CRC, COW, CSC, DRI, DSW, FEW, JOT, JUN, MCH, MCP, MHW, MHC, PAS, PGS, PJN, SGB, SMC, URB, VRI, VOW, WTM Summer – MRI	One record in CNDDDB from Project vicinity (LEB quadrangle). No records in CNDDDB in Project area, but observed in flight near Elderberry Forebay (Aspen Environmental Group 2007).
Northern Harrier ( <i>Circus cyaneus</i> )	SSC	Marshes, meadows, grasslands, open rangelands, emergent wetlands, and cultivated fields. Nests on the ground, often in brushy cover near water, but also in grassland, fields, and sagebrush flats.	Winter – CRC, DRI, DSW, MCH Summer – MCP, MHW Yearlong – AGS, BAR, BOP, BOW, COW, CSC, FEW, JUN, LAC, PGS, PJN, SGB, URB, VFR, VOW, WTM	No records.
Ferruginous Hawk ( <i>Buteo regalis</i> )	BCC	Occurs in grasslands, desert scrub, agricultural areas or other areas of sparse shrubs, where there also poles, trees, cliffs, or other elevated features for nesting.		One record in CNDDDB from Project vicinity (LEB quadrangle). No records in Project area.
White-tailed kite ( <i>Elanus leucurus</i> )	FP, BLM	Savanna, open woodland, marshes, partially cleared lands and cultivated fields, mostly in lowland situations. Often near agricultural areas. Nests in groves of deciduous trees.	Yearlong – AGS, BAR, BOP, BOW, CRC, COW, CSC, FEW, MCH, PGS, URB, VRI, VOW, WTM	One record in CNDDDB from Project vicinity (NEW quadrangle). No records in Project area.
Prairie Falcon ( <i>Falco mexicanus</i> )	BCC	Savanna, perennial grasslands, rangeland, and desert scrub. Nests on cliff ledges.		Three records in CNDDDB from Project vicinity (BMT, LEB, and LIM quadrangles). No records in Project area.
American Peregrine Falcon ( <i>Falco peregrinus anatum</i> )	FP, BCC	Breeds in open landscapes with cliffs. Winters in any open habitat, mudflats, coastlines, lake edges and mountain chains, especially in areas where potential prey (other birds) are numerous.	Yearlong – AGS, BAR, BOP, BOW, CRC, COW, CSC, DRI, FEW, JUN, LAC, MCH, MCP, MHW, MHC, MRI, PGS, PJN, SGB, SMC, URB, VRI, VOW, WTM	No records.
Bald Eagle ( <i>Haliaeetus leucocephalus</i> )	SE, FP, FSS, BCC, BLM	Breeding habitat usually includes areas close to coastal areas, bays, rivers, lakes, or other bodies of water that reflect the general availability of primary food sources. Preferentially roosts in conifers or other sheltered sites in winter in some areas.	Winter – CRC, CSC, MCH, MCP Yearlong – AGS, BAR, BOP, BOW, COW, DRI, FEW, JUN, LAC, MHW, MHC, MRI, PGS, PJN, SGB, SMC, VRI, VOW, WTM	No records in CNDDDB. Observed in flight in the Project area (Aspen Environmental Group 2007).

**Table G-4. Special-Status Wildlife Species Occurring or Potentially Occurring in the Project Area (continued)**

Common Name/ Scientific Name	Status	Habitat Associations	Temporal and Spatial Distribution <sup>1</sup>	Occurrence in Project Area <sup>2</sup>
Long-eared Owl ( <i>Asio otus</i> )	SSC	Riparian bottomland forest with over story of willows and cottonwoods; riparian forest along stream corridors (often dominated by live oak trees). Wooded areas with dense vegetation needed for roosting and nesting, adjacent open areas needed for hunting.	Yearlong – AGS, BOP, BOW, CRC, COW, DRI, JUN, MCH, MCP, MHW, MWC, PAS, PGS, SGB, SMC, VRI, VOW, WTM Summer - MRI	No records.
Burrowing Owl ( <i>Athene cunicularia</i> )	SSC, BCC, BLM	Open grasslands, especially prairie, plains, and savanna, sometimes in open areas such as vacant lots near human habitation or airports.	Yearlong – AGS, BAR, CRC, COW, CSC, DRI, DSW, JOT, JUN, MCH, MCP, PAS, PGS, PJN, SGB, URB, VRI, VOW, WTM	Eight records in CNDDDB from the Project vicinity (LEB, MTC, NEW, PIR, and WTP quadrangles). No records in Project area.
California Spotted Owl ( <i>Strix occidentalis occidentalis</i> )	SSC, FSS, BCC, BLM	Mixed forests dominated by black oak, lodgepole pine, red fir from 1200 to 5500 feet elevation	Yearlong – BOP, COW, MHW, MHC, SMC, VRI Summer – MRI	No records.
Olive-sided Flycatcher ( <i>Contopus cooperi</i> )	SSC, BCC	Non-breeding habitat includes a variety of forest, woodland, and open areas with scattered trees, especially where tall dead snags are present. Primary habitat is mature, evergreen montane forest. Breeds in various forest and woodland habitats.	Migrant - BOP Summer – CRC, MCH, MHW, MHC, MRI, SMC	No records.
Vermilion Flycatcher ( <i>Pyrocephalus rubinus</i> )	SSC	Occurs in widely scattered locations of scrub desert, cultivated lands, riparian woodlands, usually near water, including ditches, ponds, and irrigation. Trees and tall shrubs used for nesting and roosting.	Yearlong – DRI	No records.
Purple Martin ( <i>Progne subis</i> )	SSC	Found in a wide variety of forest and woodland areas, where open and partly open sites occur, frequently near water or around towns, where dragonflies and other large, aerial insects are prey.	Summer – AGS, BOP, COW, FEW, LAC, MHW, MHC, PGS, MRI, SMC, URB, VRI, VOW, WTM	No records.
Le Conte's Thrasher ( <i>Toxostoma lecontei</i> )	SSC, BCC	Closely associated with saltbrush and found in relatively open areas including desert scrub and dry washes.	Yearlong – DSW, JOT	No records.
Loggerhead Shrike ( <i>Lanius ludovicianus</i> )	SSC, BCC	Open country with scattered trees and shrubs, savanna, desert scrub, and, occasionally, open woodland; often perches on poles, wires or fence posts	Yearlong – AGS, BAR, BOP, BOW, CRC, COW, CSC, DRI, DSW, JOT, JUN, MCH, MHW, MHC, MRI, PGS, PJN, SGB, VRI, VOW, WTM Winter - URB	Six records in CNDDDB from the Project vicinity (LLR, MTC, NEW, WSM, and WTP quadrangles), some of which are within 2 miles of Project area. No records in Project area.
Gray Vireo ( <i>Vireo vicinior</i> )	SSC, FSS, BCC, BLM	Dry chaparral; in chamise-dominated habitat and mountains of Mojave Desert; associated with juniper and sagebrush. Requires closed to partly open layer of low shrub cover (1-5 feet tall)	Summer – CRC, JUN, MCH, PJN	No records.
Yellow Warbler ( <i>Setophaga petechia</i> )	SSC, BCC	Open scrub, second-growth woodland, thickets, farmlands, and gardens, especially near water; riparian woodlands, especially areas with willows.	Migrant – CRC, CSC, DSW, MCH Summer – BOP, BOW, COW, DRI, MCH, MHW, MHC, MRI, SMC, URB, VRI, VOW	Three records in CNDDDB from the Project vicinity (LEB and VAV quadrangles). Also reported from Piru Creek downstream of Pyramid Lake, Liebre Gulch, and Gorman Creek (Jones and Stokes 2002).
Yellow-breasted Chat ( <i>Icteria virens</i> )	SSC	Second growth, shrubby old pastures, thickets, bushy areas, scrub, woodland undergrowth, and fence rows, including low wet places near streams, pond edges, or swamps; thickets with few tall trees; early successional stages of forest regeneration; commonly in sites close to human habitation.	Migrant – CSC, MRI Summer – VRI Yearlong – VRI	No records.
Grasshopper Sparrow ( <i>Ammodramus savannarum</i> )	SSC	Prefer grasslands of intermediate height for breeding and often associated with clumped vegetation interspersed with patches of bare ground.	Summer – AGS, PGS, WTM	No records.

**Table G-4. Special-Status Wildlife Species Occurring or Potentially Occurring in the Project Area (continued)**

Common Name/ Scientific Name	Status	Habitat Associations	Temporal and Spatial Distribution <sup>1</sup>	Occurrence in Project Area <sup>2</sup>
Bell's Sage Sparrow ( <i>Artemisiospiza belli belli</i> )	BCC	Strongly associated with sagebrush for breeding. Also found in salt-bush brushland, shadscale, antelope brush, rabbitbrush, mesquite, and chaparral.	Yearlong – CRC, CSC, MCH, MCP, SGB Summer – JUN	Four records in CNDDDB from the Project vicinity (LEB and VAV quadrangles). No records in Project area.
Vesper Sparrow ( <i>Pooecetes gramineus affinis</i> )	SSC, BCC	Found in various open habitats with grass, including prairie, sagebrush steppe, meadows, pastures and roadsides.	Winter – AGS, MCH, PGS, Summer – JUN, MCP, PJN, SGB	No records.
Summer Tanager ( <i>Piranga rubra</i> )	SSC	Breed near gaps and edges of open forests (deciduous trees, mixed pine-oak woodlands). Found along streams with willows, cottonwoods, mesquite and saltcedar.	Summer – DRI, VRI Migrant – DSW	No records.
Tricolored Blackbird ( <i>Agelaius tricolor</i> )	SSC, BCC, BLM	Fresh-water marshes of cattails, tule, and sedges. Nests in vegetation of marshes or thickets, sometimes nests on the ground. Historically strongly tied to emergent marshes; in recent decades much nesting has shifted to non-native vegetation.	Yearlong – AGS, FEW, PGS, URB, VRI, WTM	Four records in CNDDDB from the Project vicinity (LEB and LLR quadrangles), including record at Quail Lake as recently as 2011, but not found in the 2014 survey.
Yellow-headed Blackbird ( <i>Xanthocephalus xanthocephalus</i> )	SSC	Fresh-water marshes of cattail, tule, or bulrushes. Nests in wet grasses, reeds, cattails. Also in open cultivated lands, pastures and fields.	Summer – AGS, PGS, WTM Yearlong – FEW, LAC, PAS	No records.
Pallid Bat ( <i>Antrozous pallidus</i> )	SSC, FSS	Arid deserts and grasslands, often near rocky outcrops and water. Less abundant in evergreen and mixed conifer woodland. Usually roosts in rock crevice or building, less often in cave, tree hollow, mine, etc.	Yearlong – AGS, BAR, BOP, BOW, CRC, COW, CSC, DRI, DSW, JOT, JUN, MCH, MCP, MHW, MHC, MRI, PAS, PGS, PJN, SGB, SMC, VRI, VOW, WTM Summer - URB	Two records in CNDDDB from the Project vicinity (COB and NEW quadrangles) No records in Project area.
Townsend's Big-eared Bat ( <i>Corynorhinus townsendii</i> )	SSC, FSS	Maternity and hibernation colonies typically are in caves and mine tunnels. Prefers relatively cold places for hibernation, often near entrances and in well-ventilated areas.	Yearlong – AGS, BAR, BOP, BOW, CRC, COW, CSC, DRI, DSW, JOT, JUN, MCH, MCP, MHW, MHC, MRI, PAS, PGS, PJN, SGB, SMC, URB, VRI, VOW, WTM Summer – AGS,	Three records in CNDDDB from the Project vicinity (BUP, MTC, and LEB quadrangles). No records in Project area.
Spotted Bat ( <i>Euderma maculatum</i> )	SSC, BLM	Solitary bat found in arid deserts, grasslands, and conifer forests where there are suitable roosts, including crevices in cliffs, caves, and building. Possibly occupies coniferous stands in summer and migrates to lower elevations in late summer/early fall.	Yearlong – AGS, BOP, BOW, COW, CSC, DRI, DSW, JOT, JUN, MCP, MHC, MRI, PGS, PJN, SGB, SMC, URB, VRI, VOW, WTM	One record in CNDDDB from the Project vicinity (NEW quadrangle). No records in Project area.
Western Mastiff Bat ( <i>Eumops perotis</i> )	SSC, BLM	Roosts in crevices and shallow caves on the sides of cliffs and rock walls, and occasionally buildings. Roosts usually high above ground with unobstructed approach. Most roosts are not used throughout the year. May alternate between different day roosts.	Yearlong – AGS, BAR, BOP, BOW, CRC, COW, CSC, DRI, DSW, FEW, JOT, JUN, MCH, MCP, MHW, MHC, MRI, PAS, PGS, PJN, URB, VRI, VOW, WTM	Two record in CNDDDB from the Project vicinity (COB quadrangle), in vicinity of Blue Point Campground north of Lake Piru. No records in Project area.
Western Red Bat ( <i>Lasiurus blossevillii</i> )	SSC	Roosts in foliage (mostly in trees), forages in open areas (not including deserts) from sea level up through mixed conifer forests. Typically occurs near edges and in habitat mosaics. Migrates between summer and winter ranges.	Yearlong – AGS, BOP, BOW, CRC, COW, CSC, MCP, MHC, MRI, PAS, PGS, PJN, URB, VRI, VOW, WTM Summer – FEW, JUN, LAC, MCH, MHW, SMC	No records.
Western Small-footed Myotis ( <i>Myotis ciliolabrum</i> )	BLM	Roosts in crevices and cracks in canyon walls, caves, mine tunnels, behind loose tree bark. Found in deserts, chaparral, riparian zones, and coniferous forests.	Yearlong – AGS, BAR, BOP, BOW, CRC, COW, CSC, DRI, FEW, JOT, JUN, LAC, MCH, MCP, MHW, MHC, MRI, PAS, PGS, PJN, SGB, SMC, URB, VRI, VOW, WTM	No records.

**Table G-4. Special-Status Wildlife Species Occurring or Potentially Occurring in the Project Area (continued)**

Common Name/ Scientific Name	Status	Habitat Associations	Temporal and Spatial Distribution <sup>1</sup>	Occurrence in Project Area <sup>2</sup>
Long-eared Myotis ( <i>Myotis evotis</i> )	BLM	Mostly forested areas, especially those with broken rock outcrops; also shrubland, over meadows near tall timber, along wooded streams, over reservoirs. Often roosts in buildings, also in hollow trees, mines, caves, fissures, etc.	Yearlong – BAR, BOP, BOW, CRC, COW, CSC, FEW, JUN, LAC, MCH, MCP, MHW, MHC, MRI, PAS, PGS, PJN, SMC, VFR, VOW, WTM Migrant - DSW, JOT Summer - SGB	No records.
Fringed Myotis ( <i>Myotis thysanodes</i> )	BLM	Primarily at middle elevations in desert, grassland, and woodland habitats. Roosts in caves, mines, rock crevices, buildings, and other protected sites. Nursery colonies occur in caves, mines, and sometimes buildings.	Yearlong – AGS, BAR, BOP, BOW, CRC, COW, CSC, JOT, JUN, MCH, MCP, MHW, MHC, MRI, PAS, PGS, PJN, SGB, SMC, URB, VFR, VOW Summer – DRI, DSW, LAC,	One record in CNDDDB from the Project vicinity (LIM quadrangle). No records in Project area.
Yuma Myotis ( <i>Myotis yumaensis</i> )	BLM	Open forests and woodlands with nearby sources of water over which to forage. Nursery colonies occur in buildings, caves, mines, and under bridges. Hibernates in winter.	Yearlong – AGS, BOP, BOW, CRC, COW, CSC, FEW, JUN, MCH, MCP, MHW, MHC, MRI, PAS, PGS, PJN, SGB, SMC, URB, VRI, VOW, WTM Summer – DRI, DSW, JOT, LAC,	Two records in CNDDDB from the Project vicinity (LEB and LIM quadrangles). No records in Project area.
San Diego Black-tailed Jackrabbit ( <i>Lepus californicus bennetti</i> )	SSC	The species occurs in open country with scattered thickets or patches of shrubs, including open plains, fields, and deserts. The sub-species is restricted to the South Coast bioregion.	Yearlong – AGS, BOP, BOW, CRC, COW, CSC, DRI, DSW, JOT, JUN, MCH, MCP, MHW, MHC, PAS, PGS, PJN, SGB, SMC, URB, VRI, VOW, WTM Summer - MRI	No records.
Tehachapi White-eared Pocket Mouse ( <i>Perognathus alticolus inexpectatus</i> )	SSC, FSS	Documented in various open grassy or weedy habitats within sagebrush, coastal sage scrub, desert scrub, and open forests at elevations above 3,500 feet.	Yearlong – MCH, SB	11 records in CNDDDB from the Project vicinity (BMT, LEB), including record within 2 miles of Quail Lake. No records in Project area.
San Joaquin Pocket Mouse ( <i>Perognathus inornatus</i> )	SSC	Found in open sandy grasslands and scrub areas in the interior valleys at 1100 to 2000 feet elevation.	Yearlong – AGS, BAR, BOW, COW, MCH, PAS, PGS, VOW	One record in CNDDDB from the project vicinity (BMT quadrangle). No records in Project area, which may be largely or entirely outside of this species' range.
Los Angeles Pocket Mouse ( <i>Perognathus longimembris brevinasus</i> )	SSC	Occurs in low elevation grassland, alluvial sage scrub and coastal sage scrub within coastal basins of Southern California. Few records in Los Angeles County where much of its potential habitat may have been lost to development.	Yearlong – CRC, COW, CSC, DRI, DSW, JOT, MCH, MCP, SGB, VOW	No records. Project area may be outside of this taxon's range.
Southern Grasshopper Mouse ( <i>Onychomys torridus</i> )	SSC	Most common in arid desert habitats, including desert scrub and alkali desert scrub, but also occurring in coastal scrub, sagebrush, chaparral, and other habitats.	Yearlong – AGS, CSC, DRI, DSW, MCH, MRI, PGS, SGB, VRI	No records in CNDDDB. Observed in Project area (Aspen Environmental Group 2007).
Monterey Dusky-footed Woodrat ( <i>Neotoma macrotis luciana</i> )	SSC	The species is generally found in dense chaparral, coastal sage-scrub, pinyon-juniper, oak and riparian woodlands and mixed conifer forest habitats that have a well-developed understory. Distribution of subspecies is uncertain.	Yearlong – BOP, BOW, CRC, COW, CSC, MCH, MCP, MHW, MHC, MRI, PGS, SGB, SMC, VRI, VOW, WTM	No records in CNDDDB. Species reported in Project area (Aspen Consulting Group 2007); however, subspecies not indicated.
San Diego Desert Woodrat ( <i>Neotoma lepida intermedia</i> )	SSC	The species occurs over a large part of the arid western U.S. and Mexico, whereas the sub-species is evidently limited to coastal areas from San Luis Obispo County south where populations have declined. The species is found in Joshua tree woodlands, pinyon-juniper woodlands, mixed chaparral, sagebrush, and desert habitats.	Yearlong – BOP, CRC, CSC, DRI, DSW, JOT, MCH, MCP, MHC, PJN, SGB	No records.



