

REC 13 RESERVOIR ACCESS/FACILITY ASSESSMENT

1.0 EXECUTIVE SUMMARY

Project reservoirs provide diverse recreational opportunities in the Upper San Joaquin River Watershed. The maintenance of appropriate reservoir access is a primary consideration in providing water-based activities, and other recreational opportunities. These reservoirs support various water-based recreation activities and may serve as an origination point for non-water-based recreation activities around the reservoirs such as day-hiking, picnicking and camping.

The primary focus of the study is the major reservoirs within the Big Creek ALP study area: Shaver Lake, Huntington Lake, Mammoth Pool Reservoir, and Florence Lake. All reservoirs have developed public access points with associated support facilities. Each reservoir has multiple levels of access ranging from unrestricted vehicular access to areas closed to public access.

The extent and type of development at each reservoir is closely associated with the level of use at the reservoir and the overall character of the recreational setting. At Huntington and Shaver Lakes there are several developed access points and numerous support facilities around the lakes. These areas have been developed to support large numbers of users engaged in a variety of recreational activities. At Mammoth Pool Reservoir and Florence Lake, the approach to development reflects the setting and level of use. At each of the latter referenced lakes there is a single primary developed access point, and a relatively low level of facility development around the lakes. This level of development is consistent with the “remote” character of these areas and the primary on-water activity, which is angling.

Survey data obtained from the implementation of the REC 10 Recreation Opportunities and Needs Assessment and REC 17, Dispersed Recreation Opportunities and Needs Assessment study plans (SCE 2001) was used to summarize user satisfaction attitudes relative to access, and the facilities availability and their condition (SCE 2003). At all reservoirs, more than half of the survey respondents considered river, stream, lake, or trail access “very important” when choosing a recreation area. In addition, more than half of the users surveyed responded that, at all reservoirs, the availability and condition of campsites, picnic sites, and parking was “highly acceptable.” Also, access to, and condition of, the boat ramps at all study area reservoirs was considered “highly acceptable” by more than half of the survey respondents.

2.0 STUDY OBJECTIVES

- Evaluate condition of boat launches at Project reservoirs, and other access opportunities.
- Evaluate existing support facilities at Project reservoirs.

3.0 STUDY IMPLEMENTATION

3.1 STUDY ELEMENTS COMPLETED

- Identified access points, and types of access (vehicular or non-motorized) at study area reservoirs.

3.2 OUTSTANDING STUDY ELEMENTS

- Determine need for additional or improved access to areas at study area reservoirs.
- Identify potential improvements to increase/improve access to study area reservoirs.

4.0 STUDY METHODOLOGY

Access facilities at study area reservoirs were identified and characterized by reviewing existing literature and conducting consultation with agencies and user groups. Data was collected on the number, type, and location of reservoir access facilities which included roads, boat ramps, docks, marinas, parking areas, trails, campgrounds and picnic areas. This data was compiled into a GIS database and maps were designed to depict the types and distribution of reservoir access facilities. The study area reservoirs evaluated included the four major reservoirs, Shaver Lake, Huntington Lake, Mammoth Pool Reservoir, and Florence Lake, and six moderate size diversion pools/forebays including Mono Creek, Bear Creek, Balsam Meadows, Dams 4, 5 and 6 located along Big Creek.

User data describing the number of users, facility capacities, and the number of turn-away days for each reservoir and access facility was not available through existing literature review or consultation efforts. It has been determined, through personal communication with representatives of the Sierra National Forest that there are no known studies or data available that document "turn-away days," for any facilities other than campgrounds in the study area, which have a limited designed occupancy. However, data on user satisfaction of the reservoir access facilities was obtained from results of the 2002 summer recreation use surveys that were completed as a component of the REC 10, Recreation Opportunities and Needs Assessment and REC 17, Dispersed Recreation Opportunities and Needs Assessment study plans (SCE 2001). Summer recreation use surveys were conducted at the four major reservoirs in the study area. However, recreation surveys were not conducted at the moderate size diversion pools/forebays and user preference data is not available for these locations. The user satisfaction data from the four reservoirs was compiled, tabulated and analyzed to determine user satisfaction with condition of access facilities which included campsites, picnic sites, boat ramps, and parking areas. Detailed information on the survey methodology and study results for the summer recreation user surveys is described in previously published 2002 REC 10 Recreation Opportunities and Needs Assessment (Developed) and 2002 REC 17 Dispersed Recreation Opportunities and Needs Assessment study reports (SCE 2003).

In addition to the summer recreation surveys, on-site inspections of access facilities at study area reservoirs were conducted during summer 2002 as part of the REC 9, Recreation Resources and Facility Inventory Assessment study (SCE 2003). Facilities assessed include campgrounds, day use/picnic areas, roads, boat ramps, and parking areas. The results of this study help identify the types of recreation facilities at reservoirs and the associated access facilities. Methodologies used for inventory and evaluation of physical conditions of these facilities are detailed in the REC 9, Recreation Resources and Facility Inventory Assessment study report (SCE 2003).

