4.1.15 Scenic Integrity Study

4.1.15.1 Project Nexus

Continued Project O&M and Project-related recreation activities have the potential to affect scenic integrity.

4.1.15.2 Existing Information and Need for Additional Information

Existing, relevant, and reasonably available information regarding the scenic integrity of the area within the proposed Project boundary is described in Section 4.10 of the Licensees' PAD. Approximately 49 percent of the land within the boundary is NFS lands managed by the USFS as part of the ANF. As a summary, the ANF's Scenic Integrity Objectives (SIO) are applicable for Project facilities and features on NFS lands (USFS 2005a, 2005b). Outside of NFS lands, the County of Los Angeles' Santa Clarita Valley Area Plan (2012) and Antelope Valley Area Plan (2015) provide general guidance regarding visual quality, though the plans do not apply to federal or State of California agencies. This *Scenic Integrity Study* will provide information to determine whether the existing visual conditions related to the Project meet ANF's scenic integrity direction, and generally comply with county visual direction.

4.1.15.3 Study Goals and Objectives

The goal of this *Scenic Integrity Study* is to identify any Project facilities or features on NFS lands that do not meet ANF's scenic integrity direction, and the visual quality of any Project facilities or features on non-NFS lands. The objective of this *Scenic Integrity Study* is to gather sufficient data necessary to fill recognized gaps in existing information in order to identify, map, and describe Project facilities and features, document the existing scenic integrity condition of these facilities and features, and determine whether their existing scenic integrity conditions meet ANF's scenic integrity direction if the facility or feature is on NFS lands. If the facility or feature is on non-NFS lands, this study will determine general conformity with the visual quality direction of applicable county plans.

4.1.15.4 Study Methods

Study Area

The study area for the *Scenic Integrity Study* will consist of all Project facilities and features within the proposed Project boundary within the Warne and Castaic Power Developments, and their associated viewsheds. The major Project facilities and features of the Warne Power Development include Quail Lake, Lower Quail Canal, Peace Valley Pipeline Intake Embankment, Peace Valley Pipeline, Gorman Bypass Channel, the William E. Warne Powerplant (Warne Powerplant) Switchyard, the transmission line that interconnects Warne Powerplant with the SCE Pastoria-Pardee Transmission Line, recreational facilities, 7.2 miles of primary Project roads, and appurtenant facilities. The major Project facilities and features of the Castaic Power Development include Pyramid Dam, Pyramid Lake, the Angeles Tunnel and seven penstocks, the Castaic Powerplant

and Switchyard, the Elderberry Forebay and Dam, Storm Bypass Channel and Check Dams, Castaic Switchyard and the transmission lines that interconnect Castaic Switchyard with the Independent System Operator (ISO) power grid, and approximately 3.9 miles of access roads. The study area for the *Scenic Integrity Study* is shown in Figure 4.1-23.

General Concepts and Procedures

- Personal safety is the most important consideration of each fieldwork team. Fieldwork will only occur in safely accessible areas and under conditions deemed safe by the field crews. Locations within the study area that cannot be accessed in a safe manner (e.g., locations containing dense vegetation or unsafe slopes) and areas inundated when the surveys are performed, will not be surveyed; these areas will be identified in the data summary and an explanation for survey exclusion will be provided.

- The *Scenic Integrity Study* will begin after FERC issues its Study Plan Determination.

- The *Scenic Integrity Study* does not include the development of requirements for the new license, which will be addressed outside the *Scenic Integrity Study*.

- The *Scenic Integrity Study* focuses specifically on scenic integrity on NFS lands within the proposed Project boundary and visual quality on non-NFS lands within the proposed Project boundary, and the study area for the *Scenic Integrity Study* is specific to those visual resources.

- If required for the performance of the *Scenic Integrity Study*, the Licensees will make a good faith effort to obtain permission to access private property well in advance of initiating the *Scenic Integrity Study*. The Licensees will only enter private property if permission has been provided by the landowner.

- The Licensees will acquire all necessary agency permits and approvals prior to beginning fieldwork for the *Scenic Integrity Study*.

- Field crews may make variances to the *Scenic Integrity Study* in the field to accommodate actual field conditions and unforeseen problems. Any variances in the *Scenic Integrity Study* will be noted in the data resulting from the *Scenic Integrity Study*.

