

Interpretive, Education, and Public Information Plan

Sacramento Municipal Utility District

Hydro License Implementation • October 2016

Upper American River Project

FERC Project No. 2101



Table of Contents

1.0 Introduction	1
1.1 <i>Purpose of Plan</i>	1
1.2 <i>Need for Plan</i>	1
1.3 <i>Management Direction</i>	2
1.4 <i>Definitions</i>	3
2.0 Background	4
2.1 <i>Setting</i>	4
2.2 <i>Plan Development</i>	4
2.3 <i>Intended Audiences</i>	5
2.4 <i>Trends</i>	5
3.0 Existing Conditions.....	7
3.1 <i>Inventory of Resources</i>	7
3.2 <i>Visitor Information</i>	13
3.3 <i>Signs Boards at Recreation Facilities</i>	13
3.4 <i>Printed Materials</i>	14
3.5 <i>Websites</i>	19
3.6 <i>Existing Conservation Education Programs</i>	23
3.7 <i>Resource and Management Issues</i>	23
3.8 <i>Other Existing Interpretation, Education, and Information Programs</i>	23
4.0 Plan Strategies	24
4.1 <i>Measures</i>	24
4.2 <i>Implementation</i>	25
5.0 Monitoring and Plan Revision.....	26
6.0 Literature Cited.....	27

Tables, Figures, and Appendices

Table 3.1-1. Existing displays, printed brochures, and visitor information services at UARP.	8
Table 3.5-1. Website addresses (and one telephone number) containing Project-related information for visitors and educators.....	20
Figure 3.2-1. Educational poster about preventing the spread of invasive mussels.	10
Figure 3.2-2. Trout life cycle interpretive exhibit at Gerle Creek Boat Launch.....	10
Figure 3.2-3. Gerle Creek Interpretive Trail map at Gerle Creek Boat Launch.....	11
Figure 3.2-4. Bald eagle education display at Sunset Boat Launch.	11
Figure 3.2-5. Big Hill Vista (above) and interpretive signs at Big Hill Vista.....	12
Figure 3.4-1. Crystal Basin Recreation Area brochure, page 1.	15
Figure 3.4-2. Crystal Basin Recreation Area brochure, page 2.	16
Figure 3.4-3. Hydropower brochure, page 1.....	17
Figure 3.4-4. Hydropower brochure, page 2.....	18
Appendix A—Summary of Interviews with Forest Service Staff	

ACRONYMS AND ABBREVIATIONS

ENF	Eldorado National Forest
FERC	Federal Energy Regulatory Commission
Forest Service	U.S. Department of Agriculture, Forest Service
ft	foot or feet
in.	inch or inches
Plan	Interpretive, Education, and Public Information Plan
Project	Upper American River Project (FERC Project No. 2101) or UARP
SMUD	Sacramento Municipal Utility District or Licensee
UARP	Upper American River Project (FERC Project No. 2101) or Project

1.0 INTRODUCTION

1.1 Purpose of Plan

By order dated July 23, 2014, the Federal Energy Regulatory Commission (FERC) issued a new License to the Sacramento Municipal Utility District (SMUD) for operating the Upper American River Project (UARP or Project), FERC Project No. 2101. The purpose of the Interpretive, Education, and Public Information Plan (Plan) is to comply with U.S. Department of Agriculture, Forest Service (Forest Service) 4(e) Condition No. 51.2 and 51.3, Public Information Services, located in Appendix B of the Order:

Project Recreation Brochure/Map. The licensee shall develop and print one or more brochures and maps that describes the recreation opportunities, recreation facilities, rules, and responsibilities for the area of the Project, including the canyonlands, high country lakes, and streams. The brochure will be provided to Forest Service for review and approval prior to completion. The licensee shall make the brochure/map available to the public free of charge. The brochure/map shall be made available continuously and shall be updated as conditions change.

Interpretive, Education, and Public Information Plan. Within 2 years of license issuance, the licensee, in consultation with Forest Service and other appropriate agencies and the Consultation Group, shall complete an Interpretive, Education, and Public Information Plan that shall be approved by Forest Service and filed with FERC. At a minimum, the plan shall include themes, design, audience, delivery methods, and schedule for implementation for providing up-to-date information such as: sightseeing, hiking, observing wildlife, and utilizing facilities such as boat ramps, campgrounds, and beaches. The licensee shall coordinate this plan with the licensee for the Chili Bar Hydroelectric Project, FERC No. 2155.

1.2 Need for Plan

The specific needs related to providing visitor information, interpretation, and education are listed in tables included in the Recreation Needs Assessment, prepared in support of developing the UARP license application (SMUD 2005). The tables list the identified need or deficiency specific to certain reservoirs and areas of the Project and provide references to other relicensing reports that provide supporting rationale. Identified needs and deficiencies that would be addressed by preparing and implementing this plan include:

- providing for public reservoir recreation, health and safety and safe reservoir access at the Project; and

- meeting current and projected increased demand for flatwater boating opportunities; information, interpretive and educational opportunities; and developed and dispersed recreation opportunities at the Project.

Additional information supporting the need for this Plan is provided in Rationale Report for Comprehensive Resource Agency/Non-Governmental Organization Alternative for UARP (ENF 2005) and Relicensing Settlement Agreement for the UARP and Chili Bar Hydroelectric Project (SMUD 2007).

1.3 Management Direction

Although the Eldorado National Forest (ENF) does not have a public information plan nor is public information, education and interpretation addressed in its Land and Resource Management Plan, ENF staff provided two recent documents published by the Forest Service's Region 5 office that provide guidance for National Forest visitor information, interpretation, and education programs and identify topics that should be emphasized with the public.

1.3.1 USFS Region 5 2017 Program Guidance

The 2017 USFS Region 5 program guidance (Parker, pers. comm., 2016) directs National Forests to: "strengthen the intellectual and emotional connection between people and the region's National Forests and to enhance the management and sustainability of natural resources. This should be done through the management of visitor capacity, improving visitor service, influencing visitor behavior and enhancing visitor learning and understanding." This Plan is consistent with and supports these goals. Further, specific measures in the Plan are consistent with the following program delivery elements specified in Region 5 program direction to the National Forests:

- improving relationships with existing interpretive associations and other partners;
- enhancing and improving customer service at visitor centers;
- improving customer information, kiosks, brochures, pamphlets and other printed materials using best available science;
- establishing and updating interpretive and education plans utilizing partners and contemporary messages, issues and social media; and
- reviewing program plans, activities, and existing agreements to identify improvements and new opportunities.

1.3.2 Region 5, Pacific Southwest Region Story

A second document, Region 5, Pacific Southwest Region Story (Forest Service 2015) describes the agency's emphasis to inform the public about retaining and restoring ecological resilience of the forests it manages to achieve sustainable ecosystems. The document lists many goods and benefits that the UARP provides or affects including water, energy, flood regulation, habitat, scenic landscapes and recreational opportunities.

1.4 Definitions

SMUD uses the following definitions of interpretation, education and information in this Plan:

- interpretation—a communication process that forges emotional and intellectual connections between the interests of the audience and the meanings inherent in the resource (National Interpretive Association 2016);
- education—the process of developing an individual's knowledge, values, and skills and encompasses both teaching and learning (National Interpretive Association 2016); and
- information—materials and services that provide visitor orientation and awareness of available programs, activities and services.

2.0 BACKGROUND

2.1 Setting

The footprint of UARP reservoirs, generation, and transmission facilities descend from the highest elevations in the Desolation Wilderness to the lowest elevations near the town of Placerville. Geographically, the area occupied by the Project is mostly located on public land managed by the ENF and is divided into three general areas:

- High Country—generally, the unroaded area east of Loon Lake including Buck Island and Rubicon reservoirs; only dispersed recreation opportunities exist in this area for activities such as camping, hiking, equestrian use, OHV use, hunting and angling.
- Crystal Basin—mid-elevation portion including Loon Lake, Gerle Creek, Union Valley, and Ice House reservoirs; most of the visitor use (more than 300,000 visitor-days, annually) occurs in this area and includes a spectrum of developed and dispersed opportunities for activities such as camping; motorized, non-motorized and whitewater boating; hiking; bicycling; swimming; angling; hunting; OHV use; equestrian use; scenic and wildlife viewing.
- Canyonlands—low-elevation portion including Junction, Brush Creek, Camino and Slab Creek reservoirs; steep canyons with few, low standard roads limit visitor use in this area; only dispersed recreation opportunities currently exist in this area for activities such as camping, boating, whitewater boating, hiking, equestrian use, OHV use, hunting and angling.

2.2 Plan Development

Commensurate with the wide spectrum of recreation opportunities associated with the UARP, this Plan describes how the public can obtain information and education about the UARP as well as the range of recreation resources it provides. This Plan also provides a visitor education component intended to minimize recreation-related resource impacts at UARP, such as spreading invasive species, littering and disturbing wildlife.