**Table G-4. Special-Status Wildlife Species Occurring or Potentially Occurring in the Project Area (continued)**

Common Name/ Scientific Name	Status	Habitat Associations	Temporal and Spatial Distribution <sup>1</sup>	Occurrence in Project Area <sup>2</sup>
Ringtail ( <i>Bassariscus astutus</i> )	FP	Associated with areas with a mixture of forest and shrub-dominated habitats, with rock recesses, hollows, and other sites suitable for nesting and cover and within 0.6 miles of water.	Yearlong – AGS, BAR, BOP, BOW, CRC, COW, CSC, DRI, DSW, JOT, JUN, MCH, MCP, MHW, MHC, MRI, PAS, PGS, PJN, SGB, SMC, VRI, VOW, WTM	No records.
American Badger ( <i>Taxidea taxus</i> )	SSC	Occurs in open or brushy habitats, including early successional stages of forests, with dry, friable, often sandy, soils for burrowing.	Yearlong – AGS, BAR, BOP, BOW, CRC, COW, CSC, DRI, DSW, JOT, JUN, MCH, MCP, MHW, MRI, PAS, PGS, PJN, SGB, VRI, VOW, WTM	No records.
Total	56			

Sources: Bolster 1998; Zeiner et al. 1988-1990, and updates; Shuford and Gardali 2008; IUCN Red List of threatened Species 2015; California Herps 2015

Notes:

<sup>1</sup>Temporal and Spatial Distribution derived from WHR (Cal Fish and Wildlife 2015)

<sup>2</sup>Records from CNDDDB (Cal Fish and Wildlife 2015) and other sources.

Key:

BCC = Bird of Conservation Concern

BLM = Bureau of Land Management

BMT = Black Mountain

BUP = Burnt Peak

Cal FP = Fully Protected

CESA = California Endangered Species Act

CNDDDB = California Natural Diversity Database

CT = Candidate Threatened

COB = Cobblestone Mountain

FSS = Forest Service Sensitive

GRV = Green Valley

LLR = La Liebre Ranch

LEB = Lebec

LIM = Liebre Mountain

MTC = Mint Canyon

NEW = Newhall

PIR = Piru

ST = State Threatened, SE = State Endangered

SSC = State Species of Concern

WHR = Wildlife Habitat Relationship System

WSM = Warm Springs Mountain

WTP = Whittaker Peak VAV = Val Verde

AGS = Annual Grassland, BAR = Barren, BOW = Blue Oak Woodland, BOP, Blue Oak-Foothill Pine, CRC = Chamise-redshank chaparral, COW = Coastal Oak Woodland, CSC = Coastal Scrub, DRI = Desert Riparian, DSW = Desert Wash, FEW = fresh emergent wetland, JOT = Joshua Tree, JUN = Juniper, LAC = Lacustrine, MCH = Mixed Chaparral, MCP = Montane Chaparral, MHW = Montane Hardwood, MHC = Montane Hardwood-Conifer, MRI = Montane Riparian, PAS = Pasture, PGS = Perennial Grassland, PJN = Pinyon-Juniper, SGB = Sagebrush, SMC = Sierran Mixed Conifer, URB = Urban, VFR = Valley Foothill Riparian, VOW = Valley Oak Woodland, WTM = Wet Meadow

**Table G-5. Designated Harvest Species Known or Potentially Occurring in the Project Area**

Common Name	Scientific Name	Habitat Associations
Snow goose	<i>Chen caerulescens</i>	Freshwater wetlands, foraging in pastures, cultivated lands and flooded fields.
Ross's goose	<i>Chen rossii</i>	Marshy lakes, foraging in grassy areas, pastures and cultivated fields.
Canada goose	<i>Branta canadensis</i>	Open water on lakes, ponds, reservoirs; marshes with tall grass and sedges near water; and cultivated fields.
Wood duck	<i>Aix sponsa</i>	Inland waters near woodlands such as swamps and marshes.
Northern pintail	<i>Anas acuta</i>	Lakes, rivers, marshes and ponds in grasslands, barrens, dry tundra, open boreal forest, or cultivated fields. Most breeding associated with seasonal and semi-permanent wetlands.
American wigeon	<i>Anas americana</i>	Open water on lakes, ponds, reservoirs and backwaters.
Northern shoveler	<i>Anas clypeata</i>	Open water on lakes, ponds and reservoirs.
Green-winged teal	<i>Anas crecca</i>	Open water on lakes, ponds, reservoirs and in marshes.
Cinnamon teal	<i>Anas cyanoptera</i>	Shallow open water on lakes, ponds, reservoirs and in marshes.
Blue-winged teal	<i>Anas discors</i>	Open water on lakes, ponds, reservoirs and in marshes.
Eurasian wigeon	<i>Anas penelope</i>	Winters in freshwater (marshes, lakes) and brackish water, but migrates extensively through inland regions; occurs in shallow water and fields and meadows.
Mallard	<i>Anas platyrhynchos</i>	Primarily shallow waters such as ponds, lakes, marshes, and flooded fields.
Gadwall	<i>Anas strepera</i>	Open water on lakes, ponds, reservoirs and backwaters.
Lesser scaup	<i>Aythya affinis</i>	Open water on lakes, ponds and reservoirs.
Redhead	<i>Aythya americana</i>	Open water on lakes, ponds and reservoirs.
Ring-necked duck	<i>Aythya collaris</i>	Open water on lakes, ponds, and reservoirs.
Greater scaup	<i>Aythya marila</i>	Open water and on emergent wetlands. Breeds primarily in tundra and northern borders of the taiga.
Canvasback	<i>Aythya valisineria</i>	Open water on lakes, ponds, reservoirs, and marshes.
Bufflehead	<i>Bucephala albeola</i>	Lakes, ponds, rivers and seacoasts. Breeds in tree cavities in mixed coniferous-deciduous woodland near lakes and ponds.
Common goldeneye	<i>Bucephala clangula</i>	Open water on lakes, ponds and reservoirs.
Hooded merganser	<i>Mergus cucullatus</i>	Open water on lakes, ponds and reservoirs.
Common merganser	<i>Mergus merganser</i>	Open water on lakes, ponds and reservoirs.
Red-breasted merganser	<i>Mergus serrator</i>	Open water on lakes, ponds and reservoirs.
Ruddy duck	<i>Oxyura jamaicensis</i>	Open water on lakes, ponds, reservoirs and marshes.
American coot	<i>Fulica americana</i>	Open water areas, along lake shores and stream edges, and in marshes.
Common gallinule	<i>Gallinula galeata</i>	Freshwater marshes, canals, quiet rivers, lakes, ponds, mangroves, primarily in areas of emergent vegetation and grassy borders. Nests usually among marsh plants over water, occasionally in shrub in or near water.
Chukar	<i>Alectoris chukar</i>	Rocky hillsides, mountain slopes with grassy vegetation, open and flat desert with sparse grasses, and barren plateaus. Non-native.
California quail	<i>Callipepla californica</i>	Lower elevations and transition zone of mixed conifer forest between 1,200 and 7,000 feet elevation.
Gambel's quail	<i>Callipepla gambellii</i>	Arid interior, but also introduced in areas of dense brushy cover
Mountain quail	<i>Oreortyx pictus</i>	Montane chaparral.
Wild turkey	<i>Meleagris gallopavo</i>	Wooded areas. Non-native.
Band-tailed pigeon	<i>Columba fasciata</i>	Lower elevations and transition zone of mixed conifer forest between 1,200 and 5,500 feet elevation.

**Table G-5. Designated Harvest Species Known or Potentially Occurring in the Project Area (continued)**

Common Name	Scientific Name	Habitat Associations
Ring-necked pheasant	<i>Phasianus colchicus</i>	Introduced. Open country (especially cultivated areas, scrubby wastes, open woodland and edges of woods), grassy steppe, desert oasis, riverside thickets, swamps and open mountain forest. Non-native.
Ringed turtle-dove	<i>Streptopelia "risoria"</i>	Suburban areas from escapes. Non-native.
Spotted dove	<i>Streptopelia chinensis</i>	Suburban areas from escapes. Non-native.
Mourning dove	<i>Zenaida macroura</i>	Lower elevations and transition zone of mixed conifer forest between 1,200 and 5,500 feet elevation.
American crow	<i>Corvus brachyrhynchos</i>	Open and partly open country: agricultural lands, suburban areas, orchards, and tidal flats.
Virginia opossum	<i>Didelphis virginiana</i>	Introduced. Very adaptable; may be found in most habitats. Prefers wooded riparian habitats. Also in suburban areas. Abandoned burrows, buildings, hollow logs, and tree cavities are generally used for den sites.
American beaver	<i>Castor canadensis</i>	Readily occupy artificial ponds, reservoirs, and canals, if food is available.
Common muskrat	<i>Ondatra zibethicus</i>	Fresh or brackish marshes, lakes, ponds, swamps, and other bodies of slow-moving water. Rare or absent in artificial impoundments with fluctuating water levels.
Western gray squirrel	<i>Sciurus griseus</i>	Dependent upon mature stands of mixed conifer and oak habitats, closely associated with oaks.
Eastern gray squirrel	<i>Sciurus carolinensis</i>	Wooded areas, spreading from human population centers. Non-native.
Desert cottontail	<i>Sylvilagus audubonii</i>	Various habitats; dry uplands as well as low valleys and canyons. May inhabit open grasslands, brushlands, edges of foothill woodlands, willow thickets, sometimes in cultivated fields or under buildings.
Brush rabbit	<i>Sylvilagus bachmani</i>	Dense scrub and brushy edges of habitats, chaparral, and cactus. Also brushy areas on sand dunes and in bramble thickets. Usually near dense vegetative cover. Seldom uses burrows.
Black-tailed jackrabbit	<i>Lepus californicus</i>	Open plains, fields, and deserts; open country with scattered thickets or patches of shrubs.
Raccoon	<i>Procyon lotor</i>	Various habitats; usually in moist situations, often along streams and shorelines.
Striped skunk	<i>Mephitis mephitis</i>	Semi-open country with woodland and meadows interspersed, brushy areas, bottomland woods. Frequently found in suburban areas.
Western spotted skunk	<i>Spilogale gracilis</i>	Brushy canyons, rocky outcrops (rimrock) on hillsides and walls of canyons. When inactive or bearing young, occupies den in rocks, burrows, hollow logs, brush piles, or under buildings.
Long-tailed weasel	<i>Mustela frenata</i>	Wide variety of habitats, usually near water. Favored habitats include brushland and open woodlands, field edges, riparian grasslands, swamps, and marshes.
American badger	<i>Taxidea taxus</i>	Prefers open areas and may also frequent brushlands with little groundcover. When inactive, occupies underground burrow.
Bobcat	<i>Felis rufus</i>	Various habitats including deciduous-coniferous woodlands and forest edge, hardwood forests, swamps, forested river bottomlands, brushlands, deserts, mountains, and other areas with thick undergrowth.
Coyote	<i>Canis latrans</i>	Wide range of habitats in its extensive range, from open prairies of the west to the heavily forested areas of the Northeast; sometimes found in cities.
Red fox	<i>Vulpes vulpes</i>	Introduced and possible in coastal and valley areas.
Gray fox	<i>Urocyon cinereoargenteus</i>	Often found in woodland and shrubland in rough, broken country.
Black bear	<i>Ursus americanus</i>	Occur in fairly dense, mature stands of many forest habitats mostly above 3,000 feet elevation, and feed in a variety of habitats including brushy stands of forest, valley foothill riparian and wet meadows.
Wild pig	<i>Sus scrofa</i>	Densely forested mountainous terrain, brushlands, dry ridges, swamps; sometimes in fields, marshes. Often in mixed hardwood forest with permanent water source. Seasonal changes in habitat use are linked to food availability. Non-native
Fallow deer	<i>Dama dama</i>	Introduced populations from escaped animals are possible.
Sambar deer	<i>Rusa unicolor</i>	Introduced populations from escaped animals are possible.
Mule deer	<i>Odocoileus hemionas</i>	Early to intermediate successional stages of most forest, woodland, and brush habitats interspersed with herbaceous openings, dense brush or tree thickets, riparian areas, and abundant edge.

Source: CDFW 2015

**Table G-6. Summary of Information Regarding ESA-listed Species Initially Identified as Potentially Occurring within Project Area**

Common Name/ Scientific Name	Status <sup>1</sup>	Habitat Associations	Known Occurrences in Project Vicinity Quadrangles	Occurrence in Project Area	USFWS Recovery Plans and 5-Year Reviews
Vernal Pool Fairy Shrimp ( <i>Branchinecta lynchi</i> )	FT	Branchiopod endemic to vernal pools and other seasonally flooded landscape depressions, mostly in the Central Valley of California, but with disjunct occurrences in the Coast Ranges and Riverside County. See Section 4.8.2.1 for additional information.	Mint Canyon	Unknown	Recovery Plan (2006) 5-Year Review (2007)
Riverside Fairy Shrimp ( <i>Streptocephalus woottoni</i> )	FE	Branchiopod endemic to vernal pools (mostly where multiple pools occur) and seasonally flooded alkali playas. Known occurrences in inland areas of Riverside, Orange, and San Diego Counties in California and coastal areas of San Diego County and northwestern Baja California, Mexico. One or two other occurrences in coastal Los Angeles County are described in the 5-year review as extirpated.	None	No – Project is outside of species range	Recovery Plan (1998) 5-Year Review (2008)
Santa Ana Sucker ( <i>Catostomus santaanae</i> )	FT (in part <sup>1</sup> ), SSC	Fish endemic to the Los Angeles, San Gabriel, and Santa Ana River systems, and introduced into the Santa Clara River system, where it hybridizes with Owens sucker ( <i>C. fumeiventris</i> ). Found mostly in permanent streams less than 25 feet wide and with coarse substrates.	Val Verde, Piru, Newhall, and Cobblestone Mountain	Occurs as an introduced species in Piru Creek and Castaic Creek, but is not listed as FT in these streams	Recovery Plan (2014) 5-Year Review (2011)
Unarmored Threespine Stickleback ( <i>Gasterosteus aculeatus williamsonii</i> )	FE, SFP	Small fish found mostly in perennial headwaters of the Santa Clara, Los Angeles, San Gabriel, and Santa Ana Rivers. Isolation at most times from mainstem streams, important to exclude other forms of threespine stickleback and larger, predatory fish. See Section 4.8.2.2 for additional information.	Green Valley, Piru, Newhall, and Mint Canyon	Unknown – may occur in San Francisquito Creek where the taxon has been recently reintroduced	Recovery Plan (1985) 5-Year Review (2009)
Southern California Steelhead Distinct Population Segment (DPS) ( <i>Oncorhynchus mykiss</i> )	FE, SSC	“Steelhead” is the name commonly applied to the anadromous form of rainbow trout. Relatively small numbers of returning steelhead have been recorded each year at the Freeman Diversion Dam on the Santa Clara River. Steelhead pawning habitat is mostly associated with upper stream reaches and tributaries where cool, clean, well-oxygenated water occurs. Redds are located in areas with small- to medium-sized gravel substrates free of excessive silt. Juveniles may remain in freshwater, mature, and eventually spawn in freshwater or out-migrate after one or more years. The Southern DPS inhabits coastal drainages from the Santa Maria River in San Luis Obispo County, California, down to the United States-Mexico border.	None	No – Project is outside of species range because Santa Felicia Dam blocks all upstream steelhead migration into Piru Creek above Piru Lake	Recovery Plan (2012) 5-Year Review (2010)
Arroyo Toad ( <i>Anaxyrus [Bufo] californicus</i> )	FE, SSC	Amphibian that breeds in low-gradient perennial and seasonal streams; forages and aestivates in associated riparian habitat; and may venture into adjacent uplands. Found from Monterey County, California to Baja California, Mexico in coastal streams and some inland draining streams. See Section 4.8.2.3 for additional information.	Black Mountain, Cobblestone Mountain, Newhall, Whitaker Peak	Yes – occurs in Piru Creek and Castaic Creek	Recovery Plan (1999) 5-Year Review (2009)

<sup>1</sup> Populations of Santa Ana sucker in the Santa Clara River and its tributaries, including Piru Creek and Castaic Creek, are not native and were not included in the final rule listing the species as threatened (65 FR 19686).