- To prevent the introduction and transmittal of amphibian chytrid fungus and invasive invertebrates (e.g., quagga mussels, zebra mussel, and Asian clams), field crews will be trained on, provided with, and use materials (e.g., Quat) for decontaminating their boots, waders, and other equipment between water-based study sites. Field crews will follow DWR's Quagga and Zebra Mussel Rapid Response Plan and CDFW's Aquatic Invasive Species Decontamination Protocol found at the following link:

https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=43333. All boats used during the study will follow clean protocols, including inspections before and after use. All decontamination requirements in place at Project reservoirs including those of DWR's Quagga and Zebra Mussel Rapid Response Plan for the SWP will be strictly followed (DWR 2010).

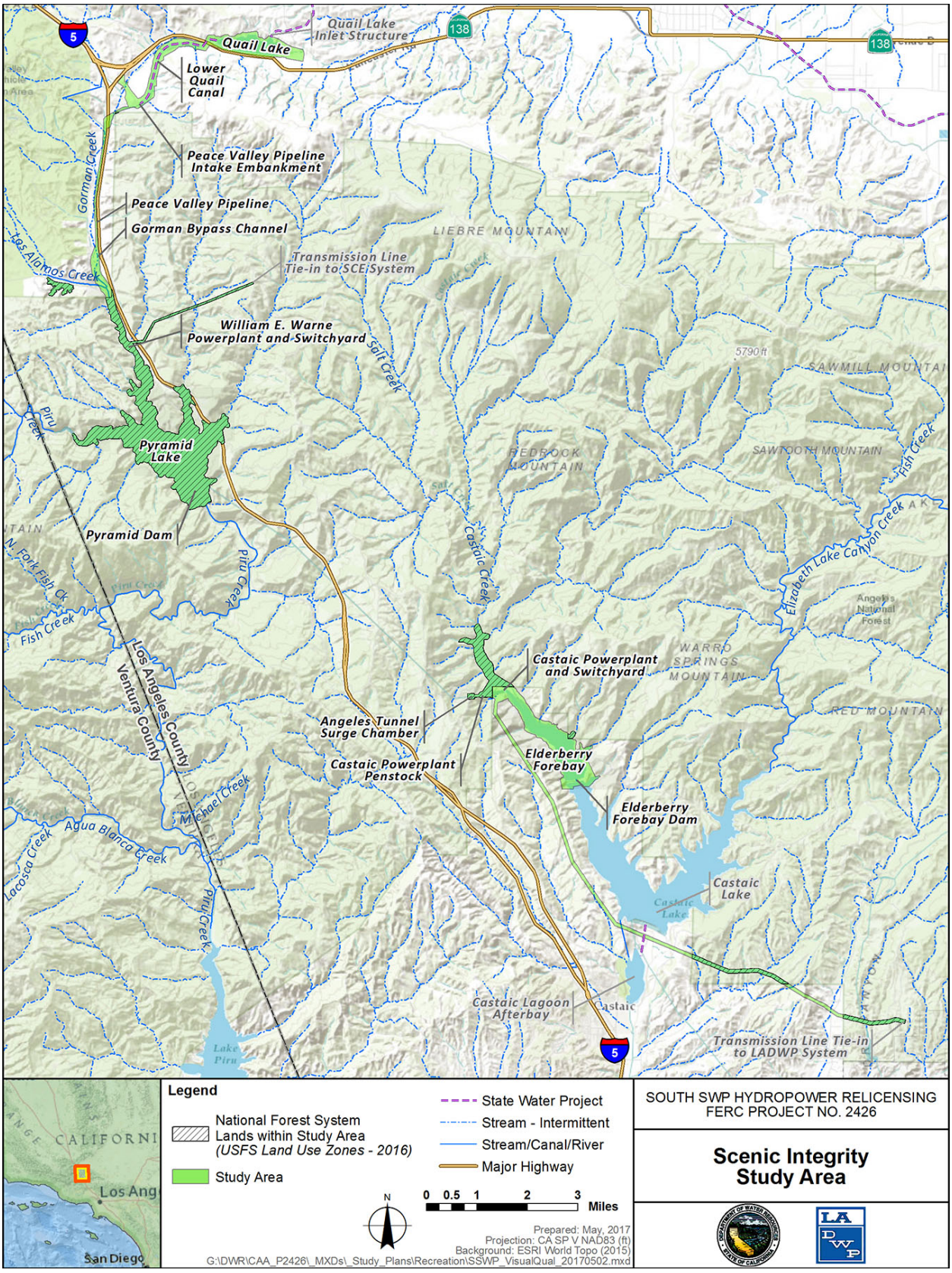

Figure 4.1-23. Scenic Integrity Study Area

Methods

The *Scenic Integrity Study* will consist of two steps: (1) identify Project facilities and features to evaluate; and (2) information gathering and mapping. These steps are described below.

