

Supporting Document A (SD A) Technical Study Report Introduction

Supporting Document A (SD A) contains Technical Study Reports (TSR) developed for the relicensing of Southern California Edison Company's (SCE) Kaweah Project (Project). These TSRs are a result of implementation of 17 Technical Study Plans (TSP) approved by the Federal Energy Regulatory Commission (FERC)¹ and that were developed in consultation with representatives from resource agencies, Native American Tribes, non-governmental organizations, and members of the public (collectively referred to as stakeholders).

The list of Project facilities included in the TSRs was developed during preparation of the Pre-Application Document filed with FERC on December 14, 2016. This preliminary list of Project facilities has been updated/revise during implementation of technical studies and development of the Application for New License (License Application). Section 4.0 – Proposed Action of Exhibit E contains the updated list (Table 4-1) and maps (Maps 4-1a-g) of the final Project facilities included under the Proposed Action and analyzed in this License Application.

Each TSR includes a description of the study objectives; study area; approach and methods; data analysis; and results. Table SD A-1 includes the distribution dates of each TSR. TSRs were either:

1. Distributed to stakeholders for a 90-day comment period prior to filing of this Draft License Application (DLA), and a TSR addressing stakeholder comments, as applicable, is included in SD A;
2. Being distributed to stakeholders as part of this DLA for a 90-day comment period, and a TSR addressing stakeholder comments will be included in the Final License Application (FLA); or
3. Ongoing and will not be completed until after filing of the FLA (Entrainment Study), and a Draft TSR will be distributed to stakeholders for review and comment in 2020 upon completion of the study.

For those TSRs that were distributed to stakeholders for review prior to filing of this DLA, Table SD A-2 includes a response to comment table that identifies commenting entity, comment, and SCE's response. If a comment resulted in revision to the TSR it is noted in the table and the revised TSR is included in this supporting document. Copies of the comment letters are included in Appendix SD A-1.

¹ SCE filed a Proposed Study Plan (PSP) on May 24, 2017 (SCE 2017b). Three comments were filed on the PSP; however, they did not result in revisions to any of the study plans. Therefore, SCE filed a Revised Study Plan (RSP) on September 19, 2017, which stated that the PSP, without revision, constituted its RSP. FERC subsequently issued a Study Plan Determination on October 24, 2017, approving all study plans for the Kaweah Project.

Table SD A-1. Technical Study Report Distribution Dates

Technical Study Report ¹	Draft TSR Distribution Date	Revised TSR Distribution Date	
		DLA: Aug 3, 2019	FLA: Dec 31, 2019
Aquatic Resources			
AQ 1 – Instream Flow	Aug 3, 2019 (DLA)		X
AQ 2 – Fish Population	Apr 2, 2019	X	
AQ 3 – Macroinvertebrates	Aug 3, 2019 (DLA)		X
AQ 4 – Water Temperature	Aug 3, 2019 (DLA)		X
AQ 5 – Geomorphology	Aug 3, 2019 (DLA)		X
AQ 6 – Water Quality	Apr 2, 2019	X	
AQ 7 – SS Amphibians and Aquatic Reptiles	Aug 3, 2019 (DLA)		X
AQ 8 – Fish Passage	Apr 2, 2019	X	
AQ 9 – Entrainment ²	TBD		
Cultural Resources³			
CUL 1 – Cultural, Built Environment	Jan 22, 2019	X	
CUL 1 – Cultural, Archaeology	Jan 22, 2019	X	
CUL 1 – Cultural, Ethnography	Feb 15, 2019	X	
Land Resources			
LAND 1 – Transportation	Jan 22, 2019	X	
LAND 2 – Aesthetic Resources	Jan 22, 2019	X	
LAND 3 – Land Use	Feb 15, 2019	X	
Recreation Resources			
REC 1 – Recreation Resources	Aug 3, 2019 (DLA)		X
REC 2 – Whitewater Boating	Jan 22, 2019	X	
Terrestrial Resources			
TERR 1 – Botanical Resources	Jan 22, 2019	X	
TERR 2 – Wildlife Resources	Jan 30, 2019	X	

1 For Draft TSRs included in the Draft License Application (DLA), comments will be addressed and the Final TSR included in the Final License Application (FLA).

2 The AQ 9 – Entrainment study is ongoing and will not be complete until after the FLA is filed with FERC. A Draft TSR will be distributed to stakeholders for review and comment in 2020 upon completion of the study.

3 To aid in clarity and ease of stakeholder review, the CUL 1 – TSR was distributed as three separate reports – Built Environment, Archaeology, and Ethnography.

Table SD A-2. Stakeholder Comments on Draft Technical Study Reports and Associated SCE Responses

No.	TSR	Comment	SCE Response
OFFICE OF HISTORIC PRESERVATION, Julianne Polanco, State Historic Preservation Officer – March 28, 2019			
1a	CUL 1 – Ethnography	After reviewing the draft ETSR [<i>Ethnography Technical Study Report</i>], I have no comments. I look forward to receiving the final ETSR that incorporates any additional comments SCE might receive from the tribal contacts.	The updated Ethnographic Technical Study Report (TSR) is provided in this Draft License Application (DLA) and will be submitted to the State Historic Preservation Officer (SHPO) for formal Section 106 consultation.
BUREAU OF LAND MANAGEMENT, Gabriel Garcia, Field Manager – April 8, 2019			
2a	CUL 1 – Archaeology	The BLM asks that Southern California Edison (SCE) and/or FERC evaluate all sites on BLM-administered lands for the National Register of Historic Places (NRHP) during Phase II of the Project, if the sites are located within the Area of Potential Effects (APE). Currently, there are no sites on BLM-administered lands that have been evaluated; what is the justification for not conducting evaluations?	Any sites in the Area of Potential Effect (APE) (including those on U.S. Bureau of Land Management [BLM] property) found to be adversely affected or that have the potential to be adversely affected by continued operation and maintenance of the Project will be subject to National Register of Historic Properties (NRHP) evaluation and treatment under the Historic Properties Management Plan (HPMP). This process was discussed at the Cultural Technical Working Group (TWG) meeting on May 7, 2019 and the Archaeology TSR was revised to include the process.
2b	CUL 1 – Archaeology	BLM identified a few discrepancies on the Archaeological Technical Report, specifically page 23 of the Cultural Resources Technical Report: <ul style="list-style-type: none"> • Please address why FERC recommends eligibility evaluations for five sites when there are about a dozen previously recorded sites that have not been evaluated. • Data related to site conditions are not consistent. Why is certain information included for some of the sites, but not included on all? 	<ul style="list-style-type: none"> • See Response 2a. • Site condition information presented in the Archaeology TSR was reviewed and updated to be consistent among all sites.
2c	TERR 2 – Wildlife	BLM requests that SCE properly cite the names of the "Bat Experts" consulted in text and, if applicable, the literature cited.	The name of the bat expert consulted for the Project (Dave Wyatt) was added to the TERR 2 TSR included in this DLA.
OFFICE OF HISTORIC PRESERVATION, Julianne Polanco, State Historic Preservation Officer – April 19, 2019			
3a	CUL 1 – Archaeology	I have no comments regarding the draft ATSR [<i>Archaeology Technical Study Report</i>]. I look forward to receiving the final ATSR and future consultation on Phase 2 evaluations of the archaeological resources within the APE for their eligibility for listing on the NRHP. Please ensure that DPR 523 records are provided for all archaeological resources identified within the APE with the Final ATSR.	Final Department of Parks and Recreation (DPR) records will be provided to the SHPO and BLM when primary numbers are received from the Information Center. The draft DPR records with temporary site numbers are included as a confidential appendix in the Archaeology TSR included in this DLA.
3b	CUL 1 – Built Environment	Regarding the draft BETSR [<i>Built Environment Technical Study Report</i>], I do not have any comments to offer at this time. Although the draft BETSR provides eligibility recommendations for several built environment resources within the Architectural APE, SCE has not requested formal Section 106 consultation at this time and has not provided a request for concurrence with their own determinations of eligibility for these resources. As such, I will not comment on the eligibility recommendations made in the draft BETSR at this time.	A request for formal Section 106 concurrence was delayed because Southern California Edison Company (SCE) wanted to receive any additional comments from the Cultural TWG prior to the request for concurrence. There have been no additional comments from other Project stakeholders and no comments were submitted at the Cultural TWG held on May 7, 2019. The TSR will be submitted to SHPO for formal Section 106 consultation in fall 2019.
3c	General Comment	When submitting future documents for review, please submit a hard copy of all technical reports. Appendices and figures can be provided digitally on a disc.	Comment noted.
NATIONAL PARK SERVICE, Barbara Rice, Program Manager – April 21, 2019			
4a	REC 2 – Whitewater Boating	Over the past four years, the NPS has engaged with Southern Cal Edison (SCE) and their consultants in study plan development and the relicensing process. Throughout our comments on the study plan development, the NPS has asked for SCE to look at potential public access for whitewater boaters on other SCE owned lands, private lands, and public lands. The only current public access site on SCE's lands is at Edison Beach. The April 3rd, 2018 focus group also expressed the importance of access to the river, since most existing sites are unofficial and informal. Identifying existing and potential river access sites is a critical component of the whitewater study.	<p>The REC 2 – TSR addresses both existing and potential river access sites. Existing river access sites are identified in Tables REC 2-1 and REC 2-3 and photographs of the existing access sites are provided in Appendix B. Access constraints, including those associated with both existing river access sites and potential river access sites are discussed in Section 5.3 of the REC 2 – TSR.</p> <p>As documented, in Section 5.3, access to the Kaweah River and the East Fork of the Kaweah River is severely restricted by the presence of private property along the bypass reaches. Theoretically, any site along the river could be developed or used for public access with permission from private property owners. However, since SCE cannot speculate on which private property owners would be amenable to providing public access, the information presented in the REC 2 – TSR focuses on known access locations and agreements.</p>