**Table G-6. Summary of Information Regarding ESA-listed Species Initially Identified as Potentially Occurring within Project Area (continued)**

Common Name/ Scientific Name	Status <sup>1</sup>	Habitat Associations	Known Occurrences in Project Vicinity Quadrangles	Occurrence in Project Area	USFWS Recovery Plans and 5-Year Reviews
California Red-legged Frog ( <i>Rana draytonii</i> )	FT, SSC	Amphibian that is largely aquatic except during dispersal, summer aestivation, and foraging in riparian areas. Breeds in still or slow-moving water with emergent and overhanging vegetation, including emergent wetlands, ponds, small lakes, and low-gradient stream reaches with permanent pools. Few known extant populations in southern California. See Section 4.8.2.4 for additional information.	Warm Springs Mountain	Unknown – may occur in Piru Creek, downstream of Pyramid Lake, and in San Francisquito Creek with a known breeding site upstream of the Castaic transmission line crossing	Recovery Plan (2002) 5-Year Review (none)
Blunt-nosed Leopard Lizard ( <i>Gambelia sila</i> )	FE, SFP	Reptile endemic to San Joaquin Valley and adjacent foothills at elevations below 2,600 feet in open, sparsely vegetated areas of grassland and scrub. Most of the extant populations are in undeveloped areas on the Central Valley floor.	Lebec	No – Project is outside of species range (no known historical or extant occurrences in Los Angeles County)	Recovery Plan (1998) 5-Year Review (2010)
Mojave Desert Tortoise ( <i>Gopherus agassizii</i> )	FT, ST	A large, terrestrial, burrowing turtle found in the Mojave and Sonoran Deserts north and west of the Colorado River. Habitats are primarily in creosote bush ( <i>Larrea tridentata</i> ) flats, less frequently on sloping ground in salt desert scrub and alluvial fans.	None	No – Project is outside of species range <sup>2</sup>	Recovery Plan (2011) 5-Year Review (2010)
California Condor ( <i>Gymnogyps californianus</i> )	FE, SE	Very large, soaring bird that seeks carrion in open habitats and nests mostly in cavities on escarpments and in hollows of old growth conifers. All wild California condors are descendants of birds removed from the wild for a captive breeding program, which continues to supplement natural breeding. See Section 4.8.2.5 for additional information.	Liebre Mountain, Black Mountain, Piru, Cobblestone Mountain	Yes	Recovery Plan (1996) 5-Year Review (2013)
Western Yellow-billed Cuckoo, western DPS ( <i>Coccyzus americanus occidentalis</i> )	FT, SE	Migratory songbird associated with large blocks of riparian habitat, which contain trees of different ages, especially large, mature trees required for nesting and foraging. As such, breeding populations generally not found on smaller streams. Winters in South America.	Val Verde	No – no recent records, Project is not within species' current known range, and the species was not identified by IPaC as a concern	Recovery Plan (none) 5-Year Review (none)
Coastal California Gnatcatcher ( <i>Polioptila californica californica</i> )	FT, SSC	Non-migratory songbird associated with coastal sage scrub and less often in chaparral in coastal California to Baja California, Mexico. See Section 4.8.2.6 for additional information.	Lebec, Mint Canyon, Newhall	Unknown – suitable habitat may be present	Recovery Plan (none) 5-Year Review (2010)
Least Bell's Vireo ( <i>Vireo bellii pusillus</i> )	FE, SE	Migratory songbird found during the breeding season in dense, riparian habitat and adjacent chaparral in river valleys. Found historically from interior northern California to northwestern Baja California, Mexico. See Section 4.8.2.7 for additional information.	Val Verde, Newhall, Warm Springs Mountain	Unknown – suitable habitat may be present	Recovery Plan (1998) 5-Year Review (2006)
Southwestern Willow Flycatcher ( <i>Empidonax traillii extimus</i> )	FE, SE	Migratory songbird found during the breeding season in dense, riparian thickets along streams and wetlands. Range includes southern California from Kern County south. See Section 4.8.2.8 for additional information.	Cajon and Harrison Mountain	Unknown – suitable habitat may be present	Recovery Plan (2002) 5-Year Review (2014)
San Joaquin Kit Fox ( <i>Vulpes macrotis mutica</i> )	FE, ST	Small canid found in San Joaquin Valley as far south as Kern County and northeastern Santa Barbara County, habitats include alkali scrub/shrub and arid grasslands.	None	No – Project is outside of the species range	Recovery Plan (1998) 5-Year Review (2010)

<sup>2</sup> In addition to information in the Recovery Plan, the species range is based on information in Gernano et al. (1994) and Nussear et al. (2009)

**Table G-6. Summary of Information Regarding ESA-listed Species Initially Identified as Potentially Occurring within Project Area (continued)**

Common Name/ Scientific Name	Status <sup>1</sup>	Habitat Associations	Known Occurrences in Project Vicinity Quadrangles	Occurrence in Project Area	USFWS Recovery Plans and 5-Year Reviews
Slender-horned Spineflower ( <i>Dodecahema</i> [ <i>Centrostegia</i> ] <i>leptoceras</i> )	FE, SE	Annual herb (Family Polygonaceae) found on floodplain terraces and sandy benches, areas that flood infrequently. Occurrences are associated with alluvial fan scrub. See Section 4.8.2.9 for additional information.	Newhall, Mint Canyon	Unknown	Recovery Plan (none) 5-Year Review (2010)
San Fernando Valley Spineflower ( <i>Chorizanthe parryi</i> var. <i>Fernandina</i> )	FC, SE, FSS	Annual herb (Family Polygonaceae) endemic to coastal sage scrub at sites from Los Angeles County to San Diego Counties, mostly in openings within coastal sage scrub. Currently known to occur at only two sites in Los Angeles County. See Section 4.8.2.10 for additional information.	Val Verde, Newhall	Unknown	Recovery Plan (none) 5-Year Review (none)
Marsh Sandwort ( <i>Arenaria paludicola</i> )	FE, SE	Annual herb (Family Caryophyllaceae) found historically in scattered sites in swamps and freshwater marshes (sea level to 1,480 feet). Currently known to occur at only two sites in San Luis Obispo County, California. Some sources suggest the species may be under-reported due to misidentification. See Section 4.8.2.11 for additional information.	None	Unknown	Recovery Plan (1998) 5-Year Review (2008)
Nevin's barberry ( <i>Berberis nevinii</i> )	FE, SE	Perennial (evergreen) shrub (Family Berberidaceae) native to chaparral and adapted to the natural fire regime for this habitat (also in washes). Endemic to southern California in scattered occurrences in Riverside, Los Angeles, and San Bernardino Counties (mostly 1,400 to 1,700 feet in elevation, rarely to 2,000 feet). See Section 4.8.2.12 for additional information.	Newhall, Warm Springs Mountain	Unknown – assessment is complicated by horticultural introductions	Recovery Plan (none) 5-Year Review (2009)
Gambel's Watercress ( <i>Nasturtium</i> [ <i>Rorippa</i> ] <i>gambelii</i> )	FE, ST	Perennial herb (Family Brassicaceae) found historically at scattered sites in freshwater marshes and near streams in southern California and a site in Mexico. Nearly all known populations have been extirpated, including hybridization with common watercress ( <i>N. aquaticum</i> ). Currently known to occur at one site in Santa Barbara County and introduced at another site in San Luis Obispo County. Some sources suggest the species may be under-reported. See Section 4.8.2.13 for additional information.	None	Unknown	Recovery Plan (1998) 5-Year Review (2011)
Conejo Dudleya ( <i>Dudleya parva</i> [ <i>D. abramsii</i> ssp. <i>parva</i> ])	FT	Succulent perennial herb (Family Crassulaceae) endemic to the western part of the Simi Hills south of the Santa Clara River between Moorpark and Thousand Oaks. Found only in a band of Conejo volcanics and growing at the base of outcrops.	None	No – Project is outside of species range	Recovery Plan (1999) 5-Year Review (2015)
Braunton's Milk-vetch ( <i>Astragalus brauntonii</i> )	FE	Perennial herb (Family Fabaceae) associated with carbonate substrates (or downwash sites below carbonate substrates) in chaparral and coastal sage scrub where shrubs are sparse. Appears after fire or mechanical soil disturbance, but short-lived. Known only from small disjunct areas in Simi Hills, Santa Monica Mountains, and Santa Ana Mountains in Ventura, Los Angeles, and Orange Counties (800 to 2,100 feet in elevation).	None	No – Project is outside of species range	Recovery Plan (1999) 5-Year Review (2009)

**Table G-6. Summary of Information Regarding ESA-listed Species Initially Identified as Potentially Occurring within Project Area (continued)**

Common Name Scientific Name	Status <sup>1</sup>	Habitat Associations	Known Occurrences in Project Vicinity Quadrangles	Occurrence in Project Area	USFWS Recovery Plans and 5-Year Reviews
Spreading Navarretia ( <i>Navarretia fossalis</i> )	FT	Annual herb (Family Polemoniaceae) occurring in vernal pools and poorly drained, seasonally flooded, alkali playas Known only from Riverside County, San Diego County, and a few sites in Los Angeles County, as well as in northwestern Baja California, Mexico (100 to 2,200 feet in elevation). See Section 4.8.2.14 for additional information.	Mint Canyon	Unknown	Recovery Plan (1998) 5-Year Review (2009)
Lyon's Pentachaeta ( <i>Pentachaeta lyonii</i> )	FE, SE	Annual herb (Family Asteraceae) associated with rocky, clay soils in pocket grasslands within chaparral and coastal sage scrub. Currently known only from two areas of coastal California in Ventura and Los Angeles Counties (extirpated from Palos Verdes Peninsula and Santa Catalina Island) (280 to 2,060 feet in elevation).	None	No – Project is outside of species range	Recovery Plan (1999) 5-Year Review (2008)
California Orcutt Grass ( <i>Orcuttia californica</i> )	FE, SE	Annual grass (Family Poaceae) endemic to deep vernal pools with clay soils in Ventura, Los Angeles, Riverside, and San Diego Counties. See Section 4.8.2.15 for additional information.	Mint Canyon	Unknown	Recovery Plan (1998) 5-Year Review (2011)

Source: CDFW 2015

Note:

Species identified by queries for Project Vicinity quadrangles on USFWS' online Information for Planning and Conservation (IPaC) (USFWS 2015), the California Native Plant Society (CNPS) online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2015), and the Cal Fish and Wildlife California Natural Diversity Database (CNDDB) (Cal Fish and Wildlife 2015).

Key:

FE = federal endangered

FT = federal threatened

FC = federal candidate

FSS = Forest Service sensitive

SE = California State endangered

ST = California State threatened

SFP = California State fully protected

SSC = California State species of special concern

**Table G-7. Previous Cultural Resources Investigations in Area Examined by Licensees**

Author/Date	Report	South Central Coastal Information Center No.
Bartoy, Kevin M. 2004	<i>Archaeological Survey Report: Cordova/Castaic/Necktie Fuelbreak Improvement Projects, Angeles National Forest, Los Angeles County, California</i>	LA-7188
Berryman, Judy, Sean Hess, Karen Rasmussen, Steve Martin, and Virginia Popper 1999	<i>Archaeology Along the Pacific Pipeline: Six Upland Roasting Pit Sites in the Liebre Mountains, Angeles National Forest, California (Draft)</i>	LA-9983
BioSystems Analysis, Inc. 1989	<i>Technical Report of Cultural Resources Studies for the Proposed WTG-West, Inc. Los Angeles to San Francisco and Sacramento, California Fiber Optic Cable Project</i>	LA-3796
Bonner, Wayne H., and Christeen Taniguchi 2004	Letter regarding Cingular Telecommunications Facility Candidate VY-367-03 Project	LA-8384
Brasket, Kelli S. 2006	<i>Archaeological Reconnaissance Report: Archaeological Survey of the Mearn's Apiary Sites, Santa Clara-Mojave Rivers Ranger District, Angeles National Forest, Los Angeles County, California</i>	LA-9778
Broeker, Gale and Beth Padon, 1993	<i>Cultural Resource Monitoring Report: Mobil Oil Corporation M-70 Pipeline Project</i>	LA-2800
Caruso, Terri L., Bryn Barabas, and R. J. Johnson, 1983	<i>Systematic Testing of CA-LAN-1015 Wildhorse Campground, Angeles National Forest, Los Angeles County, California</i>	LA-4223
Center for Public Archaeology, California State University, Northridge, 1985	<i>Report of Archaeological Reconnaissance Survey Near Castaic Lake, Los Angeles County.</i>	NA
Cultural Resource Management Services, 1991	<i>Westside Conveyance System Cultural Resources Investigation: Final Technical Report</i>	LA-2388



**Table G-7. Previous Cultural Resources Investigations in Area Examined by Licensees (continued)**

Author/Date	Report	South Central Coastal Information Center No.
Cultural Resource Management Services and Leslie Huemann and Associates, 1994	<i>Phase 2 Historic Resources Investigation for the Proposed Tesoro Del Valle Development, Los Angeles County, California</i>	LA-3093
Davis, Gene, 1990	<i>Mobil M-70 Pipeline Replacement Project Cultural Resource Survey Report for Mobil Oil Corporation</i>	LA-3289
Dillon, Brian D., 1996	<i>Archaeological Assessment of the Castaic Creek Waterway and Elderberry Reservoir Sediment and Infrastructure Management Plan, 535 +/- Acres on Castaic Creek, Los Angeles County, California</i>	LA-3849
DWR, 2008	<i>Archaeological Survey Report for the Pyramid Lake Vista Del Lago (VDL) Visitors Center Repairs Project.</i>	NA
Dodge, William A., 1978	<i>An Archaeological Survey of the Proposed Pardee-Pastoria-Pyramid 220 kV Transmission Line Route. Prepared by Archaeological Consulting and Research. Prepared for Southern California Edison Company.</i>	LA-470
Duff, Gabrielle and Donn Grenda, 2003	<i>Archaeological Survey of the Tehachapi Afterbay Enlargement Project, Kern and Los Angeles Counties, California.</i>	NA
Duff, Gabrielle, 2004	<i>A Class III Archaeological Survey of the Tehachapi Afterbay Enlargement Project Area, Kern and Los Angeles Counties, California</i>	NA
Duree, S.E., 1994	<i>Archaeological Reconnaissance Report: Saugus 93 ERFQ, Los Angeles County</i>	LA-4670
Duree, Sue Ellen, 1996	<i>Archaeological Reconnaissance Report (ARR No. 05-01-SA-142): ERFO 95 Saugus, Los Angeles County</i>	LA-9989
Ehringer, Candace and Michael Vader, 2012	<i>DWR Serrano Beach Access Road Culvert Repair Project: Phase 1 Cultural Resources Study</i>	LA-12036
Ericson, J.E., 1972	<i>Geo-Science at the Castaic Site (4-LAn-324); A Preliminary Report Submitted to the State of California Department of Parks and Recreation.</i>	LA-5525
Foster, John M., 1979	<i>Report of the Cultural Resource Inventory for the Proposed Development of Seven Recreational Areas in Pyramid Lake, Los Angeles County. Prepared for DWR.</i>	LA-438

**Table G-7. Previous Cultural Resources Investigations in Area Examined by Licensees (continued)**

Author/Date	Report	South Central Coastal Information Center No.
Gardner, Jill K., 1998	<i>An Archaeological Assessment of an Arco Pipeline Repair Project in the Angeles National Forest, Los Angeles County, California</i>	LA-4284
Gerber, Joyce L., 2003	<i>Archaeological Survey Report, Mobil M-70 Pipeline Proposed Fiber Optic Line Through the Angeles National Forest, Los Angeles County, California (FS# 05-01-00688)</i>	LA-10148
Gibson, Robert O., 1993	<i>Results of Archaeological Records Review for the Pacific Pipeline Project, Emidio Lateral Pipeline, Kern and Los Angeles Counties, CA</i>	LA-2951
Gilman, Antonio, 1975	<i>Assessment of the Archaeological Impact by the Enlargement of Quail Lake and Quail Canal and the Installation of the Peach Valley Pipeline and Pyramid Powerplant, Los Angeles County, California</i>	NA
Gonzalez, Matthew and Katherine Anderson, 2014	<i>Los Angeles Department of Water and Power Castaic Emergency Spillway Repair Project, County of Los Angeles, California: Phase 1 Cultural Resources Study</i>	LA-12679
Greenwood, Roberta S., 1990	<i>Supplementary Record Search: Proposed Route of the Mobil M-70 Pipeline</i>	LA-2198
Greenwood, Roberta S. and John M. Foster, 1981	<i>Cultural Resource Reconnaissance of the Dry Canyon Reservoir</i>	LA-511
Guerrero, Marcos L., 2009	<i>Archaeological Survey Report: Repair of Templin Highway Road Culvert and Drainage Project, Los Angeles County, California</i>	LA-9931
Hanks, Herrick E., 1972	<i>The Archaeological Resources of the Piru Creek Project: A Preliminary Report.</i>	NA
Hanks, Herrick E., 1973	<i>Archaeological Reconnaissance of the Hungry Valley Pipeline &amp; Terminal Powerplant. Prepared for the State of California, Department of Water Resources.</i>	LA-2413
Hatheway, Roger, 2007	<i>National Register of Historic Places and California Register of Historic Resources Determination of Eligibility Statement for a Portion of Old Highway 99 Extending from the I-5 Freeway Templin Highway Exit on the South to Pyramid Dam on the North</i>	LA-9779

**Table G-7. Previous Cultural Resources Investigations in Area Examined by Licensees (continued)**

Author/Date	Report	South Central Coastal Information Center No.
Henriksen, L. Suzann, Matthew DeCarlo, and Rebecca Orfila, 2008	<i>A Cultural Resources Assessment of Six Proposed Deteriorated Pole Replacement Projects (WO 6036-4800, 8-4832 and 8-4834) Rosamond, Kern County and Near Gorman and Lancaster, Los Angeles County, California</i>	LA-9994
Huckabee, Joanna, 2007	<i>Archaeological Reconnaissance Report: Los Alamos (7N32) Road Maintenance Project, Santa Clara-Mojave Rivers Ranger District, Angeles National Forest, Los Angeles County, California</i>	LA-9966
Huckabee, Joanna, 2007	<i>Archaeological Reconnaissance Report: Forest Roads 5N28, 5N29, and 6N18 Maintenance Project, Los Angeles County, California</i>	LA-9750
King, Chester, 1994	<i>Prehistoric Native American Cultural Sites in the Santa Monica Mountains</i>	LA-3587
King, Chester, 1995	<i>Archaeological Reconnaissance at 6805 Dume Drive, Malibu, California</i>	LA-3159
Knight, Albert, 2000	<i>Final Cultural Resource Monitoring Report for the Pacific Pipeline System LLC Fiber Optic Cable Installation Project</i>	LA-9988
Knight, Albert, 2002	<i>Cultural Resource Monitoring Report for the 2002 Pacific Pipeline System LLC Line 63 Maintenance Project</i>	LA-7831
Knight, Albert, 2005	<i>Archaeological Reconnaissance Report: Emergency Pipeline 63 Repairs in the Angeles National Forest, FS ARR: 05-01-00956</i>	LA-9828
Knight, Albert and Gavin Archer, 2009	<i>Archaeological Reconnaissance Report: Plains All American Pipeline Line 63 Winter Repairs Project</i>	LA-9972
Lawson, Natalie, 2011	<i>Cultural Resources Survey of Southern California Edison Transmission Line Between Bailey Substation and Neenach Substation, Los Angeles County, California</i>	LA-12504
Leonard, N., 1974	<i>Archaeological Resources of the Proposed Castaic Conduit System.</i>	LA-54
Leonard, N. and L. Haston, 1967	<i>Archeological Field Project: A survey of Route 59 (UCAS-211), between Route 4 and Route 67</i>	LA-2416
Leonard, N., 1967	<i>UCLA Archaeological Survey Field Report UCAS-211</i>	NA
Maki, Mary, 2006	<i>Phase I Cultural Resources Investigation of Approximately Three Acres for the Lower Quail Canal Seepage Blanket Project, Los Angeles County, California</i>	LA-8711

**Table G-7. Previous Cultural Resources Investigations in Area Examined by Licensees (continued)**

Author/Date	Report	South Central Coastal Information Center No.
Martinez, Al, 1991	Letter regarding Proposed Sprint PCS Wireless Telecommunication Facility Project, LA33xc435A	LA-5771
Maxwell, T. J., Ph.D., 1981	<i>An Archaeological Assessment of Forty Acres Along Route 99, Black Mountain Quadrangle, California</i>	LA-1855
McIntyre, M. 1983	<i>Archaeological Reconnaissance Report for FS 05-01-53-49.</i>	NA
McIntyre, M. 1983.	<i>Archaeological Reconnaissance Report for FS 05-01-53-50.</i>	NA
McIntyre, Michael J., 1987	<i>Archaeological Reconnaissance Report: Vista del Largo Recreation Development</i>	LA-1628
McIntyre, Michael J., 1987	<i>Archaeological Reconnaissance Report: LADWP Geologic Exploration</i>	LA-1650
McIntyre, Mike and Perry Bauman, 1991	<i>Archeological Reconnaissance Report: Pyramid Lake Hiking Trail, Los Angeles County</i>	LA-2551
McKenna, Jeanette A., 1992	<i>Archaeological Investigations and Resource Inventory for the United Water Conservation District Piru Creek Water Allocation Study, Los Angeles and Ventura Counties, California</i>	LA-2600
McKenna, Jeanette A., Richard Skyler Denniston, and Elizabeth L. Stoffers, 2004	<i>Final Cultural Resources Investigations and Paleontological Overview for the Simulation of Natural Flows in Middle Piru Creek Project, Los Angeles and Ventura Counties, California.</i>	LA-8230
McKenna, Jeanette A., 2004	<i>Cultural Resources Investigations and Paleontological Overview for the Proposed California Department of Water Resources Pyramid Lake Into Piru Creek Water Release Program, Los Angeles and Ventura Counties, California</i>	LA-10614
Milburn, Douglas H., 1992	<i>Supplemental Archaeological Reconnaissance (05-01-SA-113): Proposed Mobil Oil M-70 Pipeline Replacement Project, Saugus Ranger District, Angeles National Forest</i>	LA-3850
Milburn, Douglas H., 2002	<i>Archaeological Reconnaissance Related to the 2002 "COPCO" Wildfire Incident, Santa Clara-Mojave Rivers Ranger District, Angeles National Forest, Los Angeles County California (ASR # 05-01-00683)</i>	LA-9979

