

Recreation Implementation Plan

Sacramento Municipal Utility District

Hydro License Implementation • January 2015
Upper American River Project
FERC Project No. 2101

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1 Introduction

The Federal Energy Regulatory Commission (FERC) issued SMUD a fifty-year license to operate the Upper American River Project (UARP or Project) on July 23, 2014 (License). Appendix A of the License contains the State Water Resources Control Board (SWRCB) Water Quality Certification¹, and Attachment B of the License contains the U.S. Forest Service (FS) 4(e) conditions².

FS Condition 41 requires SMUD to develop this Recreation Implementation Plan (Plan) in coordination with the FS. Table 1 below lists the FS Conditions related to recreation. SWRCB Condition 14 requires the Plan to include provisions for SMUD to consult with the SWRCB and the Central Valley Regional Water Quality Control Board (CVRWQCB) regarding any water quality permits and approvals necessary for the construction or rehabilitation of recreation facilities. For reference, Attachments 1 and 2 of this Plan contain FS Condition 41 and SWRCB Condition 14 respectively.

This Plan will guide SMUD and FS staff in designing and constructing recreation facilities described in FS Conditions 44 and 45. In addition, the Plan addresses the process for identifying and prioritizing additional recreation measures (see FS Conditions 42, 44, 45, 48).

¹ All further references to SWRCB Conditions are to conditions in License Appendix A.

² All further references to FS Conditions are to conditions in License Appendic B.

Table 1. FS Conditions related to UARP-associated recreation facilities in the UARP FERC License.		
FS Condition	Title	Page Reference
1	FS Approval of Final Design	134
3	Consultation	135
11	Hazardous Substances Plan	137
12	Use of Explosives	137
21	Construction Inspections	140
24	Erosion Control Plan	141
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2 Special Use Permit

For any recreational facility projects occurring outside the pre-1992 UARP project boundary, a special use authorization may be required [43 U.S.C. § 1761(d)]. Such authorizations are issued on a cost recovery basis.

3 Key Implementation Staff

3.1 SMUD

Contact information and responsibilities for key SMUD staff who will oversee development of Project recreation facilities are listed below in Table 2. For each Project recreation facility to be improved or constructed, SMUD will assign a Project Manager who will have the overall responsibility for the design and construction work.

Table 2. Contact information and responsibilities for key SMUD staff members.			
Role or Title	Name	Phone	E-mail
UARP Asset Owner and FS Liaison	Jon Bertolino	530-647-5016	jon.bertolino@smud.org
Supervisor, License Implementation	Darold Perry	530-647-5010	darold.perry@smud.org
Project Manager (PM)	Will vary by project		
Recreation Planner / PM	Mark Swisher	530-647-5060	mark.swisher@smud.org
Construction Inspector*	Will vary by project		
*Construction inspection services may be contracted.			

In addition to staff resources, SMUD will maintain contracts with consulting teams to assist with implementation of the License. Work among these teams will be distributed by Task Order and overseen by SMUD staff. The contractors' tasks will focus primarily on (1) development of environmental plans and environmental monitoring; (2) development of facilities and resources management plans; and (3) engineering and design of Project recreation facilities. SMUD will procure professional services for engineering and designing the facilities and will use these designs and specifications to issue Invitation for Bids (IFB) for facility construction.

3.2 Forest Service

Contact information and responsibilities for key FS staff members responsible for reviewing and approving the recreation design and construction work associated with the License are listed below in Table 3.

Table 3. Contact information and responsibilities for key FS staff members.			
Role or Title	Name	Phone	E-mail
FS Liaison for Recreation Facility Designs / Landscape Architect	Diana Erickson	530-621-5214	dkerickson@fs.fed.us
Landscape Architect	Isaac Sims	530-295-5621	isims@fs.fed.us
Forest Recreation Program Manager	Cindy Oswald	530-621-5213	coswald@fs.fed.us
District Ranger, Pacific Ranger District	Richard Thornburgh	530-647-5410	rthornburgh@fs.fed.us
District Recreation Officer, Pacific Ranger District	Debbie Gaynor	530-647-5432	dgaynor@fs.fed.us

4 Funding

4.1 Operations, Maintenance, and Administration Collection Agreement

Per FS Condition 47, beginning the first full year after License issuance, SMUD will pay the FS \$1,000,000.00 annually³. These annual funds are for the FS to provide for operation, maintenance and administration (OM&A) of Project recreational facilities, sites, and uses. A Collection Agreement will be executed by SMUD and the FS to describe, in detail, the terms and conditions of this annual payment. The agreement will include an annual escalator based on the U.S. Gross Domestic Product-Implicit Price Deflector with year 2007 as the cost basis. As stated in FS Condition 47 and agreed upon in the Relicensing Settlement Agreement for the Upper American River Project and Chili Bar Hydroelectric Project, this payment is the financial means for the FS to ensure the Project recreational facilities are maintained according to FS and FERC standards.

³ Initial amount to be adjusted by an annual escalator.

4.2 Heavy Maintenance

SMUD is also responsible for the cost of necessary heavy maintenance, rehabilitation, and reconstruction, as defined in FS Condition 46. Heavy maintenance needs will be identified and prioritized every six years during the Review of Recreation Developments as described in FS Condition 44. Examples of activities expected to be categorized as heavy maintenance include repair or replacement of traffic control barriers, replacement or retrofitting of restrooms, and resurfacing of major recreation roads. As part of each six-year review, agreed-upon heavy maintenance will be documented in a detailed schedule. During the initial six-year period following License issuance, the priority and schedule of heavy maintenance needs will be addressed in established quarterly meetings between SMUD and the FS. These can also be used to address any unforeseen heavy maintenance needs arising between subsequent six year intervals.

4.3 Technical Services Collection Agreement

The purpose of the Technical Services Collection Agreement is to facilitate and document the voluntary contribution of funds from SMUD to the FS to ensure timely consultation in regard to the review and approval of plans and projects associated with License Implementation. The Technical Services Agreement was executed on July 29, 2014 and is in effect through September 30, 2019. The annual Scope of Work, and resultant Financial Plan, will be released, approved, and funded on the federal fiscal year schedule.

5 Implementation Schedule

A schedule showing the implementation sequence of specific recreation measures is included as Figure 1. SMUD will perform the required recreation facility upgrades/measures over the course of the first 20 years of the 50-year License term. Scheduling of near-term recreation measures (i.e., those occurring within the first 24 months following License issuance) are shown in Figure 2 in greater detail.

Table 4 shows the expected progression for the recreation activities in FS Condition 45 that contain planning, permitting, engineering, design and construction components. Dates shown in Table 4 represent a typical schedule for design and implementation of a project. Some projects may have a compressed time schedule due to the dates they are required to be completed under the License. The steps in this progression are explained in greater detail in Section 6.

Table 4. General development schedule for Project recreation facility upgrades.	
Start Date	Activity
Aug- Year 1	Select Environmental/Engineering/Design Contractor
Sep- Year 1	Define the Project (USFS consultation)
Oct- Year 1	Initiate Easement and/or Real Property Acquisitions (if necessary)
Nov- Year 1	Base Map Preparation (USFS consultation)
Dec- Year 1	Conceptual Design (USFS consultation)
Apr- Year 2	Environmental Assessment (USFS consultation and approval)
Jul- Year 2	60% Design (USFS consultation)
Aug- Year 2	Permitting (USFS consultation)
Dec- Year 2	Prepare 95% (Final) Design (USFS review and approval)
May- Year 3	Complete Easement and/or Real Property Acquisitions (if necessary)
Aug- Year 3	Select Construction Contractor
Dec- Year 3	Contractor Preparation (USFS consultation)
May- Year 4	Contractor Performs Construction
Oct- Year 4	Project Closeout (USFS review and approval)

6 Specific Recreation Measures

During the first 20 years of the License, SMUD must implement the Project recreation facility measures specified in FS Condition 45 (campgrounds, boat launches, day-use areas, and trails).

FS Condition 45 lists the required elements for each facility and makes SMUD responsible for the following items requiring FS approval: (1) survey; (2) design; (3) contract preparation and administration; (4) environmental analysis and documentation necessary for construction, including any permits; and (5) preparation of as-built drawings. All improvements will become the property of the FS upon completion, final inspection, and acceptance by the FS.

6.1 Planning and Design

Each recreation facility upgrade or new construction project will undergo a thorough planning and design process. This process, including early and frequent FS consultation, is described below.

6.1.1 Project Scoping

- SMUD issues a Task Order to consultant under contract as described above in Subsection 3.1 to assist with the designing and permitting of specific recreation measure(s).
- SMUD Project Manager (PM) and FS develop and agree upon project scope and a project-specific design and construction schedule for the improvements to be constructed (see Table 4 for a typical schedule). It is expected that initial field visits will be held during this scoping phase, and that the FS Liaison will identify which subject matter experts should participate in subsequent field visit pertaining to environmental assessments.

6.1.2 Easement and/or Real Property Acquisition (if necessary)

- Because some of the specific recreation measures listed in the License may extend beyond lands owned by SMUD or the FS, acquisition of easements and/or real property may be required.
- Specific acquisition needs will be identified following the project scoping phase in consultation with the FS where necessary.
- Necessary acquisitions will be initiated as early as possible and completed prior to completion of the issued-for-construction design.