5.0 STUDY RESULTS AND ANALYSIS

This section describes the reservoir access facilities present at the study area reservoirs and the moderate size diversion pools/forebays. Site specific user preference data regarding the adequacy of reservoir access facilities (campgrounds picnic sites, boat ramps, and parking areas) is included in the separate discussion for each of the four reservoirs.

All study area reservoirs have developed user access points and support facilities, including campsites, picnic sites, boat ramps, and parking areas. Study area reservoirs offer various levels of access ranging from unrestricted vehicular access along portions of the shoreline to restricted access at locations near sensitive project facilities such as dam structures or transmission/power lines. Public safety and facility security are the main factors considered when determining if specific locations at study area reservoirs must have restricted access. SCE makes the initial determination with respect to health and safety issues at project facilities. These decisions are also made in consultation with the FERC and the USDA-FS.

In addition, the FERC conducts annual inspections at the facilities and can make recommendations regarding access to specific locations. Maps indicating major access points, types of access, and support facilities of the four major reservoirs are provided.

5.1 MAJOR STUDY AREA RESERVOIRS – ACCESS FACILITIES

The Huntington Lake and Shaver Lake areas have been developed to support larger numbers of users engaged in a variety of recreational activities. At both of these areas, there are multiple developed user access points and numerous support facilities scattered around these lakes.

The Mammoth Pool Reservoir and Florence Lake areas are much more remote, and have fewer visitors per year. These lakes have less development, which is consistent with the setting and level of use at these areas. The main on-water recreation activity at both of these “backcountry” lakes is angling. At these reservoirs there is a relatively low level of facility development and a single primary developed user access point. This level of development is consistent with the remote character of these areas and the number of users.

In the following sections, access to the study area reservoirs and diversions are described individually.

5.1.1 SHAVER LAKE

Shaver Lake is accessible by roads, boat launches including docks and marinas, parking areas, trails, campgrounds, and picnic areas. Shaver Lake recreation facilities are summarized in Table REC 13-1, displayed in Figure REC 13-1 and discussed below.

Roads

The primary access to Shaver Lake is off of Highway 168, which runs near the west shore. There is vehicular access to the lake's major recreation use areas. Vehicular access to Road 1 Day Use Area and Road 2 Day Use Area along the north shore of the lake is provided by Forest Service Road FS 9S58 off of Highway 168 near the Sierra Marina. The entire shoreline, except for Shaver Dam, is open to non-motorized public access.

Boat Launches (including docks and marinas)

There are two boat launch areas on Shaver Lake. The Camp Edison Boat Launch and Shaver Lake Marina are located on the west end of the lake within Camp Edison and is accessed via Highway 168. The Fresno County boat launch and Sierra Marina are located on the north end of the lake and accessed off of Highway 168.

Table REC 13-2 summarizes the summer survey results regarding satisfaction with the boat launch facilities. The survey results indicate that:

- 90.1% of respondents rated their satisfaction with boat ramp availability to be acceptable (29.0% moderately acceptable and 61.1% highly acceptable).
- 77.6% indicated boat ramp parking availability to be acceptable (31.8% moderately acceptable and 45.8% highly acceptable).
- 83.4% of respondents indicated their satisfaction with boat ramp parking area conditions to be acceptable (31.7% moderately acceptable and 51.7% to highly acceptable).

Campgrounds

There are two campgrounds at Shaver Lake, Camp Edison and Dorabelle, both are located along the west shore of Shaver Lake and are accessed via Highway 168. Camp Edison is an SCE operated facility and Dorabelle is operated by the USDA-FS through a concessionaire, California Land Management (CLM).

Table REC 13-3 summarizes the summer survey responses regarding user satisfaction with these campground facilities. The survey results indicate that:

- 89.3% of respondents rated their satisfaction with campsite availability to be acceptable (27.1% moderately acceptable and 62.2% highly acceptable).

- 85.9% of respondents rated parking availability for camping as acceptable (26.2% acceptable and 59.7% and highly acceptable).
- 88.1% of respondents rated parking area conditions as acceptable (29.1% moderately acceptable and 59.0% as highly acceptable).

Picnic Areas

Seven areas around the lake have been developed for picnicking and day use activities including Camp Edison Day Use Area, Dorabelle Picnic Area, Shaver Point Day Use Area, Road 1 Day Use Area, Road 2 Day Use Area, Eagle Point (Boat Only) Day Use Area, and Dinky Creek Road Rest Area.

Table REC 13-4 summarizes the summer survey results regarding satisfaction with these picnic area facilities. The survey results indicate that:

- 96.1% of respondents rated their satisfaction with picnic site availability to be acceptable (23.4% moderately acceptable and 72.7% highly acceptable).
- 88.2% of respondents indicated picnic site parking availability was acceptable (22.4% moderately acceptable and 65.8% highly acceptable).
- 90.9% of respondents rated parking area conditions as acceptable (24.2% moderately acceptable and 66.7% highly acceptable).

Parking Areas

Designated parking is located at six areas around the lake including Camp Edison Day Use Area, Dorabelle Picnic Area, Shaver Point Day Use Area, Road 1 Day Use Area, Road 2 Day Use Area, and Dinky Creek Road Rest Area.