No.	TSR	Comment	SCE Response
4b	REC 2 – Whitewater Boating	<p>The REC 2 - Draft Whitewater Boating Technical Study Report generally covers many of the issues we've commented on in the past and documents existing recreation access sites. The report acknowledges that access issues are currently a limiting factor affecting whitewater boaters' ability to use the river, especially for private boaters. However unfortunately potential river access sites and access were only briefly mentioned in the report. The NPS recommends that the report further explore potential access by identifying site constraints and opportunities for modifications to facilitate recreation access on sites managed by SCE that could serve as access sites in the future.</p>	<p>Per the request of the National Park Service (NPS) and American Whitewater (AW), SCE explored opportunities to facilitate access on land owned by SCE, with the following results.</p> <p>SCE considered the possibility of providing public access in the vicinity of the Kaweah No. 1 Powerhouse. However, SCE concluded that providing public access in this location is not a viable option because the powerhouse is located immediately below the Kaweah No. 1 Powerhouse Campus, which serves as SCE's administration center for the Kaweah Project. The campus includes numerous buildings including an operator's cottage, materials storage buildings, and a machine shop and SCE personnel repeatedly come and go from this facility throughout the day. Allowing the general public to cross through or adjacent to the campus would seriously affect SCE's ability to complete the day to day activities that are required to operate and maintain the Project and would jeopardize the health and safety of both SCE workers and the public. Accordingly, the possibility of providing public access at this location was eliminated from further consideration.</p> <p>SCE considered the possibility of providing public access in the vicinity of the Kaweah No. 3 Powerhouse during the previous relicensing effort. When the current Federal Energy Regulatory Commission (FERC) license was issued, the FERC required SCE to construct a formal river access point at the Kaweah No. 3 Powerhouse with parking, sanitation, and improved trail facilities to enhance recreational use of the Project. However, this site was not constructed due primarily to opposition by adjacent landowners and concerns expressed by the NPS law enforcement officials. The FERC formally deleted this requirement from the Kaweah License by order issued June 30, 1993. The same issues that existed during the previous relicensing effort still exist today. Therefore, SCE does not believe that developing a formal river access point in the vicinity of the Kaweah No. 3 Powerhouse is a viable option.</p> <p>Although the Project does not include any developed Project recreation facilities, SCE allows the public to park at the Kaweah No. 2 River Access Parking Area on a limited basis. The parking area is paved and includes six striped parking stalls, one of which is accessible. SCE does not limit use of this site to any particular activity. Therefore, whitewater boaters can use this parking area as a river access site. SCE monitored use of this site in conjunction with the REC 1 – Recreation Resources Technical Study Plan (TSP) using in-person vehicle counts and observations. In addition, SCE monitored use of the parking area over a one-year period extending from March 30, 2018 through March 28, 2019 using a motion-activated camera. No boaters were observed using the parking area or beach during the in-person counts and no boaters were observed in the photos captured by the camera. Therefore, additional improvements to this site specifically to accommodate whitewater boating access are not warranted. However, the Proposed Action includes a measure to install a portable restroom and trash receptacle in the parking area. These enhancements will benefit all users, including whitewater boaters.</p>
4c	REC 2 – Whitewater Boating	<p>This report identified all unofficial private access/parking agreements on all reaches, which was an important request of both the NPS and American Whitewater from the beginning of this relicensing. The report did a good job at identifying existing parking, access, and detailing their condition and we were pleased that the report included Kaweah No. 1 Powerhouse and Kaweah No. 2 Diversion Dam/Kaweah No. 3 powerhouse as potential access sites (as noted "is included in this table at the request of the National Park Service and American Whitewater." - Table REC 2-3). The NPS recommends that the report also outline site constraints and potential options that could be implemented to facilitate public access at these potential access sites.</p>	<p>See Response 4b.</p>

No.	TSR	Comment	SCE Response
4d	REC 2 – Whitewater Boating	Further, the report should describe why Kaweah 2 Powerhouse/Edison Beach is closed on the weekends and potential ways to modify this to facilitate access.	The Kaweah No. 2 River Access Parking Area and Edison Beach are located on land owned by SCE but are accessed via Kaweah River Road. This road also provides access to numerous private residences located along the Kaweah River. These private residences have repeatedly expressed concerns about the general public using Kaweah River Road, the parking area, and Edison Beach. The private residents are concerned about factors such as noise, litter, sanitation, and trespassing. Accordingly, SCE limits use of the parking area and beach to between the hours of 8:00 a.m. and 7:00 p.m. In addition, between Memorial Day and Labor Day, use is limited to Monday through Thursday. During all other times of the year, SCE typically allows use of the parking area and Edison Beach seven days a week. However, SCE may sometimes close the parking area and beach due to complaints by local residents or to address safety or vandalism issues (graffiti), as was the case in late August/early September 2018. Out of respect for the local residents, SCE does not plan to modify the days or hours that the parking area and beach are open.
4e	REC 2 – Whitewater Boating	Also, while the report describes the Sequoia & Kings Canyon (SEKI) gateway access site in detail, there is no mention of the trail issues and parking problems at that location which NPS requested in our comments on the Proposed Study Plan. The river access site near the SEKI entrance station, which is the put-in for the three-mile Gateway to Dinley Bridge run is used by boaters however there is no long term parking or a trail to the river.	The REC 2 – TSR identifies the Indian Head River Parking Area as a possible put-in for the Gateway Bridge Run. Detailed information about the parking area, including the number of parking spaces, amenities, and access conditions is provided in Table REC 2-3 of the report. The parking area functions as a scenic turn out and a developed trailhead, with a trail leading from the parking area to the river. The Indian Head Parking Area and trail are located within the boundaries of the Sequoia National Park (SNP). SCE has no control over how facilities within the park boundaries are used or managed. Trail improvements and long term parking must be addressed by the NPS as the stewards of the SNP.
4f	REC 2 – Whitewater Boating	The draft report states that a site visit could be conducted based on feedback from stakeholders on the REC 2 study report. The NPS recommends that SCE host a site visit to look at and discuss potential access sites and what improvements could be feasible to facilitate access on SCE lands. Looking at these sites in the field would allow participants to see the resource and discuss existing constraints and potential solutions. Inviting other land managers such as Cal Trans and Tulare County would also help open dialogue amongst land managers across jurisdictions and the recreationists to better understand recreation needs, opportunities and constraints. The NPS recommends that the final report document the site visit discussions and action items.	Although the REC 2 – TSP included the possibility of conducting a site visit to examine potential access sites, the site visit was deferred based on feedback received during the Whitewater Boater Focus Group (WBFG) meeting conducted on April 3, 2018. Subsequent to the WBFG meeting, SCE considered various options for developing additional river access sites, but all options were eliminated from further consideration for the reasons described in the responses to comments 4a and 4b above. Given the prevalence of private property along the Kaweah River, and safety and security issues associated with providing access in or near the Project facilities, SCE does not believe a site visit would be productive. Furthermore, neither Caltrans nor Tulare County have shown interest in participating in a site visit to identify river access sites. Therefore, no revisions were made to the REC 2 – TSR.
AMERICAN WHITEWATER, Theresa Simsiman, California Stewardship Director – April 22, 2019			
5a	REC 2 – Whitewater Boating	1. The Draft TSR needs to include a summary of reaches that have nexus to the project. It is equally important to understand the reaches that have nexus to the project including the Ash Mountain and Dinely Bridge runs. Although these runs are not included in the “bypass reach” they do have nexus to the project for instance a takeout option for Ash Mountain run is downstream of the Kaweah No. 3 Powerhouse and a put-in option for the Dinely Bridge run is the Kaweah No. 2 powerhouse. American Whitewater would like to see these runs summarized in Section 5 Study Results. These reaches are either identified in the guide books (Cassady et al. 1995; Holbeck et al. 1998), online information or in the Whitewater Boating Focus Group.	All runs in the immediate vicinity of the Kaweah Project are discussed and described in the REC 2 – TSR. The runs located in the bypass reaches are described in detail in Section 5.1 and on Table REC 2-1. Description information about the other whitewater boating runs in the Kaweah River Watershed, including the Ash Mountain, Dinely Bridge and Three Rivers runs, is provided in Table REC 2-2. In addition, all of the runs identified on Tables REC 2-1 and REC 2-2 are graphically depicted on Map REC 2-1. The descriptive information about the other runs in the Kaweah River Watershed is sufficient to understand the whitewater opportunities that are available in the Watershed and their nexus to the Project. Additional information is unnecessary.
5b	REC 2 – Whitewater Boating	2. The Draft TSR inaccurately characterizes the Park Boundary Run The draft TSR inaccurately details that the Park Boundary Run “is not considered a “stand-alone” run. While it is a relatively short run that can be added to the end of the Ash Mountain Run or to the beginning of the Gateway Bridge Run more recent guide sources identify the Park Boundary Run as a “stand-alone” whitewater resource packed with 13-15 rapids.	The REC 2 – TSR indicates that the Park Boundary Run is 0.6-mile long run, extending from the Kaweah No. 2 Diversion Dam to the East Fork Kaweah River. The characterization of the run is based on information developed during the WBFG session. A run this short is not typically considered a “stand alone” run. Regardless, SCE acknowledges that the Park Boundary Run could be run by itself, or in combination with the other runs, at the discretion of the boater. Either way, the description of the run and access conditions presented in the REC 2 – TSR is accurate.