6.1.3 Base Map Preparation

- SMUD PM, design consultants, FS Liaison, and potentially others will meet at the location in question to review existing conditions, required upgrades, and current FS design standards, including disability access requirements.
- SMUD or its consultant will survey the site and prepare a topographic map that includes the following: contours at an appropriate interval given the topography of the site, trees (minimum 10" DBH and any large clumps of smaller trees), any animal species identified, and other notable features such as boulders and rock outcroppings.
- The base map will be provided to the FS Liaison for review. Within 30 calendar days thereafter, the FS will review and provide written comments to the SMUD PM.

6.1.4 Conceptual Design

- Comments received from the FS on base map preparation, if any, will be addressed during this phase.

- SMUD or its consultant will compile pertinent civil and structural design specifications and standards for the specific FS recreation facilities and trails to be designed. The SMUD PM will coordinate with the FS Liaison as necessary to obtain all applicable FS design standards.
- Using digital format (AutoCAD and ESRI compatible), SMUD's consultant will place the facility elements on the base map and show or convey concepts for general layout.
- SMUD and FS will exchange rough designs as necessary to facilitate a process that is collaborative and promotes joint-ownership of the resulting design. This exchange will be scaled according to project scope and schedule.
- By way of example only, elements common to many of the specific recreation measures include clearing, tree removal, grading, construction of roads, trails, shower facilities, installation of campsite furnishings, signage, vault toilets, barrier rocks, environmental protection aspects (erosion control), slash and burn, restoration, grading, potable water system components, and vegetative screening.
- Borrow sites for construction materials including barrier rock, rip-rap, and soil will be identified in this conceptual design phase. Where feasible, and in accordance with applicable resource management requirements (e.g., invasive weeds and visual resources), construction materials will be sourced from mutually agreeable sites located near the project.
- The conceptual design will be provided to the FS Liaison for review. Within 30 calendar days thereafter, the FS will review and provide written comments to the SMUD PM. Drawing redlines and spreadsheets may be used for submitting comments.

6.1.5 Environmental Assessment

- The environmental effects of the specific recreation measures identified in FS Condition 45 have been assessed through the National Environmental Policy Act (NEPA) review process and considered by FERC and the FS as documented in the March 2008 Final Environmental Impact Statement (FEIS) for the UARP relicensing process.
- As the California Environmental Quality Act (CEQA) lead agency, SMUD has relied on the FEIS, along with a CEQA Supplement, for its obligations pursuant to CEQA, as documented in the SMUD Board of Director's September 18, 2008 certification, and July 19, 2012 Project Approval.

- Following the conceptual design phase, the SMUD PM, FS Liaison, SWRCB, CVRWQCB, and potentially others will meet at the location of the facility or facilities in question for a site visit to review project scope and to discuss the extent to which any further environmental review or permits will be needed (e.g., Fish and Wildlife Section 1602 Agreement, and CVRWQCB's review and approval for a bridge). SMUD will prepare a summary of each site visit for circulation to the FS Liaison which will identify the extent to which any resource impact evaluations will be required. The FS Liaison will provide written comment on each summary within 30 days of receipt from SMUD.
- Per FS Condition 38, if the construction may affect a FS, Fish and Wildlife Service, or California Department of Fish and Wildlife sensitive species plant or wildlife species or its habitat, a Biological Evaluation (BE) will be completed, including any necessary surveys to assess the potential effects of construction. If construction may affect a species proposed for listing or listed species under the federal Endangered Species Act or its critical habitat, a Biological Assessment (BA) will be completed. If a BE and BA must be completed, the two documents will be addressed in a single BA.
- Per FS Condition 54, SMUD has prepared a Historic Properties Management Plan (HPMP) for the UARP which has been approved by the FS, FERC and the State Historic Preservation Officer (SHPO). The HPMP outlines a process to evaluate potential impacts to Historic Properties and provides measures to mitigate impacts to these resources on National Forest System lands. In regard to each construction project, SMUD will review the HPMP with the FS and determine what steps, if any, are needed to protect historic resources.
- The SMUD PM will consult with the FS Liaison on whether a Solid Waste and Waste Water Plan will be needed (see FS Condition 25).
- SMUD and SMUD's consultant will prepare any necessary BE/BAs, cultural resource evaluations, and Solid Waste and Waste Water Plan. Included in these reports will be identification of any changed circumstances, required measures to protect specific resources, or site-specific concerns to consider in the design or operation of the project.
- Any environmental assessment reports, as described above, determined to be necessary and within FS jurisdiction will require FS approval. SMUD will submit a resource impact evaluation to the FS Liaison. The FS will review the documentation and provide SMUD with written authorization to proceed within 30 days of receiving final documentation. If authorization is not provided by the FS within the allotted time, a detailed reasoning will be provided in substitute, identifying the specific deficiencies in environmental resource assessment documentation.

- As specified in License Article 401(b), SMUD will submit documentation of consultation and copies of any FS comments and recommendations in connection with BEs and BAs to FERC at least six months prior to any construction activities associated with this Plan.

6.1.6 60% Detail Design

- Comments received from the FS on the conceptual design, if any, and the results of the environmental review will be addressed in this design phase.
- SMUD will incorporate applicable construction requirements and resource impact avoidance measures resulting from environmental assessment documentation and resource management plans into the project design.
- SMUD will prepare designs for any structural elements of the project.
- SMUD will develop and incorporate any necessary visual resources protection measures applicable to the project during this design phase. Site designs submitted to FS for review will include a proposed mitigation and implementation list/schedule addressing how the finished project will meet the visual resource standards and guidelines in the Eldorado National Forest Land and Resource Management Plan as required by Condition 53. FS approval of the final design package will indicate approval of the measures incorporated.
- The 60% detail design, including stake-out file, structural designs and visual resources protection measures, will require FS coordination and review. Once provided to the FS Liaison, the FS will review and provide written comments to the SMUD PM in writing within 30 calendar days.

6.1.7 Environmental Permitting

- Necessary environmental permits associated with a project will be identified per Subsection 6.1.5 above.
- 60% Detail Design drawings and specifications will be used to acquire any necessary environmental permits.
- SMUD proposes to acquire a Regional General Permit from the Army Corps of Engineers. The proposed permit will cover a variety of actions in the UARP that involve relatively minor discharges of dredge or fill material in Waters of the U.S.
- SMUD will secure water quality certifications from the Regional Water Quality Control Board or the State Water Resources Control Board, as appropriate, per Section 401 of the Clean Water Act.

- SMUD is obtaining a Lake/Streambed Alteration Agreement for routine maintenance from the California Department of Fish and Wildlife.
- For any impacts to waters or wetland outside the scope of the above-referenced permits, SMUD will obtain the appropriate authorizations to ensure compliance with state and federal water regulations.

6.1.8 Final Design (95%)

- Comments received from the FS on the 60% detail design package, if any, will be addressed in this design phase.
- The resultant design package will be designated the final, or 95%, design. This will include the final construction drawings (e.g., layout plan, drainage and grading plan, potable water plan), the stake-out file in AutoCAD format, all technical specifications and standards, and an estimation of construction costs.
- The final design package will require FS approval. The package will be submitted to the FS Liaison. The FS will review the package and provide approval to SMUD in writing within 30 days of receiving final documentation. If approval is not provided by the FS within the allotted time, a detailed reasoning will be provided in substitute, identifying the specific deficiencies in the final design package.

6.2 Construction

6.2.1 Construction Contract Development

- Following FS approval of the final design package, SMUD will prepare and release an IFB for the project.
- The issued for construction, or 100%, design package will be generated in parallel with the construction contract issuance. Any changes between 95% and 100% design, other than clarifications or correction of any minor technicalities, shall receive concurrence from both SMUD and the USFS, provided, however, this process does not adversely affect the bid solicitation schedule.
- SMUD will competitively select a construction contractor from the bids received and a contract package will be finalized and executed for facility construction.

6.2.2 Contractor Prepares for Construction

- SMUD's construction contractor will prepare a Safety During Construction Plan, identifying potential hazard areas and measures necessary to address public safety (areas to consider include construction activities near public roads, trails, and recreation areas open to the public). SMUD will file the plan with FERC within 60 days of planned construction activity (see FS Condition 21).
- SMUD's construction contractor will prepare an Erosion Control Plan which will include measures to control erosion, stream sedimentation, dust, and soil mass movement (see FS Condition 24), and protect water quality commensurate with the scope of the construction (See FS Condition 26 and SWRCB Condition 14). The plan must be approved by the FS, the SWRCB Deputy Director of Water Rights, and FERC before construction begins. If the project involves new ground disturbance of one or more acres, SMUD will prepare a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP may be incorporated into or serve as the Erosion Control Plan.
- SMUD's construction contractor will acquire any necessary additional permits (e.g., grading, health, building, etc.) commensurate with the scope of construction.
- The SMUD PM will coordinate with the FS Liaison on temporary facility closures and other construction related items as appropriate.