Trails

There are no formal trailheads at the lake which provide access to established trails around Shaver Lake. However, there are numerous informal access trails leading to and providing access along the north and west shore of Shaver Lake that originate from day use/picnic areas, campgrounds, boat launches, and marinas. In addition, within Camp Edison there several miles of informal yet developed trails for campers and day users. These trails are also maintained and used for nordic skiing during the winter.

5.1.2 HUNTINGTON LAKE

Huntington Lake can be accessed by roads, boat launches including docks and marinas, parking areas, trails, campgrounds, and picnic areas. Huntington Lake recreation facilities are summarized in Table REC 13-5, displayed in Figure REC 13-2 and discussed below.

Roads

Huntington Lake is accessed from Highway 168 along the eastern shoreline. Huntington Lake Road intersects with Highway 168 and provides lake access along the north and west shores. Access points off of Huntington Lake Road include College Campground, Rancheria Marina, USDA-FS Huntington Lake Boat Ramp, Deer Creek Picnic Area, Deer Creek Campground, Kinnikinnick Camp Ground, Catavee Camp Ground, Bear Cove Picnic Area, Billy Creek Picnic Area, Upper and Lower Billy Creek Campground, Huntington Lake Resort, Dowville Picnic Area, and the Dam 3 Parking Area. There are controlled access roadways along the southern shore of Huntington Lake branching off from Huntington Lake Road. The entire shoreline, including the dam structures, is open to non-motorized public access.

Boat Launches (including docks and marinas)

Huntington Lake has two boat launch areas. The Huntington Lake Resort Boat Ramp is on the west end of the lake and has boat docks. On the east end of the lake is the USDA-FS boat ramp. Additionally, the Rancheria Marina, which has boat docks, is close to the USDA-FS boat launch.

Table REC 13-6 summarizes the summer survey responses regarding user satisfaction with these boat launch facilities. The survey results indicate that:

- 92.1% of respondents rated their satisfaction with boat ramp availability to be acceptable (25.9% moderately acceptable and 66.2% highly acceptable).
- 82.9% indicated boat ramp parking availability to be acceptable (29.5% moderately acceptable and 53.4% highly acceptable).
- 85.7% of respondents indicated their satisfaction with boat ramp parking area conditions to be acceptable (29.6% moderately acceptable and 56.1% highly acceptable).

Campgrounds

There are seven campgrounds at Huntington Lake. The public campgrounds are located on the west and east ends of the lake. Upper and Lower Billy Creek Campgrounds are located on the west end of the lake and Deer Creek, Kinnikinnick, Catavee, College, and Rancheria campgrounds are located on the east end of the lake. The public campgrounds are operated by the USDA-FS through their concessionaire, CLM. There are four private Scout camps on the south shore of the lake: Camp Kern; Camp Olijato; Camp Mirimichi and Camp Gold Arrow and one Scout Camp on the north shore: Camp Silver Fir. Users of the private camps were not surveyed as part of the active survey.

Table REC 13-7 summarizes the summer survey responses regarding user satisfaction with campground facilities. The survey results indicate that:

- 90.5% of respondents rated their satisfaction with campsite availability to be acceptable (23.3% moderately acceptable and 67.2% highly acceptable).
- 84.9% of respondents rated parking availability for camping as acceptable (27.3% moderately acceptable and 57.6% highly acceptable).
- 88.0% of respondents rated parking area conditions as acceptable (27.4% moderately acceptable and 60.6% highly acceptable).

Picnic Areas

Five areas around the lake have been developed for picnicking and day use activities including Bear Cove, Billy Creek, Deer Creek, Dowville, and the USDA-FS Beach and Day Use Area.

Table REC 13-8 summarizes the summer survey responses regarding user satisfaction with picnic area facilities. The survey results indicate that:

- 96.8% of respondents rated their satisfaction with picnic site availability to be acceptable (20.8% moderately acceptable and 76.0% highly acceptable).
- 83.5% of respondents indicated picnic site parking availability was acceptable (20.2% moderately acceptable and 63.3% highly acceptable).
- 84.8% of respondents rated parking area conditions as acceptable (19.0% moderately acceptable and 65.8% highly acceptable).

Parking Areas

Designated parking is located at seven areas around the lake including Bear Cove Picnic Area, Billy Creek Picnic Area, Deer Creek Picnic Area, Dowville Picnic Area, the USDA-FS beach and day use area, Eastwood Visitor Center, and at Dam 3 along Huntington Lake Road.

Summer survey respondents indicated their satisfaction with parking availability at picnic areas and boat launches to be acceptable.

However, consultation with stakeholders indicates that parking near Dam 3 along Huntington Lake Road is inadequate. Dam 3 located at the west end of Huntington Lake and is a popular location for angling from the dam and hiking along the shore. Vehicle parking at this location consists of a small turn out and additional parking is along the shoulder of Huntington Lake Road. Consultation with stakeholders has indicated that parking at this location presents a potential safety hazard on busy summer days and on weekends when there is high recreation demand.

Trails

Trail access to the lake is provided by numerous informal access trails located at boat launches, campgrounds and picnics areas. However, there is an established trail, the Huntington Shore Trail, which is approximately two miles in length and is located along the northern shoreline of Huntington Lake connecting the Billy Creek Picnic Area to the Bear Cove Picnic Area.