No.	TSR	Comment	SCE Response
5c	REC 2 – Whitewater Boating	<p>3. A separate sub-heading for Access should be included in Section 5.2 Limiting Factors</p> <p>American Whitewater identified access as a key limiting factor in specific comments on the PSP and subsequently requested a modified study that would identify and characterize all access opportunities that are within and nexus to the Kaweah Project. While the draft TSR does provide more detail on access it does so in a scattered fashion making it hard to comprehend the status of public access for each run.</p> <p>For example, Table REC 2-3 provides property jurisdiction, parking availability, access conditions and public facilities but you must pull up Table REC 2-2 to match up the access to the specific river reach. The access pictures are than provided in a separate appendix with no reference to the specific river reach or important context such as time of year.</p> <p>It would be helpful to have a separate subheading in section 5.2 for Access. Then, as opposed to having this information in different tables and an appendix, combine the information under a listing for each reach. If organized in this fashion readers of the TSR can easily identify what access condition exist for each resource.</p>	<p>As indicated in the comment, the REC 2 – TSR provides detailed information about the various put-ins and take-outs associated with each whitewater boating run, including the runs on the bypass reaches and those immediately upstream and downstream. River access was discussed under Section 5.2 – Limiting Factors, because the WBFG meeting participants indicated that access to and from the river channel was one of the primary factors that limits whitewater boating use on the Kaweah River. All of the information presented under Section 5.2 pertains to access as a limiting factor. SCE believes that the REC 2 – TSR accurately and thoroughly conveys current river access conditions. Therefore, adding another subheading is unnecessary.</p>
5d	REC 2 – Whitewater Boating	<p>4. A separate sub-heading for Real-Time Flow Information should be included in Section 5.2 Limiting Factors</p> <p>The whitewater boating focus group identified real-time flow information as a limiting factor for stakeholders using the Middle Fork and East Fork Kaweah Runs. However, the draft TSR once more provides scattered detail on the availability of flow information referencing it in section 5.2 but detailing other information in section 5.4.1, section 5.5, on the map Rec 2-2 and table Rec 2.5. All the streamflow information should be combined and provided in section 5.2 under a separate subheading for Real-Time Flow Information.</p> <p>Additionally, on table Rec 2.5 it is hard to discern if any of the identified gauges would be suitable to for whitewater boating use. Thus, it would be helpful to know what gauges are public or private and for each gauge the unit of time the information is reported in (i.e., average daily or hourly).</p> <p>It should also be noted that the whitewater boating focus group detailed the only current gauge used by boating stakeholders is the USGS “Three – Rivers” gauge. This gauge is a combination of the forks of the Kaweah and an estimated gauge reading must be calculated for each specific reach. This information is often too inaccurate for the preferences of paddlers traveling from a distance. They often do not want to chance the hours of travel only to show up and find the flow too low or too high.</p>	<p>The REC 2 – TSR identifies dissemination of real-time flow information as a limiting factor and directs the reader to Section 5.5 which describes this limitation and characterizes the type of flow information that is currently available to the public. In addition, Table REC 2-5 describes stream gages located within the Kaweah River Watershed. As detailed in the notes column of the table, the only two Project gages suitable to measure stream flow and provide real-time flow information are the stream gage on the East Fork Kaweah River (USGS Gage No. 11208730; SCE Gage No. 201) and the stream gage on the Kaweah River (USGS Gage No. 11208600; SCE Gage No. 203). All other Project gages on the East Fork Kaweah River and Kaweah River are located on Project facilities (penstocks, release pipes, flowlines) and do not measure stream flow. The Three Rivers Gage (USGS Gage No. 11209900) also measures stream flow and is described on Table REC 2-5, however this is not a Project gage. The objective of the study related to the dissemination of real-time flow information has been met and modification/reorganization of the TSR is not necessary.</p> <p>It should be noted that SCE proposes to implement a Stream Gaging Monitoring Plan and a Dissemination of Real-time Flow Information Measure under the Proposed Action (refer to Section 4.0, Appendix 4-A for a detailed description of each). In summary, the Stream Gaging Monitoring Plan identifies and describes: (1) Project gages used to document compliance, including gages used for the dissemination of real-time flow information; (2) operation and maintenance of the gages; and (3) reporting of compliance. The Dissemination of Real-time Flow Information Measure requires the Licensee to provide real-time flow information to the public on the East Fork Kaweah River and the Kaweah River downstream of Project diversions in 1-hour recording intervals (based on averaging the 15-minute data) using data available from USGS Gage No. 11208730 and Gage No. 11208600.</p>