6.2.3 Contractor Performs Construction

- SMUD's contractor will construct the facility or facilities according to design, specifications, survey, and relevant permit conditions.
- SMUD will provide an on-site Construction Management Inspector (CMI) or, if necessary, will contract an Independent CMI (see FS Condition 21).
- SMUD will seek FS concurrence regarding any substitutions, design changes, or conditions for departure from accessibility standards that may arise during the construction phase. As appropriate, FS will be included in key construction and preconstruction meetings where such topics will be discussed.
- SMUD and/or SMUD's consultant will inspect the site to make sure all resource protection measures are in place and ensure any required monitoring is being completed as applicable.

6.2.4 Project Closeout

- SMUD will coordinate an inspection with FS Liaison to determine what, if any, outstanding items need to be addressed by SMUD's construction contractor.
- SMUD's construction contractor will address outstanding items, and SMUD and FS Liaison will complete a final inspection to verify that all items of concern have been adequately addressed.
- SMUD's construction contractor will prepare as-built drawings of the constructed or upgraded facility.
- The FS will then accept ownership of facility via written letter to SMUD.
- SMUD's License Implementation Supervisor will file with FERC as-built drawings, any revised License Exhibits A, F, or G, documentation of consultation history, and an FS letter accepting ownership with FERC.

7 Supplemental Recreation Measures

While FS Condition 45 identifies the general scope and schedule of specific initial recreation measures, SMUD and the FS have recognized that these specific measures may not meet the needs of changing recreation levels, patterns, and types throughout the life of the License. Processes for SMUD and the FS to justify, scope, and schedule additional specific recreation measures that have yet to be identified are discussed below.

7.1 Recreation Area Development Plans

In addition to specific development requirements, FS Condition 45 also includes requirements for SMUD to produce development plans for several recreation areas. These areas include Loon Lake, Gerle Creek Reservoir, Union Valley Reservoir, Ice House Reservoir, Brush Creek Reservoir, and Slab Creek Reservoir. These recreation area development plans might contain elements not specifically identified in the License.

7.2 Recreation Surveys

On a six-year interval following License issuance, FS Condition 42 requires SMUD to conduct recreation surveys to determine changes in the levels, patterns, and types of recreation occurring at Project recreation facilities. Findings of these surveys will be reported to the FS and the Consultation Group, who will make recommendations to address any perceived facility deficiencies. Recommended facility upgrades justified and mutually agreeable to both FS and SMUD may be incorporated into the License through the consultation processes described in FS Condition 3.

7.3 Review Recreation Developments

Also on a six-year interval following License issuance, FS Condition 44 requires SMUD to meet with the FS to review all Project recreation developments. It is during these meetings that the FS and SMUD will discuss, agree upon, prioritize, and schedule necessary heavy maintenance, rehabilitation, construction, and/or reconstruction work in accordance with FS Conditions 45 and 46. As described above in Section 4.2, the priority and schedule of heavy maintenance needs during the initial six year period following License Issuance will be addressed through annual consultation between SMUD and the FS. These can also be used to address any unforeseen heavy maintenance needs arising between subsequent six year intervals.

7.4 Carrying Capacity

In parallel with, and closely related to, the recurring recreation surveys required by FS Condition 42 and development reviews required by FS Condition 44, SMUD is required to provide data to support the determination of carrying capacity of UARP-associated lands per FS Condition 48. The FS has reserved the right to modify the specific recreation measures listed in FS Condition 45 contingent on this determination and related evaluations. Modifications to FS Condition 45 may create additional specific recreation measures, including development elements.

8 Signing and Sign Placement

The design, content, and placement of UARP-associated signage will be consistent with applicable FS guidelines and FERC requirements. Current FS guidelines pertaining to some types of signs and sign placement are found in the *Sign and Poster Guidelines for the Forest Service* (EM7100-15; Revised October 2013). Additional Eldorado National Forest guidelines for signage within recreation sites will be provided as needed during project design. FERC requirements pertaining to recreation related sign and sign placement are found in 18 CFR §8.2.

For the purpose of this Recreation Implementation Plan, Project signage is categorized as 1) traffic signage, 2) public informational signage, or 3) recreation facility signage. Classification is necessary because requirements for each are addressed separately in the License.

Regular maintenance of UARP-associated recreation signage will be performed by the FS and funded by SMUD through the OM&A collection agreement discussed above in Section 4.1. The mechanism to fund heavy maintenance activities at Project recreation facilities, should a signage-related project rise to that level, is discussed above in Section 4.2.

8.1 Traffic Signage

Within one year of License issuance, FS Condition 56 requires SMUD to develop a Transportation System Management Plan (TSMP) to include, among other things, traffic safety and destination/distance signage on UARP associated roads. Recurring updates to this plan identifying construction and maintenance needs and schedules, including traffic signage, will be completed every 5 years. The TSMP does not include the management of signs within recreation facilities (campgrounds, day-use areas, etc.). When a recreation site is upgraded or developed, traffic sign placement, acquisition, and installation will be part of the design for that facility.

8.2 Public Information Signage

As described below in Section 9.3, FS Condition 51 requires SMUD to complete an Interpretive, Education, and Public Information Plan within two years of License issuance. Details of informational signing and sign placement will be addressed in this plan.

8.3 Recreation Facility Signage

FS Condition 45 identifies and schedules a list of initial specific recreation measures including construction, reconstruction, and restoration of UARP-associated recreation facilities. As described in Subsection 6.1, signage will be a part of the overall design of a new recreation facility or facility upgrade.

9 Public Information Dissemination

SMUD's requirement to develop and disseminate public information in consultation and coordination with the FS and others are detailed in FS Condition 51. As applicable, the activities summarized below in sections 9.1 through 9.3 will be coordinated with PG&E's Chili Bar Hydroelectric Project.

9.1 Streamflow and Reservoir Level Information

SMUD will produce a Streamflow and Reservoir Level Information Plan for FERC approval within one year of License issuance. The plan is required to include a website and a toll-free telephone number (or other appropriate technology approved by the FS) capable of reporting reservoir stage height and storage information at eight specified UARP reservoirs and streamflow levels at ten specified locations. The website will also publish minimum, pulse, and recreational streamflow schedules, as well as current water-year type and designation.

Additionally, the Plan will include installation of simple staff gages at South Fork Silver Creek below Ice House Reservoir Dam and South Fork American River below Slab Creek Reservoir Dam. These gages are to be placed near popular whitewater boating put-ins for the public to use in evaluating flow-related boating conditions.

9.2 Project Recreation Brochure and Map

SMUD is required to develop and print Project recreation brochures and maps. These materials will be made continuously available at no cost to the public through typical FS distribution methods at information stations and recreation facilities and will be updated over time as conditions change. Content and design of UARP-associated recreation brochures and maps will be revisited annually, or as deemed necessary, for accuracy and relevancy.

9.3 Interpretive, Educational, and Public Information Plan

SMUD will complete an Interpretive, Education, and Public Information Plan within two years of License issuance.

Figure 1. UARP New License High-Level Implementation Schedule - First 20 Years

Calendar Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
License Year	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Reservoir Releases and Levels																					
Implement all Flows and Res. Levels																					
Coordinate Operations w/ PG&E (Chili Bar)																					
Ecological Monitoring																					
Water Chemistry																					
Hardhead																					
Foothill Yellow-legged Frogs																					
In Situ Water Quality																					
Water Temperature																					
Bacteria Monitoring																					
Metals bioaccumulation																					
Bald Eagle																					
Bear/human interaction																					
Benthic Macroinvertebrate																					
Rainbow and Brown Trout																					
Mountain Yellow-legged Frogs																					
Geomorphology																					
Riparian Vegetation																					
Recreation Survey and Plan																					
Annual Review Ecological Conditions																					
Facilities, Visual, Roads, Trails - review with FS																					
Facilities & Resources Management																					
Coordinated Operations / Project Implementation																					
Streamflow and Res Level Gaging																					
Heritage Properties																					
Gerle Creek Sensitivity																					
Gerle Creek Stability																					
Robbs Entrainment / Adaptive Releases																					
Avian Protection (transmission lines)																					
Fish Stocking / Woody Debris / Snow Plowing																					
Invasive Weeds / Vegetation Management																					
Transportation System / Trails System																					
Fire Prevention and Response																					
Fish Passage at Gerle Reservoir																					
Review of special status species																					
Recreation Management																					
Annual Payment to FS for Recreation Operations, Maintenance, and Administration (1)																					
Develop Recreation Implementation Plan (1)																					
Conduct Recreation Facility Review (Recurring Every 6)																					
Develop Four Reservoir Recreation Management Plan (2)																					
Develop and Implement Whitewater Boating Monitoring Plan (1)																					
Develop Slab Creek Whitewater Take-out Access & Parking Plan (2)																					
Develop Slab Creek Whitewater Boating Recreation Management Plan (2)																					
Develop Ice House Whitewater Boating Recreation Plan (2)																					
Develop Slab Creek Reservoir Boat Launch Plan (2)																					
Develop Union Valley Reservoir Boating Management Plan (2)																					
Develop Interpretive, Educational, and Public Information Plan (2)																					
Develop Slab Creek Reservoir Boat Launch Plan (2)																					
Develop Bear-Proof Food Storage and Trash Receptacle Installation Plan (2)																					
Develop Slab Creek Whitewater Boating Recreation Plan (5)																					
Develop Recreation Management Plan for Brush Creek Reservoir (5)																					
Recreation Facility Upgrades (Year Due)																					
Expand UV Bike Trail - Tells to Yellowjacket (2)																					
Upgrade Rubicon Hiking & Pleasant Trails (2)																					
Replace Toilets at Pleasant Campground (2)																					