**Table G-7. Previous Cultural Resources Investigations in Area Examined by Licensees (continued)**

Author/Date	Report	South Central Coastal Information Center No.
Nordstrom, Hans A., 1963	<i>UCLA Archaeological Survey Report UCAS-0011.</i>	LA-2429
Offermann, Janis, 2003	<i>Department of Water Resources Negative Archaeological Survey Report: Pyramid Dam Bridge Seismic Retrofit and Piru Creek Erosion Repair (05-01-00830), Los Angeles County</i>	LA-7845
Parr, Robert E., 1988	<i>Environmental Impact Evaluation: An Archaeological Assessment of the Ranch/Tapia/San Fran Control Burn Areas Located in the Castaic Lake Area of Los Angeles County, California</i>	LA--573
Parr, Robert E., 2008	<i>Archaeological Assessment for the Replacement of Five Deteriorated Poles on the Southern California Edison Bailey-Neenach-Westpac 66 kV Line, Los Angeles County, California</i>	LA-9417
Parr, Robert A., 2011	<i>Cultural Resource Assessment for the Replacement of Ten Deteriorated Power Poles on the Southern California Edison Company Hughes Lake, Lucerne, Duntley, Fairmont, Oban, Kinsley, Bledsoe, and Museum 12 kV Distribution Circuits, Los Angeles County, California</i>	LA-875
Peebles, David S., 2006	<i>Archaeological Reconnaissance Report: Cherry Canyon Road Maintenance Project, Santa Clara-Mojave Rivers Ranger District, Angeles National Forest, Los Angeles County, California</i>	NA
Peebles, David S., 2007	<i>Archaeological Reconnaissance Report: Castaic Lake Road/Sawtooth Warm Springs Road Maintenance Project, Santa Clara-Mojave Rivers Ranger District, Angeles National Forest, Los Angeles County, California</i>	LA-9780
Peebles, David S., 2008	<i>Heritage Resource Testing for the Homeland Security Camera Installation at Pyramid Lake, Santa Clara-Mojave Rivers Ranger District, Angeles National Forest, Los Angeles County, California, ARR #05-01-01110</i>	LA-9946
Pollock, Katherine H. and Gabrielle Duff, 2005	<i>Archaeological Monitoring of the Tehachapi East Afterbay Enlargement Project Area, Kern County, California.</i>	NA
Rasson, Judith A., Toni Snyder, Rene L. Vellanoweth, and Helen Wells, 1992	<i>Clougherty Ranch, Los Angeles County, California Cultural Resources Investigation: Literature Search and Survey Final Report</i>	LA-2718

**Table G-7. Previous Cultural Resources Investigations in Area Examined by Licensees (continued)**

Author/Date	Report	South Central Coastal Information Center No.
Reponen Jr., Gerald I. 1978.	<i>Letter requesting archaeological information for proposed plantation sites and archaeological reconnaissance reports.</i>	NA
Reponen Jr., Gerald I. 1978.	<i>Archaeological Reconnaissance Report 05-01-53-28.</i>	NA
Reponen, Gerald I., 1981	<i>Archaeological Reconnaissance Report: Proposed Vista Del Largo Interstate Exchange.</i>	LA-1302
Robinson, R.W., 1980	<i>Cultural Resources Investigation Submitted to A &amp; T Engineering &amp; Design RE: Conditional Use Permit No. 1662 and Tract No. 40106. Prepared for A&amp;T Engineering &amp; Design.</i>	LA-964
Robinson, Roget W., 1991	<i>A Cultural Resources Investigation of a Portion of Tentative Tract No. 46361, Los Angeles County, California</i>	LA-2418
Rogers, Michael J, 1993	Letter regarding emergency undertaking, Old Ridge Route (LAN-990H), Los Angeles County, California	LA-4283
Romani, Gwen R., 1978	<i>Assessment of the Impact Upon Archaeological Resources by the Proposed Development of 60 acres of Land Located at Frenchmans Flat, California.</i>	NA
Ryan, Thomas M., 1975	<i>Archaeological Reconnaissance Report: Dry Canyon Fire Plantation Sites. Angeles National Forest.</i>	LA-1187
Ryan, Thomas M., 1975	<i>Archaeological Reconnaissance Report: Relocation of California Riding and Hiking Trail. Angeles National Forest.</i>	LA-1186
Schmid, Tiffany A. and Janis K. Offermann, 2008	<i>Department of Water Resources Archaeological Survey Report: Pyramid Lake Vista Del Lago (VDL) Visitors Center Repairs Project</i>	LA-9136
Schmid, Tiffany A. and Janis K. Offermann, 2008	<i>Department of Water Resources Archaeological Survey Report: Pyramid Lake United States Department of Agriculture (USDA) Forest Service Boat Dock Sediment Removal Project</i>	LA-9268

**Table G-7. Previous Cultural Resources Investigations in Area Examined by Licensees (continued)**

Author/Date	Report	South Central Coastal Information Center No.
Schmidt, James J., 2005	Letter regarding DWO 6036-4800; AI #5-4833: 2005 Deteriorated Pole Replacement Project Godde A-1, Rayburn C-1, Lasker B-2, Kinsey, Tejon B-2, and Cuyama B-1 and C-2 12 kV Distribution Lines, Los Angeles, Kern, and Ventura Counties	LA-7941
Schmidt, James J., 2009	Letter regarding WO 4703-0457: Bailey-Neenach-Westpac 66 kV, Deteriorated Pole Replacement Project, Los Angeles County	LA-9817
Schmidt, June A., 2011	Letter regarding Bailey-Gorman ISO 66kV Deteriorated Pole Replacement & New Access Road Project (WO 36-TD501876), Bailey Substation, Los Angeles County	LA-10865
Schulz, Peter D., 1977	<i>Review of Archeological Resource Identification and Impact Mitigation California Aqueduct Project (West Branch, Mojave Division and Coastal Branch).</i>	LA-848
Science Applications International Corporation, 1995	<i>Draft Environmental Impact Report, Implementation of the Monterey Agreement, Statement of Principals by the State Water Contractors and the State of California, Department of Water Resources for Potential Amendments to the State Water Supply Contracts</i>	LA-4287
Science Applications International Corporation, 1996	<i>Final Cultural Resources Investigation, Pacific Pipeline Emidio Route (Including West Liebre Gulch Ridge Alignment and Mojave Alternatives), Los Angeles and Kern Counties, California</i>	LA-4008
Singer, Clay A., 1972	<i>The Archaeology of Bridgeport Flats (Part I and Part II).</i>	LA-3580
Singer, Clay A., 1981	<i>Cultural Resource Survey and Impact Assessment for a 20+ Acre Lot in San Francisquito Canyon (Parcel Map No. 13726), Los Angeles County, California.</i>	LA-938
Singer, Clay A., Herrick E. Hanks, and Robert O. Gibson, 1972.	<i>1st Draft; Archaeology of the Pyramid Reservoir.</i>	LA-3701
Skaggs, Glenn A., 2001	<i>Archaeological Survey Report: Geo-Testing Drill Sites, Santa Clara/Mojave Rivers Ranger District, Angeles National Forest, Los Angeles County</i>	LA-10166

**Table G-7. Previous Cultural Resources Investigations in Area Examined by Licensees (continued)**

Author/Date	Report	South Central Coastal Information Center No.
Stickel, E. Gary, and Lois J. Weinman-Roberts with Rainer Berger and Pare Hopa, 1979	<i>An Overview of the Cultural Resources of the Western Mojave Desert.</i>	LA-3894
Strudwick, Ivan H. and Bradley L. Sturm, 1996	<i>Results of Archaeological Testing at Sites CA-LAN-2117, CA-LAN-2118, CA-LAN-2119, and CA-LAN-2120, Angeles National Forest, Los Angeles County, California</i>	LA-3359
SWCA Environmental Consultants, 2006	<i>Cultural Resources Final Report of Monitoring and Findings for the QWEST Network Construction Project, State of California</i>	LA-8255
Tartaglia, Louis J., 1978	<i>Assessment of the Impact Upon Archaeological Resources by the Proposed Development of Three Spoil Areas for the Pyramid Powerplant, California.</i>	NA
Tartaglia, Louis James, 1997	<i>Cultural Resources Survey Report: Lake Castaic, California</i>	LA-3848
Vance, Darrell W., n.d.	<i>Archaeological Reconnaissance Report: Lake Hughes Road, Angeles National Forest, Los Angeles County, California.</i>	LA-9981
Vance, Darrell W., 2002	<i>2002 Copper Fire Suppression and Rehabilitation Archaeological Reconnaissance Report (# 05-01-00682), Angeles National Forest, Los Angeles County, California</i>	LA-9984
Various: • Curriden, Nancy. 1980a • Curriden, Nancy. 1980b. • Reponen, Gerald. 1980a. • Reponen, Gerald. 1980b.	<ul style="list-style-type: none"> <li>• <i>Memo regarding the Cultural Resources Reconnaissance Report for the Pyramid Block Fuels Management Unit Undertaking. On file at Angeles Forest Service Supervisor's Office.</i></li> <li>• <i>Memo Regarding the Pacific Crest Trail - Sandberg Trailhead. On file at Angeles Forest Service Supervisor's Office.</i></li> <li>• <i>Evaluation of Completeness for the Pyramid Block Fuels Management Unit. On file at Angeles Forest Service Supervisor's Office.</i></li> <li>• <i>Determination of Effect for the Pyramid Fuels Management Unit. On file at Angeles Forest Service Supervisor's Office.</i></li> </ul>	NA



**Table G-7. Previous Cultural Resources Investigations in Area Examined by Licensees (continued)**

Author/Date	Report	South Central Coastal Information Center No.
Wallace, Ben, 2005	<i>Archaeological Survey Report: Pyramid Dam Emergency Access Road, Santa Clara-Mojave Rivers Ranger District, Angeles National Forest, Los Angeles County, California</i>	LA-10147
Wessel, Richard L. and Michael J. McIntyre, 1986	<i>Archaeological Reconnaissance Report: A Portion of the Bailey-Pardee &amp; Pardee-Pastoria 220 kV Transmission Lines in the Saugus Ranger District, Angeles National Forest</i>	LA-1575
Wessel, Richard L. and Michael J. McIntyre, 1986	<i>Archaeological Reconnaissance Report: A Portion of the Bailey-Pardee &amp; Pardee-Pastoria 220 kV Transmission Lines in the Saugus Ranger District, Angeles National Forest</i>	NA
Wessel, Richard L., Michael J. McIntyre, and Helen M. Johnson, 1988	<i>Archaeological Reconnaissance Report 05-01-SO-01, Cultural Resource Inventory of the Cross-Forest OfG-Highway Vehicle Trail</i>	LA-7846
Wlodarski, Robert J., 1991	<i>Request for Determination of Eligibility for Inclusion in the National Register of Historic Places: State Route 4; The Tejon Route; and, the Old Ridge Route</i>	LA-9266
White, David R. M., Ph.D., 1978	<i>Supplement to "An Archaeological Survey of the Proposed Pardee-Pastoria-Pyramid 220 kV Transmission Line Route" Concerning New Thru Access from Tower Site 7 to I-5. Southern California Edison</i>	LA-1355
Whitler, David, 2004	<i>Class III Inventory/Phase I Archaeological Survey of the Dry Canyon OHV Study Area, Angeles National Forest, Los Angeles County, California</i>	LA-9980
Woods, Clyde M., Andrew York, Rebecca Apple, Tirzo Gonzalez, Stephen Van Wormer, Tom Demere, James H. Cleland, 1987	<i>Bicep Transmission Project, Magunden to Vincent/Pardee Alternative Corridor Study, Archaeology, Ethnology, History, and Paleontology Technical Reports (Draft)</i>	LA-2987
Woodward, Jim, 1987	<i>Archeological Survey of Proposed New Development Areas in Castaic Lake State Recreation Area, Los Angeles County, CA</i>	LA-1667

**Table G-7. Previous Cultural Resources Investigations in Area Examined by Licensees (continued)**

Author/Date	Report	South Central Coastal Information Center No.
York, Andrew L., 1991	<i>Addendum No. 2: B1R Route Variation Supplement to Mobil M-70 Pipeline Replacement Project Cultural Resources Survey Report</i>	LA-3491
York, Andrew L. and Gene P. Davis, 1991	<i>B1R Route Variation Supplement to Mobil M-70 Pipeline Replacement Project Cultural Resources Survey Report</i>	LA-4107

Source: SCCIC

Key:

DWR = California Department of Water Resources

kV = Kilovolt

LADWP = Los Angeles Department of Water and Power

NA = Not Applicable

OHV = Off-Highway Vehicle

VDL = Vista Del Lago

**Table G-8. Previously Recorded Prehistoric Archaeological Sites**

Primary No.	Trinomial	USFS No.	Description	NRHP Eligibility
P-19-000324	CA-LAN-324	N/A	Occupation site, probable house ring, indistinct house pits, knoll with cremations, lithic artifacts and debitage, steatite disc beads, worked faunal fragments. Site collected as part of salvage archaeology for reservoir construction, bulldozed, and inundated.	Likely ineligible due to being bulldozed in 1970s.
P-19-000392	CA-LAN-392	N/A	Midden site. Destroyed by construction of Division of Highways pumping station.	Unevaluated
P-19-000393	CA-LAN-393	N/A	Lithic scatter: quartzite and obsidian debitage, possible core tool.	Unevaluated
P-19-000394	CA-LAN-394	N/A	Midden, bedrock mortars, cooking stones.	Unevaluated
P-19-000395	CA-LAN-395	N/A	Lithic scatter with granite cobble handstone.	Unevaluated
P-19-000396	CA-LAN-396	N/A	Lithic scatter with a small silicate flake concentration, rock scatter (cairns), dark soils.	Unevaluated
P-19-000437	CA-LAN-437	N/A	Two groups of bedrock mortars outcrops.	Unevaluated
P-19-000438	CA-LAN-438	N/A	Small occupation site, possible hearth, midden, small lithic scatter: obsidian, quartzite, chalcedony, and jasper tools and debitage.	Unevaluated
P-19-000442	CA-LAN-442	N/A	Small lithic scatter with chalcedony and fused shale debitage.	Unevaluated
P-19-000443	CA-LAN-443	N/A	Small lithic scatter with chalcedony, quartzite, and felsite debitage and cores.	Unevaluated
P-19-000444	CA-LAN-444	N/A	A small lithic scatter with chalcedony, quartzite, chert, and felsite debitage and cores, possible bedrock mortar.	Unevaluated
P-19-001008	CA-LAN-1008	05-01-54-46	Possible seasonal campsite with sandstone outcrop rock shelter, two other possible rock shelters were documented nearby.	Unevaluated
P-19-001015	CA-LAN-1015	N/A	Small lithic scatter with quartzite, chalcedony, jasper, felsite, and quartzite debitage and tools.	Unevaluated

**Table G-8. Previously Recorded Prehistoric Archaeological Sites (continued)**

Primary No.	Trinomial	USFS No.	Description	NRHP Eligibility
P-19-001221	CA-LAN-1221	N/A	Rock shelter with incisions/ grooves in sandstone outcropping at front of shelter. One chlorite schist incised shaft straightener, possible ground stone.	Unevaluated
P-19-001354	CA-LAN-1354	05-01-53-40	Possible travel route with a sparse scatter of lithic debitage and tools (obsidian and sandstone) and miscellaneous bone fragments (fauna).	Unevaluated
P-19-002116	CA-LAN-2116	05-01-53-150	Roasting pit.	Undetermined
P-19-002119	CA-LAN-2119	05-01-53-152	Concentration of small, fire-affected granite rocks and cobbles, concentration of charcoal and fire-darkened soils, rock-lined hearth (yucca processing), battered mano, quartzite flake, burned organic material, burned bone fragments.	Eligible
P-19-002372	CA-LAN-2372	N/A	Hearth with fire-darkened soils, concentrations of fire-affected rock. Phase II testing revealed no cultural materials. Site destroyed by bulldozing.	Ineligible
P-19-002373	CA-LAN-2373	N/A	Hearth with a large amount of fire-affected rock and darkened soils. Phase II testing found no other cultural materials; radiocarbon dated to 3,000-1,000 B.P. (Middle Period/Late Holocene). Potential additional buried deposit(s) that could provide future evaluation	Undetermined
P-19-003211	N/A	N/A	Small lithic scatter with two quartzite cobble tools, one quartzite flake, and one chert shatter flake.	Unevaluated
P-19-003215	N/A	N/A	Quarry with discontinuous concentrations of cobbles, lithic debris, including about 25 quartzite cobble cores and flakes.	Unevaluated
P-19-003217	N/A	N/A	Quarry and lithic tool manufacturing site with deposits of alluvial cobbles, low density lithic scatter of core/cobble tools, quartzite debitage.	Unevaluated

**Table G-8. Previously Recorded Prehistoric Archaeological Sites (continued)**

Primary No.	Trinomial	USFS No.	Description	NRHP Eligibility
P-19-003220	N/A	N/A	Quarry and lithic tool manufacture site with discontinuous deposits of alluvial cobbles; about 10 cores, cobble tools, and shatter flakes of quartzite with some igneous cobble tools.	Unevaluated
P-19-003221	N/A	N/A	Quarry and lithic manufacture site comprised of a small concentration of alluvial cobbles, two quartzite hammerstones, and two quartzite flakes.	Unevaluated
P-19-003222	N/A	N/A	Quarry and lithic manufacture site comprised of a small concentration of alluvial cobbles, one quartzite cobble core, one quartzite flake and one quartzite shatter, one basalt flake, and one fresh water clam shell.	Unevaluated
P-19-003223	N/A	N/A	Quarry and lithic tool manufacture site, discontinuous concentrations of alluvial cobbles and lithic artifacts: about 25 cores, cobble tools, and shatter flakes primarily of quartzite with some igneous materials present.	Unevaluated
P-19-003224	N/A	N/A	Quarry and lithic tool manufacture site, discontinuous concentrations of alluvial cobbles and lithic artifacts: about 20 cores, cobble tools, and shatter flakes. Material: primarily quartzite, some igneous artifacts.	Unevaluated
P-19-003225	N/A	N/A	Quarry and lithic tool manufacture, concentrations of alluvial cobbles and about 10 quartzite cores and shatter flakes.	Unevaluated
P-19-003226	N/A	N/A	Quarry and lithic tool manufacture, small concentration of alluvial cobbles, one quartzite hammerstone, two quartzite shatter flakes.	Unevaluated
P-19-003227	N/A	N/A	Quarry and lithic tool manufacture, discontinuous concentrations of alluvial cobbles, about 40 cores, cobble tools, and flakes, a few igneous cobble tools.	Unevaluated

**Table G-8. Previously Recorded Prehistoric Archaeological Sites (continued)**

Primary No.	Trinomial	USFS No.	Description	NRHP Eligibility
P-19-003228	N/A	N/A	Bedrock milling station on sandstone boulder, five mortar cups, seven possible cupules. No artifacts.	Unevaluated
P-19-003229	N/A	N/A	Quarry and lithic tool manufacture, small concentration of alluvial cobbles, three quartzite cobble cores, one quartzite flake.	Unevaluated
P-19-003246	N/A	N/A	Quarry and lithic tool manufacture, small concentration of alluvial cobbles, two quartzite hammerstones, two quartzite flakes.	Unevaluated
P-19-003576	N/A	05-01-53-331	Cooking pit, fire-affected rock, darkened soils, charcoal fragments, ash lens.	Unevaluated
N/A	N/A	05-01-53-17	Prehistoric campsite with rockshelter, midden, and lithic scatter of handstone fragments, a projectile point, debitage, cores, and hammerstones, faunal remains, bedrock moratrs.	Unevaluated
N/A	N/A	05-01-53-20	Cherry Canyon, located in an area of probable prehistoric seasonal use, as well as historic land use nearby on the Old Ridge Route (State Highway 99). All rock outcrops and canyon bottoms are expected to be highly sensitive areas whereas ridgetops within the plantation sites are expected to be moderately sensitive.	Unevaluated
N/A	N/A	05-01-53-46	A possible seasonal campsite utilizing one major rock shelter. There are two other possible rock walls.	Unevaluated
N/A	N/A	05-01-53-68	A prehistoric flake scatter on a small bench. Artifacts include one quartzite scraper, six chalcedony flakes, one jasper flake, one quartzite flake, 20-30 felsite flakes.	Unevaluated
N/A	N/A	05-01-53-370	Bedrock mortars.	Unevaluated.