No.	TSR	Comment	SCE Response
5e	REC 2 – Whitewater Boating	<p>5. The Hydrology Assessment needs to include information about project operations including the quantity and duration of project diversions from the Middle Fork and East Fork Kaweah River.</p> <p>The comparison of unimpaired and impaired flows indicates there is an impact on the number of available boatable days. While it is understood the project has very little capability to provide scheduled recreational flow days we should get a better understanding of how operations impacts the available boatable days. Thus, the hydrology assessment should detail operations including the quantity and duration of diversions for each reach by water year type.</p>	<p>The REC 2 – TSP included an objective to identify the range of flows in the bypass reaches that accommodate whitewater boating. This was accomplished by summarizing the hydrology (impaired and unimpaired) on the river reaches associated with the Project and utilizing boatable flow ranges, in combination with hydrologic data, to determine the number of boating days that are available on the bypass reaches under impaired and unimpaired conditions during different water-year types. This objective was met and the study results are provided in the following sections of the REC 2 – TSR:</p> <ul style="list-style-type: none"> • Section 5.4 includes a description of the hydrologic assessment and calculation of boatable flow days. • Table REC 2-7 and Table REC 2-8 present average, minimum, and maximum numbers of boating opportunity days for impaired and unimpaired conditions in dry and normal water-year types. • Table REC 2-9 presents annual boating opportunity days under impaired and unimpaired conditions. • Appendix G: Boating Flow Hydrographs – Representative Water-year Types includes plots graphically depicting the seasonal distribution of flow suitable for whitewater boating under impaired and unimpaired conditions. <p>Additional information regarding Project operations is available in Section 3.0 – No Action Alternative and 7.2 – Water Use and Hydrology of the License Application.</p>
BUREAU OF LAND MANAGEMENT, Gabriel Garcia, Field Manager – May 13, 2019			
6a	LAND 3 – Land Use	<p>3. Extent of Study Area</p> <p>The additional survey area of Kaweah No. 1 Forebay Road only included 1.5 miles; beginning at the locked gate located on Craig Ranch Road, but did not continue up to the actual Forebay. BLM requests that this area be included to the study.</p>	<p>As specified in the LAND 3 – Land Use TSP, the Study Area included “the land surrounding the Kaweah No. 2 Flowline and Forebay and the Kaweah No. 3 Flowline and Forebay within FERC jurisdiction”. The LAND 3 – TSP did not include any facilities or land associated with the Kaweah No. 1 development. However, based on a verbal request made by the BLM during a teleconference on April 11, 2018, SCE voluntarily expanded the study area to include an approximately 1.5 mile long segment of the Kaweah No. 1 Forebay Road (beginning at the locked gate located on Craig Ranch Road). SCE did not include the remainder of the road because it was not identified in the LAND 3 – TSP or during the April 11, 2018, teleconference.</p>
6b	LAND 3 – Land Use	<p>4.2.4 Documentation</p> <p>The report states, "All spatial data collected in the field and provided by SCE and the BLM was incorporated into GIS using ArcGIS software." There are numerous gaps in the exclusionary fence data presented on the maps. It is unclear if the gaps represent actual absence of inventoried fencing or if these areas were not inventoried due to difficult terrain or unsafe access. BLM requests representation on the maps of the areas not inventoried to understand this difference.</p>	<p>The BLM provided SCE with a Shapefile containing fence data on August 18, 2016 and duplicate data on April 5, 2018. This layer was incorporated into the Project GIS data base, and all data that was provided in that data set is shown on map series LAND 3-3 a-j. Note that some of the segments that were included in the BLM data were not found in the field, either because those segments are no longer present or because they could not be seen or safely accessed. These segments are shown in light grey on map set LAND 3-3a-j.</p> <p>The survey area is shown on the maps in light yellow shading. The entire shaded area was surveyed and all fencing that was seen during the field surveys is shown on the maps, color coded by condition as specified in the legend. The gaps between fence segments occur because either: (1) a fence is not present in that location; or (2) a fence was not seen during the surveys because it was obscured by vegetation and the area could not be safely accessed due to steep slopes, excessively dense vegetation, or poison oak.</p>
6c	LAND 3 – Land Use	<p>4.3 Characterization of Maintenance Practices and Responsibilities</p> <p>BLM finds the methods used to characterize maintenance practices and responsibilities to be inadequate, as research of SCE records, FERC records, current and past licenses, and those same records of similar projects were not conducted or documented. BLM requests that this research be conducted and added to the TSR.</p>	<p>The LAND 3 – TSP requires SCE to “characterize SCE’s maintenance practices, responsibilities, and schedules for exclusionary fencing and safety measures.” However, as indicated under Study Objectives, the requirement specifically pertains to “exclusionary fencing”. As documented in the LAND 3 – TSP, SCE does not have any agreements with the BLM, Tulare County, or private property owners that relate to the maintenance of fencing and/or safety features. SCE’s responsibilities and maintenance practices that pertain to safety measures are summarized in Section 5.2.</p>

No.	TSR	Comment	SCE Response
6d	LAND 3 – Land Use	<p>4.4 Livestock Mortality Assessment</p> <p>Why were the mammal mortality reports only reviewed back to 1991 when this data is available dating back to 1964? BLM requests a review of all records and documentation added to the TSR.</p>	<p>As required in Article 410 of the Kaweah Project license (issued by FERC on January 31, 1992), SCE monitors livestock and wildlife mortality along the Kaweah No. 2 and Kaweah No. 3 flowlines and files monitoring reports with the FERC annually. These reports were used to document livestock and wildlife mortality. Livestock mortality is documented in the LAND 3 – TSR and wildlife mortality is documented in the TERR 2 – Terrestrial TSR.</p> <p>The information presented in the LAND 3 and TERR 2 TSRs intentionally focuses on livestock and wildlife mortality incidents that have occurred since 1991 because incidents that occurred prior to 1991 were already documented and addressed during the previous relicensing effort. Furthermore, SCE has made numerous modifications to the Project facilities to decrease wildlife and cattle mortality over time. Accordingly, historic incidents are no longer relevant. SCE believes that the information presented in the LAND 3 and TERR 2 – TSRs sufficiently documents cattle and wildlife mortality, respectively.</p>
6e	LAND 3 – Land Use	<p>4.5 Identification of Public Safety Measures</p> <p>It is unclear on how far back the record research went for safety incidents. BLM requests a review of all records searched and documented within the TSR.</p>	<p>To identify safety-related incidents, SCE searched the FERC’s e-library for Environmental Inspection reports and for safety-related incident reports filed by SCE under 18 CFR §12.10. The e-library search covered the period of January 1, 2000, through May 27, 2019. As documented in the LAND 3 – TSR, no safety related incidents were identified in the Environmental Inspection Reports. Since 2000, SCE has filed seven incident reports under 18 CFR §12.10, all relating to flume failures. None of these incidents resulted in injuries or deaths, nor did they cause serious damage to public or private property. Additional information about these incidents is available in the REC 1 – Recreation Resources TSR. Therefore it is not necessary to update the LAND 3 – TSR.</p>
6f	LAND 3 – Land Use	<p>5.1 Protection and Safety Feature Inventory and Assessment</p> <p>BLM previously provided the OPS coordinates for the livestock watering trough, located along the assessed route in Map 3-3d. This watering trough is visible with commercially available satellite imagery software. See the below picture of the livestock watering trough. BLM requests representation on the maps of areas not inventoried and the reasoning for not being inventoried, to ensure and evaluate the accuracy of all inventoried data.</p>	<p>As documented in Section 5.1 of the LAND 3 – TSR, the BLM provided SCE with GIS coordinates for two troughs along the Kaweah No. 2 Flowline. However, the information provided by the BLM contained the same spatial coordinate pairs for both troughs. A technician visited the area defined by the coordinate pair that was provided by the BLM on two separate occasions but could not find a trough. The photograph provided by the BLM clearly shows a trough, but that trough was not observed during the survey effort, either because the coordinates provided by the BLM were incorrect, or because the trough was obscured by brush. The survey area is graphically depicted on map set LAND 3-3 a-j. The entire area was surveyed, except where dense vegetation or steep slopes prohibited safe access.</p>
6g	LAND 3 – Land Use	<p>5.2 Maintenance Practices and Responsibilities</p> <p>Comment 1: The TSR states that all facilities, including Kaweah No. 2 and No. 3 flow lines, are regularly patrolled and inspected on a monthly basis, however, the maps generated show large sections that are either inaccessible for an adequate inventory or do not have any exclusionary fencing. SCE identify the exclusionary fencing to include the primary Project features and used to block access for wildlife, domestic animals, and the public, and repaired on an as-needed basis. BLM requests the identification of all SCE-maintained exclusionary fencing on maps and within Appendix A: Project Protection and Safety Feature Inventory and Assessment Summary.</p>	<p>The only cattle exclusion fencing that SCE maintains is at the Kaweah No. 3 Forebay, where SCE recently erected fencing to prevent cattle from causing erosion along the banks of the forebay (i.e. to protect SCE infrastructure. The location of this fence is shown on Map Land 3-3g in the LAND 3 – TSR.</p> <p>Appendix A of the LAND 3 – TSR includes an inventory and condition assessment of the safety features located within the Study Area that SCE maintains, based on the field work conducted in 2019. As discussed in the LAND 3 – TSR, SCE regularly inspects all Project-related safety features and makes repairs on an as-needed basis. SCE does not inspect or maintain cattle-related exclusionary fencing that has been erected by the BLM or private parties.</p>
6h	LAND 3 – Land Use	<p>5.2 Maintenance Practices and Responsibilities</p> <p>Comment 2: The LAND 3 TSP approach was to identify existing agreements of maintenance, but also to include, easements, rights-of-way, or other special use permits. TSP did not identify all water-use diversion documents with private property owners and the responsibilities of those parties. BLM requests that the data from all such current and past documents, and summarize the parties involved, responsibilities, and effective dates of each.</p>	<p>The LAND 3 – TSP requires SCE to “identify existing agreements (e.g., maintenance agreements, easements, rights of way, and special use permits) between SCE, the BLM, Tulare County, and private property owners, as applicable, including associated termination dates”. However, as indicated under Study Objectives, the requirement specifically pertains to “exclusionary fencing”. As documented in the LAND 3 – TSP, SCE does not have any agreements with the BLM, Tulare County, or private property owners that relate to the maintenance of fencing and/or safety features. Water user diversion documents do not pertain to exclusionary fencing and were therefore not discussed in the LAND 3 – TSR. SCE’s responsibilities and agreements related to water user diversions are documented in Section 3.5.2 – Operating and Water Delivery Agreements.</p>
6i	LAND 3 – Land Use	<p>5.3 Livestock Mortality</p> <p>Per comment 4.4, mammal mortality data is available to at least 1964, as described in the Environmental Assessment for the current license. Why were records only reviewing since 1991? BLM requests a review and tabulate results from all past mammal mortality records of the Project.</p>	<p>See Responses 6d.</p>