Although public interpretation, education and information for visitors to the ENF spans a wide range of topics, this Plan focuses on a subset of these topics as they relate to the Project. In preparation of this Plan, SMUD conducted interviews with Forest Service staff (Appendix A), who identified the following key points relevant to preparing the Plan:

- Information service staff are challenged by not having real-time and correct information to answer visitor questions about hunting, campsite availability, reservoir levels, motorized and non-motorized boating, and unforeseen events that affect public access (e.g., law enforcement actions, search and rescue operations, and wildland fires).

- Suggestions for interpretive or educational programs include providing displays at the Crystal Basin Information Station for tree and mushroom identification, organizing wildflower walks, promoting ethical outdoor use (i.e., Leave No Trace), educating visitors about wildland fuel reduction, providing fish consumption advisories for reservoirs potentially affected by mercury, and SMUD's participating in ENF youth education programs (e.g., Generation Green and Youth Conservation Corps).
- Future program delivery methods should support providing real-time visitor information and consider evolving technology, such as cell phone and audio tours, maps with Quick Response Codes, interactive kiosks, and providing campfire programs at Sunset Point.
- Although ENF does not have a public information plan, the agency emphasizes informing the public about retaining and restoring ecological resilience of the forests it manages to achieve sustainable ecosystems and the many goods and benefits associated with forests including water, energy, flood regulation, habitat, scenic landscapes and recreational opportunities (Forest Service 2015).

SMUD also reviewed websites and printed materials currently available to the public, and information posted at developed recreation sites. To develop measures in this Plan, SMUD considered (1) information sought by visitors (as identified in interviews with ENF staff) (2) how visitors customarily, both currently and in the future, seek information to plan and implement their visits (e.g., in-person, websites, and printed material); (3) the convenience of obtaining information; and (4) seasonality of information needs. After Forest Service approval, SMUD will file the Plan for FERC approval. SMUD will implement the approved Plan and develop specific actions, in consultation with the ENF, when accomplishing heavy maintenance, construction and reconstruction at recreation facilities and implementing License measures (e.g., printing Crystal Basin brochures).

2.3 Intended Audiences

The content of interpretive, educational, and information materials and programs addressed by this plan is to inform and educate Project visitors and support ENF's public interpretation, information, and education program. Specific target audiences for various components of the plan include: day and overnight users, boaters, anglers, hunters, scenic viewers, boaters (high-speed, flatwater, and whitewater), hikers, bicyclists, winter recreationists, and educators.

2.4 Trends

Projected demand generally depends on changes in population and preferences for and trends of activity recreation participation. The population of largest nearby metropolitan area of Sacramento County is expected to grow about 1.2 percent per year through 2035 (California Department of Finance 2013). Nationally, snow skiing, day hiking, snowmobiling, horseback riding on trails, and some forms of fishing, for example, have

begun to decline in popularity whereas viewing, photographing, and studying nature have shown spectacular growth. Generally, however, the greatest growth in participation is for activities that are physically not very challenging (Cordell 2008). These trends will generate a growing demand for interpretive and education opportunities as well as an increasing need to protect the natural resources by educating the public about proper use during their visits.

3.0 EXISTING CONDITIONS

3.1 Inventory of Resources

This section focuses on the existing resources that provide interpretation, education, and information to the public. Detailed descriptions of natural, recreational, and cultural resources are provided in various relicensing documents with the most thorough description of resources associated with the Project provided in the UARP Application for New License (SMUD 2005). Tables 3.1-1 provides a summary of the signs and displays at recreation facilities; printed materials; and visitor information services that provide opportunities for public interpretation, education and information related to the Project. Figures 3.1-1 through 3.1-5 are photographs of existing signs and displays.

Table 3.1-1. Existing displays, printed brochures, and visitor information services at UARP.				
Location, Materials, or Visitor Services	Theme	Design	Audience	Delivery
Loon Lake Chalet	Recreation experiences— Winter recreation opportunities	2 bulletin boards inside metal framed, locked glass cases for posting printed materials	Recreation visitors including day and overnight users; hikers; winter recreationists	Information and education signs; non-personal information and education
Big Hill Vista	Hydropower— <i>Stairway of Power</i>	5 etched metal interpretive sign (~2 foot [ft] x 3 ft)	Recreation visitors including scenic viewers; day users	Interpretive exhibit; non-personal interpretation
Sunset Boat Ramp	Wildlife habitat— <i>Bald Eagle</i>	5 interpretive signs mounted on 1 plexi-glass covered wooden sign (~3 ft x 3 ft)	Recreation visitors including boaters; anglers; day and overnight users	Interpretive sign; non-personal interpretation
West Point Boat Ramp	Wildlife habitat— <i>Bald Eagle</i>	5 interpretive signs mounted on 1 plexi-glass covered wooden sign (~3 ft x 3 ft)	Recreation visitors including boaters; anglers, day and overnight users	Interpretive sign; non-personal interpretation
Gerle Creek Reservoir Along Gerle Creek and reservoir shoreline	Recreation experiences— <i>Summer Harvest Trail</i> (cultural resources)	Interpretive sign mounted on plexi-glass covered wooden sign (~2 ft x 3 ft)	Recreation visitors including day and overnight users	Interpretive trail; non-personal interpretation
At boat launch	Fish habitat— <i>Brown Trout Life Cycle</i>	3 routed wooden signs (~3 ft x 4 ft)	Recreation visitors including boaters; anglers; day and overnight users	Interpretive exhibit; non-personal interpretation
Boat launches at Loon Lake, Union Valley and Ice House reservoirs	Fish Habitat— <i>Don't Move a Mussel</i> (Invasive species)	Printed sign (8.5 inches [in.] x 11 in.) posted on information boards	Recreation visitors including boaters; anglers	Educational sign; non-personal education

Table 3.1-1. Existing displays, printed brochures, and visitor information services at UARP.				
Location, Materials, or Visitor Services	Theme	Design	Audience	Delivery
Crystal Basin Recreation Area brochure	Recreation experiences— Directional assistance and places of interest	Printed media (11 in. x 17 in.)	Recreation visitors including; boaters; anglers; day and overnight users; scenic viewers; bicyclists; hikers; winter recreationists	Printed media; non-personal information delivery but may also be used by VIS staff during visitor contact
Crystal Basin Information Station	NA	NA	Recreation visitors including; boaters; day and overnight users; scenic viewers; bicyclists; hikers; wildlife viewers; anglers; hunters	VIS; in-person interpretation, education, and information
Pacific Ranger District Office	NA	NA	Recreation visitors including; boaters; day and overnight users; scenic viewers; bicyclists; hikers; wildlife viewers; anglers; hunters	VIS; in-person interpretation, education, and information

VIS = Visitor information services



Figure 3.2-1. Educational poster about preventing the spread of invasive mussels.



Figure 3.2-2. Trout life cycle interpretive exhibit at Gerle Creek Boat Launch.



Figure 3.2-3. Gerle Creek Interpretive Trail map at Gerle Creek Boat Launch. The Harvest Trail (not shown) extends along the shoreline to the right of site marker “1”.

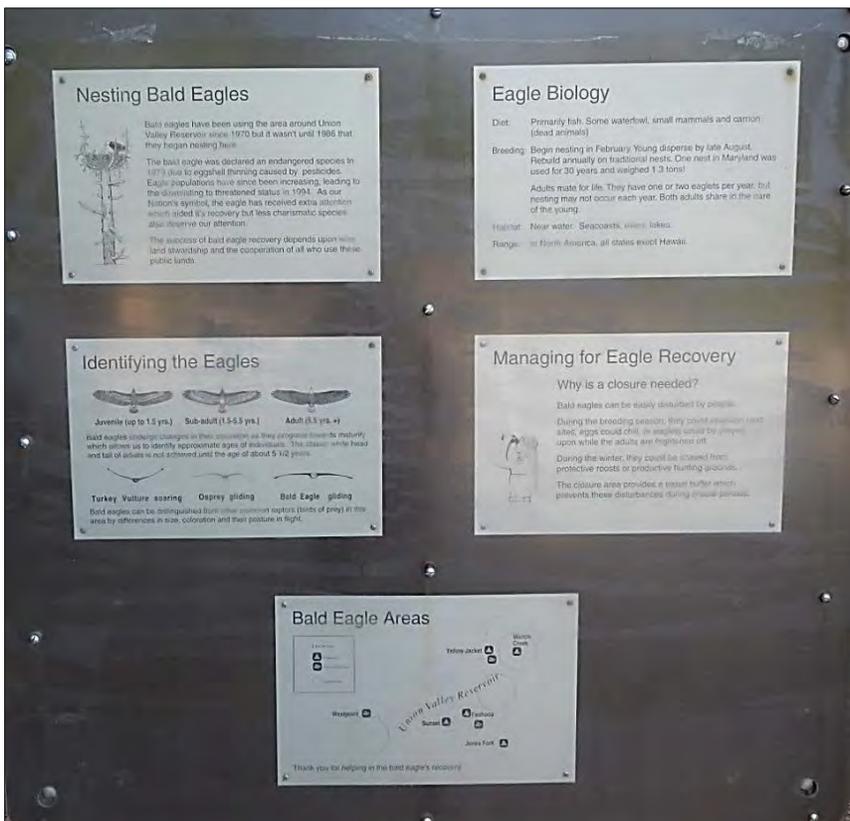


Figure 3.2-4. Bald eagle education display at Sunset Boat Launch. This signage is also provided at West Point Boat Launch.



