

FERC Project No. 2426
South SWP Hydropower
ESA-Listed Riparian Bird Species, Southwestern Willow Flycatcher, Least Bell's Vireo,
and Yellow-Billed Cuckoo Habitat Evaluations Study

FIELD RESULTS AND DATA SUMMARY

August 21, 2019

Consistent with Section 5.0 of the South SWP Hydropower Revised Study Plan and as approved in the Federal Energy Regulatory Commission (FERC) Study Plan Determination dated June 14, 2017, the California Department of Water Resources and the Los Angeles Department of Water and Power (Licensees) provide the following Field Results and Data Summary for Study 4.1.10, *ESA [Endangered Species Act]-Listed Bird Species, Southwestern Willow Flycatcher, Least Bell's Vireo, and Yellow-Billed Cuckoo Habitat Evaluations Study* (Study), which includes work completed to date, key findings, associated data files, variances, and remaining work. The Licensees consider these data to be public.

Completed Work to Date:

The Study is complete. As detailed below, the Study was initiated and largely implemented in 2018. After initiation of the Study, the Licensees proposed the inclusion of existing road segments to add to the Project's licensed facilities and proposed Project boundary as Primary Project Roads (PPR). The areas associated with these additional PPRs were evaluated for habitat suitability, and the suitable habitat was surveyed in 2019. The results of the 2018 and 2019 surveys are described separately below. Collectively, the sites for 2018 and 2019 represented all potential habitat for the three species within the proposed Project boundary.

2018 Survey Sites

As required by the FERC-approved Study Plan, the Licensees completed Step 1 (Identify Study Areas), and preliminarily identified 36 patches of riparian vegetation from publicly available aerial imagery to merit a field assessment of habitat suitability, which was performed on April 5 and 6, 2018 for least Bell's vireo (LBVI, *Vireo bellii pusillus*) and southwestern willow flycatcher (SWFL, *Empidonax traillii extimus*), and June 4 for yellow-billed cuckoo (YBCU, *Coccyzus americanus occidentalis*). The field assessment verified that habitat patches contained necessary habitat characteristics (e.g., vegetation structure and plant species composition) and were large enough to potentially support these species. In addition, five small habitat patches at Elderberry Forebay, which were not initially identified from aerial imagery or viewed during the field assessment, but were identified as potential habitat during Proper Functioning Condition studies, bring the total number of patches to 41. These patches were subsequently noted and surveyed for the remaining six survey events. Nineteen of the 41 patches were found to be potential habitat for LBVI and SWFL based on habitat requirements and suitability, and were thus designated as survey sites for both species. Nine of the 19 patches were also determined to be potential habitat for YBCU and were designated as survey sites for that species. The 19 SWFL and LBVI survey sites were distributed as follows: 2 sites at Quail Lake; 7 sites at Pyramid Lake; 1 site east of Interstate 5 within Liebre Gulch; 1 site on Piru Creek just below Pyramid Dam; 1 site encompassing all of Gorman Creek within the proposed Project boundary; and 7 sites within the Elderberry Forebay area. The 9 YBCU survey sites included: 1 site at Quail Lake; 3 sites at Pyramid Lake; 1 site east of

Interstate 5 within Liebre Gulch; 1 site encompassing the entirety of Gorman Creek within the proposed Project boundary; 1 site below Pyramid Dam; and 2 sites at Elderberry Forebay.

2019 Survey Sites

As was done prior to avian surveys in 2018, an analysis of aerial imagery was completed in order to assess habitat surrounding the additional PPRs for suitability for LBVI, SWFL, and YBCU. A pre-survey site visit to confirm habitat suitability was conducted for SWFL, LBVI, and YBCU on April 10, 2019. The habitat assessment identified potential habitat for LBVI and SWFL at five locations associated with access roads on the west side of Elderberry Forebay. Potential habitat for LBVI, SWFL, and YBCU was also identified at the North Adit Road below Pyramid Dam.

Conduct Field Surveys

Under Step 2 (Conduct Field Surveys), all potential SWFL habitat within the 2018 and 2019 Study areas was surveyed in 2018 and 2019, respectively, following the U.S. Fish and Wildlife Service's (USFWS) accepted protocols and guidelines for project-related presence/absence surveys. Surveys were performed five times at each site in each year: once during Period 1 (May 15 – May 31), twice during Period 2 (June 1 – June 24), and twice during Period 3 (June 25 – July 17). Survey visits to each site were timed at least five days apart. A Willow Flycatcher Survey and Detection Form was filled out for each SWFL survey.

All potential LBVI habitat within the Study area was surveyed according to the guidelines stipulated by USFWS for presence/absence surveys; 8 survey visits were performed at each site, with at least 10 days between survey visits for each site, with the exception of one group of five sites at Elderberry Forebay in 2018. At the five 2018 Elderberry Forebay Study sites with small habitat patches (i.e., Elderberry Forebay 1-5), only six survey visits were completed. The survey variance did not affect the Study conclusions. See the Variance section below for details.

All potential YBCU habitat within the Study area was surveyed consistent with USFWS presence/absence survey protocols, with four survey visits to each site within three survey windows: June 15 – June 30, July 1 – July 30, and July 31 – August 15.

The survey results for the three species were reported to USFWS and California Department of Fish and Wildlife (CDFW).

In 2018, biologists conducted surveys on 38 days between April 10, 2018 and August 3, 2018. Under Step 3 (Prepare Data), all survey methodology, results, field notes, and data were compiled into a report that was submitted to USFWS on September 20, 2018. In 2019, biologists conducted surveys on 12 days between April 10, 2019 and August 6, 2019. All suitable habitat, survey areas, and survey results were mapped and submitted as a data file.