No.	TSR	Comment	SCE Response
BUREAU OF LAND MANAGEMENT, Gabriel Garcia, Field Manager – June 24, 2019			
7a	AQ 2 – Fish Population	The BLM asks that Southern California Edison (SCE) kept the “imagination” to a minimum and to provide an explanatory statement that clarifies that gray-shading are the months of the specified species activity (page 12, Table AQ 2-9).	The caption label for the table was updated to say: “Table AQ 2-9. Species and Life Stage Periodicities (gray shaded areas indicate periods when the life stage is assumed to be present).” The method for obtaining the periodicity table is outlined in Section 5.3: “A fish life stage periodicity chart (or life history chronology chart by month) for each species in the study reaches was developed based on available literature (Moyle 2002), discussion with qualified fisheries biologists, and review of the results of the 2018 fish population sampling (backpack e-fishing, snorkeling, and young-of-year sampling; Table AQ 2-9)”.
7b	AQ 6 – Water Quality	BLM recommends a clarification or a restructure of what sentence 2 of the 1 st paragraph means, starting with, “the laboratories attempted...” As written, the sentence structure seems to suggest that the laboratories may tamper with the reports to achieve levels at or below criteria, (Page 2, Chapter 4, Section 4.4).	The text has been modified to state, “The laboratories used best available methods to achieve analysis reporting limits and detection limits that were at or below the applicable regulatory criteria.” This is related to the analysis methods, not the analysis results.
7c	AQ 8 – Fish Passage	Is stated minnow/sucker capability an assumption? If so, BLM recommends that SCE state such assumption. If not, what citation is linked to this statement (Page 2, Chapter 4, 2 nd “Dash”)?	The AQ 8 – Fish Passage TSR indicates that the minnow/sucker capability is an assumption. The 4.0 Study Approach section of the AQ 8 – TSR states: “The sixty-minute sustained swimming velocity was assumed to be between 2 and 4 body lengths/sec for trout (Brett and Glass 1973; Beamish 1978; Reiser and Peacock 1985) and approximately 2 body lengths/sec for minnows/suckers (Myrick and Cech 2000; Berry and Pimentel 1985).” The TSR also includes a footnote that explains how the minnow/sucker swimming speed was derived.
STATE WATER BOARD, Nathan Fisch, Environmental Scientist – July 2, 2019			
8a	AQ 2 – Fish Population	Section 5.4 , The Fry Emergence timing discussion should be expanded to clarify what methodology was used by Hokanson et al. 1977 and the comparability with the Kaweah River. Typically, I’ve seen a 647 degree-day model (R2 Resource Consultants 2008) or a daily temperature unit model (Senn 1984) for fry emergence.	The AQ 2 – TSR has been updated to clarify the Hokanson et al. 1977 methodology used. The Hokanson et al. 1977 paper is a laboratory growth study of fry (initial size 30 mm) at different water temperatures fed at maximum consumption. The laboratory fry growth versus water temperature data from the Hokanson et al. 1977 paper were used to back calculate the approximate emergence timing of the fry that were captured in the Kaweah study sites July 5-6 (40–50 millimeter [mm]). That calculation indicates fry would grow approximately 20 mm/month and would have been emergence size (26 mm) in early to mid-June.
8b	AQ 2 – Fish Population	Section 5.1 , State Water Board staff appreciates the biomass and density comparisons with other Southern Sierra streams. We would appreciate including a comparison with past sampling efforts on the Kaweah as well.	SCE will research the availability of historical fish biomass and density data. If data is available, comparisons will be provided in the Final TSR.
8c	AQ 6 – Water Quality	<p>Section 5.4, The second paragraph and Table AQ 6-2 seems to suggest that samples were not analyzed for fecal coliform. From State Water Board staff’s perspective it looks like there could have been a variance to a portion of the FERC approved study plan or it was not completed. This could be problematic as the bacteria water quality objective in the Tulare Basin Plan for waterbodies with REC-1 beneficial uses requires fecal coliform samples. I’ve linked the basin plan below for reference.</p> <ul style="list-style-type: none"> https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/tlbp_201805.pdf <p>State Water Board staff agrees with the discussion on page 7 that states ‘E. coli is a species of fecal coliform bacteria that is specific to fecal material from humans and other warm-blooded animals. EPA now recommends <i>E. coli</i> as the best indicator of health risk from water contact in recreational waters rather than fecal coliform.’ In the intervening year plus since the Updated Study Plan was approved by FERC, the State Water Board updated the statewide Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California. This update included establishing <i>E. coli</i> water quality objectives for waterbodies with REC-1 beneficial uses. You can find that update linked below.</p> <ul style="list-style-type: none"> https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/final_iswebe_bacteria_provisions.pdf <p>None the less, the metric used does not appear to be consistent with the study plan or provide the information required as part of the new water quality objective.</p>	<p>The comment is correct in relation to the sample processing. The laboratory processed the coliform samples using the State Water Board’s updated total coliform and <i>E. coli</i> recreation contact criteria approach and not the fecal coliform approach outlined in the AQ 6 – Water Quality TSP. The AQ 6 – Water Quality TSR was modified to more explicitly identify how the samples were processed, <i>E. coli</i> versus fecal coliform, and include the new State Water Board total coliform and <i>E. coli</i> REC-1 criteria.</p> <p>With respect to the statement that the collected information will not provide “the information required as part of the new water quality objective” we are unclear what that means in this case where the criteria are in transition. The laboratory processed the samples using the updated State Water Board <i>E. coli</i> recreation contact criteria. Using the updated criteria, the data collected indicate that there was not an issue with bacterial contamination at the study site.</p> <p>Per FERC regulations, SCE will file an Updated Summary Report Memo prior to October 24, 2019 and convene an Updated Study Report Meeting with stakeholders prior to November 8, 2019 to discuss study implementation and any variances.</p>

No.	TSR	Comment	SCE Response
CULTURAL TECHNICAL WORKING GROUP MEETING – May 7, 2019			
	CUL 1 – Ethnography Verbal comment	<p>NPS has additional regional ethnographic information that could be shared with the Project Team. The information is from an ethnographic overview recently completed for the SNP by Doug Deur, Oregon State University. This report confirms findings of Kaweah CUL 1 Ethnographic Study that the Kaweah/ Three Rivers area has an ethnographic gap in information most likely from disease and population pressure from invasion by Euro-Americans.</p> <p>BLM asked if specific tribal informants had been contacted for the study and if information had been found regarding resources in Case Mountain Area.</p> <p>NPS and BLM suggested that a United States Forest Service (USFS) ethnographic trail study led by Karen Miller and James Snyder be incorporated into the final TSR if available.</p> <p>FERC commented to the group that the HPMP can address any burgeoning interest or information that appears from tribal members under the course of the license. The HPMP would also address how consultation would continue with active groups during implementation of the license.</p>	SCE made minor revisions to the Ethnographic TSR to update research and consultation efforts; add information from recently conducted ethnographic overviews of the area; add and revise maps to show a broader regional area; add a table of native place names in the Upper Kaweah River; and make minor revisions to ensure consistency between the three cultural resources reports for the Project.
	CUL 1 – Archaeology Verbal comment	<p>NPS asked how the need for NRHP Evaluations would be determined for archaeological resources.</p> <p>BLM asked whether the BLM would be notified in advance of any monitoring or treatment activities undertaken in support of the HPMP.</p> <p>BLM stated that they have been conducting archaeological work on Case Mountain / Craig Ranch Road and that the BLM would share such information when it is available to the Project team.</p>	NRHP evaluations will be guided by the development of an NRHP Evaluation Plan, which will be distributed to the TWG for review and comment as part of the HPMP. Any sites in the APE (including those on BLM property) found to be adversely affected or that have the potential to be adversely affected by continued operation and maintenance of the Project will be subject to NRHP evaluation and treatment under the HPMP. The Archaeology TSR was updated to include this process.
	CUL 1 – Built Environment Verbal comment	FERC asked if SHPO had concurred on the findings of the TSR.	See Response 3b.

APPENDIX SD A -1
Stakeholder Comment Letters

This Page Intentionally Left Blank



**DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION**

Lisa Ann L. Mangat, *Director*

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

March 28, 2019

In Reply Refer To: FERC_2018_0309_001

Audry Williams
Senior Archaeologist, Environmental Services
Southern California Edison
2244 Walnut Grove Avenue
Rosemead, CA 91770

Re: Section 106 Consultation for the Southern California Edison Kaweah Project
Cultural and Tribal Relicensing Studies (CUL-1), Ethnographic TSR, FERC Project No.
298.

Dear Ms. Williams:

The California State Historic Preservation Officer (SHPO) received a letter continuing consultation for the above-named undertaking on February 20, 2019, pursuant to 36 CFR Part 800 (as amended 8-05-04), the regulations implementing Section 106 of the National Historic Preservation Act (NHPA). Southern California Edison (SCE) is delegated under 36 CFR Part 800.2(c)(4) by the Federal Energy Regulatory Commission (FERC) to consult with the SHPO regarding this undertaking. SCE is seeking review and comments regarding the document titled *CUL 1- Cultural Resources Ethnographic Draft Technical Study Report* (SCE February 2019).