Figure 3.2-5. Big Hill Vista (above) and interpretive signs at Big Hill Vista.

3.2 Visitor Information

Visitors who are either at or en route to their recreation destinations and need more refined information, such as campsite availability or site conditions, and obtain permits that may be necessary for their activities can stop at the ENF Supervisor's Office (Placerville), Pacific Ranger District Office (Fresh Pond), Cleveland Corral Visitor Center, and Crystal Basin Information Station. Visitors can speak with information specialists at these locations to obtain campfire permits, printed information, such as recreation opportunity guides and maps, including the Crystal Basin Recreation Area brochure (Figures 3.4-1 and 3.4-2, below). Information specialists also answer questions and provide information about recreation activities, developed recreation facilities, locations for dispersed recreation, and site conditions. Visitors wanting real-time information about developed campsite availability may be able to obtain this information at the Crystal Basin Information Station, depending on coordination between ENF and its facility operators. Wilderness permits for trailheads located on the Pacific Ranger District can only be obtained at the Pacific Ranger District Office and existing campsite availability in the Crystal Basin is sometimes provided at the Crystal Basin Information Station.

Visitors most often seek assistance at visitor information stations and offices during the peak recreation season, which for the UARP is generally Memorial Day to Labor Day. SMUD provides funding to ENF to staff Crystal Basin Information Station with at least 2 persons for 6 months a year to cover the peak recreation season and the months before and after this period and the Pacific Ranger District Office with 1 person for 6 months a year¹. Information specialists staffing these locations can monitor real-time and recent information posted on SMUD's website about streamflow, reservoir elevation, and boat launch availability, so they can provide visitors with up-to-date information.

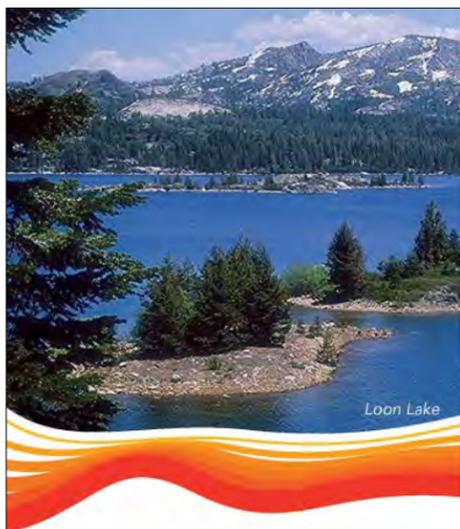
3.3 Signs Boards at Recreation Facilities

Each developed UARP recreation facility has one or more information sign boards where general information is posted to promote proper public safety and facility use. Information typically posted on these boards relates to rules and regulations (e.g., fees, permits, campsite occupancy limit, quiet hours, and resource concerns), warnings (e.g., raw fish consumption by dogs, plague, bears, and snakes) and special notices (e.g., closures or restrictions). In addition to these information boards, some recreation facilities have unique information, education and interpretive displays, and signage

¹ USFS 4(e) Condition No. 47 in the UARP License requires SMUD to provide annual funding to ENF. The Rationale Report for Comprehensive Resource Agency/Non-Governmental Organization Alternative contained in Filing of Alternative for Consideration in Environmental Impact Statement for Upper American River Project (ENF 2005) specifies that the funding will be used, in part, to provide 280 person-days for staffing at Crystal Basin Information Station, 120 person-days for staffing at Pacific Ranger District, and overhead support for these services.

3.4 Printed Materials

SMUD provides two 11 x 17 inch, color information brochures related to the UARP titled *Crystal Basin Recreation Area* (Figures 3.4-1 and 3.4-2) and *Hydropower—Turning Water into Electricity* (Figures 3.4-3 and 3.4-4). SMUD provides the Crystal Basin Recreation Area brochure to ENF for distribution at its information stations and offices; the brochure is also available at SMUD Sacramento and Fresh Pond offices and posted on SMUD's website. SMUD distributes the Hydropower brochure at its Sacramento and Fresh Pond offices.



Loon Lake

Crystal Basin Recreation Area

Powering forward.
Together.



Vicinity Map



TREAD LIGHTLY!
ON PUBLIC AND PRIVATE LAND

During your visit to the Crystal Basin, please join SMUD and the Forest Service in their commitment to protect the environment - respect the natural inhabitants of the forest, the rights of those you meet along the way and those who follow you.



ELDORADO National Forest

Forest Service - U.S. Department of Agriculture
06/30/14
Rev. 5/14

Welcome to the Crystal Basin Recreation Area of the Eldorado National Forest, spanning 85,000 acres of pine and fir forests along the western slopes of the Sierra Nevada. Capped by the majestic, granite peaks of the Crystal Range and traversed by lakes, reservoirs and streams, the Crystal Basin's four seasons and varied terrain offer a diverse range of rugged outdoor adventure.

History

The Crystal Basin was once the home of the Miwok, Washo and Maidu people. In the 1800's, ranch settlers grazed dairy cattle on the high mountain meadows now covered by reservoirs. In the early 1900's, the U.S.D.A. Forest Service opened the Basin to the public. Today, ranchers continue to operate on private land that winds through the national forest.



Union Valley

In 1957, SMUD (Sacramento Municipal Utility District) began construction of the Upper American River Project, a series of hydroelectric power plants in the Crystal Basin. Today, the Upper American River Project is capable of producing 1.8 billion kilowatt-hours of clean, affordable electricity - enough energy to power about 180,000 homes a year in Sacramento.

As part of the Upper American River Project, SMUD created a network of beautiful mountain reservoirs. Through careful planning with the Forest Service, SMUD built a variety of recreational facilities around the reservoirs - a condition of operating within National Forest System lands. Working together, SMUD and the Forest Service continue to provide land and water based recreation opportunities - for all forest visitors to enjoy.

Camping

Over 700 developed campsites are available in the Crystal Basin. Most require fees and/or reservations and have a fire ring with grate, a table and parking spur. Most campgrounds have trash containers and toilets, and many provide piped water. Many sites accommodate recreational vehicles (no hookups). The maximum stay is 14 days. Camping in an undeveloped setting is allowed in most areas of the National Forest. When you pick your spot, make sure that it is at least 100 feet away from streams and lakes, to protect streamside vegetation and prevent pollution. Check with the Forest Service for instructions on how to dispose of human waste while camping in a primitive setting. Remember to pick up a campfire permit if you plan to make a campfire, or use a stove or lantern, and always check local fire restrictions.

Fishing

Anglers can cast for kokanee salmon, small mouth bass, mackinaw or rainbow trout at Union Valley Reservoir. Throughout the summer, Ice House Reservoir and Loon Lake are planted with rainbow trout by the California Department of Fish and Game. For fishing enthusiasts eager to reel in a wild brown trout, try your luck at Gerle Creek.

Boating

Recreational boating is a favorite pastime on the clear mountain lakes of the Basin. Ice House Reservoir, Union Valley Reservoir and Loon Lake have paved boat ramps and are large enough to accommodate motorboats.

Horseback Riding

Equestrian campgrounds are available at Loon Lake, Wrights Lake and Tells Creek with access to scenic riding trails. The individual sites at Loon Lake have hitching posts and pull-through parking to conveniently accommodate horse trailers.

Hiking

The Crystal Basin provides a gateway to Desolation Wilderness, offering access to 117 miles of hiking trails across the Sierra Nevada. Many of the trails located within the Basin offer easy to moderate day hikes. For an historical hike, try the Gerle Creek Summer Harvest Trail (adapted for wheelchairs) and learn how Native Americans collected food in the area.

Wheelchair Access

Many of the developed areas throughout the Basin are accessible for people with disabilities. The Crystal Basin Information Station, fishing pier and trails at Gerle Creek, several of the campsites and parking areas, and the paved boat ramps at the reservoirs, accommodate wheelchairs.



Gerle Creek

Snow Skiing

Cross-country skiers can traverse miles of exquisite, pristine ski trails near Loon Lake, the highest elevation in the Crystal Basin. The ungrooved trails are rated "Easiest" to "Most Difficult". Trail maps are available from the Forest Service.

Robbs Hut

Robbs Hut is a popular mountain bunkhouse located on a 6,700 foot peak overlooking the Crystal Basin. It is open year-round, and is equipped with a cook stove, outdoor barbeque and sleeping accommodations for six.

Loon Lake Chalet

Skiers, hikers, and mountain bikers can take refuge at the Loon Lake Chalet year-round. It offers a large warming room, a small kitchen and sleeping accommodations for up to 20 people.