Legend	
	Planning
	Consultation
	Field/Construction

Figure 2. Schedule of UARP License Implementation Activities Within First 24 Months of License Issuance

Measure	Year due after License	USFS 4(e)	SWRCB	License Condition(s)	2014					2015					2016					2017												
					Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan										
Union Valley Res. Management (2)	2	45	n/a	45									USFS consultation and field review		CG	draft plan	review	final	FERC approval													
Ice House Res. Management (2)	2	45	n/a	45									USFS consultation and field review		CG	draft plan	review	final	FERC approval													
Gerle Creek Res. Management (2)	2	45	n/a	45									USFS consultation and field review		CG	draft plan	review	final	FERC approval													
Loon Lake Res. Management (2)	2	45	n/a	45									USFS consultation and field review		CG	draft plan	review	final	FERC approval													
Slab Cr. Res. Forebay Rd. Access Plan (2)	2	45	n/a	45									USFS consultation and field review		CG	draft plan	review	final	FERC approval													
Slab Cr. Res. Near Dam Access Plan (2)	2	45	n/a	45									USFS consultation and field review		CG	draft plan	review	final	FERC approval													
WW Boating Use Monitoring Plan (0.5)	1	50	4	50			CG	final	FERC approval	implement >>>																						
Ice House Reach Woody Debris Review	2	50	n/a	50								review					review															
Bear-proof Food Lockers (2)	2	45	n/a	50											CG	draft plan	review	final	FERC approval	implement >>>												
Slab Creek Reach WWB Mgmt. (2)	2	50	n/a	50												CG	draft plan	review	final	FERC approval	implem											
Interp. & Ed. Plan and Brochure/Map (2)	2	51	n/a	51									CG	draft plan	review	final	app.	FERC approval	implement >>>													
Access and Parking Plan for White Rock	1.5	50	n/a	50									CG	draft plan	review	final	app.	FERC approval	implement >>>													
Recreation Facility Upgrades																																
Expand UV Bike Trail - Tells to YJ CG (2)	2	45	n/a	45	con. design	env. assessment	60% design	App.					95% design	App.	site prep.							construct		approve as-built								
Reconstruct Rubicon and Pleasant CG Hiking Trail (2)	2	45	n/a	45	con. design	env. assessment	60% design	App.					95% design	App.								construct		approve as-built								
Improve Buck Island Hiking Trail (4)	4	45	n/a	45	con. design	env. assessment	60% design	App.					95% design	App.								construct		approve as-built								
Replace toilets at Pleasant Campground (2)	2	45	n/a	45	con. design	env. assessment	60% design	App.					95% design	App.								construct		approve as-built								
Construct toilets at Ellis Staging and Buck Island (2, 4)	2,4	45	n/a	45							con. design	env. assessment	60% design	App.	95% design	App.						construct		approve as-built								
Reconstruct Sunset CG (5)	5	45	n/a	45																		early planning										
Expand North Shore RV CG (5)	5	45	n/a	45																		early planning										
West Point Boat Launch	5	45	n/a	45																		early planning										
Yellow Jacket Boat Launch	5	45	n/a	45																		early planning										
Ice House & UV Roads Surfacing, Parking, and access (5)	5	56	n/a	56								USFS consultation and field review	planning	con.	conceptual design	app.						acquisition and environmental assessment										
Non-Recreation Facility Upgrades																																
Modify Rubicon Dam Valve		27	1.A	27	Scheduled for 2015																											
Reconstruct Weir - Buck Island		27	1.B	27	Scheduled for 2015																											
Reconstruct Loon Lake Dam Weir		27	1.C	27	Completed in 2012																											
Replace Valve at Gerle Dam		27	1.D	27	Completed in 2012																											
Construct New Weir below Robbs Dam		27	1.E	27	Scheduled for 2015																											
Modify Robbs outlet valve		27	1.E	27	Scheduled for 2016																											
Reconstruct Ice House Dam Weir		27	1.F	27	Completed in 2012																											
Construct new weir below Camino Dam		27	1.H	27	Scheduled for 2016																											
Amendment for New Slab Powerhouse	0.25	27	1.K	27; 50	Submit Final License Amendment Application					FERC performs NEPA, consults, and issues license order										CEQA	implement >>>											
Visual - Loon Passive Reflector (2)		53	n/a	53	Completed in 2014																											
Install Temp. Gages - 4 w/ Telemetry		31	8.1	31	Completed in 2013																											
Visual - New Fence - Robbs & Rubicon (2)	2	53	n/a	53								planning	design	install																		
Visual - Painting at Four Sites (2)	2	53	n/a	53								planning	paint																			
Iowa Hill																																
Obtain a Special Use Permit		64	n/a					USFS consultation	Approval																							
Develop and Implement Hardhead Monitoring Plan		66	21												CG	draft plan	review	final	FERC approval													
Develop and Implement Edgewater Temperature Monitoring Plan		66	21												CG	draft plan	review	final	FERC approval													
Develop and Implement Wildlife Land Mitigation Plan		67	n/a	409												Agency Consultation	CG	draft plan	review	final	FERC approval											
Prepare and Implement a Groundwater Monitoring Plan		69	18																				USFS Consultation		CG	d. plan						
Develop and File Visual Quality Specifications and Simulations		70																						CG	draft plan	review						
Develop and Implement a Construction Noise Management Plan		74																						CG	draft plan	review						
Develop and Implement a Recreation Access Plan		75	22																					CG	draft plan	review						

Attachment 1

FS Condition 41 states:

“A recreation implementation plan shall be developed by the licensee in coordination with FS within 6 months of license issuance. The implementation plan shall include a construction schedule for the recreation facilities specified in Condition No. 45, as well as other details related to recreation resources, including, but not limited to, signing and sign placement, public information dissemination, and a schedule for design of facilities to be reconstructed. The implementation plan shall be maintained and updated in conjunction with the review of recreation developments required in Condition No. 44.”

Attachment 2

SWRCB Condition 14 states:

“The Licensee shall develop a Recreation Implementation Plan in coordination with USFS within six months of license issuance. The Recreation Implementation Plan shall include a construction schedule for the recreation facilities specified in SA Article 1-19, and shall be periodically updated in conjunction with the review of recreation developments required in the SA Article 1-18. The plan shall include a provision to consult with the State Water Board and Central Valley Water Board regarding water quality permitting and approvals necessary for the construction or rehabilitation of recreation facilities and to obtain the required permits or approvals before initiating construction activities. Permits that may be required include, but are not limited to, individual waste discharge requirements or coverage under the Construction General Permit and/or Water Quality Order 97-10. Construction plans for projects identified in the Recreation Implementation Plan that have the potential to affect water quality shall be submitted to the Deputy Director for review and approval. Plans shall at a minimum include proposed BMPs, and erosion and turbidity control measures. The Deputy Director may require modification as part of approval. The Licensee shall file the Deputy Director’s approval, together with any required plan modifications, with the Commission. Projects with the potential to affect water quality shall not be constructed until after receipt of Deputy Director approval and any other necessary regulatory approvals.”