Source: SCCIC

Key:

NRHP = National Register of Historic Places

USFS = United States Forest Service

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## **Appendix H**

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### ***Privileged Cultural Maps***



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**APPENDIX H****PRIVILEGED CULTURAL MAPS**

Due to the sensitive nature of information regarding cultural resources, maps depicting the locations of cultural studies, cultural resources, and potential cultural resources, are considered to be "PRIVILEGED" and provided only to those on a need to know basis. Anyone who has not been provided with copies of PRIVILEGED maps, but who believe they should have a copy, may contact DWR for further assistance.

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**Appendix I**  
***Study Plan Outlines***

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**APPENDIX I****STUDY PLAN OUTLINES**

- Aquatic Invasive Species Study
- Quail Lake Fish Populations Study
- Pyramid Reach Fish Populations Study
- Special-Status Aquatic Amphibians and Semi-Aquatic Snakes Study
- Botanical Resources Study
- Non-Native Invasive Plants Study
- Special-Status Terrestrial Wildlife Species Study
- ESA-Listed Plants Study
- ESA-Listed Amphibians, California Red-Legged Frog Study
- ESA-Listed Bird Species, Southwestern Willow Flycatcher and Least Bell's Vireo Riparian Habitat Evaluations Study
- Recreation Facilities Demand Analysis and Condition Assessment Study
- Cultural Resources Study
- Tribal Resources Study

## **STUDY PLAN OUTLINE 1. AQUATIC INVASIVE SPECIES**

### **Summary of Existing Information and Additional Information to be Developed by the Study**

Existing, relevant, and reasonably available information regarding AIS in the proposed Project boundary is provided in Section 4.5. Licensees found four documented AIS observations of AIS in Pyramid Lake (American bullfrog, African clawed frog, sago pondweed and coontail), and identified nine additional AIS that have not been found in the proposed Project boundary, but have a potential to be introduced from recreationists using reservoirs where these species occur. Currently, Licensees conduct early detection monitoring for both veliger and adult stages of quagga mussel and zebra mussel in Project reservoirs, and has not found either of the species. Additional information, which would be provided by this study, would be the presence/absence of AIS in Project waters, and the relative distribution and abundance of the AIS, if they are present.

### **Study Area, Methods and Analysis**

The study area would consist of Pyramid Lake. The study area would not include Quail Lake or Elderberry Forebay since recreation contact, the primary vector for introducing AIS to water is prohibited. Only non-water contact recreation is permitted at Quail Lake and Elderberry Forebay is closed to the public due to safety concerns.

The study would consist of four steps: (1) gather any known data and prepare for fieldwork; (2) conduct surveys; (3) prepare data and perform quality assurance; and (4) prepare a study report. Surveys would be conducted in the study area for AIS plants by boat, following standard CDFW plant survey methodology, as modified for in-water surveys. Surveys would occur between May and September when AIS plants are most readily identifiable. Surveys would be conducted for AIS mollusks using standard methods in malacology, including dip netting, sieving, and visual surveying. These surveys would be performed during the same approximate time as the AIS plant surveys. Licensees would continue conducting early detection monitoring for both the veliger and adult stages of quagga mussel and zebra mussel. Other AIS, which have not been found in Quail Lake or Pyramid Lake, if observed during the study or other Licensees' relicensing studies, would be noted as incidental sightings. Where applicable and relevant to the potential introduction or establishment of AIS in the study area, water quality would be reviewed. A study report summarizing methods and results would be prepared and included in Licensees' Initial Study Report (ISR) and in Licensee's DLA and FLA.

**Consistency of Methodology with Generally Accepted Scientific Practices**

The study methods would be consistent with methods used to perform AIS surveys, including 2014 surveys for Asian clams in New York and 2010 surveys for New Zealand mudsnails in Washington, as well as the CDFW's 2009 protocol for botanical surveys, which generally would follow the methods for surveying invasive aquatic plants.



## **STUDY PLAN OUTLINE 2. QUAIL LAKE FISH POPULATIONS**

### **Summary of Existing Information and Additional Information to be Developed by the Study**

Existing, relevant, and reasonably available information regarding fish populations in Quail Lake is provided in Section 4.5. As a summary, Licensees found little information regarding fish populations in Quail Lake. A single DWR brochure describes six species of fish that can be found there, including striped bass, channel catfish, blackfish, tule perch, threadfin shad, and hitch. Quail Lake is not stocked. Additional information, which would be provided by the study, includes a current characterization of fishes in Quail Lake.

### **Study Area, Methods and Analysis**

The study area would consist of the area within the proposed Project boundary surrounding Quail Lake.

The study would consist of four steps: (1) conduct planning; (2) conduct fieldwork; (3) prepare data and perform quality assurance; and (4) prepare a report. The shoreline of Quail Lake would be sampled using boat electrofishing at night. Sampling would employ an approach similar to that used by CDFW in 2013 at Pyramid Lake. The shoreline would be divided into six, 0.5-miles-long sites and each would be sampled for a minimum of 10 minutes of pulsed direct current applied to the water. Electrofishing would be done in a leap frog manner, parallel to the shoreline in roughly 50-foot segments. Surveys would occur on one night in the spring (May) and one night in the fall (October). Fish would be identified by species, and lengths and weights would be recorded for the first 25 fish of each species collected at each site. Length frequency distribution, length-weight relationships, relative weights, and (if an adequate number are captured) relative stock density would be evaluated for sport fish species. Relative stock density would be calculated as the percentage of fish sampled greater than 6 inches. Standing stock estimates would be reported as number and weight of fish by species per pounds per acre, and kilograms per hectare. A study report summarizing methods and results would be prepared and included in Licensees' ISR and in Licensee's DLA and FLA.

### **Consistency of Methodology with Generally Accepted Scientific Practices**

The study methods would be consistent with the methods used by CDFW in recent electrofishing studies at Pyramid Lake (CDFW 2013).

### **STUDY PLAN OUTLINE 3. PYRAMID REACH FISH POPULATIONS**

#### **Summary of Existing Information and Additional Information to be Developed by the Study**

Existing, relevant, and reasonably available information regarding fish populations in Pyramid reach is provided in Section 4.5. As a summary, surveys conducted by CDFW in Pyramid reach in 1987 detected two native species (rainbow trout and prickly sculpin) and five introduced fishes (bluegill, green sunfish, largemouth bass, catfish, and brown trout). CDFW stocked Pyramid reach with rainbow trout and largemouth bass in the 1930's, and with rainbow trout from the 1940's to August 2008 when CDFW suspended fish stocking in the reach as part of a settlement to end a CEQA lawsuit. Additional information, which would be provided by the study, includes a current characterization of fishes in Pyramid reach.

#### **Study Area, Methods and Analysis**

The study area would consist of Pyramid reach (i.e., the 18.4-mile-long section of Piru Creek from Pyramid Dam to the NMWSE of Lake Piru).

The study would consist of six steps: (1) conduct mesohabitat mapping; (2) select sampling sites; (3) collect data; (4) prepare data and perform quality assurance; (5) analyze data; and (6) prepare a report. Habitat would be mapped using a combination of ground-based surveys and aerial imagery. Areas mapped using aerial imagery would be ground-truthed with ground-based mapping data to assure overall accuracy of the habitat mapping results. Ground based mapping would follow a three-tiered habitat mapping classification system developed by Hawkins et al. (1993), and would be used to assist in the identification of individual habitat units in the field. Level III categories generally modified/adopted from McCain et al (1990) would be used. Three sites would be selected, one in the 2-mile-long section of Pyramid reach between Pyramid Dam and the concrete weir upstream of Frenchman's Flat; one within a mile downstream of Frenchman's Flat; and the third within one mile upstream of Blue Point Campground. The sites would be selected at accessible locations, would represent the overall habitat ratios found in the reach using habitat mapping data available for the reach, and would be in areas with minimal recreational fishing. Sampling would be conducted in the spring (April) and fall (October). Two sampling events would provide information about changes in the fish community related to seasonal changes in habitat. A three-pass removal protocol as described by Temple et al. (2007), utilizing electrofishing, would be used at all sites. If permits cannot be acquired for electrofishing, then a visual observation protocol described by Hankin and Reeves (1988) would be utilized for snorkel sampling of each site. In the case that electrofishing is used for data collection, all fish captured would be identified by species, counted, and measured for length and weight. In addition, prior to electrofishing, a biologist would walk both banks of the survey area to be sure no ESA-listed or SSC species are present that could be disturbed by the electrofishing. If snorkeling is used, fish would be identified by species, counted, and put into predetermined length bins based on two-inch intervals.

Habitat data would be collected for each site. Water quality data including temperature, conductivity, and dissolved oxygen would be recorded. The average and maximum depth, wetted width and flood prone width, thalweg length, substrate including estimate of potential spawning habitat, and cover would be recorded for each site. A discharge measurement would also be taken at each site.

Analyses would focus on three key constituents of fish populations: (1) individual condition factor; (2) individual species populations and biomass; and (3) community analysis. Fish size and weight data would be examined to establish a baseline for condition factor at each site for the general health of individuals. Population level analysis would include size structure based on relative stock densities as calculated based on Anderson and Neumann (1996). Relative stock density would be calculated as the percentage of fish sampled greater than 6 inches. Standing stock estimates would be reported as number and weight of fish by species per 100 meters of stream, number per mile, pounds per acre, and kilograms per hectare. Additional population level analysis would include length frequency analysis to evaluate the age structure of each population of fish. Analysis would also include species composition and relative abundance as data allows. The condition of fish communities would be evaluated based on the rigor of the collected data described above at three levels of organization: (1) the individual; (2) the population; and (3) the community level as described in Moyle et al. (2002) and Moyle and Marchetti (1998). A study report summarizing methods and results would be prepared and included in Licensees' ISR and in Licensee's DLA and FLA.

### **Consistency of Methodology with Generally Accepted Scientific Practices**

These methods would be generally consistent with the methods used for recent FERC hydroelectric relicensing efforts in California, including for the Drum-Spaulding Project (FERC Project No. 2310), Yuba-Bear Hydroelectric Project (FERC Project No. 2266) and Yuba River Development Project (FERC Project No. 2246).

## STUDY PLAN OUTLINE 4. SPECIAL-STATUS AQUATIC AMPHIBIANS AND SEMI-AQUATIC SNAKES STUDY

### Summary of Existing Information and Need for Additional Information to be Developed by the Study

Existing, relevant and reasonably available information regarding special-status aquatic and semi-aquatic species and their habitat within the proposed Project boundary is provided in Section 4.5 of the PAD. As a summary, Licensees determined that two aquatic-breeding special-status amphibians and two semi-aquatic snake species have the potential to occur: western spadefoot (*Spea hammondi*), foothill yellow-legged frog (FYLF) (*Rana boylei*), two-striped garter snake (*Thamnophis hammondi*), and “South Coast garter snake” (defined as a form of California red-sided garter snake [*Thamnophis sirtalis infernalis*] from the coastal plain from the Santa Clara River Valley in Ventura County to San Diego County, possibly extending into adjacent foothills [Jennings and Hayes 1994]). There are recent records for two-striped garter snake within or near the Project boundary and along Piru Creek. FYLF is described as apparently extirpated on Piru Creek and throughout southern California south of Monterey County (Jennings and Hayes 1994). Additional information, which will be provided by this study, includes field reconnaissance to identify potential habitat for these species in the study area and results of surveys within these identified habitats in relation to Project facilities and normal O&M activities.

### Study Area, Study Methods and Analysis

The study area would consist of the area within the proposed Project boundary, excluding lands overlying the Angeles Tunnel on which Licensees do not perform any Project activities. In addition, the study area would include Pyramid reach, excluding the lowermost uppermost 4.5-mile-long section where existing information is fully adequate as a result of annual sensitive species monitoring since 2010.

The study would consist of four steps: (1) summarize existing information and preliminary identification of potential habitat; (2) perform a field reconnaissance and surveys where additional information is needed, and where accessible; (3) prepare the data and perform quality assurance; and (3) prepare a report. Survey methods would be appropriate to each species. FYLF is a diurnally active, stream species easily differentiated from other frog species and detectable by observation of one or more life stages (i.e., adults, juveniles, larvae, or egg masses) in suitable habitat. Western spadefoot is a terrestrial and fossorial species, which breeds somewhat unpredictably by season and location, and therefore can be difficult to document. Surveys would focus on potential breeding habitats, where larvae may be observed, including vernal pools and seasonal pools within intermittent streams or washes. The two garter snake species are semi-aquatic, closely associated with streams and wetlands, particularly where amphibians and small fish occur, and are diurnally active. Therefore, although there are no established survey protocols, these species are likely to be detected, if present, by multiple inspections of potential habitat. Up to three surveys would be performed in areas of potential habitat. Identification materials for each species would be provided to

biologists engaged in other relicensing studies for the Licensees with instructions to document and report any incidental observations of these species. Any species observations would be recorded and reported to the CNDDDB and appropriate agencies. Where the species are documented, Biologists would review Project O&M activities, including vegetation control and recreation use areas to areas with a Project nexus. After completion of the surveys, Licensees would identify any Project O&M and recreational activities that occur in the vicinity of where the species were documented. A study report summarizing methods and results would be prepared and included in Licensees' ISR and in Licensee's DLA and FLA.

### **Consistency of Methodology with Generally Accepted Scientific Practices**

This study is consistent with the goals, objectives, and methods outlined for recent FERC hydroelectric relicensing efforts in California for areas where these or similar special-status species potentially occur.

## STUDY PLAN OUTLINE 5. BOTANICAL RESOURCES

### Summary of Existing Information and Additional Information to be Developed by the Study

Existing, relevant, and reasonably available information regarding special-status plants within the proposed Project boundary is provided in Section 4.6 and Section 4.7. As a summary, Licensees found that no comprehensive plant surveys or vegetation habitat mapping have been performed recently in the Project area. Existing mapping (NWI data and CalVeg data) is based on remote sensing, aerial photograph interpretation, or both, with little to no field verification. These limited data available from field surveys indicate that sensitive habitats, including wetlands, riparian areas, and littoral zones, exist in the proposed Project boundary, but the locations, extent, and conditions are not known. A number of special-status plants have the potential to occur in the proposed Project boundary based on the proximity to other recorded occurrences and suitable elevation range and habitat requirements, but no special-status plant surveys have been conducted aside from surveys in isolated locations related to other projects. Additional information, which would be provided by this study, would include a determination of vegetation types, wetland and riparian conditions and special-status plants in the proposed Project boundary.

### Study Area, Methods and Analysis

The study area would consist of the area within the proposed Project boundary, excluding lands overlying the Angeles Tunnel on which Licensees do not perform any Project activities.

The study would consist of four steps: (1) map vegetation types in the study area using aerial imagery and existing information (NWI, CALVEG, etc.); (2) conduct field surveys to verify vegetation mapping, collect data on wetland and riparian area quality, and identify the locations of special-status plant species if present; (3) prepare data and perform quality assurance; and (4) prepare a study report. Representative vegetation types would be visited during field surveys to confirm boundaries and to collect vegetation data using the CNPS rapid assessment vegetation sampling technique. Under this method, vegetation data would be collected and habitats would be described using the Manual of California Vegetation field-assessed vegetation alliance name. Wetlands and riparian areas mapped during the desktop review would be visited during the field survey to assess the condition of the habitat using the Proper Functioning Condition qualitative method in Pritchard et al (1998) and in Pritchard et al (2003). All areas of potentially suitable habitat for special-status plant species would be surveyed. Special-status plant species surveys would be conducted following CDFW's Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities. After completion of vegetation type and special-status plant species mapping, Licensees would identify any Project O&M and recreational activities that occur in the vicinity of the identified sensitive communities or special-status plants. A study report summarizing methods and results would be prepared and included in Licensees' ISR and in Licensee's DLA and FLA.

**Consistency of Methodology with Generally Accepted Scientific Practices**

The methods would be generally consistent with the methods used for recent FERC hydroelectric relicensing efforts in California, including the Don Pedro Project (FERC No. 2299), Yuba River Development Project and Merced River Hydroelectric Project (FERC No. 2174), and would use standard botanical survey methods as defined by CDFW.

## **STUDY PLAN OUTLINE 6. NON-NATIVE INVASIVE PLANTS**

### **Summary of Existing Information and Additional Information to be Developed by the Study**

Existing, relevant, and reasonably available information regarding NNIP within the proposed Project boundary is provided in Section 4.6 and Section 4.7. As a summary, Licensees found that several NNIP species have been reported in the Project area, but no comprehensive NNIP surveys have been performed. Additional information, which would be provided by this study, would include a determination of presence and general quantity of NNIPs in the proposed Project boundary.

### **Study Area, Methods and Analysis**

The study area would consist of the area within the proposed Project boundary, excluding lands overlying the Angeles Tunnel on which Licensees do not perform any Project activities.

The study would be performed in conjunction with DWR's relicensing Botanical Resources Study, and would consist of four steps: (1) conduct field surveys for NNIP; (2) prepare data and perform quality assurance; and (3) prepare a study report. All areas of potentially suitable habitat for NNIP would be surveyed. The locations of any NNIP encountered during surveys would be mapped, and the number of individual plants estimated. After completion of NNIP mapping, DWR would identify any Project O&M and recreational activities that occur in the vicinity of the NNIP. A study report summarizing methods and results would be prepared and included in Licensees' ISR and in Licensee's DLA and FLA.