Loon Lake Chalet

Big Hill

For a panoramic view of the captivating scenery of the Crystal Basin, visit Big Hill Vista and Lookout. It offers views of the Crystal Basin and west to Sacramento and Mt. Diablo.



RECREATION SITES	APPROXIMATE SEASON	FAMILY CAMPSITES	GROUP CAMPSITES	DAY USE	PICNIC SITES	FACILITIES & ACTIVITIES	COMMENTS
CLEVELAND CORRAL - 4000'	5/25 - 9/15	1				?	Information about Crystal Basin
Silver Creek Group Campground - 5200'	6/15 - 9/15	1					No trailers/RVs Maximum of 50 people
BIG HILL VISTA POINT - 6100'	5/15 - 10/15		1				
ICE HOUSE RESERVOIR - 5400'							
Ice House Campground	5/15 - 10/15	83	10				Accessible boarding ramp and dock
Northwind Campground	5/15 - 10/1	9					No water
Strawberry Point Campground	6/1 - 10/1	10					No water
CRYSTAL BASIN INFORMATION STATION	5/25 - 10/1					?	Visitor Information
UNION VALLEY RESERVOIR - 4900'							
Azalea Cove Campground	5/25 - 10/1	10					Access by foot, boat or bicycle only No water or garbage
Big Silver Group Campground	5/25 - 10/1	1					No water Group - maximum of 50 people
Camino Cove Campground	5/25 - 10/15	32					No water
Fashoda Campground	5/25 - 9/9	30	5				Shower
Jones Fork Campground	5/25 - 10/1	10					No water
Lone Rock Campground	5/25 - 10/1	5					Access by foot, boat or bicycle only No water
Sunset Campground	5/25 - 10/1	131					Accessible boarding ramp and dock
Wench Creek Campground	5/25 - 9/15	100	2				2 groups - max. 50 people each
Westpoint Campground	5/25 - 10/15	8					No water
Wolf Creek Campground	5/25 - 9/15	42	3				3 groups - max. 25, 25, 50
Yellowjacket Campground	5/25 - 9/15	40					
Van Vleck Bunkhouse - 6500'	Year Round						Reservations required Maximum of 6 people
Robbs Hut - 6700'	Year Round		1				Reservations required Maximum of 6 people
South Fork Group Campground - 5200'	5/25 - 10/1	1					Reservations required Maximum of 125 people
GERLE CREEK RESERVOIR - 5200'							
Angel Creek Picnic Area	6/15 - 10/1		4				No motorboats
Gerle Creek Campground	6/15 - 10/1	50	4				Interpretive hiking trail No motorboats
Airport Flat Campground	5/25 - 10/15	16					No water Motorcycles & ATVs allowed
LOON LAKE RESERVOIR - 6400'							
Loon Lake Campground	6/15 - 10/1	53	2	5			Group #1 - Maximum of 50 people Group #2 - Maximum of 25 people Group - Maximum of 25 people Livestock Required
Loon Lake Equestrian Campground	6/15 - 9/15	9	1				No campfires
Loon Lake Boat Ramp RV Campground	6/15 - 10/1	12					
Loon Lake Chalet - 6500'	Year Round						Reservations required Maximum of 20 people
Northshore RV Campground	6/15 - 10/15	15					No water
Pleasant Campground	7/1 - 9/15	10					Access by foot, boat or bicycle only No water
Red Fir Group Campground	7/1 - 9/15	1					Maximum of 25 people, 8 cars Tents only
Wentworth Springs Campground	6/15 - 10/1	8					No trailers, rough road, no water
WRIGHTS LAKE - 7000'							
Wrights Lake Equestrian Camp	6/25 - 10/1	15					Livestock Required
Wrights Lake Campground	6/25 - 10/1	68	10				No motorboats

For more information, call Eldorado information line (530) 647-5400

LEGEND

- Reservations: 1-877-444-6777, www.recreation.gov
- Boating: Boat Ramp, Drinking Water
- Equestrian: Fee, Information, Lookout
- Hiking: Information, Phone
- Mountain Biking: Ranger Station, Restroom, RV
- Picnic Area: Phone
- RV: RV
- View Point: View Point, Wheel Chair Accessible
- Other icons: Skating, Swimming, etc.

Figure 3.4-1. Crystal Basin Recreation Area brochure, page 1.



Figure 3.4-2. Crystal Basin Recreation Area brochure, page 2.



Workers check the progress of a drilling rig during the first construction stages of the Jaybird Tunnel in September 1958. The drilling lasted approximately 2 years as the tunnel grew to nearly 4 miles.

Photo on left: One thousand feet below the ground workers install reinforced steel in the Loon Lake intake shaft, constructed to carry water to the Loon Lake Powerhouse. Completed in 1971, the underground powerhouse sits in a manmade cavern drilled from solid rock 1,200 feet below the surface.

History

When SMUD began operations in 1947, we had no power generation system of our own, so we bought power from other producers. We lost no time laying the foundation for an independent energy future, with planning for the Upper American River Project starting in 1948.

SMUD began construction in September 1957. On May 1, 1961, the flip of a switch sent our first self-generated power from the Jaybird Powerhouse to a substation in Sacramento, 55 miles away.

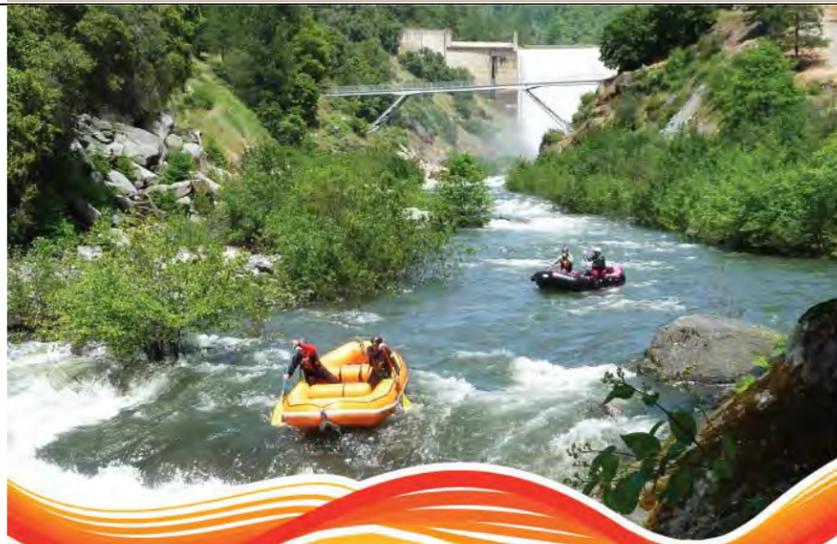
To complete the massive project, it took more than a thousand workers more than 10 years. Crews often worked through the night, drilling and blasting through solid granite to build underground water tunnels. Workers carved through solid rock to build a cavern 1,200 feet below the surface for the Loon Lake Powerhouse, finished in 1971.



Clean energy

Hydroelectricity is one of the least polluting ways to generate electricity. It burns no fossil fuels, so it emits no carbon dioxide. Water is UARP's "fuel," renewed by winter snow and rain.

With a second 50-year operating license issued for our hydroelectric system in 2014, this clean resource will play a pivotal role in SMUD's energy future for decades to come. Hydroelectricity will continue to be a crucial component of our sustainable energy mix, which includes renewable resources such as geothermal, solar and wind power.



For information about these facilities, call the Eldorado National Forest information line at 530-647-5400.

For camping reservations, call 1-877-444-6777 or reserve online at recreation.gov.

Hydropower

Turning water into electricity

The Upper American River Project — SMUD's first power generating system — has reliably served Sacramento for decades and is a cornerstone of our clean energy future.

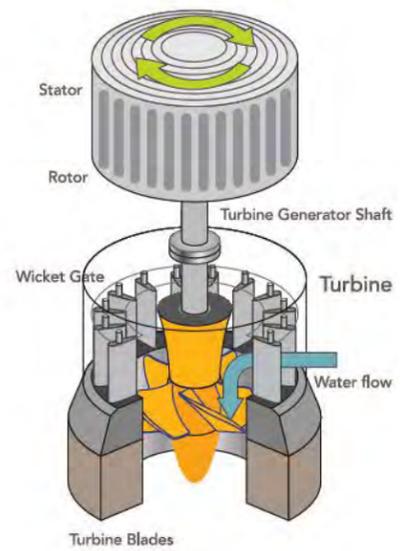


How it works

For centuries, people have used the power of water to help them do their work. The ancient Greeks used the energy of falling water to turn a water wheel and grind their grain into flour. SMUD uses this same force at the Upper American River Project (UARP) to generate electricity — part of a 100-year tradition of American hydropower.

As the south fork of the American River flows down the Sierra Nevada, a series of dams collects the water in lakes or reservoirs. Water from each reservoir travels through tunnels and penstocks to a powerhouse.