5.1.3 MAMMOTH POOL RESERVOIR

Access to Mammoth Pool Reservoir is through a single primary area serviced by the Mammoth Pool Road, which is off Minarets Road. Mammoth Pool reservoir recreation facilities are summarized in Table REC 13-9 and displayed in Figure REC 13-3.

Roads

Mammoth Pool Reservoir is accessed from Mammoth Pool Road along the southwest corner of the reservoir from the Mammoth Boat Launch to the Mammoth Pool Dam. Access points to the reservoir along the road include the Mammoth Boat Launch, Windy Point Boat Launch, and the Windy Point Picnic Area. The reservoir is closed to public vehicular access from May 1st to June 15th to avoid interference with the annual deer migration. When open, vehicular access to the lake is available where indicated above. The entire shoreline, including the dam structures, is open to non-motorized public access.

Boat Launches (including docks and marinas)

The main boat launch area is the Mammoth Pool boat launch. The ramp has been designed to accommodate a wide variance in water surface elevation. When water surface elevations fall below the functional range of the Mammoth Pool Boat Ramp, the smaller, undeveloped, Windy Point Boat Launch can be used.

Table REC 13-10 summarizes the summer survey responses regarding user satisfaction with boat launch facilities. The survey results indicate that:

- 92.1% of respondents rated their satisfaction with boat ramp availability to be acceptable (34.2% moderately acceptable and 57.9% highly acceptable).
- 68.4% indicated boat ramp parking availability to be acceptable (31.6% moderately acceptable and 36.8% highly acceptable).
- 74.3% of respondents indicated their satisfaction with boat ramp parking area conditions to be acceptable (31.4% moderately acceptable and 42.9% highly acceptable).

Campgrounds

The Mammoth Pool Campground is located a short distance from the reservoir and boat launch area and is operated by the USDA-FS/CLM. The China Bar Boat Camp is only accessible by boat and is located along the northwest shore of the reservoir.

Table REC 13-11 summarizes the summer survey results regarding satisfaction with campground facilities. The survey results indicate that:

- 92.7% of respondents rated their satisfaction with campsite availability to be acceptable (22.0% moderately acceptable and 70.7% highly acceptable).
- 75.3% of respondents rated parking availability for camping as acceptable (20.5% moderately acceptable and 54.8% highly acceptable).
- 83.3% of respondents rated parking area conditions as acceptable (22.7% moderately acceptable and 60.6% highly acceptable).

Picnic Areas

The Windy Point Picnic Area has been developed for picnicking and day use activities. This area is a short distance from the boat launch on the west end of the reservoir. There is undeveloped parking at the picnic area.

Table REC 13-12 summarizes the summer survey responses regarding user satisfaction with picnic facilities. The survey results indicate that:

- 100% of respondents rated their satisfaction with picnic site availability to be “highly acceptable.”
- 100% of respondents indicated picnic site parking availability was acceptable (10.5% moderately acceptable and 89.5% highly acceptable).
- 100% of respondents indicated parking area conditions was acceptable (10.5% moderately acceptable and 89.5% highly acceptable).

Parking Areas

There is undeveloped parking at the Windy Point Picnic Area. This area is a short distance from the Windy Point boat launch on the west end of the reservoir.

Trails

The Mammoth Pool Campground Area has an informal trail providing access to the reservoir. The French Trail is an established trail which runs along the southwest border of the reservoir.

5.1.4 FLORENCE LAKE

Access to Florence Lake is through a single primary area serviced by a single road. Access to the lake is from the picnic area or boat launch. Florence Lake recreation facilities are summarized in Table REC 13-13 and displayed in Figure REC 13-4.

Roads

Florence Lake is accessed from Florence Lake Road, which intersects Kaiser Pass Road east of Kaiser Pass. The USDA-FS closes the Kaiser Pass Road to vehicular traffic during the winter as snow removal activities are not performed. The unplowed road is used in winter as a snowmobile trail and trail riders can snowmobile to Florence Lake. The road ends at the Florence Lake Picnic Area. The reservoir access points include the Florence Lake Boat Ramp and the Florence Lake Picnic Area. The USDA-FS recognizes the Florence Lake Trail, which runs along the east shore of Florence Lake. With the exception of dam structures and other project related facilities, the entire shoreline is open to non-motorized public access.

Boat Launches (including docks and marinas)

There is a single boat launch area at Florence Lake. It is located at the end of the access road to the lake. There is developed parking at the boat launch site. The boat ramp at the lake is paved at its upper end and the ramp surface changes to gravel or decomposed granite as it extends into the lake. Due to the wide variance in the water surface elevations at Florence Lake, the ramp essentially extends to the bottom of the lake. A ferry service is operated at the lake and provides transport across the lake to hikers and backpackers leading to the wilderness areas and the Pacific Crest Trail east of the lake. The Ferry is also used to transport people and supplies that are traveling to a private ranch located several miles upstream along the South Fork San Joaquin River.