### **Consistency of Methodology with Generally Accepted Scientific Practices**

The methods would be generally consistent with the methods used for recent FERC hydroelectric relicensing efforts in California, including the Yuba River Development Project and Merced River Hydroelectric Project, and would use standard botanical survey methods as defined by CDFW.



## **STUDY PLAN OUTLINE 7. SPECIAL-STATUS TERRESTRIAL WILDLIFE SPECIES**

### **Summary of Existing Information and Additional Information to be Developed by the Study**

Existing, relevant, and reasonably available information regarding special-status terrestrial wildlife species and their habitat within the proposed Project boundary is provided in Section 4.6. As a summary, Licensees found no recent special-status species wildlife survey information. Based on available information, several special-status species are likely or known to inhabit the proposed Project boundary including: coast horned lizard, loggerhead shrike, loon (wintering), golden eagle (non-nesting), bald eagle (wintering), northern harrier, tricolored blackbird, yellow warbler, Townsend's big-eared bat, western mastiff bat, and ringtail. Additional information, which would be provided by this study, would include field-based habitat mapping to determine the presence/absence of special-status wildlife species habitat within the proposed Project boundary.

### **Study Area, Methods and Analysis**

The study area would consist of the area within the proposed Project boundary, excluding lands overlying the Angeles Tunnel on which Licensees do not perform any Project activities.

The study would consist of five steps: (1) conduct current CNDDDB analysis; (2) prepare habitat association maps based on WHR system protocols; (3) conduct field visits to representative locations to confirm habitat types and quality, and determine presence/absence of habitat; (4) prepare data and perform quality assurance; and (5) prepare a study report. Field verification efforts would focus on habitat type, habitat continuity, surrounding land uses and the probability of the habitat supporting special-status wildlife species. Surveys would be conducted at a time of year that would yield the best opportunity to observe special-status wildlife species (i.e., nesting season). Biologists would note Project O&M activities, including vegetation control and recreation use areas that overlap with the location of special-status wildlife habitat. A study report summarizing methods and results would be prepared and included in Licensees' ISR and in Licensee's DLA and FLA.

### **Consistency of Methodology with Generally Accepted Scientific Practices**

The study methods would be consistent with the methods used for recent FERC hydroelectric relicensing efforts in California, including the Oroville Facilities relicensing (FERC No. 2100).

## **STUDY PLAN OUTLINE 8. ESA-LISTED PLANTS**

### **Summary of Existing Information, and Additional Information to be Developed by the Study**

Existing, relevant, and reasonably available information regarding ESA-listed plants within the proposed Project boundary is provided in Section 4.8. As a summary, Licensees found no recent surveys for ESA-listed plants or documented occurrences of ESA-listed plants within the proposed Project boundary. Existing information suggests that seven ESA-listed plants (slender-horned spineflower, San Fernando Valley spineflower, marsh sandwort, Nevin's barberry, Gambel's watercress, spreading navarretia, and California orcutt grass) could potentially occur if there is suitable habitat within the proposed Project boundary. Additional information, which would be provided by this study, is the presence/absence of these and other ESA-listed plants within the proposed Project boundary, and their relative abundance and location, if they occur.

### **Study Area, Methods and Analysis**

The study area would consist of the area within the proposed Project boundary, excluding lands overlying the Angeles Tunnel on which Licensees do not perform any Project activities.

The study would be performed in conjunction with Licensees' relicensing Botanical Resources Study, which consists of a comprehensive floristic survey within the study area. The study would consist of four steps: (1) identify potential habitat for ESA-listed plants; (2) conduct surveys; (3) prepare data and perform quality assurance; and (4) prepare a study report. Surveys would follow methodology described in the botanical survey section of CDFW's Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities. Additional efforts would focus on habitats with a higher probability of supporting ESA-listed plants. Taxonomy and nomenclature would be based on The Jepson Manual. If an ESA-listed plant occurrence is identified, Project O&M and recreation activities that occur in the area would be noted. A report summarizing study methods and results would be prepared and included in Licensees' ISR and in Licensee's DLA and FLA. If any ESA-listed plants are found, the report would be considered "Privileged," and would only be provided to FERC, USFWS, and CDFW, and to the USFS if any ESA-listed plants are found on NFS lands.

### **Consistency of Methodology with Generally Accepted Scientific Practices**

The study methods would be consistent with the methods used for recent FERC hydroelectric relicensing efforts in California, including the Don Pedro Project, Yuba River Development Project and Merced River Hydroelectric Project, and would use standard botanical survey methods as defined by CDFW.

## **STUDY PLAN OUTLINE 9. ESA-LISTED AMPHIBIANS, CALIFORNIA RED-LEGGED FROG**

### **Summary of Existing Information, and Additional Information to be Developed by the Study**

Existing, relevant, and reasonably available information regarding CRLF within the proposed Project boundary is provided in Section 4.8. As a summary, CRLF has not been reported to occur within the proposed Project boundary. Nor was CRLF detected during annual surveys performed since 2010 in Pyramid reach. However, occurrences of CRLF have been reported in the Project area. Additional information, which would be developed by the study, would include site-specific assessment of habitat suitability for CRLF in the proposed Project boundary.

### **Study Area, Methods and Analysis**

The study area would consist of the area within the proposed Project boundary, excluding lands overlying the Angeles Tunnel on which Licensees do not perform any Project activities. In addition, the study area would include an area extending one mile from potential aquatic habitat in the Project boundary due to the known migratory behavior of CRLF. The study area would not include Pyramid reach because the area is surveyed annually for CRLF.

The study would consist of four steps: (1) summarize existing information and identify potential aquatic habitat for CRLF; (2) complete a desktop site assessment, supplemented by field reconnaissance where additional information is needed and where accessible; (3) prepare data and perform quality assurance; and (4) prepare a report. Known occurrences of CRLF within the study area would be identified and mapped, based on agency records, museum records, and other existing information. Locations of habitats in the study area potentially suitable for CRLF breeding would then be identified and mapped based on review of existing aerial imagery, NWI maps, and any existing on-the-ground photographs. Other aquatic habitats potentially affected by the Project that may be utilized by CRLF for dispersal, foraging, or predator avoidance would also be identified and mapped. If habitat mapping indicates the presence of habitats potentially suitable for CRLF breeding within the study area, Licensees would conduct a field reconnaissance of these areas, where accessible, in accordance with USFWS (2005) guidelines. A Habitat Site Assessment Data Sheet would be completed at each site that is examined, along with photographs depicting habitat and other notable findings. Data to be collected during field reconnaissance would include flow and water depth at the time of the site assessment, bank-full depth, stream gradient (i.e., percent slope), substrate, and description of bank. The presence of fish, non-native crayfish, and American bullfrog would be noted. Aquatic habitats would be mapped and characterized by habitat type (e.g., pond, creeks, or pool) and apparent seasonality. Upland habitats within the study area would be characterized based on description of upland vegetation communities, land uses, and any potential barriers to CRLF movement. Once the site assessment has been completed, Licensees would note Project O&M and recreation that typically occurs in the area. A report summarizing

study methods and results would be prepared and included in Licensees' ISR and in Licensee's DLA and FLA. If any CRLF are found, the report would be considered "Privileged," and would only be provided to FERC, USFWS, and CDFW, and to the USFS if CRLF are found on NFS lands.

### **Consistency of Methodology with Generally Accepted Scientific Practices**

The study methods would be consistent with methods used for recent FERC hydroelectric relicensing efforts in California, including the Yuba River Development Project and Merced River Hydroelectric Project, and follows methodology recommended by USFWS.

## **STUDY PLAN OUTLINE 10. ESA-LISTED BIRD SPECIES, SOUTHWESTERN WILLOW FLYCATCHER AND LEAST BELL'S VIREO RIPARIAN HABITAT EVALUATIONS**

### **Summary of Existing Information, and Additional Information to be Developed by the Study**

Existing, relevant, and reasonably available information regarding southwestern willow flycatcher and least Bell's vireo within the proposed Project boundary is provided in Section 4.8. As a summary, Licensees found no existing information regarding the species within the proposed Project boundary. The most recent known surveys were performed in 2002 and 2003, and the nearest known occurrence for either species is downstream of Elderberry Forebay, and non-breeding, migrating willow flycatchers (sub-species not determined) were detected on Castaic Creek upstream of Elderberry Forebay. Additional information, which would be provided by this study, would include determining the occurrence and identification of breeding habitat of southwestern willow flycatcher or least Bell's vireo in the proposed Project boundary, if they occur.

### **Study Area, Methods and Analysis**

Since southwestern willow flycatcher and least Bell's vireo utilize riparian habitat, the study area would consist of riparian habitat within the proposed Project boundary, excluding lands overlying the Angeles Tunnel on which Licensees do not perform any Project activities.

The study would be coordinated with Licensees' relicensing Botanical Resources Study, which would identify, map, and describe vegetation areas, including riparian habitat, within the study area. The study would consist of four steps: (1) identify riparian habitat areas that may be affected by Project O&M and recreation; (2) conduct surveys in these areas; (3) prepare data and perform quality assurance; and (4) prepare a study report. Surveys would be performed in riparian areas in the study area potentially affected by Project O&M and recreation. All surveys would be performed following USFWS standard protocols for southwestern willow flycatcher and least Bell's vireo. Detection surveys conducted by trained personnel for southwestern willow flycatcher require at least five survey visits, distributed within the May through July period, whereas surveys for least Bell's vireo require at least eight survey visits between April 10 and July 31. Where habitat is documented, Licensees would note Project O&M and Project recreation in the area. A report summarizing study methods and results would be prepared and included in Licensees' ISR and in Licensee's DLA and FLA. If any occurrences of willow flycatcher or least Bell's vireo are found, the report would be considered "Privileged," and would only be provided to FERC, USFWS, and CDFW, and to the USFS if any occurrences of southwestern willow flycatcher or least Bell's vireo are found on NFS lands.

**Consistency of Methodology with Generally Accepted Scientific Practices**

The study methods would follow survey protocol methods that are recommended by USFWS. Therefore, the study would be consistent with standard methods accepted by the scientific community, USFWS and CDFW for assessing the presence of breeding southwestern willow flycatcher and least Bell's vireo.

## **STUDY PLAN OUTLINE 11. RECREATION FACILITIES DEMAND ANALYSIS AND CONDITION ASSESSMENT**

### **Summary of Existing Information, and Additional Information to be Developed by the Study**

Existing, relevant, and reasonably available information regarding recreational resources within the proposed Project boundary is provided in Section 4.9. As a summary, existing data includes a basic inventory of Project recreation facilities, maps showing locations of existing recreational trails, statistics on visitor use, and management guidelines and regional needs assessments from relevant regional resource management plans, including the SCORP and the Angeles and Los Padres National Forests' LRMP. Licensees also have 2015 and historical annual occupancy information for Pyramid Lake recreation facilities. Recreation use information for Project day use areas and dispersed use areas is collected every six years for FERC Form 80 reporting; the most recent collection year was 2014. Additional information, which would be provided by this study, would include an inventory and comprehensive assessment of Project recreation facilities.

### **Study Area, Methods and Analysis**

#### **Recreation Demand Component**

To assess future day use and overnight based recreation in the vicinity of Pyramid and Quail Lakes, various information sources will be examined. The demand and need for recreation is contingent upon the supply of existing resources and user preferences. The first step in the preparation of a needs analysis will be to compile a detailed inventory of all existing recreation facilities in the vicinity of the Project. The next step will be to gather and review recent relevant California-based user preference surveys and other outdoor recreation surveys. These reviews will include the 2007 California Outdoor Recreation Survey and 2012 Survey of Public Opinions and Attitudes on Outdoor Recreation in California as well as more current surveys that show outdoor recreation participation rates and growth needs in the greater Los Angeles area. Studies at various scales, covering California, but especially those addressing Southern California will be reviewed for their applicability to the Project area.

Recreation activity and participation trends will be examined from the existing literature, interviews with regional and local recreation providers and user groups, Forest Service reports, FERC Form 80 filings, and data collected by Licensees. The recreation demand analysis will compare demand with the existing supply of recreation opportunities and use patterns. A gap analysis will be performed by comparing relative demand to supply, with consideration for trends and cultural variations in user groups based on research and forecasts of population growth. By comparing this information with a detailed inventory of existing recreation opportunities, it will be possible to determine whether there is a need for modifications to existing facilities or additional new facilities and recreation amenities.

Determinations from this assessment can be used to make appropriate policy, allocation and site specific decisions to inform an updated recreation plan for the Project.

#### Condition Assessment Component

The study area would consist of Project recreation facilities within the proposed Project boundary surrounding Quail Lake and Pyramid Lake. The study area would not include Elderberry Forebay since the forebay is closed to the public due to safety concerns.

The condition assessment would consist of five steps: (1) create forms and templates for assessment; (2) conduct site condition assessments completing detailed inventory conditions forms; (3) assemble results and create maps; (4) prepare data and perform quality assurance; and (5) prepare a study report. Inventory would include assessments of parking areas, and the location and number of parking spaces, picnic and camping units, boat and trailer parking spaces, accessible parking spaces, and facility components. Trailheads would be inventoried for signage, types of improvements, general widths, and general trail conditions. The field reconnaissance would include a physical inspection of existing Project recreation facilities and user-defined and designated Project trails. The reconnaissance would be used to identify use patterns and help determine and verify recreation amenities as related to likely user experiences and common access points and travel routes. Observable resource impacts at developed and dispersed Project recreational sites would be noted.

A report summarizing the recreation demand analysis and condition assessment results would be prepared and included in Licensees' ISR and in Licensee's DLA and FLA.

#### **Consistency of Methodology with Generally Accepted Scientific Practices**

A demand analysis that compares recreation demand with existing supplies of recreation opportunities along with an inventory of recreation opportunities/facilities using existing information and information collected during a site visit, would be consistent with generally accepted practices employed during hydroelectric relicensings in California, including Bucks Creek (FERC No. 619) and Big Creek Hydroelectric Project (FERC No. 2175). Evaluating outdoor recreation facilities per the Architectural Barriers Act Accessibility Guidelines would be a common technique to establish the level of accessibility at outdoor recreation areas, parks, and recreation facilities.



## STUDY PLAN OUTLINE 12. CULTURAL RESOURCES

### Summary of Existing Information, and Additional Information to be Developed by the Study

Existing, relevant, and reasonably available information regarding cultural resources within the proposed Project boundary is provided in Section 4.11. As a summary, in the Project area Licensees identified 55 previous cultural resources investigations that identified 46 archaeological sites and four historic built environment resources. Only one archaeological site has been previously evaluated and was found not to be eligible for the NRHP. Two of the historic built environment resources have been evaluated as eligible for listing on the NRHP. Licensees review of historical maps indicates that approximately 100 to 125 potential historic-era sites or features may be located in the Project area. Additional information, which would be provided by this study, would include the location of historic properties in the proposed Project boundary.

### Study Area, Methods and Analysis

The study area would consist of the area within the proposed Project boundary, excluding lands overlying the Angeles Tunnel on which Licensees do not perform any Project activities.

The study methods would consist of five steps: (1) archival research; (2) field surveys; (3) NRHP evaluations of resources that can be evaluated at the survey level without additional investigation; (4) prepare data and perform quality assurance; and (5) prepare a study report. Under step 1, additional archival research would be used to augment the data collected for the PAD to provide the prehistory and history specific to the study area. The research would be used to prepare the historic contexts against which identified resources may be understood and, if possible at the survey level, evaluated for the NRHP. The field surveys conducted under step 2 would be supervised by qualified, professional archaeologists and others who meet the Secretary of the Interior's Standards for professional archaeologists, historians, and/or architectural historians. Fieldwork would follow the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation and the California Office of Historic Preservation's Instructions for Recording Historical Resources. In step 3, NRHP evaluations would be completed for archaeological sites and historic built environment resources for which the data gathered during steps 1 and 2 are sufficient to assess significance against the NRHP criteria found at 36 CFR § 60.4. A report, conforming to the guidelines of the Archaeological Resources Management Reports, would be prepared and included in Licensees' ISR and in Licensee's DLA and FLA as "Privileged" information, and would only be provided to FERC, SHPO, and interested Native

American tribal chairs or their designated tribal representatives, and to the USFS if any cultural resources are found on NFS lands.

### **Consistency of Methodology with Generally Accepted Scientific Practices**

The study methods would be consistent with the methods used for recent FERC hydroelectric relicensing efforts in California, including for the Don Pedro Project, Yuba River Development Project and Merced River Hydroelectric Project. The methods would be consistent with the ACHP's guidelines.

## **STUDY PLAN OUTLINE 13. TRIBAL RESOURCES**

### **Summary of Existing Information, and Additional Information to be Developed by the Study**

Existing, relevant, and reasonably available information regarding tribal resources within the proposed Project boundary is provided in Section 4.13. As a summary, in the Project area Licensees identified 40 previous cultural resources investigations, none of which identified any TCPs, ITA's or other cultural resources of tribal significance. Licensees found the entire proposed Project boundary has not been surveyed, and interested tribes have not been consulted regarding their interests. Additional information, which would be provided by this study, would include tribal interests in proposed Project boundary.

### **Study Area, Methods and Analysis**

The study area would consist of the area within the proposed Project boundary, excluding lands overlying the Angeles Tunnel on which Licensees do not perform any Project activities.

The study would consist of six steps: (1) archival research; (2) tribal consultation; (3) site visits with tribal representatives; (4) NRHP evaluations of resources that can be evaluated at the study level; (5) prepare data and perform quality assurance; and (6) prepare study report. Under step 1, additional archival research would be used to augment the data collected for the PAD to provide the prehistory and ethnography specific to the Project, and that research would be used to prepare the historic context against which identified tribal resources may be understood and evaluated for the NRHP. In step 2, a professional ethnographer/oral historian would meet and consult with interested tribal members to conduct interviews regarding past and traditional tribal use and activities in the study area, and may visit archaeological sites or other locations within the study area with the tribes under step 3 to further gain knowledge relevant to tribal interests and resources. Identified tribal resources would be documented during step 3 and evaluated for the NRHP under step 4, unless additional investigation is required to conduct the NRHP evaluation. The documentation and NRHP evaluation of tribal interests would be consistent with National Register Bulletin No. 38, Guidelines for Evaluating and Documenting Traditional Cultural Properties. A report, conforming to National Register Bulletin No. 38, would be prepared and included in Licensees' ISR and in Licensee's DLA and FLA as "Privileged" information, and would only be provided to FERC, SHPO, and interested Native American tribal chairs or their designated tribal representatives, and to the USFS if any tribal resources are found on NFS lands.