Step 1 – Identify Project Facilities and Features to Evaluate. The Licensees will document all existing Project facilities and features within the proposed Project boundary on NFS lands (refer to Section 4.1.15.4 above).

Step 2 – Information Gathering and Mapping. The Licensees will perform the following:

- Identify and map all reasonable viewsheds associated with the Project facilities and features identified in Step 1.
- Map and summarize the ANF's SIOs (USFS 2005a, 2005b) potentially related to the Project facilities and features on NFS lands.
- Identify and summarize the ANF's Land Management Plan (USFS 2005a, 2005b) direction associated with the scenic inventories relative to the Project facilities and features on NFS lands, and the visual direction provided in applicable county plans for Project facilities and features on non-NFS lands.
- Map the location of the Project facilities and features with respect to their associated foreground, middleground, and background viewsheds and scenic inventories, including SIOs.
- Summarize variety classes, sensitivity levels, and distance zones in table format.
- Document the existing scenic integrity conditions of the Project facilities and features.
- Identify Key Observation Points (KOP) where photographs will be taken based on the list of Project facilities and features using agreed upon photographic protocols. The Licensees will map and describe the location of the KOPs, and take photographs from the KOPs of the Project facilities and features. The Licensees will consult with the USFS regarding the KOPs and photographic protocols to be used for Project facilities and features on NFS lands.

Quality Assurance and Quality Control

All data collected during this *Scenic Integrity Study* will be collected in a manner that promotes high quality results, and will be subject to appropriate QA/QC procedures including checking field data for accuracy and completeness.

Analysis

The Licensees will assess the existing scenic integrity conditions of the Project facilities and features identified in Step 1. For Project facilities and features on NFS lands, the Licensees will document whether those conditions meet ANF Land Management Plan scenic direction and are consistent with the 1969 MOU between the USFS and DWR regarding construction and operation of the California Aqueduct on NFS lands within the ANF and LPNF (USFS and DWR, 1969). The relevant portions of the MOU include Section III, Protection of Lands, which states: "The Department shall make every reasonable effort to preserve the scenic and aesthetic values of all National Forest System lands occupied or used by the Project as far as possible and consistent with Project development." Furthermore, MOU Section X, General Considerations, states: "All permanent structures will harmonize with the forest setting. Use of bright colors and reflective surfaces incompatible with the environment will not be authorized." For Project facilities and features on non-NFS lands, the Licensees will document if the Project facilities and features are generally consistent with the visual guidelines in applicable county plans.

Reporting

Scenic Integrity Study methods and results will be prepared and included, to the extent completed and ready for inclusion in the Licensees' ISR, USR, DLA, and FLA.

4.1.15.5 Consistency of Methodology with Generally Accepted Scientific Practices

The *Scenic Integrity Study* methods are generally consistent with the methods used for recent FERC hydroelectric relicensing efforts in California, including the Yuba River Development Project (FERC Project No. 2246).

4.1.15.6 Schedule

The *Scenic Integrity Study* will begin after FERC issues its Study Plan Determination. The Licensees anticipate the schedule below will be followed to complete the *Scenic Integrity Study*.

Fieldwork Preparation	July 2017 – August 2017
Fieldwork	September 2017
Data QA/QC	October 2017
Data Analysis and Reporting	November 2017

4.1.15.7 Level of Effort and Cost

Based on the work effort described above, the Licensees estimate the current cost to complete this *Scenic Integrity Study* will range between $25,000 and $35,000.

4.1.15.8 References

DWR. 2010. The Quagga and Zebra Mussel Rapid Response Plan for the State Water Project. 93 pp. CONFIDENTIAL/PRIVILEGED – Not for Public Distribution.

United States Department of Agriculture, Forest Service (USFS) and California Department of Water Resources (DWR). 1969. MOU Between the Forest Service, United States Department of Agriculture, and the Department of Water Resources, State of California, for Conduct of Work by the Department During Construction and Subsequent Operation of the California Aqueduct on the Los Padres and Angeles National Forests.

USFS. (1995). Landscape Aesthetics – A handbook for Scenery Management. Agricultural Handbook 701. Washington, DC.

USFS, Southwest Region. 2005a. Land Management Plan, Part 2, Angeles National Forest.

USFS. 2005b. Land Management Plan, Part 3, Design Criteria for Southern California National Forests.