Key Accomplishments/Summary of Findings:

The survey results included detections of LBVI at Elderberry Forebay and willow flycatcher (WIFL) (subspecies not determined) at multiple locations, but no detections of YBCU at any of the survey sites. As detailed below, the LBVI and WIFL detections were consistent with non-breeding migrants.

LBVI 2018

In 2018, two LBVI detections (auditory and/or visual) were recorded at two sites around Elderberry Forebay: one at Elderberry Forebay Site 2 on May 23, 2018 and one at Elderberry Forebay Site 1 on June 7, 2018. Although these two detections occurred at different sites at Elderberry Forebay, the sites are very close to one another (approximately 900 feet apart) and, in the opinion of the Licensees, the detections were likely the same individual. This individual was probably a migrant, as it was not detected again during the remaining three survey passes. No nests or nesting behavior were observed.

LBVI 2019

No LBVI were detected at any of the sites surveyed in 2019.

WIFL 2018

In 2018, a total of 26 WIFL detections were recorded during the surveys, all within survey Period 1 and Period 2. These detections occurred at Quail Lake, Pyramid Lake, Gorman Creek, and Elderberry Forebay. Six WIFL detections were recorded at Quail Lake Site 2: three on May 22, 2018; two on June 5, 2018; and one on June 19, 2018. Although the last three detections were during survey Period 2, when early nesting activity may occur, no nests or nesting behavior were observed. Furthermore, no detections were recorded on subsequent survey visits at this or any other Quail Lake site. Three WIFL detections also occurred at three different sites at Pyramid Lake: Priest Cove on June 6, 2018; Piru Creek on June 6, 2018; and Bear Trap on May 24, 2018. Six WIFL detections were recorded along Gorman Creek, all during one survey pass on June 8, 2018. Eleven WIFL detections were recorded at various sites around Elderberry Forebay: two on May 8, 2018 and five on June 7, 2018 at the Forebay Peninsula; and four total detections on June 7, 2018 consisting of one WIFL detection each at Elderberry Forebay Study Sites 1, 2, 3, and 5. The detections occurred within the normal period of spring migration of the species in southern California. The absence of any detections or nests during survey Period 3 indicates, in the opinion of the Licensees, that these birds were migrants and subspecies cannot be determined.

WIFL 2019

In 2019, one WIFL was detected on the west side of Elderberry Forebay 1 on May 21, 2019. This detection occurred during the first survey period and no nesting behavior or nests were detected during the survey or in subsequent surveys, indicating that this observation was likely a migrant of an undetermined subspecies.

YBCU 2018

There were no detections of YBCU at any of the survey sites in 2018 and no incidental observations were noted during the Licensees' other relicensing field studies.

YBCU 2019

There were no detections of YBCU detections in 2019.

Incidental Observations 2018

Other noteworthy species incidentally observed during the surveys conducted in 2018 include yellow warbler (*Dendroica petechia*), a CDFW species of special concern. In addition, the surveyors detected Cooper’s hawk (*Accipiter cooperii*), which is on the CDFW watch list; Nuttall’s woodpecker (*Picoides nuttallii*); and Lawrence’s goldfinch (*Spinus lawrencei*), listed as a “Bird Species of Concern” and on the American Bird Conservancy watch list. Yellow warblers were observed a total of four times, one observation each at four different locations including Gorman Creek, Quail Lake 1, Bear Trap, and Piru Creek. Detections of brown-headed cowbird (*Molothrus ater*), a species known to parasitize nests of both LBVI and SWFL, were documented (seen or heard) a total of 11 times during the surveys at the following sites: Gorman Creek, Liebre Gulch arm, Glory Hole, Piru Creek, below Pyramid Dam, Elderberry Forebay Peninsula, and Elderberry Forebay Site 4.

Incidental Observations 2019

Yellow warblers (*Setophaga petechia*) were incidentally observed on three occasions at the North Adit Road survey site on May 7, 24, and June 4, 2019. A bald eagle was observed on the west side of Elderberry Forebay 1 on May 7.

Associated Data/Map Files (All associated data can be found in the folder with this summary form. Note: confidential Critical Energy Infrastructure Information and Privileged information will not be posted publicly.)

File Name	Data Description	File Type	File Location
2018_0918_toStantec_ESA_BirdsSurvey	Survey Transects, study area, and survey sites	ZIP	Available upon request
Bird_survey_maps	Maps of habitat	PDF	Available upon request
YBCU Survey Form (North Adit Rd)_2019	Survey forms	PDF	Available upon request
ESA_BirdsSurvey2019.gdb	2019 data collected	GDB	Available upon request

Variations from Study Methods, Schedule or Approach and Abnormalities in Expected Field Conditions:

In 2018, there was one variance to the FERC-approved Study Plan. The survey protocol for LBVI requires that all potential habitat be surveyed a total of eight times. There were five sites at Elderberry Forebay (Elderberry Forebay 1, 2, 3, 4 and 5) associated with small patches of potential habitat not identified until May 1, 2018. Therefore, these sites were not surveyed during the first two survey periods for LBVI during the Study. However, the sites were surveyed during the remaining six survey periods, during which time there was a detection of a single migrant LBVI at one of the Elderberry Forebay sites during the third survey period, and again at an adjacent site during the fourth survey period. Because the survey produced a positive result for presence of LBVI, this variance in protocol did not affect the outcome of the survey.

There was no variance to the Study Plan in 2019.

Remaining Work:

None. This Study is complete.