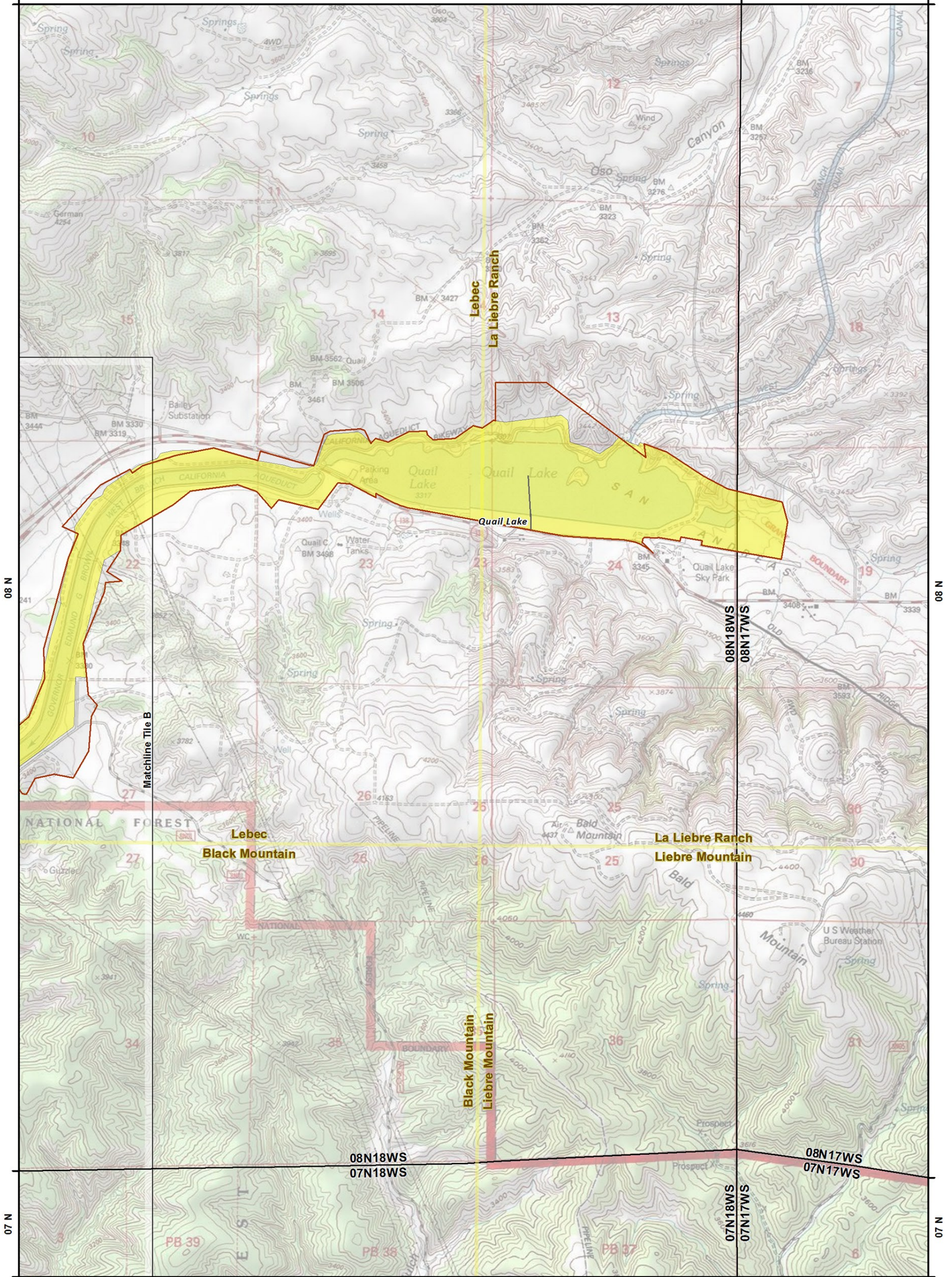
### **Consistency of Methodology with Generally Accepted Scientific Practices**

The study methods would be consistent with the methods used for recent FERC hydroelectric relicensing efforts in California, including for the Don Pedro Project, Yuba River Development Project and Merced River Hydroelectric Project. The methods would be consistent with the ACHP's guidelines.

**Appendix J**  
***Project Maps***

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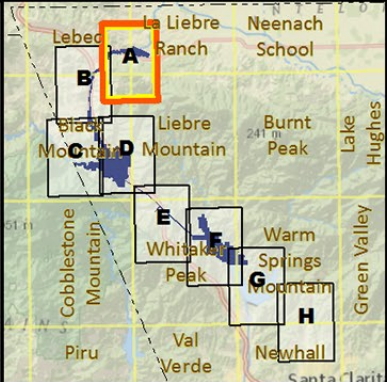


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**Legend**

- Transmission Line (Included in FERC License)
- FERC P-2426 South SWP Hydropower Boundary (v.20150114)
- FERC P-2426 Proposed Boundary (v.20151214)
- USGS 7.5' Quad Boundary

**Name**

Prepared: December, 2015  
 Projection: NAD 1983 StatePlane California V FIPS 0405 Feet  
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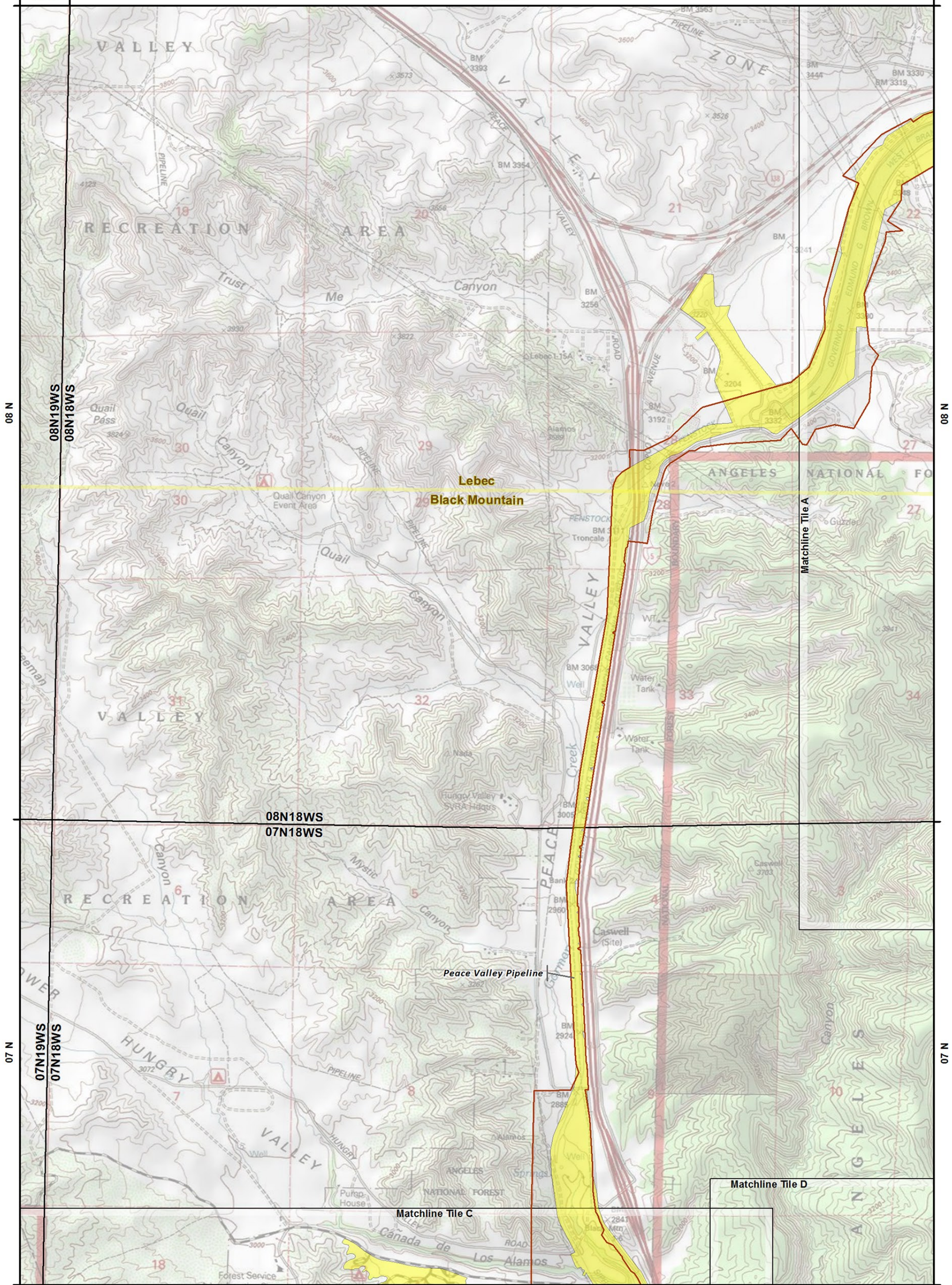
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SOUTH SWP HYDROPOWER RELICENSING  
FERC PROJECT NO. 2426

**Project Boundary Comparison  
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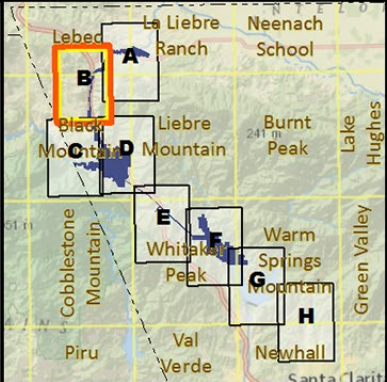


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



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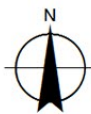
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**Legend**

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(Included in FERC License)
-  FERC P-2426 South SWP Hydropower  
Boundary (v.20150114)
-  FERC P-2426 Proposed Boundary  
(v.20151214)
-  **Name** USGS 7.5'  
Quad Boundary



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Prepared: December, 2015  
 Projection: NAD 1983 StatePlane California V FIPS 0405 Feet  
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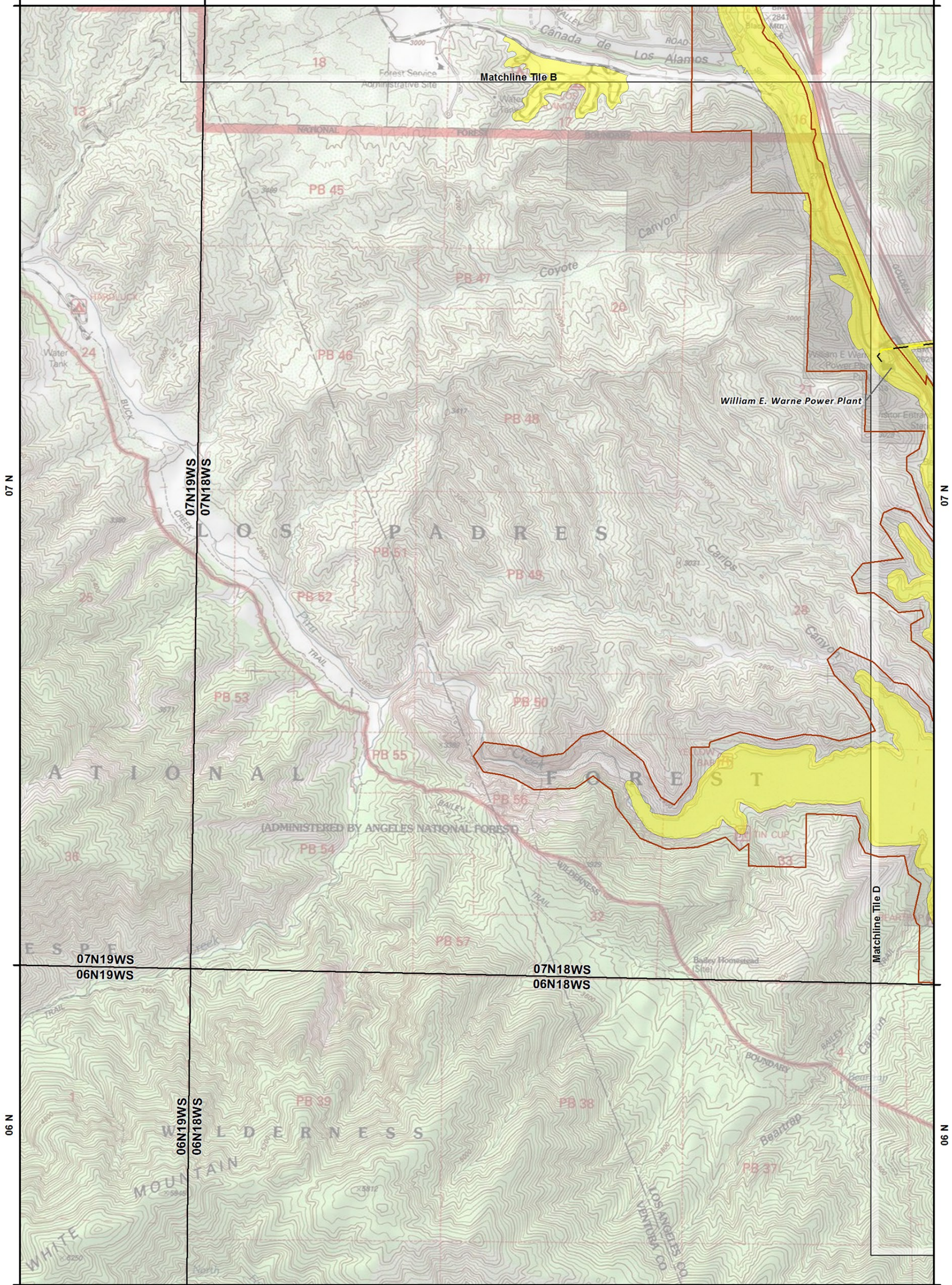
SOUTH SWP HYDROPOWER RELICENSING  
 FERC PROJECT NO. 2426

**Project Boundary Comparison  
 Map Tile: B**



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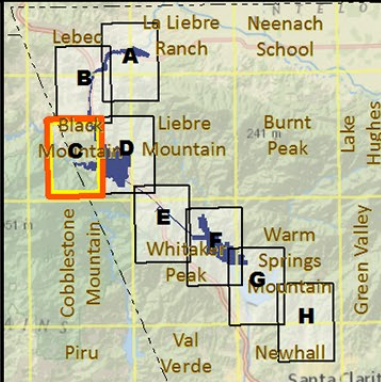


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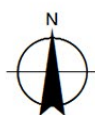
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**Legend**

- Transmission Line  
(Included in FERC License)
- FERC P-2426 South SWP Hydropower Boundary (v.20150114)
- FERC P-2426 Proposed Boundary (v.20151214)
- USGS 7.5' Quad Boundary



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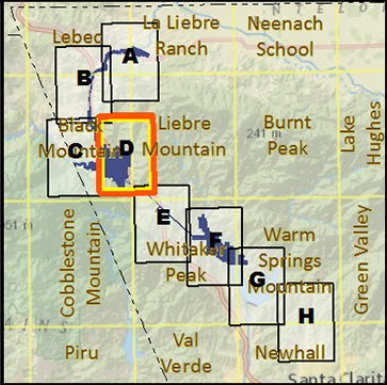
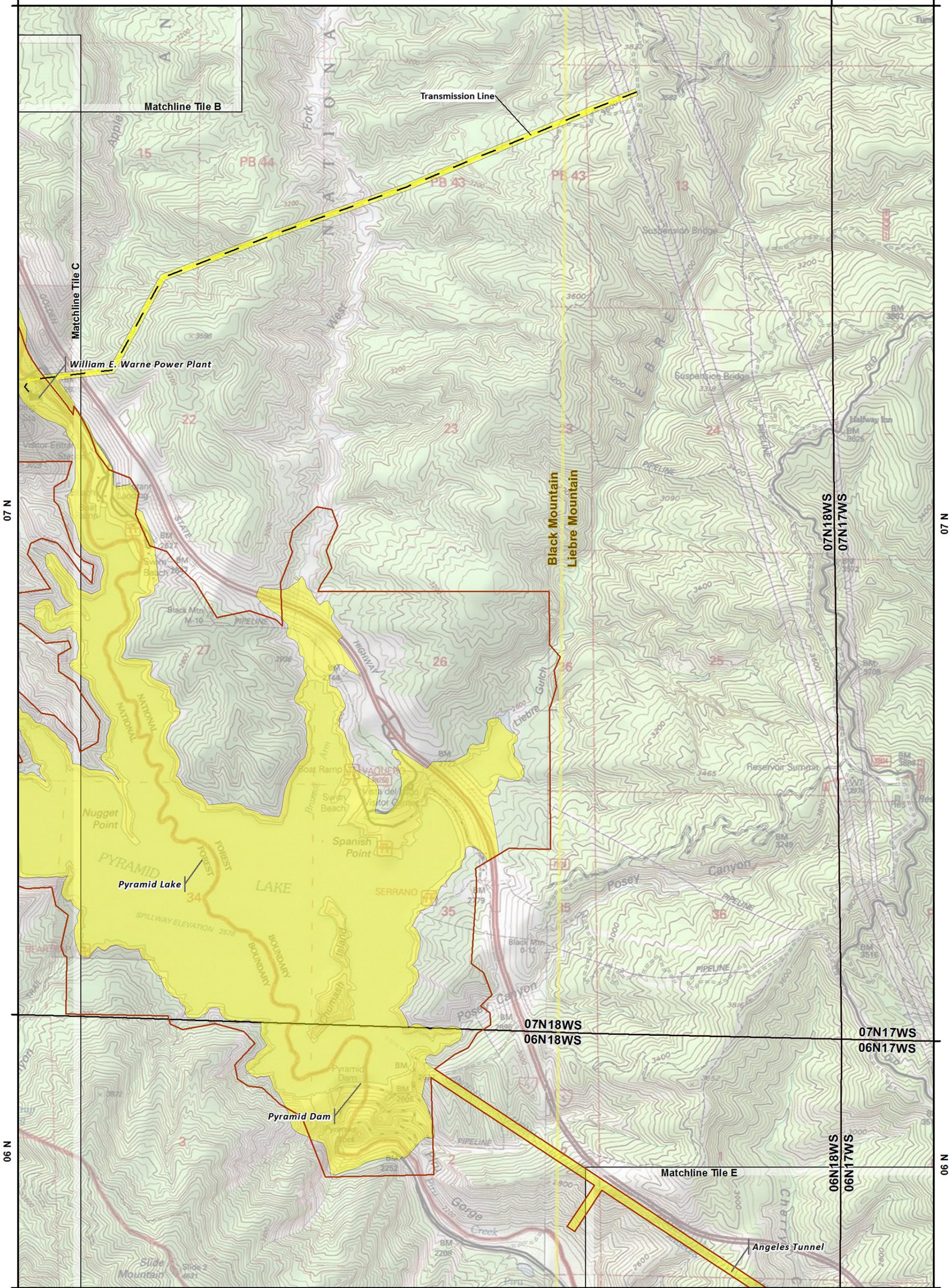
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SOUTH SWP HYDROPOWER RELICENSING  
 FERC PROJECT NO. 2426

**Project Boundary Comparison  
 Map Tile: C**







**Legend**

- Transmission Line (Included in FERC License)
- FERC P-2426 South SWP Hydropower Boundary (v.20150114)
- FERC P-2426 Proposed Boundary (v.20151214)
- USGS 7.5' Quad Boundary