Consultation Record

Draft Recreation Implementation Plan Comment Summary

#	Page	Par.	Comment	Agency	Result
1	4	Table 2	Forest Service Liason for Recreation Facility Designs/Acting Recreation Program Manager Diana Erickson (530) 621-5214 dkerickson@fs.fed.us Landscape Architect Isaac Sims (530) 295-5621 isims@fs.fed.us District Ranger, Pacific RD Richard Thornburgh (530) 647-5410 rthornburgh@fs.fed.us District Recreation Officer, Pacific RD Debbie Gaynor (530) 647-5432 dgaynor@fs.fed.us	USFS	Incorporated
2	4	2	1,000,000 annually * * initial sum to be adjusted by annual escalator	USFS	Incorporated
3	4	3	With regard to Conditions 44 and 46, in both the Recreation Plan and the License Implementation Plan, far more than 6 years has passed since the conditions for the plan were written, and the condition of some facilities has deteriorated to the extent that it would be expected some heavy maintenance will be needed before an additional 6 years has passed. Suggest these conditions be implemented within the first two years, and then on a 6 year sechedule.	USFS	Incorporated with modification. Added: "During the initial six-year period following License issuance, the priority and schedule of heavy maintenance needs will be addressed through annual consultation between SMUD and the FS."
4	5	4	Add: Dates shown in Table 6.0-01 represent a typical schedule for design and implementation of projects. Some projects may have a compressed time schedule due to the dates they are required to be completed under the license. Development of these plans will also follow the process for Consultation Group participation described above, if it is determined that there are Consultation Group members who wish to participate in the development of these plans.	USFS	Incorporated with modification. Per Section 4.12 of the Settlement Agreement the Consultation Group will be involved in the development of implementation and adaptive management plans, along with participating in the Annual Review of Ecological Conditions.
5	6	Table 3	Next to last row "Contractors Perform Construction"	USFS	Incorporated
6	7	2	ERROR message	USFS	Corrected - thank you.
7	7	4	10" DBH or better would be acceptable for trees to be Incorporated in survey. Large clumps of smaller trees are also helpful to be shown.	USFS	Incorporated
8	7	7	Property or easement acquisition could take a long time and should be initiated well in advance of the design phase for the project where it is known that it will be needed. It is unclear why SMUD would wait until after a detailed topo/tree site survey is done.	USFS	The point has been moved as far forward in the Plan progression as possible. SMUD agrees it should be initiated as soon as possible.
9	7	9	Conceptual Design - should not just consist of design firm placing digital elements on a base map. Please address site analysis and conceptual design. Will there be an opportunity for the FS to review alternative rough design concepts? Participate in a design charrette?	USFS	Incorporated. Added: SMUD and FS will exchange rough designs as necessary to facilitate a process that is collaborative and promotes joint-ownership of the resulting design. This exchange will be scaled according to project scope and schedule.
10	8	5	The conceptual design will be provided to the FS Liason for review. Within 30 calendar days thereafter, the FS will review and provide written coments to the SMUD Project Manager. Drawing redlines and spreadsheets may be used for submitting comments.	USFS	Incorporated

Draft Recreation Implementation Plan Comment Summary

#	Page	Par.	Comment	Agency	Result
11	9	3	It is not clear which site visits are being referred to as to resource impact evaluations. Is this at conceptual design phase?	USFS	Incorporated. Now reads: will meet at the location of the facility or facilities in question for a site visit to review project scope and to discuss the extent to which any further environmental review or permits will be needed...SMUD will prepare a summary of each site visit for circulation to the FS Liaison which will identify the extent to which any resource impact evaluations will be required. The FS Liaison will provide written comment on each summary within 30 days of receipt from SMUD.
12	10	4	This paragraph refers to a FS-approved plan prepared pursuant to FS Condition 53, but the Condition 53 language says that during planning and prior to any new construction or maintenance of facilities that have the potential to affect visual resources of NFS lands the licensee shall file with FERC a plan approved by the FS for the protection and rehabilitation of National Forest System visual resources affected by such construction or maintenance. A Visual resource plan is not shown in the Implementation Plan, or in Figures 1 or 2 in the Appendices for this Recreation Plan. Is it to be developed for each facility in the early planning stage? If so, then should development of the plan be identified as a step in this schedule? Maybe back under Environmental Assessment? Or is it being developed at the same time as the design?	USFS	Incorporated. Reference to a FS-approved Visual Resources Protection Plan has been deleted. Now reads: SMUD will develop and incorporate any necessary visual resources protection measures applicable to the project during this design phase. FS approval of the final design package will indicate approval of the measures
13	11	6	Concern over the language "The only changes that may occur between 95% and 100% design are clarifications and the correction of any minor technicalities absent approval from USFS". It is not clear what the intent of this statement is. Perhaps it should say " Any changes between 95% and 100% other than clarifications or correction of any minor technicalities shall receive concurrence from both SMUD and the USFS."	USFS	Incorporated. Now reads: Any changes between 95% and 100% design, other than clarifications or correction of any minor technicalities, shall receive concurrence from both SMUD and the USFS, provided, however, this process does not adversely affect the bid solicitation schedule.

Draft Recreation Implementation Plan Comment Summary

#	Page	Par.	Comment	Agency	Result
14	12	6	We are not comfortable with no involvement of the FS during the construction phase. What about Requests for Information or Requests for substitution? What about unforeseen problems during construction. FS should be consulted before approving any substitutions, design changes, or conditions for departure from accessibility standards that may arise during the construction phase. Will the FS be Incorporated in any preconstruction or construction meetings? What will be done if FS observes something under construction will not meet standards. Do we wait until final project inspection?	USFS	Incorporated. Added: SMUD will seek FS concurrence regarding any substitutions, design changes, or conditions for departure from accessibility standards that may arise during the construction phase. As appropriate, FS will be Incorporated in key construction and preconstruction meetings where such topics will be discussed.
15	12	8	Final Inspection with FS liason should occur PRIOR to SMUD final acceptance of work by the contractor.	USFS	Incorporated. Now reads: SMUD will coordinate a final inspection with FS Liaison to determine what, if any, outstanding items need to be addressed by SMUD's construction contractor. SMUD's construction contractor will address outstanding items, and SMUD and FS Liaison will complete a final inspection to verify that all items of concern have been adequately addressed.
16	13	2 & 3	See comments under page 4 paragraph 3	USFS	Incorporated with modification-see above.
17	14	3-5	We suggest that a basic sign plan should be Incorporated in this document. An example will be provided.	USFS	Incorporated with modification-Now reads: The design, content, and placement of UARP-associated signage will be consistent with applicable FS guidelines and FERC requirements. Current FS guidelines pertaining to sign and sign placement are found in the Sign and Poster Guidelines for the Forest Service (EM7100-15; Revised October 2013). FERC requirements pertaining to recreation related sign and sign placement are found in 18 CFR §8.2.
18	Appendix A	Fig 1	Please incorporate all FS comments made on Figure 1 in the Implementation Plan to Figure 1 in this Appendix	USFS	Aknowledged.

Draft Recreation Implementation Plan Comment Summary

#	Page	Par.	Comment	Agency	Result
19	Appendix B	Fig 2	Please incorporate all FS comments made on Figure 2 in the Implementation Plan to Figure 2 in this Appendix	USFS	Aknowledged.
20	NA	NA	The State Water Resources Control Board (State Water Board) initial staff review of the draft Recreation Implementation Plan (Plan) finds the Plan to be generally in keeping with the requirements of Condition 14 of the water quality certification (certification) for the Upper American River Hydroelectric Project (UARP). Notwithstanding, State Water Board staff submits the following comments regarding the Plan. [All initial comments are based upon staff review of the draft Plan submitted by the Sacramento Municipal Utility District (SMUD) and the applicable requirements outlined in the UARP certification. Review and approval of a final Plan by the State Water Board, Deputy Director of Water Rights, as required under the terms and conditions of the UARP certification, may require modification, as outlined in the UARP certification.]	SWRCB	SMUD can find no documentation that the Deputy Director approval is required for this plan. Please advise.
21	1	1	The Introduction section should also include a brief description of the State Water Board and Central Valley Regional Water Quality Control Board (Central Valley Board) consultation requirements outlined in Condition 14 of the certification.	SWRCB	Incorporated.
22	2	1	The language of certification Condition 14 should be Incorporated in Section 2 of the Plan.	SWRCB	Incorporated in Attachment 2.
23	8	7	Section 7.1.5 "Environmental Assessment" should be modified to include the State Water Board and Central Valley Board during the review of project scope and to discuss the extent to which any further environmental review or permits will be needed (see underlined for proposed additional language for inclusion). Following the conceptual design phase, the SMUD PM, FS Liaison, <u>State Water Resources Control Board, Central Valley Regional Water Quality Control Board,</u> and potentially others will meet at the location of the facility or facilities in question to review project scope and to discuss the extent to which any further environmental review or permits will be needed (e.g., Fish and Wildlife Section 1602 Agreement, and Central Valley Regional Water Quality Control Board's review and approval for a bridge).	SWRCB	Incorporated.