Generator



Inside the powerhouse, the force of falling water turns the blades of a turbine. As the turbine spins, its shaft turns a magnet, called a rotor, inside a generator. The magnet creates electricity as it moves across stationary coils of copper wire (a stator) and changes the magnetic fields.

Figure 3.4-3. Hydropower brochure, page 1.

Sierra stairway of power

Today, SMUD's Upper American River Project includes 11 dams, 8 powerhouses containing 11 turbines, and 6 auxiliary dams and dikes. We make the most of nature and gravity to produce clean, economical hydropower by channeling rain and snowmelt through the powerhouses, which form the steps in our stairway of power.

While this hydropower system is a vital component of Sacramento's electricity supply, we also operate it to benefit the environment and enhance recreation. We release some of the water in our reservoirs into the South Fork American River and its tributaries to improve habitat for fish and other species and to support whitewater boating.

Fuel source The "fuel" for this power source comes from the snow and rain in a 550-square mile watershed. Unlike power plants that run on fossil fuels, hydroelectric powerhouses emit no carbon dioxide. Plus, the same "fuel" is used over and over again as water flows downstream from one powerhouse to the next.

Our largest storage reservoirs – Union Valley, Loon Lake and Ice House – collectively hold about 380,000 acre-feet of water. They store water from wet winters for use in dry years.

Power generation The Upper American River Project has an installed generating capacity of 688 megawatts. Given average water supplies, it generates 1.6 billion kilowatt-hours of electricity a year. That's enough to power about 178,000 households – or satisfy about 15 percent of our customers' annual power demand.

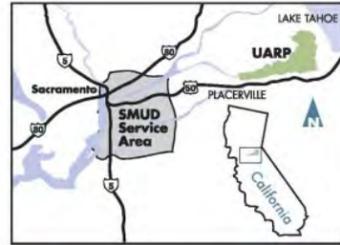
The most powerful of UARP's powerhouses is White Rock with 224 megawatts of capacity. Running at full tilt, about 1.5 million gallons of water rush into the powerhouse every 60 seconds, spinning each of its two massive turbines 277 revolutions per minute. At the other end of the spectrum, the smallest power plant is the 0.45-megawatt Slab Creek Powerhouse.

Power on demand Electricity generated by the UARP helps SMUD meet Sacramento's daily need for power. And the system plays a critical role in meeting the surge in power demand on hot summer days, when air conditioning causes demand to soar.

One advantage of hydroelectric systems is that we can easily adjust water flow through the powerhouses to increase or reduce power production in response to minute-by-minute changes in demand. This flexibility and other hydroelectric operating advantages enhance the reliability of our electrical system.

Cost The Upper American River Project is one of SMUD's most economical energy sources. While we invest in maintenance and safety of the system, the "fuel" is free.

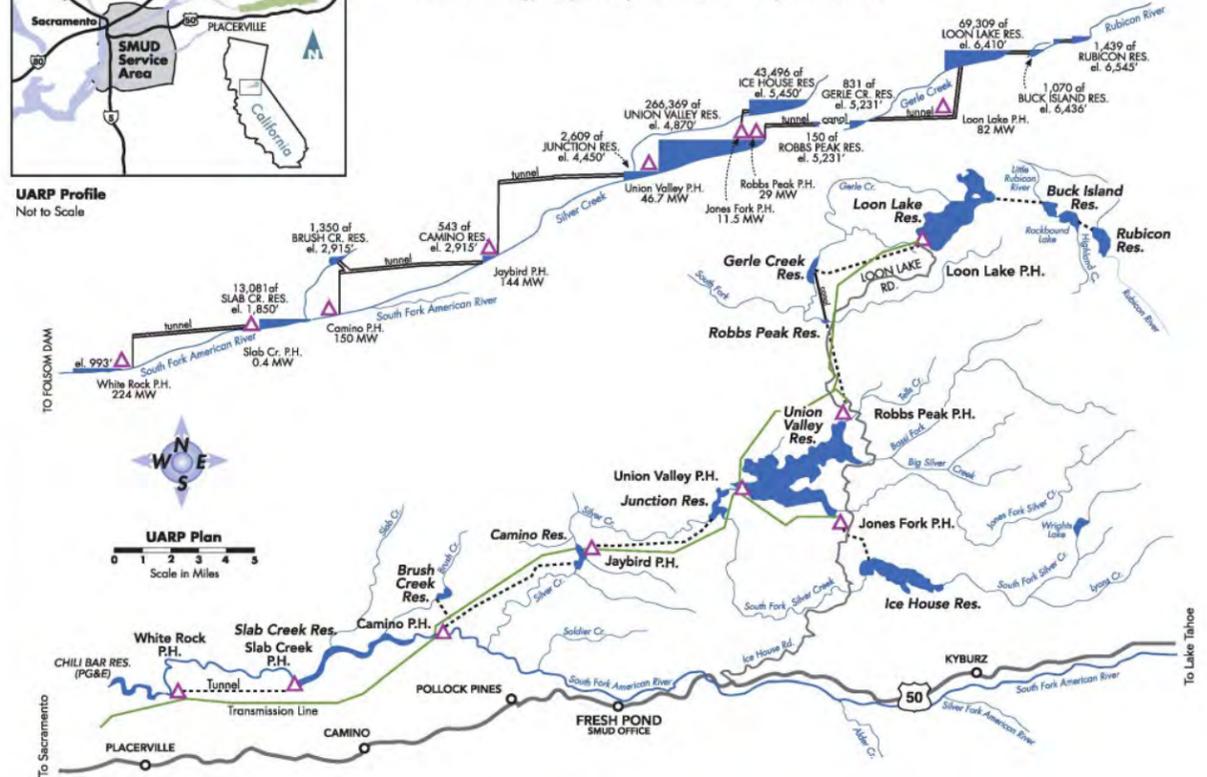
Read more about the UARP at smud.org/hydropower.



UARP Profile
Not to Scale

Upper American River Project

Federal Energy Regulatory Commission Project No. 2101



As the American River descends the western slope of the Sierra, the UARP forms a "stairway of power" as water drops 1 mile along a 53-mile reach of the river.

Year-round recreation

Over the decades, SMUD has worked cooperatively with the U.S. Forest Service to construct a variety of recreation facilities around our beautiful reservoirs. Spanning 85,000 acres of pine and fir forests, the Crystal Basin Recreation Area draws more than 300,000 people a year. Visitors enjoy campgrounds, beaches, hiking and horse trails, bike paths and fishing and boating facilities – all open to the public and operated by the U.S. Forest Service.

To enhance whitewater boating, SMUD releases water from Ice House and Slab Creek reservoirs at various times of year. In summer, we beef up the fishing opportunities by stocking Union Valley Reservoir, Ice House Reservoir and Loon Lake with rainbow trout.

In winter, outdoor opportunities include cross-country ski trails. The Loon Lake Chalet and a bunkhouse at Robbs Peak can be reserved year-round. You can pick up our Crystal Basin Recreation Area brochure and map at our Customer Service Center in Sacramento, order it by calling us at 916-732-5100 or download it at smud.org/eldorado.