**Name**

Prepared: December, 2015  
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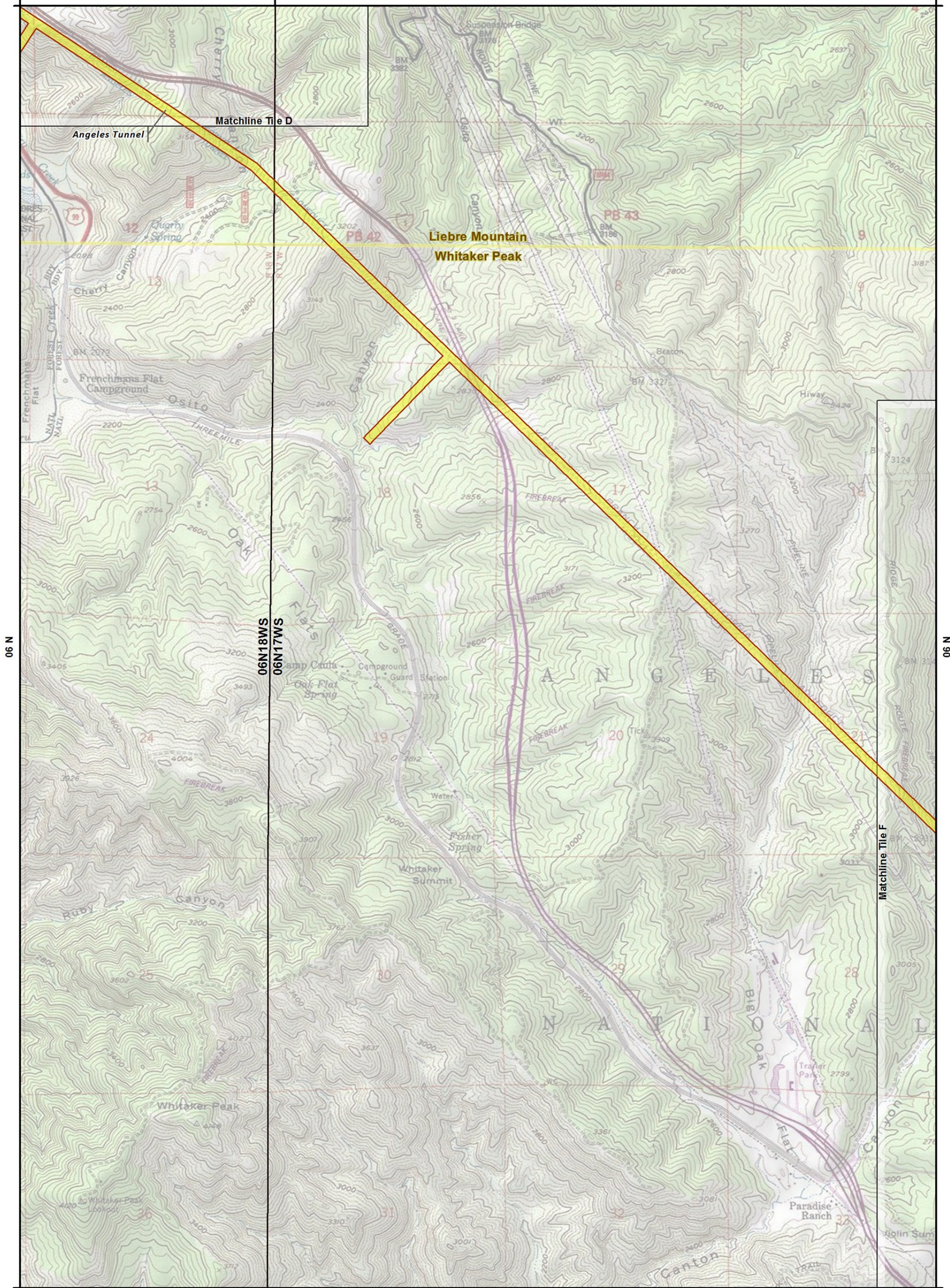
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SOUTH SWP HYDROPOWER RELICENSING  
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**Project Boundary Comparison  
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



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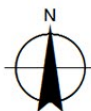


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**Legend**

-  Transmission Line  
(Included in FERC License)
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Boundary (v.20150114)
-  FERC P-2426 Proposed Boundary  
(v.20151214)
-  **Name** USGS 7.5'  
Quad Boundary



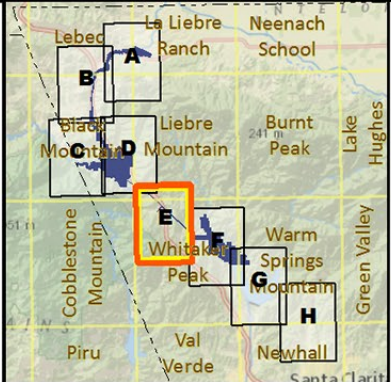
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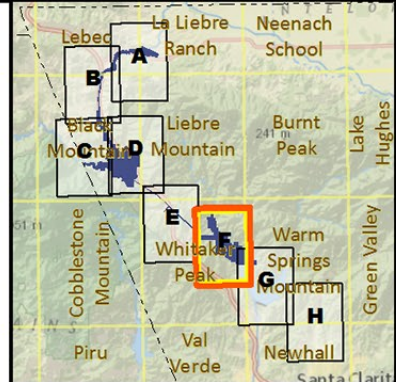
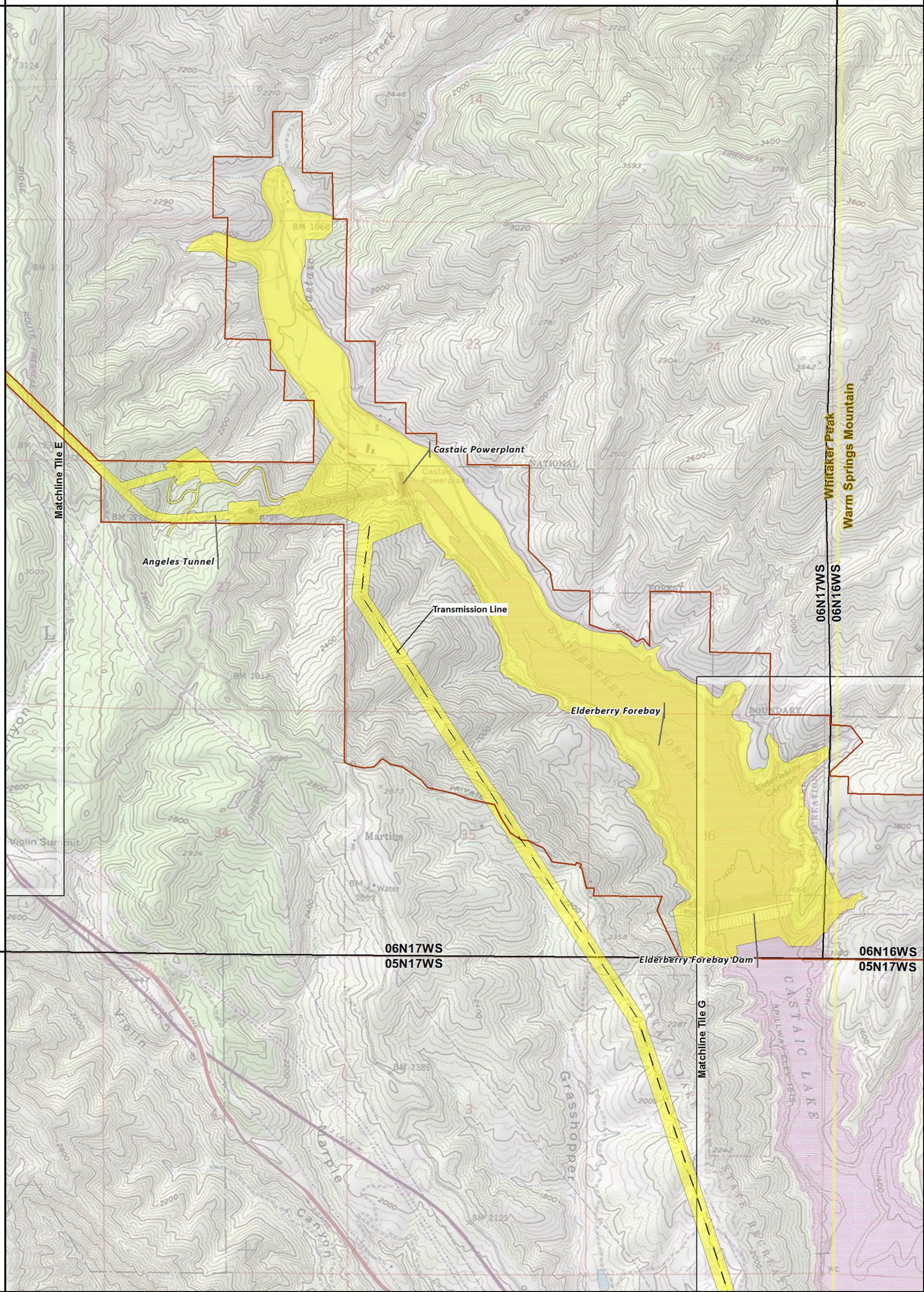
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SOUTH SWP HYDROPOWER RELICENSING  
 FERC PROJECT NO. 2426

**Project Boundary Comparison  
 Map Tile: E**





**Legend**

- Transmission Line (Included in FERC License)
- FERC P-2426 South SWP Hydropower Boundary (v.20150114)
- FERC P-2426 Proposed Boundary (v.20151214)
- USGS 7.5' Quad Boundary

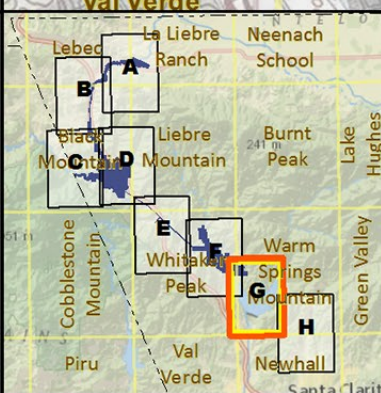
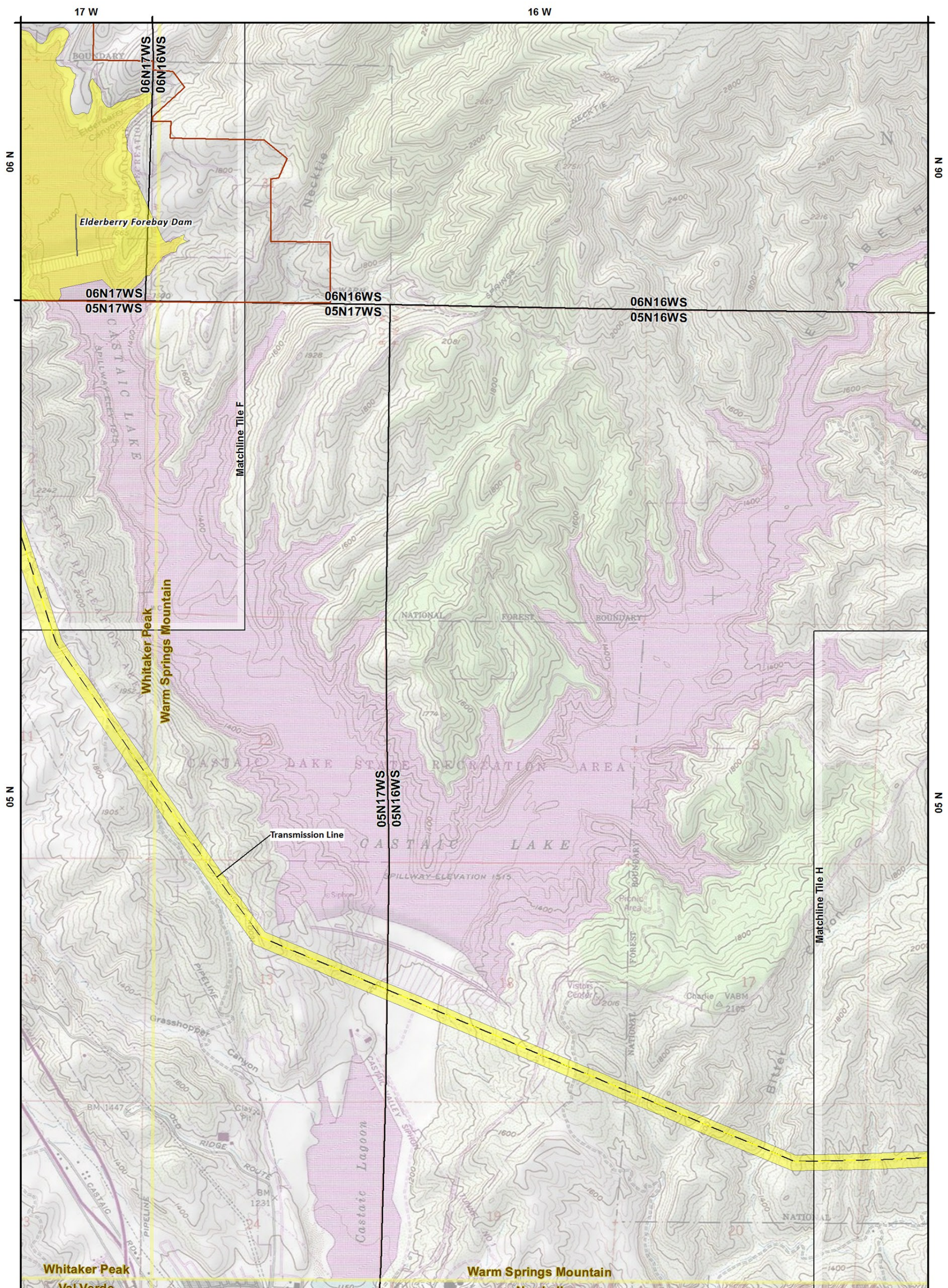
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SOUTH SWP HYDROPOWER RELICENSING  
 FERC PROJECT NO. 2426

**Project Boundary Comparison  
 Map Tile: F**



**Legend**

- Transmission Line (Included in FERC License)
- FERC P-2426 South SWP Hydropower Boundary (v.20150114)
- FERC P-2426 Proposed Boundary (v.20151214)
- USGS 7.5' Quad Boundary

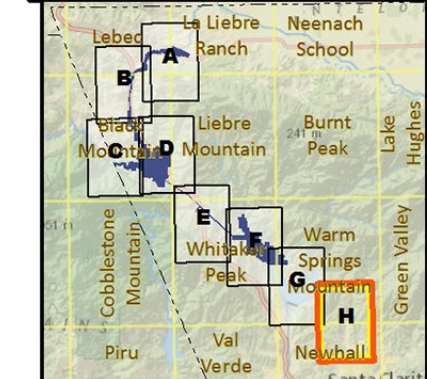
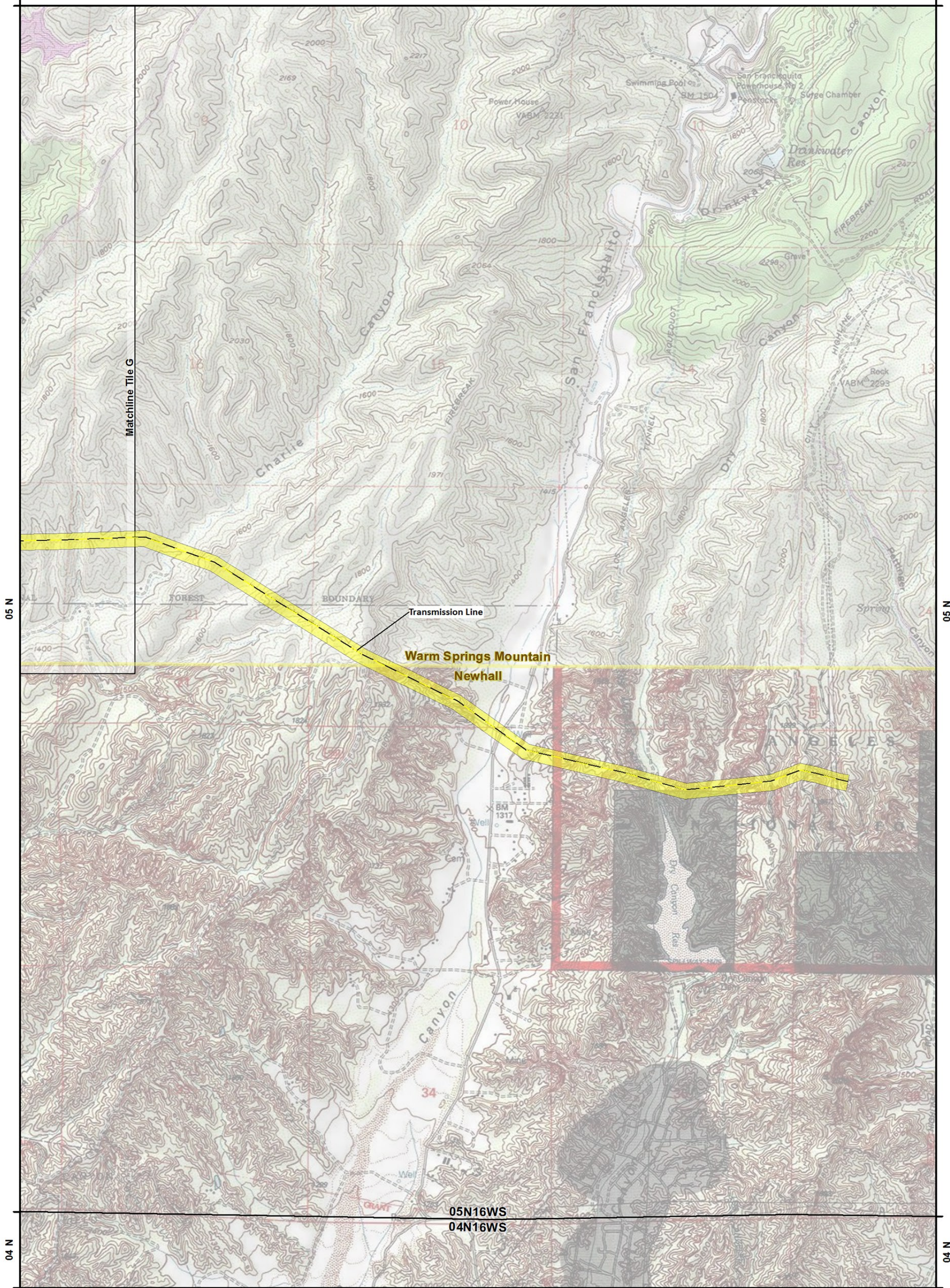
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SOUTH SWP HYDROPOWER RELICENSING  
 FERC PROJECT NO. 2426

**Project Boundary Comparison  
 Map Tile: G**



**Legend**

- Transmission Line (Included in FERC License)
- FERC P-2426 South SWP Hydropower Boundary (v.20150114)
- FERC P-2426 Proposed Boundary (v.20151214)
- USGS 7.5' Quad Boundary

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FERC PROJECT NO. 2426

**Project Boundary Comparison  
Map Tile: H**