Draft Recreation Implementation Plan Comment Summary

#	Page	Par.	Comment	Agency	Result
24	11,12	8,1	<p>Section 7.2.2 “Contractor Prepares for Construction” should be modified to include the State Water Board, Deputy Director of Water Rights, to the list of agencies with approval authority for the Erosion Control Plan (see underlined for proposed additional language for inclusion).</p> <p>SMUD’s construction contractor will prepare an Erosion Control Plan which will include measures to control erosion, stream sedimentation, dust, and soil mass movement (see FS Condition 24), and protect water quality commensurate with the scope of the construction (See FS Condition 26 and State Water Resources Control Board’s Water Quality Certification Condition 14). The plan must be approved by the FS, <u>the State Water Board Deputy Director of Water Rights</u>, and FERC before construction begins. If the project involves new ground disturbance of one or more acres, SMUD will prepare a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP may be incorporated into or serve as the Erosion Control Plan.</p>	SWRCB	Incorporated
25	4	Table 3	Change Role or title for Diana Erickson to "FS Liason for Recreation Plans and Recreation facility Designs/Landscape Architect"	USFS	Incorporated
26	4	Table 3	Add Forest Recreation Program Manager; Cindy Oswald; 530-621-5213; coswald@fs.fed.us	USFS	Incorporated
27	4	2	<p>Edit 1. Operations, Maintenance, and Administration Collection Agreement as follows: <i>Per FS Condition 47, beginning the first full year after License issuance, SMUD wil pay the FS \$1,000,000.00 annually. These annual funds are for the FS to provide for opeartion, maintenance and administration (OM&A) of Project recreational facilities, sites, and uses. A Collection Agreement will be executed by SMUD and the FS to describe, in detail, the terms and conditions of this annual payment. The agreement will include an annual escalator based on the U.S. Gross Domestic Product - Implicit Price Deflector with year 2007 as the cost basis. As stated in FS Condition 47 and agreed upon in the Relicensing Settlement Agreement for the Upper American River Project and Chili Bar Hydroelectric Project, this payment is the financial means for the FS to ensure the Project recreational facilities are maintained according to FS and FERC standards for the duration of the License. As indicated in the Rationale Report fo the UARP Relicensing Settlement Agreement, this figure reflects Operation and Maintenance costs only for existing facilities and uses. It is anticipated that additional modifications to the collection amount may be needed in subsequent years to reflect changes in operation and maintenance costs resulting from the construction of new project related recreation sites or facilities, reconstruction of existing recreation sites or facilities, or other changes in recreation management pursuant to implementation of requirements in the License (such as increased whitewater flow levels). If any such modifications are needed, they will be addressed in a future revision to the collection agreement.</i></p>	USFS	<p>SMUD acknowledges the USFS position on this matter, but has not incorporated the statement for the purposes of this Plan, instead limiting the Plan to the language in 4(e) Condition 47 and the Settlement Agreement .</p> <p>SMUD and the USFS will continue discussions regarding circumstances under which it might be appropriate to provide for collection of additional funds for facilities not yet constructed. Any agreed upon changes will be reflected in a subsequent Collection Agreement.</p>
28	5	2	3. Technical Services Collection Agreement - Spelling error in word <i>Financial Plan</i>	USFS	Spelling error corrected
29	8	5	Why was Visual Resources crossed out as a consideration for selection of Borrow sites?	USFS	This deletion was an error and has been corrected.

Draft Recreation Implementation Plan Comment Summary

#	Page	Par.	Comment	Agency	Result
30	10	5	<p>We are in agreement with the paragraph but are confused about SMUD not planning on preparing a Visual Resources Plan for FERC review as required by Condition 53. We envisioned that the plan would outline the types of considerations that will be made during the design phase of individual facilities (such as facility configurations, alignments, building materials, colors, landscaping, and screening, materials, cuts and fills, construction zones and borrow areas, tree and vegetation removal, blasted rock surfaces and their treatment, management activities, revegetation, etc.) and be used as a reference by SMUD and their contractors during the site specific design phase. Are the individual site plans going to be submitted to FERC after FS approval? As a minimum, we request the following edits: <i>SMUD will develop and incorporate any necessary visual resources protection measures applicable to the project during this design phase.</i> The site designs submitted to the Forest Service for review will include a proposed mitigation and implementation list/schedule addressing how the finished project will meet the visual resource standards and guidelines in the Eldorado National Forest Land and Resource Management Plan site as required by Condition 53. <i>FS approval of the final design package will indicate approval of the measures incorporated.</i></p>	USFS	Requested edits have been made.
31	14	3	<p><i>Current FS guidelines pertaining to some types of sign s and sign placement are found in the Sign and Poster Guidelines for the Forest Service...</i> Additional Eldorado National Forest guidelines for signage within recreation sites will be provided as needed during project design.</p>	USFS	Requested edits have been made.

154 FERC ¶ 62,046

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Sacramento Municipal Utility District

Project No. 2101-100

ORDER MODIFYING AND APPROVING RECREATION IMPLEMENTATION
PLAN PURSUANT TO ARTICLE 401 AND ARTICLE 408

(Issued January 21, 2016)

1. On January 26, 2015, Sacramento Municipal Utility District, licensee for the Upper American River Hydroelectric Project (FERC No. 2101), filed a Recreation Implementation Plan (plan) for the project. The plan was filed for Commission approval pursuant to Article 401(a) and Article 408 of the project license and was developed to comply with the U.S. Forest Service Section 4(e) Condition 41; State Water Resources Control Board (SWRCB) Water Quality Certification Condition 14; and Section 4.12.1 of the project relicensing Settlement Agreement (SA).¹ The project currently consists of seven developments located on the Rubicon River, Silver Creek, and South Fork American River in El Dorado and Sacramento Counties in central California. These seven developments occupy federal lands managed by the U.S. Department of Agriculture Forest Service (Forest Service) and the U.S. Department of Interior Bureau of Land Management (BLM). The license also authorizes the construction of the Iowa Hill Development as part of the project which will be located in El Dorado County and may occupy additional federal land within the Eldorado National Forest.

BACKGROUND

2. Article 401(a) requires that various conditions of the project license found in the SWRCB section 401 Water Quality Certification (WQC) conditions and the Forest Service's section 4(e) conditions require the licensee to file specified plans and measures for Commission approval prior to implementation. The licensee must include documentation that the plans or measures were developed in consultation with the agencies identified in the WQC conditions or the Forest Service's section 4(e) conditions

¹ See Order Issuing New License (148 FERC ¶ 62,070), issued July 23, 2014 and Order Granting Rehearing in Part, Denying Rehearing in Part, and Amending License (149 FERC ¶ 61,035), issued October 16, 2014.

which mandated the requirement. The Commission reserves the right to make changes to any plans submitted. Upon Commission approval, the plan will become a requirement of the license, and the licensee must implement the plan, or changes in project operations or facilities, including any changes required by the Commission. Article 401(a) incorporates the SWRCB section 401 WQC and the Forest Service 4(e) Conditions into the license. Along with many other requirements, article 401(a) requires that within 6 months of license issuance, the licensee must develop a recreation implementation plan in consultation with the Forest Service.

3. Forest Service Condition 41 requires a recreation implementation plan be developed by the licensee, in coordination with Forest Service, within 6 months of license issuance. The implementation plan must include a construction schedule for the recreation facilities specified in Condition No. 45, as well as other details related to recreation resources, including, but not limited to, signing and sign placement, public information dissemination, and a schedule for design of facilities to be reconstructed. The plan must be maintained and updated in conjunction with the review of recreation developments required in Condition No. 44.

4. Article 408 requires the plan mandated by Forest Service Condition 41 be expanded to include the operation and maintenance of the following existing recreation areas and associated facilities for the term of the license: Loon Lake Area, Gerle reservoir Area, Union Valley reservoir Area, Ice House reservoir Area, Junction reservoir Boat Launch, Brush Creek Reservoir Boat Launch, Slab Creek reservoir Area, and Big Hill Overlook, as identified in Tables 5.3.8-1 through 5.3.8-5 in the licensee's final license application with the exceptions noted by footnote 3 (SMUD Application vol. 2A, section 5.3.8, filed July 15, 2005).

5. Forest Service Condition 44 states the licensee must schedule a meeting with Forest Service staff at least every 6 years to review all project-related recreation facilities described in Condition Nos. 44 and 45 and to agree upon necessary maintenance, rehabilitation, construction, and reconstruction work needed and its timing, as described in Condition Nos. 45 and 46. Because the standard life of recreation facilities ranges from 20 to 30 years, facilities that are currently in good condition may need to be redesigned and reconstructed to current standards during the 50-year term of the license. The criteria for project selection will depend on the amount and type of use, current recreation facility policy, condition of facilities, effects on surrounding areas, and other factors. Following the review, the licensee must develop a 6-year schedule for maintenance, rehabilitation, and reconstruction, which must be approved by the Forest Service prior to being filed with the Commission.

6. Forest Service Condition 45 includes a list of initial recreation projects identified at the time of license issuance, including construction, reconstruction, and restoration, that must be completed by the licensee at the 54 recreation sites listed, as well as the

development of seven recreation plans. The licensee is responsible for: survey; design; contract preparation and administration; environmental analysis and documentation necessary for construction of proposed facilities, including any permits; and preparation of as-built drawings, all of which require Forest Service approval. The licensee is also responsible for funding the actual capital costs of the measures listed. All improvements will become property of Forest Service upon completion, final inspection, and acceptance by Forest Service.

7. Forest Service Condition 46 requires the licensee to be responsible for the cost of the necessary maintenance, rehabilitation, and reconstruction, including the costs of design and administration, as determined through the Review of Recreation Developments (as described in Condition No. 44) for the project recreation facilities. Heavy maintenance and rehabilitation are defined as work that is necessary to keep existing facilities in serviceable condition to meet Forest Service standards and includes components of recreation facilities such as water systems, traffic control barriers, roads, spurs, and associated drainage structures, grills and fire rings, picnic tables, toilets, and signboards. The licensee is to use Forest Service standards for the frequency of heavy maintenance as a guideline, but not a prescription, for licensee's performance of its heavy maintenance responsibilities. As determined through the Review of Recreation Developments (as described in Condition No. 44), heavy maintenance projects may be deferred that would otherwise be timely under Forest Service frequency standards, if Forest Service determines that actual conditions indicate that the project is not yet necessary.