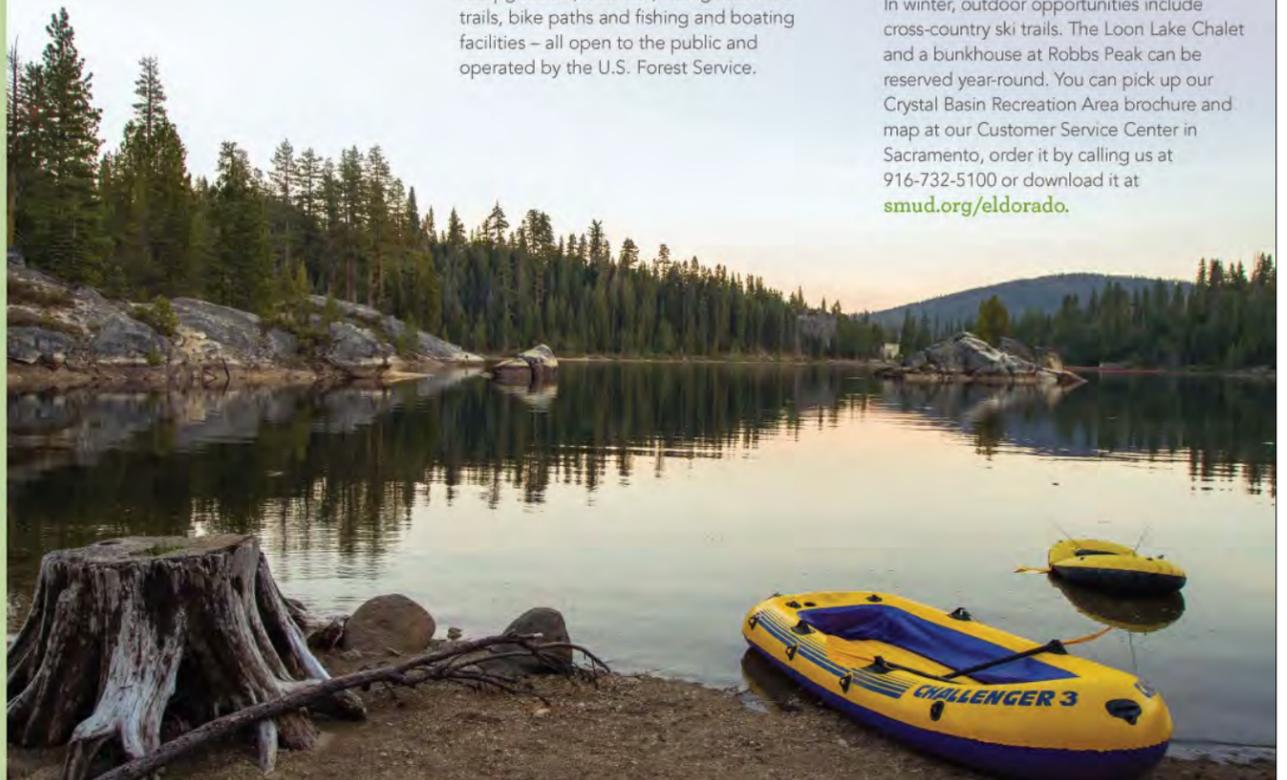


Figure 3.4-4. Hydropower brochure, page 2.

3.5 Websites

Websites and telephone-based systems provide the ability for visitors to get general information about the types, and locations, of various recreation opportunities. These systems are well suited for providing information for pre-trip planning as well as some real-time condition information, such as reservoir elevation and streamflow levels.

The ENF and SMUD independently maintain websites containing information about Project recreation opportunities. Visitors often go to the ENF website (<http://www.fs.usda.gov/recmain/eldorado/recreation>) first for Project recreation information because the UARP is located on National Forest System (NFS) land, and they are unaware of SMUD's critical role in providing recreation opportunities. The ENF website contains abundant and updated visitor interpretation and education content as well as a broad spectrum of visitor information. SMUD's website content overlaps some of that shown on the ENF website but also provides information specifically about the Project. Table 3.5-1 lists SMUD's websites and one telephone number where the public can find Project-related information relevant to trip planning and site conditions. The content design consists of webpages which deliver interpretation, education, and information to the public in a non-personal manner.

Table 3.5-1. Website addresses (and one telephone number) containing Project-related information for visitors and educators.				
Type of Information	Theme	Target Audience	Website Addresses and Telephone Number	Comments
Streamflow ^a	Recreation experiences— whitewater boating opportunities and angling	Recreation visitors including whitewater boaters, anglers	https://www.smud.org/en/about-smud/community/recreational-areas/UARP-conditions/ 1-877-426-3569	Year-round, real-time or recently available data and preceding 7 days of flow data below all UARP dams.
Whitewater release schedules ^a	Recreation experiences— whitewater boating opportunities and angling	Recreation visitors including whitewater boaters, anglers	https://www.smud.org/en/about-smud/community/recreational-areas/UARP-conditions/	Current water year type determination and release schedules for reaches below Chili Bar, Slab Creek and Ice House dams.
Reservoir elevation ^a	Recreation experiences— reservoir boating and angling	Recreation visitors including boaters, anglers, day and overnight users	https://www.smud.org/en/about-smud/community/recreational-areas/UARP-conditions/	Year-round, real-time or recently available data and preceding 7 days of reservoir level and reservoir storage data elevations for all UARP reservoirs.
Boat ramp availability ^a	Recreation experiences— reservoir boating and angling	Recreation visitors including boaters, anglers, day and overnight users	https://www.smud.org/en/about-smud/community/recreational-areas/UARP-conditions/	Year-round, real-time or recently available data and preceding 7 days of reservoir level and reservoir storage data elevations and elevation of the ends of all boat ramps for all UARP reservoirs.

Table 3.5-1. Website addresses (and one telephone number) containing Project-related information for visitors and educators.

Type of Information	Theme	Target Audience	Website Addresses and Telephone Number	Comments
Recreation opportunities	Recreation experiences—spectrum of recreation opportunities	Recreation visitors including day and overnight users, anglers, hunters, hikers, off-highway vehicle users; winter recreationists	https://www.smud.org/en/about-smud/community/recreational-areas/crystal-basin-recreation-area.htm	This website contains: (1) information about available recreation opportunities, weather, reservoir level and streamflow information; (2) a link to www.recreation.gov where visitors can make campground reservations; (3) the Crystal Basin Recreation Area brochure listing all of the Project recreation facilities, including site capacity and amenities provided; (4) a brief Project history and map; and (5) an ENF phone number where visitors may obtain information about campgrounds, roads and trails, cabins or fire restrictions.
Recreation facility availability	Recreation experiences—developed camping opportunities	Recreation visitors including overnight users	https://www.smud.org/en/about-smud/community/recreational-areas/crystal-basin-recreation-area.htm	This website contains a link to www.recreation.gov for campsite reservations.
Hunting and fishing	Recreation experiences—hunting and angling	Recreation visitors including hunters, anglers	https://www.smud.org/en/about-smud/community/recreational-areas/crystal-basin-recreation-area.htm	
Educational videos	Fish Habitat—Don't Move a Mussel (Invasive species)	Recreation visitors including boaters, anglers	https://www.smud.org/en/about-smud/environment/environmental-commitment/stewardship.htm	Don't Move a Mussel—Invasive mussel program (SMUD 2010)
	Hydropower—Stairway of Power	Educators and recreation visitors including day and overnight users	https://www.smud.org/en/about-smud/environment/environmental-commitment/compliance.htm	Educational video about UARP hydropower system

Table 3.5-1. Website addresses (and one telephone number) containing Project-related information for visitors and educators.				
Type of Information	Theme	Target Audience	Website Addresses and Telephone Number	Comments
	Wildlife habitat— Saving the Noble Birds	Educators and recreation visitors including day and overnight users	https://www.smud.org/en/about-smud/environment/avian-stewardship.htm	Saving the Noble Birds—Mission of SMUD-supported California Raptor Center in Davis, California
	Wildlife habitat— Protecting Birds in the Wild	Educators and recreation visitors including day and overnight users	https://www.smud.org/en/about-smud/environment/avian-stewardship.htm	Protecting Birds in the Wild—Potential effects of Project infrastructure on avian species and SMUD's actions to reduce bird mortality and bird caused outages
	Hydropower—A Jewel in the Sierras	Educators and recreation visitors including day and overnight users	https://www.smud.org/en/about-smud/environment/environmental-commitment/compliance.htm	A Jewel in the Sierras—Panoramic view of the source of SMUD's hydropower system

^a The reservoir level and streamflow information is provided consistent with the Streamflow and Reservoir Level Information Plan (SMUD and PG&E 2016).

3.6 Existing Conservation Education Programs

ENF participates in youth education programs that promote learning about many aspects of National Forests. Generation Green is a kindergarten through 12th grade program sponsored by the Central California Consortium, which provides environmental education and leadership opportunities to underserved rural and urban youth. This program provides role models and mentors, career training, and encouragement for higher education, while exposing high school students to Forest Service careers in natural resources. The ENF also sponsors crews participating in the Youth Conservation Corps, a summer employment program administered by the Department of Agriculture and Department of the Interior. ENF provides the youth participating in this program with education about environmental resources, management and employment opportunities associated with National Forests.

3.7 Resource and Management Issues

Many resource and management issues relevant to developing this Plan primarily relate to the high level of Project recreation use, wide spectrum of available recreation opportunities, area access, and streamflow in Project reaches. Based on relicensing study results and consultation, SMUD identified the following items that should be considered with regard to providing visitor interpretation, education and information:

- developed recreation facilities—locations, amenities, availability, reservations;
- locations for dispersed recreation activities (e.g., hiking, angling, hunting, wildlife viewing, scenic driving);
- reservoir elevations and boat ramp availability;
- flow release schedules from Project reservoirs and streamflow in Project reaches that provide whitewater boating opportunities;
- rules and regulations;
- natural resource protection and education;
- interactions with bears; and
- invasive species (e.g., weeds, mussels).

3.8 Other Existing Interpretation, Education, and Information Programs

The Forest Service is the dominant public land managing agency of lands in the region. Accordingly, ENF provides abundant interpretation, education and information to National Forest visitors in the region through its many offices, visitor information stations, websites, and field staff using both formal and informal manners of program delivery regarding a broad spectrum of natural, cultural, and developmental resources.