Table REC 13-14 summarizes the summer survey results regarding satisfaction with boat launch facilities. The survey results indicate that:

- 93% of respondents rated their satisfaction with boat ramp availability to be acceptable (32.4% moderately acceptable and 60.6% highly acceptable).
- 80.9% indicated boat ramp parking availability to be acceptable (33.3% moderately acceptable and 47.6% highly acceptable).
- 87.2% of respondents indicated their satisfaction with boat ramp parking area conditions to be acceptable (39.5% moderately acceptable and 47.7% highly acceptable).

Campgrounds

There are no campgrounds on Florence Lake. Camping at Florence Lake is provided at the Jackass Meadows Campground that is operated by the USDA-FS/CLM. The

campground is located just downstream of the base of the dam and is a short distance from the boat launch and day use areas on the lake.

Table REC 13-15 summarizes the summer survey results regarding satisfaction with the campground facility. The survey results indicate that:

- 92.3% of respondents rated their satisfaction with campsite availability to be acceptable (12.3% moderately acceptable and 80.0% highly acceptable).
- 88% of respondents rated parking availability for camping as acceptable (21.0% moderately acceptable and 67.0% highly acceptable).
- 87.6% of respondents rated parking area conditions as acceptable (24.3% moderately acceptable and 63.3% highly acceptable).

Picnic Areas

The Florence Lake Day Use/Picnic Area is on the lake adjacent to the boat launch area.

Table REC 13-16 summarizes the summer survey results regarding satisfaction with the picnic facility. The survey results indicate that:

- 100% of respondents rated their satisfaction with the picnic site availability to be acceptable (15.2% moderately acceptable and 84.8% highly acceptable).
- 90.7% of respondents indicated picnic site parking availability was acceptable (14.1% moderately acceptable and 76.6% highly acceptable).
- 93.6% of respondents rated parking area conditions as acceptable (19.0% moderately acceptable and 74.6% highly acceptable).

Parking Areas

There is designated parking at the Florence Lake Day Use/Picnic Area, next to the boat launch area.

Trails

The Florence Lake Trail crosses the inlet of the South Fork San Joaquin River before heading east towards the Pacific Crest Trail. Moderate Diversion Pools – Access Facilities.

The moderate size diversion pools/forebays (Mono, Bear, Balsam Meadows, and Dams 4, 5 and 6 along Big Creek) have either limited or no development. Mono Diversion Pool/Forebay is the most developed with a campground/picnic area providing access to the diversion pond. Bear Diversion Pool is accessed by a 4-wheel drive route or by foot from the Pacific Crest Trail, and Balsam Forebay has a picnic area that is accessed by a hiking along a road that is closed to public vehicles. The Dam 4 and Dam 5 Diversion

Pools/Forebays do not have developed recreation facilities and are located along roads that are not open to public vehicular travel. However, the public may access these diversion pools/forebays by foot or bike. Dam 6 Diversion Pool/Forebay does have two stairways that provide angler access to the water.

Access facilities at each of the moderate size diversion pools/forebays are discussed in the following sections.

5.1.5 BALSAM FOREBAY

A developed picnic area provides shoreline access to Balsam Meadow Forebay (Figure REC 13-1). Access to the picnic area is from a developed parking area, which also functions as a Sno-Park in winter, located along Highway 168. Visitors choosing to recreate at the picnic area must hike from the parking area along an established trail, or a road which is closed to public vehicular travel. There are restrooms, but no boat launches, or campgrounds at Balsam Forebay. Balsam Forebay recreation facilities are summarized in Table REC 13-17.

Picnic Areas

The Balsam Forebay Day Use/Picnic Area located adjacent to forebay. Table REC 13-18 summarizes the summer survey results regarding satisfaction with the picnic area. The survey results indicate that:

- 100% of respondents rated their satisfaction with the picnic site availability to be acceptable (40.0% moderately acceptable and 60.0% highly acceptable).
- 100% of respondents indicated picnic site parking availability was acceptable (33.3% moderately acceptable and 66.7% highly acceptable).
- 100% of respondents rated parking area conditions as acceptable (66.7% moderately acceptable and 33.3% highly acceptable).

5.1.6 BEAR DIVERSION POOL/FOREBAY

Access to the Bear Diversion and Forebay is by driving along the Bear OHV Route 6S83, which originates from Kaiser Pass Road (Figure REC 13-5). The Bear Creek Trailhead originates at an undeveloped parking area adjacent to the forebay. An informal trail around the forebay provides access to anglers and connects on the other end to the Pacific Crest hiking trail. There are no developed boat launches, picnic areas, or campgrounds at the forebay.

5.1.7 MONO DIVERSION AND FOREBAY

The Mono Diversion and Forebay is located off of Kaiser Pass Road and access to the forebay shore is provided from the developed Mono Creek Campground/Picnic Area (Figure REC 13-5). Informal trails along the forebay provide access to the water's edge.

There are no developed boat launches at the forebay. Mono Diversion and Forebay recreation facilities are summarized in Table REC 13-19.