8. The SWRCB Condition 14 requires the licensee to develop a recreation implementation plan in coordination with Forest Service within six months of license issuance. The recreation implementation plan is to include a construction schedule for the recreation facilities specified in SA Article 1-19, and must be periodically updated in conjunction with the review of recreation developments required in the SA Article 1-18. The plan must include a provision to consult with the SWRCB and Central Valley Water Board regarding water quality permitting and approvals necessary for the construction or rehabilitation of recreation facilities and to obtain the required permits or approvals before initiating construction activities. Condition 14 allows the Deputy Director to require modification of the plan as part of its approval and the licensee must file the Deputy Director's approval, together with any required modifications, with the Commission.

THE LICENSEE'S PLAN

9. The licensee's plan provides a guide for the design and construction of recreation facilities described in Forest Service Conditions 44 and 45. The plan also addresses the process for identifying and prioritizing additional recreation measures associated with Forest Service Conditions 42, 44, 45, and 48. The plan identifies the licensee's key

implementation staff as well as Forest Service personnel responsible for reviewing and approving design and construction work associated with the project license. The plan describes funding issues related to the operations, maintenance, and administration collection agreement (Forest Service Condition 47); heavy maintenance (as defined in Forest Service Condition 46); and the technical services collection agreement.

10. The plan includes the schedule below in Table 1, showing the implementation sequence of specific recreation measures that are outlined on spreadsheets in the plan. The licensee will perform the required recreation facility upgrades/measures over the course of the first 20 years of the 50-year license term. Scheduling of near-term recreation measures (i.e., those occurring within the first 24 months following license issuance) are shown greater detail in other spreadsheets in the plan. Table 1 shows the expected progression for the recreation activities in Forest Service Condition 45 that contain planning, permitting, engineering, design and construction components. Dates shown in Table 1 represent a typical schedule for design and implementation of a recreation project. Some recreation projects may have a compressed time schedule due to the dates they are required to be completed under the license. The steps in this progression are explained in greater detail in plan.

TABLE 1: General development schedule for Project recreation facility upgrades.	
Start Date	Activity
Aug- Year 1	Select Environmental/Engineering/Design Contractor
Sep- Year 1	Define the Project (Forest Service consultation)
Oct- Year 1	Initiate Easement and/or Real Property Acquisitions (if necessary)
Nov- Year 1	Base Map Preparation (Forest Service consultation)
Dec- Year 1	Conceptual Design (Forest Service consultation)
Apr- Year 2	Environmental Assessment (Forest Service consultation and approval)
Jul- Year 2	60% Design (Forest Service consultation)
Aug- Year 2	Permitting (Forest Service consultation)
Dec- Year 2	Prepare 95% (Final) Design (Forest Service review and approval)
May- Year 3	Complete Easement and/or Real Property Acquisitions (if necessary)
Aug- Year 3	Select Construction Contractor
Dec- Year 3	Contractor Preparation (Forest Service consultation)
May- Year 4	Contractor Performs Construction
Oct- Year 4	Project Closeout (Forest Service review and approval)

11. During the first 20 years of the license, the licensee, as required, will implement the project recreation facility measures specified in Forest Service Condition 45 (campgrounds, boat launches, day-use areas, and trails). Forest Service Condition 45 lists the required elements for each facility and makes the licensee responsible for the following items requiring Forest Service approval: (1) survey; (2) design; (3) contract preparation and administration; (4) environmental analysis and documentation necessary for construction, including any permits; and (5) preparation of as-built drawings. All improvements will become the property of the Forest Service upon completion, final inspection, and acceptance by the Forest Service.

12. Each recreation facility upgrade or new construction project will undergo a thorough planning and design process. This process, including early and frequent Forest Service consultation, is described in detail within the plan as: Project Scoping, Easement and/or Real Property Acquisition (if necessary), Base Map Preparation, Conceptual Design, Environmental Assessment, Detail Design, Environmental Permitting, Final Design, Construction Contract Development, Contractor Prepares for Construction, Contractor Performs Construction, and Project Closeout.

13. While Forest Service Condition 45 identifies the general scope and schedule of specific initial recreation measures, the licensee and the Forest Service recognized that these specific measures may not meet the needs of changing recreation levels, patterns, and types throughout the life of the license. In addition to specific development requirements, Forest Service Condition 45 also includes requirements for the licensee to produce development plans for several recreation areas. These areas include Loon Lake, Gerle Creek Reservoir, Union Valley Reservoir, Ice House Reservoir, Brush Creek Reservoir, and Slab Creek Reservoir. These recreation area development plans might contain elements not specifically identified in the license.

14. On a six-year interval following license issuance, Forest Service Condition 42 requires the licensee to conduct recreation surveys to determine changes in the levels, patterns, and types of recreation occurring at project recreation facilities. Findings of these surveys will be reported to the Forest Service and the Consultation Group,² who

² Section 4.12.1 of the Settlement Agreement, filed with the Commission on February 1, 2007, defines the Consultation Group as consisting of all parties to the Settlement Agreement and invited participants consisting of the SWRCB, the Regional Water Quality Control Board, and El Dorado County. The information and advice provided by the members of the Consultation Group are advisory only. Signatories to the Settlement Agreement are: Sacramento Municipal Utility District; Pacific Gas and Electric Company; US Department of the Interior Fish and Wildlife Service; US Department of the Interior National Park Service; US Department of the Interior Bureau of Land Management; US Department of Agriculture Forest Service; California

(continued)

will make recommendations to address any perceived facility deficiencies. Recommended facility upgrades justified and mutually agreeable to both Forest Service and the licensee may be incorporated into the license through the consultation processes described in Forest Service Condition 3.

15. Also on a six-year interval following license issuance, Forest Service Condition 44 requires the licensee to meet with the Forest Service to review all project recreation developments. It is during these meetings that the Forest Service and the licensee will discuss, agree upon, prioritize, and schedule necessary heavy maintenance, rehabilitation, construction, and/or reconstruction work in accordance with Forest Service Conditions 45 and 46. The priority and schedule of heavy maintenance needs during the initial six year period following license issuance will be addressed through annual consultation between the licensee and the Forest Service. These will also be used to address any unforeseen heavy maintenance needs arising between subsequent six year intervals.

16. In parallel with, and closely related to, the recurring recreation surveys required by Forest Service Condition 42 and development reviews required by Forest Service Condition 44, the licensee is required to provide data to support the determination of carrying capacity of project associated lands per Forest Service Condition 48. The Forest Service has reserved the right to modify the specific recreation measures listed in Forest Service Condition 45 contingent on this determination and related evaluations. Modifications to Forest Service Condition 45 may create additional specific recreation measures, including development elements.

17. The plan states that design, content, and placement of project-associated signage will be consistent with applicable Forest Service guidelines and Commission requirements. Current Forest Service guidelines pertaining to some types of signs and sign placement are found in the *Sign and Poster Guidelines for the Forest Service* (EM7100-15; Revised October 2013). Additional Eldorado National Forest guidelines for signage within recreation sites will be provided as needed during project design. For the purpose of this plan, project signage is categorized as: 1) traffic signage, 2) public informational signage, or 3) recreation facility signage. Classification is necessary because requirements for each are addressed separately in the license. Regular maintenance of project-associated recreation signage will be performed by the Forest

Department of Fish and Game; California Department of Parks and Recreation; Friends of the River; American Whitewater; California Sportfishing Protections Alliance; American River Recreation Association and Camp Lotus; Foothill Conservancy; California Outdoors; Hilde Schweitzer; Theresa Simsiman; and Richard C. Platt.

Service and funded by the licensee through the operation, maintenance and administration collection agreement.

18. Within one year of license issuance, Forest Service Condition 56 requires the licensee to file with the Commission a Transportation System Management Plan (TSMP) that has been approved by the Forest Service and includes, among other things, traffic safety and destination/distance signage on project associated roads. Recurring updates to this plan identifying construction and maintenance needs and schedules, including traffic signage, will be completed every 5 years and must be filed with the Commission. The TSMP does not include the management of signs within recreation facilities (campgrounds, day-use areas, etc.). When a recreation site is upgraded or developed, traffic sign placement, acquisition, and installation will be part of the design for that facility.

19. The licensee is required to develop and print project recreation brochures and maps. These materials will be made continuously available at no cost to the public through typical Forest Service distribution methods at information stations and recreation facilities and will be updated over time as conditions change. Content and design of project associated recreation brochures and maps will be revisited annually, or as deemed necessary, for accuracy and relevancy. The licensee will complete an Interpretive, Education, and Public Information Plan in within two years of license issuance as required by Forest Service Condition 51.

20. Per Forest Service Condition 47, beginning the first full year after license issuance, the licensee will pay the Forest Service \$1,000,000.00 annually.³ These annual funds are for the Forest Service to provide for operation, maintenance and administration of project recreational facilities, sites, and uses.⁴ A Collection Agreement will be executed by the licensee and the Forest Service to describe, in detail, the terms and conditions of this annual payment. As stated in Forest Service Condition 47 and agreed upon in the Relicensing Settlement Agreement for the Upper American River Project and Chili Bar Hydroelectric Project, this payment is the financial means for the Forest Service

³ Initial amount to be adjusted by an annual escalator.