4.0 PLAN STRATEGIES

This section summarizes the strategies that will be used to implement the Plan during the License term for connecting visitors with sources of information to: (1) plan and enhance their visits, (2) take advantage of seasonal recreation opportunities, and (3) provide an interpretation of, and education about, natural and cultural resources. Based on the scope of Project recreation opportunities, individual actions implemented under this Plan are intended to reach an audience consisting of a broad spectrum of the public including, day and overnight users, boaters, anglers, hunters, scenic viewers, boaters (high-speed, flatwater, and whitewater), hikers, bicyclists, winter recreationists, and educators. Considering the primary purpose of the Project is to generate electricity with water flowing in streams and rivers, *Water Resources* is an appropriate theme for measures and programs associated with this Plan. Probable subthemes within this overarching theme would include (1) Hydropower; (2) Fish and Wildlife Habitat; and (3) Recreation Experiences.

4.1 Measures

Measures implemented under the Plan include the existing signs, displays, websites, and brochures discussed in Chapter 3.0, “Existing Conditions,” which may be retained, supplemented, or modified, in consultation with ENF, and planned development of an amphitheater at Sunset Point where campfire programs can be provided. SMUD reviewed the content and delivery of existing interpretation, education, and information related to the Project and responses from ENF staff interviews to identify the following additional topics and delivery to consider during License implementation:

- integrate website links and content of SMUD and ENF webpages;
- provide flow phone number on ENF webpage or a link to the appropriate SMUD webpage that provides the phone number;
- post SMUD’s hydropower brochure on its website;
- provide educational videos, interpretive displays at Crystal Basin Information Station;
- use evolving technologies (e.g., cell phone and audio tours, social media, maps with Quick Response codes, interactive kiosks) to connect the public with opportunities to obtain interpretation, education and information;
- make presentations to the public at campfires and organized walks; and
- include signs or programs to communicate with the public about additional topics including, but not limited to: consuming raw fish, bear-human interactions, using local firewood, invasive species, cultural resources, fish and wildlife resources, boating obstacles on reservoirs, boating safety, water resources, energy, fuel reduction for managing wildland fire potential (specifically transmission line vegetation management), tree and plant identification and ethical land use (e.g., Leave No Trace).

These topics and delivery methods incorporate the suggestions received from ENF staff and El Dorado County, including (1) using evolving technologies, displays, videos, campfires and nature walks for program delivery; and (2) considering additional topics for interpretation, education and information.²

4.2 Implementation

Delivering the Plan is a partnership between SMUD and ENF. In general, SMUD funds and implements measures related to capital improvements at recreation sites, including heavy maintenance; prints brochures; maintains information on its website; and provides funding to ENF for visitor services. ENF, as funded by SMUD, provides information, interpretive, and education services and materials related to UARP at its visitor information stations and offices.

Interpretive and educational materials and public information services will require updating and revising over the term of the License. These needs will be discussed and addressed in consultation with ENF during scheduled recreation site improvements (Forest Service 4(e) Condition No. 45), and/or concurrent with the Review of Recreation Developments (Forest Service 4(e) Condition No. 44). Measures that involve printed material or construction will be designed in consultation with ENF and be consistent with Forest Service standards (e.g., Forest Service Sign and Poster Guidelines [Forest Service 2013a], Outdoor Recreation Area and Trail Guidelines for Accessibility [Forest Service 2013b,c]). Signs and displays will prominently feature SMUD's logo and branding graphics along with those of the Forest Service, where appropriate, to emphasize SMUD's contribution to the recreational amenities associated with the UARP. Consultation with ENF will occur when existing interpretive and educational materials or displays are revised or reconstructed to determine whether educational themes, subjects, delivery methods, or intended audiences should be revised.

² SMUD did not incorporate ENF's suggestion to improve communication among ENF, campground concessionaire, and El Dorado sheriff office to improve access to real-time information about emergencies (e.g., search and rescue) because these relationships are outside the scope of SMUD's responsibility. SMUD did not incorporate ENF's suggestion to participate in its youth education program because its content and purpose do not relate to the Project.

5.0 MONITORING AND PLAN REVISION

Forest Service 4(e) Condition No. 42 requires SMUD conduct a recreation survey every 6 years to collect information from Project visitors and produce a Recreation Resources Report. SMUD will include question(s) in the survey instrument to assess effectiveness of existing measures and identify visitor needs and preferences for future measures related to interpretation, education and information at Project-related facilities and developments. Additionally, SMUD will interview key staff identified by ENF to collect information about the effectiveness of Plan measures that are in place, evolving issues, and suggestions for new or changed measures, including themes, subject matter, audiences, and delivery. Other potential sources of information include recreation-related incident reports and citations, reported user conflicts, comments reported by visitors on the National Recreation Reservation System, visitor use reported by concessionaire, National Visitor Use Monitoring data and other various forms of official data and documentation.

The Recreation Resources Report will be discussed with ENF and the Consultation Group to generate recommendations to address findings. These recommendations may include periodic revision and/or adaption of this Plan to increase the effectiveness of Project-related interpretation, education, and public information.

6.0 LITERATURE CITED

- ENF. 2005. *Rationale Report for Comprehensive Resource Agency/NGO Alternative contained in Filing of Alternative for Consideration in Environmental Impact Statement for Upper American River Project, FERC No. 2101, and Chili Bar Hydroelectric Project, FERC No. 2155. U.S. Forest Service, Eldorado National Forest, Placerville, CA.* Filed with FERC by the Forest Service on November 1, 2005. Available at:
<http://elibrary.ferc.gov/idmws/common/OpenNat.asp?fileID=10884024>.
- California Department of Finance. 2013. Total Population Projections for California and Counties: July 1, 2015 to 2060 in 5-year Increments. Available at:
<http://www.dof.ca.gov/research/demographic/reports/projections/P-1/>.
- Cordell, H. K. 2008. The Latest Trends in Nature-Based Outdoor Recreation. *Forest History Today*, Spring 2008.
- Forest Service (U.S. Forest Service). 2015. *R-5 Pacific Southwest Region Story*. R5-FR-019. December 2015.
- Forest Service. 2013a. Sign and Poster Guidelines for the Forest Service. In *Engineering Management Series 7100-15*. October 2013.
- Forest Service. 2013b. *Forest Service Outdoor Recreation Accessibility Guidelines*. Available at:
http://www.fs.fed.us/recreation/programs/accessibility/FSORAG_2013%20Update.1.docx. Last updated 2013.
- Forest Service. 2013c. *Forest Service Trail Accessibility Guidelines*. Last updated 2013. Available at:
http://www.fs.fed.us/recreation/programs/accessibility/FSTAG_2013%20Update.docx.
- National Interpretive Association. 2016. National Interpretive Association Webpage Definitions. Available at:
http://www.definitionsproject.com/definitions/def_full_term.cfm.
- Parker, Charis. Resource Officer, Pacific Ranger District, August 25, 2016 — e-mail to M. Swisher, Project Manager, Sacramento Municipal Utility District. Sacramento, CA, regarding Interpretive Plan Information.

SMUD (Sacramento Municipal Utility District) and PG&E (Pacific Gas and Electric Company). 2016. *Streamflow and Reservoir Level Information Plan for Upper American River Project, FERC No. 2101, and Chili Bar Project, FERC No. 2155*. Sacramento, CA. March.

SMUD. 2010. *Invasive Mussel Protection Plan*. Sacramento Municipal Utility District. Sacramento, CA. February.

SMUD. 2007. *Relicensing Settlement Agreement for the Upper American River Project and Chili Bar Hydroelectric Project*. FERC Accession No. 20070201-4014. Sacramento Municipal Utility District, Sacramento, CA. January.

SMUD. 2005. *Recreation Needs Assessment, Upper American River Project (FERC No. 2101), Sacramento Municipal Utility District*. Sacramento, CA. March.



APPENDIX A

Summary of Interviews with Forest Service Staff

Interviews, October 2015

Interpretive, Education, and Public Information Plan

Kelly Hooten, Information Specialist, Pacific Ranger District Front Desk, October 23, 2015.

Types of information and services most often requested from visitors:

- Locations and facilities available for recreation use for activities, such as backpacking, fishing, camping, and hunting
- Available services and weather
- Lake levels and whether ramps and docks are in service; currently, provide visitors with information reported in the newspaper
- Campground availability, but staff do not have real-time information for visitors
- Dispersed camping locations
- Campfire permits and fire restrictions
- Wilderness permits, usually for Desolation Wilderness
- Rubicon OHV Trail and off-highway vehicle use

Types of information available at the Pacific RD front desk:

- Maps
- Interpretive books
- Permits for campfires, wilderness access, forest products
- Passes not specific to ENF locations (e.g., access pass to National Parks, Golden Age pass).
- Recreation opportunity guides (slip sheets for activities and ENF locations)
- Children's section of books/activities
- SMUD Crystal Basin recreation brochure (very popular)
- May be responding to a request to provide an educational program to a local school

Types of information gaps that the front desk is challenged by:

- Campground availability
- Reservoir levels
- Real-time information about multi-jurisdictional incidents that affect visitors or visitor access, such as search and rescue

Suggestions for resolving the challenge:

- Building relationships and improving communication with campground concessionaire and El Dorado sheriff office
- Specific topic suggestions for interpretive or educational programs:
- Land stewardship/proper use like Leave No Trace
- Hours of operation for Pacific Ranger District front desk:
- •Summer hours—Memorial Day weekend to fall (soft date but sometime after Labor Day), 7 days per week, 8 a.m. to 4:30 p.m.
- Winter hours—fall to Memorial Day weekend

Patty Kushner, Information Specialist, Crystal Basin Information Station, October 26, 2015.