Campgrounds

The Mono Campground is located adjacent to the Mono Forebay and is operated by the USDA-FS/CLM. Table REC 13-20 summarizes the summer survey results regarding satisfaction with the campground facility. The survey results indicate that:

- 92.5% of respondents rated their satisfaction with campsite availability to be acceptable (27.5% moderately acceptable and 65.0% highly acceptable).
- 86.8% of respondents rated parking availability for camping as acceptable (23.7% moderately acceptable and 63.1% highly acceptable).
- 94.6% of respondents rated parking area conditions as acceptable (21.6% moderately acceptable and 73.0% highly acceptable).

Picnic Areas

The Mono Forebay Day Use/Picnic Area is located adjacent to the campground area and the forebay. Table REC 13-21 summarizes the summer survey results regarding satisfaction with the picnic facility. The survey results indicate that:

- 100% of respondents rated their satisfaction with the picnic site availability to be acceptable (14.3% moderately acceptable and 85.7% highly acceptable).
- 100.0% of respondents indicated picnic site parking availability was acceptable (14.3% moderately acceptable and 85.7% highly acceptable).
- 100.0% of respondents rated parking area conditions as acceptable (16.7% moderately acceptable and 83.3% highly acceptable).

5.1.8 DAM 4 DIVERSION AND FOREBAY

Dam 4 Diversion and Forebay is located along Big Creek near Powerhouse 1. Access to this location is by way of Cascada Road which is a controlled access road to the powerhouse (Figure REC 13-2). However, there are no developed recreation facilities at the forebay and shoreline vehicular access is limited due to the steep topography, and SCE's need for controlled access to the powerhouse, switchyard, and dam structure.

5.1.9 DAM 5 DIVERSION AND FOREBAY

Dam 5 Diversion and Forebay is located along Big Creek near Powerhouse 2 and access to this location is by way of the Upper Canyon Road, which is a controlled access road that is closed to public vehicular travel (Figure REC 13-6). The public may access the forebay by hiking or bicycling along the Upper Canyon Road. However,

there are no developed recreation facilities at the forebay and shoreline access is limited, due to the steep topography, lack of available parking, safety concerns for the public on the Upper Canyon Road, and SCE's need for security and controlled access to its powerhouse, switchyard and dam structures.

5.1.10 DAM 6 DIVERSION AND FOREBAY

Dam 6 Diversion and Forebay is located on the San Joaquin River near Powerhouse 8 and access to this location is by way of either the Upper or Lower Canyon Road (Figure REC 13-6), both are controlled access roads that are closed to public vehicular travel. The upstream end of the forebay can be accessed by USDA-FS Road 8S03 which is located off of Minarets Road. The public may travel along road 8S03 to the San Joaquin River where further public vehicular access is restricted by a locked gate. An unimproved parking area is located near the gate. The public may hike or bicycle along this road beyond the gate to access the forebay.

Access to the forebay shoreline is provided by two angler access stairways which lead from the road to the water's edge. A metal stairway provides access to the north shore of the forebay and is located at the upstream end of the forebay adjacent to the road 8S03 bridge crossing over the San Joaquin River. A wooden stairway provides access to the east shore of the forebay and is located along the non-public vehicular access portion of Road 8S03 approximately half the distance between the bridge crossing and Big Creek Powerhouse No. 8.

6.0 LITERATURE CITED

Southern California Edison. 2001. Final Technical Study Plan Package for the Big Creek Hydroelectric System Alternative Licensing Process. August 2001.

Southern California Edison. 2003. 2002 Technical Study Report Package for the Big Creek Hydroelectric System Alternative Licensing Process. Recreation Reports. October 2003.

TABLES

Table REC 13-1. Shaver Lake Access Facilities.

Campgrounds	Picnic Areas	Parking	Boat Launch Areas
Camp Edison Campground	Camp Edison Day Use Area	Camp Edison Day Use Area Parking	Camp Edison Boat Launch
Dorabelle Campground	Dorabelle Picnic Area	Dorabelle Picnic Area Parking	County Boat Launch at Sierra Marina
	Shaver Point Day Use Area	Shaver Point Day Use Area Parking	
	Road 1 Day Use Area	Road 1 Day Use Area Parking	
	Road 2 Day Use Area	Road 2 Day Use Area Parking	
	Eagle Point Boat Only Day Use Area		
	Dinky Creek Road Rest Area	Dinky Creek Road Rest Area Parking	

Table REC 13-2. Shaver Lake User Satisfaction with Boating Access Facilities.

Satisfaction	Availability of Boat Ramps Respondent Percentage	Parking Availability Respondent Percentage	Parking Area Condition Respondent Percentage
Highly Unacceptable	1.2	3.0	0.4
Moderately Unacceptable	3.6	7.6	3.8
Neutral	5.2	11.7	12.5
Moderately Acceptable	29.0	31.8	31.7
Highly Acceptable	61.1	45.8	51.7
Total Acceptable Responses	90.1	77.6	83.4
"N" = (total number of respondents)	252	264	265

Table REC 13-3. Shaver Lake User Satisfaction with Campground Accessibility.