The proposed undertaking is the relicensing process for the 8.85-megawatt (MW) Kaweah Project located on the Kaweah River in Tulare County, California. SCE Owns and operates the project under a license issued by FERC and is using the Integrated Licensing Process (ILP) to relicense the project by December 31, 2019. SCE defined the Area of Potential Effects (APE) as all FERC Project facilities where Project Operations and Maintenance (O&M) has the potential to cause direct or indirect adverse effects to historic properties. This includes all Kaweah Project facilities and O&M areas located within the existing FERC Project Boundary and any other facilities outside the FERC Boundary where Project O&M activities are conducted.

The Ethnographic Draft Technical Study Report (ETSR) submitted for review reports the results of the Ethnographic study, which included a records search, Sacred Lands File (SLF) search, archival research, literature review, and tribal outreach. The records search was completed on February 23, 2018 using SCE's Archaeology GIS Data

Viewer (AGOL) and included the APE and a 1-mile search radius around it. The SLF search was requested on February 12, 2018 along with a list of contacts of Native Americans knowledgeable about ethnographic resources of the Project Area. The Native American Heritage Commission (NAHC) responded on February 20, 2018 with a letter stating that the SLF search was negative and providing a list of Native American contacts for the Project Area. FERC sent letters to the Native American contacts on January 10, 2017, and the SCE's consultant invited the contacts listed by the NAHC to a CUL 1 Technical Working Group kick-off meeting on March 21, 2018. Lastly, SCE sent letters to all tribal representatives identified inviting them to participate in the ETSR on June 29, 2018. Telephone interviews were held with several individuals who responded to these requests.

As a result of these efforts, no specific tribal resources or potential Tribal Cultural Properties were identified within or adjacent to the APE. However, tribal contacts expressed a marked interest in the botanical resources of the Project area and the seven archaeological sites of Native American origin that have been identified within the APE. SCE plans to continue to include the tribal contacts interested in consulting on the remainder of their inventory and evaluation efforts for this project and all stakeholders were provided with the draft ETSR for review. Following review of this ETSR, any forthcoming information will be added to the final draft of the report and circulated among the stakeholders.

After reviewing the draft ETSR, I have no comments. I look forward to receiving the final ETSR that incorporates any additional comments SCE might receive from the tribal contacts. When submitting future documents for review, please submit a hard copy of all reports. Appendices can be provided digitally on a disc. 1

If you have any questions, please contact Archaeologist Jessica Tudor of my staff at (916) 445-7016 or jessica.tudor@parks.ca.gov, or Historian Kathleen Forrest of my staff at 916-445-7020 or kathleen.forrest@parks.ca.gov.

Sincerely,



Julianne Polanco
State Historic Preservation Officer



United States Department of the Interior
BUREAU OF LAND MANAGEMENT

Bakersfield Field Office
3801 Pegasus Drive
Bakersfield, CA 93308
www.blm.gov/california



APR 08 2019

LLCAC06000.45

Mr. David Moore
FERC Licensing & Compliance
Southern California Edison
1515 Walnut Grove Avenue
Rosemead, CA 91770

RE: Kaweah Project No. 298

Dear Mr. Moore:

The Bureau of Land Management Bakersfield Field Office (BLM) offers the following comments to the Technical Study Reports (TSP) of the Kaweah Project No. 298 FERC Relicensing Project.

CULT 1 – ARCHAEOLOGY – The BLM asks that Southern California Edison (SCE) and/or FERC evaluate all sites on BLM-administered lands for the National Register of Historic Places (NRHP) during Phase II of the Project, if the sites are located within the Area of Potential Effects (APE). Currently, there are no sites on BLM-administered lands that have been evaluated; what is the justification for not conducting evaluations?

2a

CULT 1 – ARCHAEOLOGY – BLM identified a few discrepancies on the Archaeological Technical Report, specifically page 23 of the Cultural Resources Technical Report:

1. Please address why FERC recommends eligibility evaluations for five sites when there are about a dozen previously recorded sites that have not been evaluated.
2. Data related to site conditions are not consistent. Why is certain information included for some of the sites, but not included on all?

2b


TERR 2 – WILDLIFE – 4.3.1.2. – BLM requests that SCE properly cite the names of the “Bat Experts” consulted in text and, if applicable, the literature cited.

2c

End of BLM’s Comments

The BLM appreciates the opportunity to comment on the Technical Study Reports and participation in the relicensing process. If you have any questions, please contact Alison Lipscomb, Realty Specialist at (661) 391-6177 or alipscomb@blm.gov.

Sincerely,



Gabriel R. Garcia
Field Manager

CC:

Julie Smith, Julie.smith@cardno.com

Deanne Kidd, dykidd@blm.gov



**DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION**

Lisa Ann L. Mangat, *Director*

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

April 19, 2019

In Reply Refer To: FERC_2018_0309_001

Audry Williams
Senior Archaeologist, Environmental Services
Southern California Edison
2244 Walnut Grove Avenue
Rosemead, CA 91770

Re: Section 106 Consultation for the Southern California Edison Kaweah Project, CUL-1 Cultural Resources Archaeology and Built Environment Technical Study Reports (FERC Project No. 298).

Dear Ms. Williams:

The California State Historic Preservation Officer (SHPO) received a letter continuing consultation for the above-named undertaking on February 27, 2019, pursuant to 36 CFR Part 800 (as amended 8-05-04), the regulations implementing Section 106 of the National Historic Preservation Act (NHPA). Southern California Edison (SCE) is delegated under 36 CFR Part 800.2(c)(4) by the Federal Energy Regulatory Commission (FERC) to consult with the SHPO regarding this undertaking. SCE is seeking review and initial comments regarding their documents titled *Kaweah Project, FERC Project No. 298 CUL 1- Cultural Resources Archaeology Draft Technical Study Report* and, *CUL 1- Cultural Resources Built Environment Draft Technical Study Report* (SCE January 2019).

The proposed undertaking is the relicensing process for the 8.85-megawatt (MW) Kaweah Project located on the Kaweah River in Tulare County, California. SCE Owns and operates the project under a license issued by FERC and is using the Integrated Licensing Process (ILP) to relicense the project by December 31, 2019. SCE defined the Area of Potential Effects (APE) as all FERC Project facilities where Project Operations and Maintenance (O&M) has the potential to cause direct or indirect adverse effects to historic properties. This includes all Kaweah Project facilities and O&M areas located within the existing FERC Project Boundary and any other facilities outside the FERC Boundary where Project O&M activities are conducted.

The Archaeology Draft Technical Study Report (ATSR) and Built Environment Draft Technical Study Reports (BETSR) submitted for review report the results of the efforts

to identify archaeological and built environment historic properties that have the potential to be affected by the proposed undertaking. The study methods included a records search and archival research of the entire APE, pedestrian survey of the archaeological APE, and background research, property investigations, and survey of the architectural APE. After reviewing the draft ATSR and BETSR, the following comments are offered:

- I have no comments regarding the draft ATSR. I look forward to receiving the final ATSR and future consultation on Phase 2 evaluations of the archaeological resources within the APE for their eligibility for listing on the NRHP. Please ensure that DPR 523 records are provided for all archaeological resources identified within the APE with the Final ATSR. 3a
- Regarding the draft BETSR, I do not have any comments to offer at this time. Although the draft BETSR provides eligibility recommendations for several built environment resources within the Architectural APE, SCE has not requested formal Section 106 consultation at this time and has not provided a request for concurrence with their own determinations of eligibility for these resources. As such, I will not comment on the eligibility recommendations made in the draft BETSR at this time. 3b
- When submitting future documents for review, please submit a hard copy of all technical reports. Appendices and figures can be provided digitally on a disc. 3c

If you have any questions, please contact Archaeologist Jessica Tudor of my staff at (916) 445-7016 or jessica.tudor@parks.ca.gov, or Historian Kathleen Forrest of my staff at 916-445-7020 or kathleen.forrest@parks.ca.gov.

Sincerely,



Julianne Polanco
State Historic Preservation Officer



United States Department of the Interior
NATIONAL PARK SERVICE
Pacific West Region
333 Bush Street
San Francisco, CA



DRAFT
April 21, 2019

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

Electronic Filing

RE: National Park Service's (NPS) comments on the REC 2 – Whitewater Boating Draft Technical Study Report for the Kaweah Hydropower Project (P-298).