⁴ The project license recognizes Condition 47 includes a cost cap that limits the licensee's responsibility for implementing the specified measure. Although the language including the cost cap was required to be included in the project license, the Commission is not bound by its limits in enforcing compliance with required recreation measures. See Virginia Electric Power Company, 110 FERC ¶ 61,241 (2005) and Portland General Electric Company and Confederated Tribes of the Warm Springs Reservation of Oregon, 111 FERC ¶ 61,450 (2005).

to ensure the project recreational facilities are maintained according to Forest Service and Commission standards.

CONSULTATION

21. The plan was prepared in consultation with the Forest Service as specified in article 401(a) along with other interested parties. By email, dated September 24, 2014, the licensee notified the Consultation Group, which the Forest Service is a member along with other agencies and interested parties that the draft Recreation Implementation Plan for the Upper American River Project was posted for their review at a web link that was provided.

22. The 30-day review and comment period ended on October 24, 2014. The Forest Service provided 26 comments on the draft plan and the SWRCB provided 5 comments on the draft plan, which were uploaded to the licensee's internet based commenting site available to all members of the Consultation Group between September 24, 2014 and October 24, 2014. The Forest Service provided additional comments via email on November 7 and 13, 2014. Each comment is detailed in a spreadsheet included within the plan. No other comments on the draft plan were received from other interested parties or agencies. Most Forest Service and SWRCB comments addressed corrections or the need to clarify language. The licensee detailed their response to each comment, with most resulting in changes that were incorporated into the body of the final text of the plan. The licensee's response to each comment appeared adequate and there are no outstanding issues.

DISCUSSION

23. The plan meets the requirements of being developed in coordination with the Forest Service, SWRCB, and providing all members of the Consultation Group the opportunity to comment. The plan includes provisions for the licensee to consult with the SWRCB and the Central Valley Regional Water Quality Control Board regarding any water quality permits and approvals necessary for the construction or rehabilitation of recreation facilities. The plan will guide the licensee and Forest Service staff in designing and constructing recreation facilities described in Forest Service Conditions 44 and 45. The plan addresses the process for identifying and prioritizing additional recreation measures found in Forest Service Conditions 42, 44, 45, 48, and 51. The plan includes a table listing the various Forest Service conditions related to the licensee's recreation facilities at the project. The table omits Forest Service Condition 51 and this table should be revised in future updates of the plan.

24. The plan provides contact information and responsibilities for key licensee staff who will oversee development of project recreation facilities are listed in the plan. For each project recreation facility to be improved or constructed, the licensee will assign a project manager who will have the overall responsibility for the design and construction

work. In addition to staff resources, the licensee will maintain contracts with consulting teams to assist with implementation of the license requirements. Work among these teams will be distributed by Task Order and overseen by licensee staff. The contractors' tasks will focus primarily on (1) development of environmental plans and environmental monitoring; (2) development of facilities and resources management plans; and (3) engineering and design of Project recreation facilities. The licensee will procure professional services for engineering and designing the facilities and will use these designs and specifications to issue Invitation for bids for facility construction.

25. The plan provides detailed schedules for the license implementation activities for the first two years of license issuance. These schedules identify how the licensee will address each SWRCB and Forest Service Condition. The licensee developed appropriate planning sequences for each requirement and their inter-relationships with other license conditions. The licensee's recreation surveys will be helpful in determining changes in the levels, patterns, and types of recreation occurring at project recreation facilities.

26. Article 408 requires the licensee to expand the plan to include the operation and maintenance for the term of the license at Loon Lake Area, Gerle reservoir Area, Union Valley reservoir Area, Ice House reservoir Area, Junction reservoir Boat Launch, Brush Creek Reservoir Boat Launch, Slab Creek reservoir Area, and Big Hill Oak. While the licensee does not specifically mention Article 408, the licensee's plan addresses planning, operation, and maintenance of these recreation areas and therefore meets the requirement of Article 408.

27. Forest Service Conditions 42 (recreation survey report),⁵ 44 (review of recreation developments report), 51 (interpretive, education, and public information plan), and 56 (transportation system management plan) require the licensee to file these plans or reports with the Commission.⁶ The licensee's plan does not provide for filing this information, therefore Ordering paragraph (B) requires the filing of these plans and reports to keep the Commission informed regarding the licensee's progress in meeting the requirements of

⁵ The recreation survey required by Condition 42 is required to be in compliance with Commission regulations at 18 CFR §8.11(a), which requires the licensee to file the Form 80 Licensed Hydropower Development Recreation Report every six years. To maximize efficiency, the licensee should coordinate the requirements of Condition 42 and the requirements of the Form 80.

⁶ The licensee filed the streamflow and reservoir level information plan required by Condition 51 with the Commission on July 21, 2015. The licensee filed the transportation system management plan required by Condition 56 with the Commission on November 19, 2015.

these Forest Service conditions and future changes to recreational resources which may be required throughout the 50-year term of the license.

28. Section 6.2.4 of the plan indicates the licensee will file as-built drawings; any revised license Exhibits A, F, or G; documentation of consultation history; and Forest Service letters accepting ownership of the recreation facilities with the Commission. Ordering paragraph (C) requires the filing of recreation as-built drawings that are consistent with Commission guidelines for as-built site plan drawings.⁷

29. Overall, the Recreation Implementation Plan fully addresses the requirements of Article 401(a), Article 408, and provides commitments that exceed the articles requirements. The plan describes the licensee's overall intent, key personnel, funding requirements, and implementation schedule to meet the requirements of Conditions 44 and 45. Additionally, the plan details specific measures the licensee will undertake to implement the recreation facilities specified in Condition 45, including planning and design and construction. The licensee further describes supplemental recreation measures, including recreation area development plans, recreation surveys, the review of recreation developments, and issues related to carrying capacity. The plan provides for recreational access, documenting studies, resources, and consultation with agencies and other interested parties. This plan, with its extensive public recreation development, is in the public interest and should be approved.

The Director orders:

(A) The Sacramento Municipal Utility District's Recreation Implementation Plan, filed on January 26, 2015, pursuant to article 401(a), as modified in paragraphs (B) and (C) below is approved.

(B) To keep the Commission informed, the licensee must file reports and plans as required by U. S. Forest Service 4(e) conditions as follows:

- i. Condition 42 – Report on Recreational Resources to be filed with the Commission, in compliance with 18 CFR §4.51(f), or as amended.

⁷ Commission staff is working with the licensee to finalize Commission Approved Recreation Facilities and Commission Approved Recreation Amenities Tables. Upon completion, Commission staff will issue final versions of the Commission Approve Recreation Facilities and Recreation Amenities Tables to the licensee. The licensee will then utilize the information contained in the Commission Approved Recreation Facilities Table in completing the overall as-built site plan drawing required in Ordering paragraph (C) and the Commission Approved Recreation Amenities Table in completing the required Form 80 report.

- ii. Condition 44 – Report detailing the 6-year schedule for maintenance, rehabilitation, and reconstruction.
- iii. Condition 51 – Interpretive, Education, and Public Information plan must be filed with the Commission within two years of license issuance.

The Commission reserves the right to make changes to the recreation implementation plan based upon the information provided in these plans and reports.

(C) The licensee must file, for Commission approval, as-built site plan drawings within 90 days of completing all construction at each approved recreation site identified in the Commission Approved Recreation Facilities Table. An overall site plan drawing that includes the location of all Commission approved recreation sites in relation to the project boundary and an as-built site plan drawing five-column table is required. In addition to the overall site plan drawing, the licensee must file as-built site plan drawings for each recreation site showing the location of all recreation facilities (the licensee may file multiple as-built site plan drawings for complex sites) in relation to the project boundary.

The first column of the five-column table on the overall site plan drawing must be titled “Identification” and must key each recreation site to the location on the drawing. The second column must be titled “Exhibit No.” and must include the Commission assigned Exhibit Numbers for any previously approved as-built site plan drawings and left blank for the current filing until provided in an approval order. The third and fourth columns must be the two columns from the Commission Approved Recreation Facilities Table, titled “Recreation Site Name” and “Recreation Facilities.” The fifth column must be titled “Construction Status” and must indicate if the recreation site is “constructed” or “unconstructed.”

Each drawing must include a north arrow, scale (graphic and numeric), and Title Block. The Title Block must include the Project Name, Project Number, a space for Exhibit Number (Commission assigned upon approval), a space for Drawing Number (Commission assigned upon approval), and drawing name. All drawings must be legible when reduced to or printed on 11”x17” paper size. For additional guidance, please see: <https://www.ferc.gov/industries/hydropower/gen-info/guidelines/as-built-site-plan.pdf> .

(D) This order constitutes final agency action. Any party may file a request for rehearing of this order within 30 days from the date of its issuance, as provided in section 313(a) of the FPA, 16 U.S.C. § 8251 (2012), and the Commission's regulations at 18 C.F.R. § 385.713 (2015). The filing of a request for rehearing does not operate as a stay of the effective date of this order, or of any other date specified in this order. The licensee's failure to file a request for rehearing shall constitute acceptance of this order.

Robert J. Fletcher
Chief, Land Resources Branch
Division of Hydropower
Administration and Compliance

Document Content(s)

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