Satisfaction	Availability of Campsites	Parking Availability	Parking Area Condition
	Respondent Percentage	Respondent Percentage	Respondent Percentage
Highly Unacceptable	1.4	1.3	1.3
Moderately Unacceptable	3.8	4.1	1.5
Neutral	5.6	8.7	9.0
Moderately Acceptable	27.1	26.2	29.1
Highly Acceptable	62.2	59.7	59.0
Total Acceptable Responses	89.3	85.9	88.1
"N" = (total number of respondents)	288	390	388

Table REC 13-4. Shaver Lake User Satisfaction with Picnic Area Accessibility.

Satisfaction	Availability of Picnic sites	Parking Availability	Parking Area Condition
	Respondent Percentage	Respondent Percentage	Respondent Percentage
Highly Unacceptable	0.0	1.2	0.0
Moderately Unacceptable	0.0	2.5	0.74
Neutral	3.9	8.1	8.5
Moderately Acceptable	23.4	22.4	24.2
Highly Acceptable	72.7	65.8	66.7
Total Acceptable Responses	96.1	88.2	90.9
"N" = (total number of respondents)	77	161	153

Table REC 13-5. Huntington Lake Access Facilities.

Campgrounds	Picnic Areas	Parking	Boat Launch Areas
Upper and Lower Billy Creek Campground	Bear Cove Picnic Area	Bear Cove Picnic Area Parking	Huntington Lake Resort Boat Ramp
Deer Creek Campground	Billy Creek Picnic Area	Billy Creek Picnic Area Parking	USFS Boat Ramp
College Campground	Deer Creek Picnic Area	Deer Creek Picnic Area Parking	
	Dowville Picnic Area	Dowville Picnic Area Parking	
Rancheria Campground	USFS Beach/Day Use	USFS Boat Ramp Parking Area	
Kinnikinnick Campground		Huntington Lake Resort Parking	
Catavee Campground		Eastwood Visitor Center Parking	
		Dam 3 Parking Area	

Table REC 13-6. Huntington Lake User Satisfaction with Boating Access Facilities.

Satisfaction	Availability of Boat Ramps Respondent Percentage	Parking Availability Respondent Percentage	Parking Area Condition Respondent Percentage
Highly Unacceptable	0.6	2.0	0.3
Moderately Unacceptable	2.4	4.3	2.8
Neutral	4.9	10.8	11.2
Moderately Acceptable	25.9	29.5	29.6
Highly Acceptable	66.2	53.4	56.1
Total Acceptable Responses	92.1	82.9	85.7

"N" = (total number of respondents)

328

352

358

Table REC 13-7. Huntington Lake User Satisfaction with Campground Accessibility.

Satisfaction	Availability of Campsites	Parking Availability	Parking Area Condition
	Respondent Percentage	Respondent Percentage	Respondent Percentage
Highly Unacceptable	2.7	2.3	1.9
Moderately Unacceptable	1.6	4.1	1.7
Neutral	5.1	8.7	8.4
Moderately Acceptable	23.3	27.3	27.4
Highly Acceptable	67.2	57.6	60.6
Total Acceptable Responses	90.5	84.9	88.0
"N" = (total number of respondents)	369	483	475

Table REC 13-8. Huntington Lake User Satisfaction with Picnic Area Accessibility.

Satisfaction	Availability of Picnic sites	Parking Availability	Parking Area Condition
	Respondent Percentage	Respondent Percentage	Respondent Percentage
Highly Unacceptable	0.0	3.2	1.6
Moderately Unacceptable	0.0	3.7	1.1
Neutral	3.2	9.6	12.5
Moderately Acceptable	20.8	20.2	19.0
Highly Acceptable	76.0	63.3	65.8
Total Acceptable Responses	96.8	83.5	84.8
"N" = (total number of respondents)	125	188	184

Table REC 13-9. Mammoth Pool Reservoir Access Facilities.

Campgrounds	Picnic Areas	Parking	Boat Launch Areas
Mammoth Pool Campground*	Windy Point Picnic Area	Windy Point Picnic Area Parking	Mammoth Pool Boat Launch
China Bar Campground**		Mammoth Pool Boat Launch Parking Area	Intake Road Boat Ramp Windy Point

*Mammoth Pool campground is not located on Mammoth Pool Reservoir.

**China Bar Campground is a "boat-in" camping area that is only accessible by boat.

Table REC 13-10. Mammoth Pool Reservoir User Satisfaction with Boating Access Facilities.

Satisfaction	Availability of Boat Ramps	Parking Availability	Parking Area Condition
	Respondent Percentage	Respondent Percentage	Respondent Percentage
Highly Unacceptable	0.0	15.8	5.7
Moderately Unacceptable	7.9	7.9	8.6
Neutral	0.0	7.9	11.4
Moderately Acceptable	34.2	31.6	31.4
Highly Acceptable	57.9	36.8	42.9
Total Acceptable Responses	92.1	68.4	74.3
"N" = (total number of respondents)	38	38	35

Table REC 13-11. Mammoth Pool Reservoir User Satisfaction with Campground Accessibility.

Satisfaction	Availability of Campsites	Parking Availability	Parking Area Condition
	Respondent Percentage	Respondent Percentage	Respondent Percentage
Highly Unacceptable	0.0	8.2	1.5
Moderately Unacceptable	4.9	8.2	9.1
Neutral	2.4	8.2	6.1
Moderately Acceptable	22.0	20.5	22.7
Highly Acceptable	70.7	54.8	60.6
Total Acceptable Responses	92.7	75.3	83.3
"N" = (total number of respondents)	41	73	66

Table REC 13-12. Mammoth Pool Reservoir User Satisfaction with Picnic Area Accessibility.