Dear Ms. Bose:

The NPS has authority to consult with FERC and applicants concerning a project's effects on outdoor recreation resources under the Federal Power Act (18 CFR 4.38(a), 5.41(f)(4)-(6), and 16.8(a)); the Outdoor Recreation Act (Public Law [PL] 88-29), the NPS Organic Act (39 Stat. 535), and the Wild and Scenic Rivers Act (PL 90-542). It is the policy of the NPS to represent the national interest regarding recreation, and to assure that hydroelectric projects subject to re-licensing recognize the full potential for meeting present and future public outdoor recreation demands, while maintaining and enhancing a quality environmental setting for those projects. Investigating opportunities to improve the recreation experience is consistent with the NPS policy and FERC guidelines to identify future potential recreation needs.

The NPS has reviewed the REC 2 – Whitewater Boating Draft Technical Study Report and offers the following comments.

Over the past four years, the NPS has engaged with Southern Cal Edison (SCE) and their consultants in study plan development and the relicensing process. Throughout our comments on the study plan development, the NPS has asked for SCE to look at potential public access for whitewater boaters on other SCE owned lands, private lands, and public lands. The only current public access site on SCE's lands is at Edison Beach. The April 3rd, 2018 focus group also expressed the importance of access to the river, since most existing sites are unofficial and informal. Identifying existing and potential river access sites is a critical component of the whitewater study.

4a

The REC 2 - Draft Whitewater Boating Technical Study Report generally covers many of the issues we've commented on in the past and documents existing recreation access sites. The report acknowledges that access issues are currently a limiting factor affecting whitewater boaters' ability to use the river, especially for private boaters. However unfortunately potential river access sites and access were only briefly mentioned in the report. The NPS recommends that the report further explore potential access by identifying site constraints and opportunities for modifications to facilitate recreation access on sites managed by SCE that could serve as access sites in the future.

4b

This report identified all unofficial private access/parking agreements on all reaches, which was an important request of both the NPS and American Whitewater from the beginning of this relicensing. The report did a good job at identifying existing parking, access and detailing their condition and we were pleased that the report included Kaweah No. 1 Powerhouse and Kaweah No. 2 Diversion Dam/Kaweah No. 3 powerhouse as potential access sites (as noted “is included in this table at the request of the National Park Service and American Whitewater.” - Table REC 2-3). The NPS recommends that the report also outline site constraints and potential options that could be implemented to facilitate public access at these potential access sites. Further, the report should describe why Kaweah 2 Powerhouse/Edison Beach is closed on the weekends and potential ways to modify this to facilitate access. Also, while the report describes the Sequoia & Kings Canyon (SEKI) gateway access site in detail, there is no mention of the trail issues and parking problems at that location which NPS requested in our comments on the Proposed Study Plan. The river access site near the SEKI entrance station, which is the put-in for the three-mile Gateway to Dinley Bridge run is used by boaters however there is no long term parking or a trail to the river.

4c

4d

4e

The draft report states that a site visit could be conducted based on feedback from stakeholders on the REC 2 study report. The NPS recommends that SCE host a site visit to look at and discuss potential access sites and what improvements could be feasible to facilitate access on SCE lands. Looking at these sites in the field would allow participants to see the resource and discuss existing constraints and potential solutions. Inviting other land managers such as Cal Trans and Tulare County would also help open dialogue amongst land managers across jurisdictions and the recreationists to better understand recreation needs, opportunities and constraints. The NPS recommends that the final report document the site visit discussions and action items.

4f

Thank you for the opportunity to comment on the Rec 2- Whitewater Boating Study Report for the Kaweah Hydropower Project (P-298). If you have any further questions, please contact Steve Bowes at 415-623-2321 or Barbara Rice at 415-623-2320.

Sincerely,



Barbara Rice, Program Manager
National Park Service, Pacific West Region
333 Bush Street, Suite 500
San Francisco, CA 94104
415-623-2320



Theresa Simsiman
California Stewardship Director
5463 Dodson Court
Shingle Springs, CA 95682
theresa@americanwhitewater.org

April 22, 2019

Julie Smith
Senior Consultant
Cardno
2890 Gateway Oaks Drive, Suite 200
Sacramento, CA 95833

**RE: Comments Kaweah Hydropower Project #298 - Rec-2 Whitewater Boating
Draft Technical Study Report January 2019**

Dear Julie,

As we learned from participants in the whitewater boating focus group the Middle Fork and the East Fork Kaweah rivers provide paddling recreation that attracts paddlers from around the world, nationally and across California. It is American Whitewater's goal to fully understand the impacts of Southern California Edison's Project on these resources and a comprehensive technical study report will aid us in that endeavor. We provide the following comments for your consideration.

1. The Draft TSR needs to include a summary of reaches that have nexus to the project.

It is equally important to understand the reaches that have nexus to the project including the Ash Mountain and Dinely Bridge runs. Although these runs are not included in the "bypass reach" they do have nexus to the project for instance a take-out option for Ash Mountain run is downstream of the Kaweah No. 3 Powerhouse and a put-in option for the Dinely Bridge run is the Kaweah No. 2 powerhouse. American Whitewater would like to see these runs summarized in Section 5 Study Results. These reaches are either identified in the guide books (Cassady et al. 1995; Holbeck et al. 1998), online information or in the Whitewater Boating Focus Group.

5a

2. The Draft TSR inaccurately characterizes the Park Boundary Run

The draft TSR inaccurately details that the Park Boundary Run “is not considered a “stand-alone” run. While it is a relatively short run that can be added to the end of the Ash Mountain Run or to the beginning of the Gateway Bridge Run more recent guide sources identify the Park Boundary Run as a “stand-alone” whitewater resource packed with 13-15 rapids.¹

5b

3. A separate sub-heading for Access should be included in Section 5.2 Limiting Factors

American Whitewater identified access as a key limiting factor in specific comments on the PSP and subsequently requested a modified study that would identify and characterize all access opportunities that are within and nexus to the Kaweah Project. While the draft TSR does provide more detail on access it does so in a scattered fashion making it hard to comprehend the status of public access for each run.

For example, Table REC 2-3 provides property jurisdiction, parking availability, access conditions and public facilities but you must pull up Table REC 2-2 to match up the access to the specific river reach. The access pictures are than provided in a separate appendix with no reference to the specific river reach or important context such as time of year.

5c

It would be helpful to have a separate subheading in section 5.2 for Access. Then, as opposed to having this information in different tables and an appendix, combine the information under a listing for each reach. If organized in this fashion readers of the TSR can easily identify what access condition exist for each resource.

4. A separate sub-heading for Real-Time Flow Information should be included in Section 5.2 Limiting Factors

The whitewater boating focus group identified real-time flow information as a limiting factor for stakeholders using the Middle Fork and East Fork Kaweah Runs. However, the draft TSR once more provides scattered detail on the availability of flow information referencing it in section 5.2 but detailing other information in section 5.4.1, section 5.5, on the map Rec 2-2 and table Rec 2.5. All the streamflow

5d

¹ Brasuell, Daniel. "Middle Fork of the Kaweah River (Park Boundary)." A Wet State, www.awetstate.com/MKaweahPB.html. Accessed April 22, 2019.

Pooley, Bill. "KAWEAH RIVER LOG, SCE Power Plant No 3. To Confluence with the East Fork -The Park Boundary Run." The Kaweah River Page, c2.com/kaweah/log_pkbndry2gateway.html. Accessed April 22, 2019.

information should be combined and provided in section 5.2 under a separate sub-heading for Real-Time Flow Information.

Additionally, on table Rec 2.5 it is hard to discern if any of the identified gauges would be suitable to for whitewater boating use. Thus, it would be helpful to know what gauges are public or private and for each gauge the unit of time the information is reported in (i.e. average daily or hourly).

It should also be noted that the whitewater boating focus group detailed the only current gauge used by boating stakeholders is the USGS “Three – Rivers” gauge. This gauge is a combination of the forks of the Kaweah and an estimated gauge reading must be calculated for each specific reach. This information is often too inaccurate for the preferences of paddlers traveling from a distance. They often do not want to chance the hours of travel only to show up and find the flow too low or too high.

5. The Hydrology Assessment needs to include information about project operations including the quantity and duration of project diversions from the Middle Fork and East Fork Kaweah River.

The comparison of unimpaired and impaired flows indicates there is an impact on the number of available boatable days. While it is understood the project has very little capability to provide scheduled recreational flow days we should get a better understanding of how operations impacts the available boatable days. Thus, the hydrology assessment should detail operations including the quantity and duration of diversions for each reach by water year type.

American Whitewater thanks you for the opportunity to provide comments on the Kaweah Project Rec-2 Whitewater Boating Draft Technical Study Report.

Sincerely,



Theresa L Simsiman
California Stewardship Director
American Whitewater
916-835-1460

5d, cont.