Types of information and services most often requested from visitors:

- Campsite availability (campground operators communicate with Crystal Basin staff to let them know whether campsites are available)
- Directions to and locations for OHV use, dispersed camping, and hot spots for fishing and hunting
- Restroom facilities

Types of information provided at the Crystal Basin Information Station:

- Maps—Forest maps, motorized vehicle use maps, SMUD Crystal Basin recreation brochure
- Recreation opportunity guides
- Campfire permits
- Eldorado NF Interpretive Association sells guidebooks, shirts, and other materials
- Interpretive materials—library of guidebooks; displays of nests, bones, butterflies, bear paw prints, and cultural/archaeological materials; and a slide show of Crystal Basin showing seasons and wildlife

Types of information gaps that the information staff is challenged by:

- Questions about hunting
- Locations for flatwater kayaking and motorized boating
- Locations for more campsites
- Why potable water is not available at all campgrounds

Suggestions for resolving the challenge:

- None provided

Specific topic suggestions for interpretive or educational programs:

- Displays at Crystal Basin Information Station for trees and mushroom identification
- Wildflower walks (currently provided on occasion at Wrights Lake)
- Leave No Trace (existing educational program to promote ethical use of the outdoors)

Hours of operation and staffing for Crystal Basin Information Station:

- Summer season—Wednesday to Sunday from mid-May to mid-September, 9 a.m. to 4:30 p.m.
- Fall season—Wednesday to Saturday from mid-September to mid-October, 9 a.m. to 4:30 p.m.
- Staffing during the summer consists of one Information Specialist and four interns (compensated with only subsistence and housing) that rotate through the station (one at a time).

Other information:

- Station is being remodeled and additional space has been requested to provide space for displays. Also requested a new television to support the slide show.

Jennifer Chapman, Public Affairs Officer, ENF Supervisor's Office, February 22, 2015.

The ENF does not have a Public Information Plan in effect at this time. However, Jennifer e-mailed printed materials to Carol Efirid after the interview containing information about currently emphasized topics in Region 5 of the U.S. Department of Agriculture, Forest Service (Forest Service):

- The South Fork American River Watershed Cohesive Strategy/Large Landscape Project addresses fire management challenges on a larger scale by working collaboratively among all stakeholders and across all landscapes, using the best science to achieve resilient landscapes, fire-adapted communities, and safe and effective wildfire response. Vegetation management under the Jones Fork transmission line would relate to this project and could be the topic of an educational opportunity.
- Pacific Southwest Region Story promotes the Forest Service's role to manage forests to provide public goods and benefits, including water, energy, flood regulation, habitat, scenic landscapes and recreational opportunities.

The ENF would be interested in providing the public with fish consumption advisories related to mercury levels in some reservoirs and letting the public know where to get current information about this topic.

Ideas for effective program delivery should include using evolving technology, such as cell phone and audio tours and mapping using Quick Response Codes, and providing campfire programs at Sunset Point.

Jennifer provided contact information for addition ENF staff that may have additional input for the plan.

Cindy Oswald, Acting Forest Resource Staff Officer, ENF Supervisor's Office, February 25, 2015.

The UARP brochure is a valuable visitor information tool; however, new technologies can improve information services and should be considered in the future. Social media and other means that will provide real-time information to visitors should be considered.

ENF currently participates in on-forest youth education programs that could provide an educational opportunity for SMUD. Youth Conservation Corps and Generation Green are two of these programs. ENF provides the youth participating in these programs with education about environmental resources, management and employment opportunities associated with National Forests. SMUD could participate in the ENF-sponsored events to present information to program participants about topics such as UARP, water resources, and energy.

It would be beneficial to provide an amphitheater at Sunset Point where campfire programs could be provided for the public.

157 FERC ¶ 62,160
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Sacramento Municipal Utility District

Project No. 2101-134

ORDER APPROVING INTERPRETIVE, EDUCATION, AND PUBLIC
INFORMATION PLAN

(Issued November 29, 2016)

1. On October 20, 2016, Sacramento Municipal Utility District, licensee for the Upper American River Hydroelectric Project No. 2101, filed an Interpretive, Education, and Public Information Plan as required by license Article 401(a) and US Forest Service (Forest Service) Condition Nos. 51.2 and 51.3.¹ The project is located on the Rubicon River, Silver Creek and South Fork American River in El Dorado and Sacramento counties, California. The project occupies federal lands administered by the Bureau of Land Management and by the Forest Service within the Eldorado National Forest.
2. Article 401(a), Forest Service Condition No. 51.2 required the licensee to develop and print one or more brochures and maps that describes the recreation opportunities, recreation facilities, rules, and responsibilities for the area of the project, including Canyonlands, high country lakes, and streams. The brochure was to be provided to the Forest Service for review and approval prior to completion. The licensee was to provide the brochure/map available to the public free of charge and be updated as conditions change.
3. Article 401(a), Forest Service Condition No. 51.3 required the licensee to file for Commission approval, within 2 years of license issuance, an Interpretive, Education, and Public Information Plan, approved by the Forest Service. At a minimum, the plan was to include themes, design, audience, delivery methods, and schedule for implementation of providing up-to-date information such as: sightseeing, hiking, observing wildlife, and utilizing facilities such as boat ramps, campgrounds, and beaches.
4. The proposed plan includes descriptions of the purpose and need for an Interpretive, Education, and Public Information Plan. The plan lists an inventory, including photographs, of the existing resources at the project currently providing

¹ Order Issuing New License (148 FERC ¶ 62,070), issued July 23, 2014.

educational resources and information to the public. As required by Forest Service Condition No. 51.2, a copy of 2 approved brochures related to the project, titled Crystal Basin Recreation area and the Hydropower – Turning Water into Electricity, are provided in the plan. The brochures are available at several areas as well as posted on the licensee’s webpage for public use. The plan also includes a section describing both the licensee and the Eldorado National Forest webpages and lists individual web addresses for pages containing project related information, the theme of the page, and its target audience.

5. The proposed plan includes plan strategies and implementation measures to enhance the visitor experience; take advantage of seasonal recreation; and provide an interpretation of, and education about, natural and cultural resources. Measures include retaining, supplementing, and/or modifying existing displays, websites, and brochures. The licensee states that the plan’s implementation is a partnership between itself and the Eldorado National Forest. In general, the licensee will fund and implement capital improvements at recreation sites and maintain the printed brochures and its website; while providing funding to the National Forest for educational visitor services.

6. The licensee provided the proposed plan to the Consultation Group on March 4, 2016 for a 30-day review and comment period.² The licensee received comments from the California Water Resources Control Board, El Dorado County, and the Forest Service. On July 14, 2016, the licensee filed a request, with the Commission, for an extension of time to complete consultation with the Forest Service regarding their comments, to revise the plan as necessary, and obtain Forest Service approval.³ The Commission granted the request and subsequently the Forest Service approved the proposed plan.

7. The proposed plan describes how visitors to the Upper American River Project area can obtain information and education about the project area as well as the various

² The Consultation Group includes all parties to the February 2007 Relicensing Settlement Agreement for this project and Chili Bar Hydroelectric Project; this includes: American Whitewater, American River Recreation Association, the Bureau of Land Management, California Parks and Recreation, California Fish and Wildlife, California Outdoors, California Sportfishing Protection Alliance, Camp Lotus, Foothill Conservancy, Forest Service, Friends of the River, U.S. Fish and Wildlife Service, Department of the Interior, U.S. National Park Service, PG&E, Rich Platt, Hilde Schweitzer, Theresa Simsiman, and Sacramento Municipal Utility District.

³ Unpublished Order Granting Extension of time issued July 27, 2016.

recreation resources it provides. The plan provides details on the educational information provided to visitors intended to minimize potential recreation-related impacts within the project area. The licensee consulted with and incorporated comments from the project's Consultation Group and worked closely with and received approval from the Forest Service on the plan. Lastly, the plan meets the requirements of license Article 401(a), Forest Service Condition Nos. 51.2 and 51.3, and should be approved.

The Director orders:

(A) Sacramento Municipal Utility District's Interpretive, Education, and Public Information Plan filed pursuant to Article 401(a), Forest Service Condition Nos. 51.2 and 51.3 of the Upper American River Hydroelectric Project No. 2101, filed on October 20, 2016, is approved.

(B) 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 Federal Power Act, 16 U.S.C. § 8251 (2012), and the Commission's regulations at 18 C.F.R. § 385.713 (2016). 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
Land Resources Branch
Division of Hydropower Administration
and Compliance

Document Content(s)

P-2101-134.DOCX.....1-3