5e



United States Department of the Interior
BUREAU OF LAND MANAGEMENT

Bakersfield Field Office
3801 Pegasus Drive
Bakersfield, CA 93308
www.blm.gov/california



MAY 13 2019

LLCAC06000.45

Mr. David Moore
FERC Licensing & Compliance
Southern California Edison
1515 Walnut Grove Avenue
Rosemead, CA 91770

RE: Kaweah Project No. 298

Dear Mr. Moore:

The Bureau of Land Management Bakersfield Field Office (BLM) offers the following attached comments to the LAND 3 Technical Study Report (TSR) of the Kaweah Project No. 298 FERC Relicensing Project. Comments focus on the need for more information, as the TSR is lacking critical details that BLM needs to determine if any impacts from the Project will occur to BLM's resources of concerns.

The BLM appreciates the opportunity to comment on the Technical Study Report and participation in the relicensing process. If you have any questions, please contact Alison Lipscomb, Realty Specialist at (661) 391-6177 or alipscomb@blm.gov.

Sincerely,

Gabriel R. Garcia
Field Manager

CC:
Julie Smith, Julie.smith@cardno.com
Deanne Kidd, dykidd@blm.gov

LAND 3 Technical Study Report Comments

3. Extent of Study Area

The additional survey area of Kaweah No. 1 Forebay Road only included 1.5 miles; beginning at the locked gate located on Craig Ranch Road, but did not continue up to the actual Forebay. BLM requests that this area be included to the study.

6a

4.2.4. Documentation

The report states, "All spatial data collected in the field and provided by SCE and the BLM was incorporated into GIS using ArcGIS software." There are numerous gaps in the exclusionary fence data presented on the maps. It is unclear if the gaps represent actual absence of inventoried fencing or if these areas were not inventoried due to difficult terrain or unsafe access. BLM requests representation on the maps of the areas not inventoried to understand this difference.

6b

4.3 Characterization of Maintenance Practices and Responsibilities

BLM finds the methods used to characterize maintenance practices and responsibilities to be inadequate, as research of SCE records, FERC records, current and past licenses, and those same records of similar projects were not conducted or documented. BLM requests that this research be conducted and added to the TSR.

6c

4.4 Livestock Mortality Assessment

Why were the mammal mortality reports only reviewed back to 1991 when this data is available dating back to 1964? BLM requests a review of all records and documentation added to the TSR.

6d

4.5 Identification of Public Safety Measures

It is unclear on how far back the record research went for safety incidents. BLM requests a review of all records searched and documented within the TSR.

6e

5.1 Protection and Safety Feature Inventory and Assessment

BLM previously provided the GPS coordinates for the livestock watering trough, located along the assessed route in Map 3-3d. This watering trough is visible with commercially available satellite imagery software. See the below picture of the livestock watering trough. BLM requests representation on the maps of areas not inventoried and the reasoning for not being inventoried, to ensure and evaluate the accuracy of all inventoried data.

6f



5.2 Maintenance Practices and Responsibilities

Comment 1: The TSR states that all facilities, including Kaweah No. 2 and No. 3 flow lines, are regularly patrolled and inspected on a monthly basis, however, the maps generated show large sections that are either inaccessible for an adequate inventory or do not have any exclusionary fencing. SCE identify the exclusionary fencing to include the primary Project features and used to block access for wildlife, domestic animals, and the public, and repaired on an as-needed basis. BLM requests the identification of all SCE-maintained exclusionary fencing on maps and within Appendix A: Project Protection and Safety Feature Inventory and Assessment Summary.

6g

Comment 2: The LAND 3 TSP approach was to identify existing agreements of maintenance, but also to include, easements, rights-of-way, or other special use permits. TSP did not identify all water-use diversion documents with private property owners and the responsibilities of those parties. BLM requests that the data from all such current and past documents, and summarize the parties involved, responsibilities, and effective dates of each.

6h

5.3 Livestock Mortality

Per comment 4.4, mammal mortality data is available to at least 1964, as described in the Environmental Assessment for the current license. Why were records only reviewing since 1991? BLM requests a review and tabulate results from all past mammal mortality records of the Project.

6i

End of BLM's Comments



United States Department of the Interior
BUREAU OF LAND MANAGEMENT

Bakersfield Field Office
3801 Pegasus Drive
Bakersfield, CA 93308
www.blm.gov/california



JUN 24 2019

LLCAC06000.45

Mr. David Moore
FERC Licensing & Compliance
Southern California Edison
1515 Walnut Grove Avenue
Rosemead, CA 91770

RE: Kaweah Project No. 298

Dear Mr. Moore:

The Bureau of Land Management Bakersfield Field Office (BLM) offers the following comments to the Technical Study Reports (TSP) of the Kaweah Project No. 298 FERC Relicensing Project.

AQ 2 – FISH POPULATION – The BLM asks that Southern California Edison (SCE) kept the “imagination” to a minimum and to provide an explanatory statement that clarifies that gray-shading are the months of the specified species activity (Page 12, Table AQ 2-9).

7a

AQ 6 – WATER QUALITY – BLM recommends a clarification or a restructure of what sentence 2 of the 1st paragraph means, starting with, “the laboratories attempted...” As written, the sentence structure seems to suggest that the laboratories may tamper with the reports to achieve levels at or below criteria, (Page 2, Chapter 4, Section 4.4).

7b

AQ 8 – FISH PASSAGE – Is stated minnow/sucker capability an assumption? If so, BLM recommends that SCE state such assumption. If not, what citation is linked to this statement (Page 2, Chapter 4, 2nd “Dash”)?

7c

End of BLM’s Comments

The BLM appreciates the opportunity to comment on the Technical Study Reports and participation in the relicensing process. If you have any questions, please contact Alison Lipscomb, Realty Specialist at (661) 391-6177 or alipscomb@blm.gov.

Sincerely,



Gabriel R. Garcia
Field Manager

CC:

Julie Smith, Julie.smith@cardno.com

Deanne Kidd, dykidd@blm.gov

Sarah Bullock, sbullock@blm.gov

Julie Smith

From: Fisch, Nathan@Waterboards <Nathan.Fisch@Waterboards.ca.gov>
Sent: Tuesday, July 02, 2019 5:47 PM
To: Julie Smith
Subject: Kaweah Hydroelectric Project (P-298) First Year Study Comments for AQ-2 and AQ-6

Good afternoon,

Thanks for the opportunity to comment on the study reports for the project. Pending the distribution of AQ-1, AQ-4, AQ-7, and AQ-9-State Water Board staff may have a few other items. But I have a couple comments about study reports/studies and then some process questions.

- **AQ-2 Fish Population**
 - **Section 5.4**

The Fry Emergence timing discussion should be expanded to clarify what methodology was used by Hokanson et al. 1977 and the comparability with the Kaweah River. Typically, I've seen a 647 degree-day model (R2 Resource Consultants 2008) or a daily temperature unit model (Senn 1984) for fry emergence. 8a

- **Section 5.1**

State Water Board staff appreciates the biomass and density comparisons with other Southern Sierra streams. We would appreciate including a comparison with past sampling efforts on the Kaweah as well. 8b

- **AQ-6 Water Quality**
 - **Section 5.4**

The second paragraph and Table AQ 6-2 seems to suggest that samples were not analyzed for fecal coliform. From State Water Board staff's perspective it looks like there could have been a variance to a portion of the FERC approved study plan or it was not completed. This could be problematic as the bacteria water quality objective in the Tulare Basin Plan for waterbodies with REC-1 beneficial uses requires fecal coliform samples. I've linked the basin plan below for reference.

https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/tlbp_201805.pdf

State Water Board staff agrees with the discussion on page 7 that states 'E. coli is a species of fecal coliform bacteria that is specific to fecal material from humans and other warm-blooded animals. EPA now recommends E. coli as the best indicator of health risk from water contact in recreational waters rather than fecal coliform.' In the intervening year plus since the Updated Study Plan was approved by FERC, the State Water Board updated the statewide Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California. This update included establishing E. coli water quality objectives for waterbodies with REC-1 beneficial uses. You can find that update linked below. 8c

https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2018/final_iswebe_bacteria_provisions.pdf

None the less, the metric used does not appear to be consistent with the study plan or provide the information required as part of the new water quality objective.

- **General Questions**

- Is the timeline for releasing the rest of the aquatics focused study reports unchanged?
- Is SCE planning to have some collaborative meetings for completing some of the study reports (IE AQ-1, AQ-4)?

I appreciate the opportunity to review the study plans and look forward to continued collaboration on the project.

Best,



Nathan Fisch

Environmental Scientist
Division of Water Rights, Water Quality Certification Program
State Water Resources Control Board
1001 I Street, 14th Floor, Sacramento, CA 95814
(916) 322-6796 | nathan.fisch@waterboards.ca.gov