Satisfaction	Availability of Picnic sites	Parking Availability	Parking Area Condition
	Respondent Percentage	Respondent Percentage	Respondent Percentage
Highly Unacceptable	0.0	0.0	0.0
Moderately Unacceptable	0.0	0.0	0.0
Neutral	0.0	0.0	0.0
Moderately Acceptable	0.0	10.5	10.5
Highly Acceptable	100.0	89.5	89.5
Total Acceptable Responses	100.0	100.0	100.0
"N" = (total number of respondents)	10	19	19

Table REC 13-13. Florence Lake Access Facilities.

Campgrounds	Picnic Areas	Parking	Boat Launch Areas
Jackass Meadows Campground	Florence Lake Picnic Area	Florence Lake Picnic Area Parking	Florence Lake Boat Ramp

Table REC 13-14. Florence Lake User Satisfaction with Boating Access Facilities.

Satisfaction	Availability of Boat Ramps	Parking Availability	Parking Area Condition
	Respondent Percentage	Respondent Percentage	Respondent Percentage
Highly Unacceptable	1.4	3.6	0.0
Moderately Unacceptable	4.2	4.8	3.5
Neutral	1.4	10.7	9.3
Moderately Acceptable	32.4	33.3	39.5
Highly Acceptable	60.6	47.6	47.7
Total Acceptable Responses	93.0	80.9	87.2
"N" = (total number of respondents)	71	84	86

Table REC 13-15. Florence Lake User Satisfaction with Campground Accessibility.

Satisfaction	Availability of Campsites	Parking Availability	Parking Area Condition
	Respondent Percentage	Respondent Percentage	Respondent Percentage
Highly Unacceptable	3.1	0.0	1.1
Moderately Unacceptable	1.5	1.7	2.8
Neutral	3.1	10.2	8.5
Moderately Acceptable	12.3	21.0	24.3
Highly Acceptable	80.0	67.0	63.3
Total Acceptable Responses	92.3	88.0	87.6
"N" = (total number of respondents)	65	176	177

Table REC 13-16. Florence Lake User Satisfaction with Picnic Area Accessibility.

Satisfaction	Availability of Picnic sites	Parking Availability	Parking Area Condition
	Respondent Percentage	Respondent Percentage	Respondent Percentage
Highly Unacceptable	0.0	0.0	0.0
Moderately Unacceptable	0.0	3.1	0.0
Neutral	0.0	6.3	6.3
Moderately Acceptable	15.2	14.1	19.0
Highly Acceptable	84.8	76.6	74.6
Total Acceptable Responses	100.0	90.7	93.6
"N" = (total number of respondents)	33	64	63

Table REC 13-17. Balsam Forebay Access Facilities.

Campgrounds	Picnic Areas	Parking	Boat Launch Areas
None	Balsam Forebay	Balsam Sno-Park Parking Area	None

Table REC 13-18. Balsam Forebay User Satisfaction with Picnic Area Accessibility.

Satisfaction	Availability of Picnic sites	Parking Availability	Parking Area Condition
	Respondent Percentage	Respondent Percentage	Respondent Percentage
Highly Unacceptable	0.0	0.0	0.0
Moderately Unacceptable	0.0	0.0	0.0
Neutral	0.0	0.0	0.0
Moderately Acceptable	40.0	33.3	66.7
Highly Acceptable	60.0	66.7	33.3
Total Acceptable Responses	100.0	100.0	100.0
"N" = (total number of respondents)	5	3	3

Table REC 13-19. Mono Diversion and Forebay Access Facilities.

Campgrounds	Picnic Areas	Parking	Boat Launch Areas
Mono Creek Campground	Mono Creek Picnic Area	Mono Creek Parking Area	None

Table REC 13-20. Mono Diversion and Forebay User Satisfaction with Campground Accessibility.

Satisfaction	Availability of Campsites	Parking Availability	Parking Area Condition
	Respondent Percentage	Respondent Percentage	Respondent Percentage
Highly Unacceptable	2.5	0.0	0.0
Moderately Unacceptable	2.5	5.3	5.4
Neutral	2.5	7.9	0.0
Moderately Acceptable	27.5	23.7	21.6
Highly Acceptable	65.0	63.1	73.0
Total Acceptable Responses	92.5	86.8	94.6
"N" = (total number of respondents)	40	38	37

Table REC 13-21. Mono Diversion and Forebay User Satisfaction with Picnic Area Accessibility.

Satisfaction	Availability of Picnic sites	Parking Availability	Parking Area Condition
	Respondent Percentage	Respondent Percentage	Respondent Percentage
Highly Unacceptable	0.0	0.0	0.0
Moderately Unacceptable	0.0	0.0	0.0
Neutral	0.0	0.0	0.0
Moderately Acceptable	14.3	14.3	16.7
Highly Acceptable	85.7	85.7	83.3
Total Acceptable Responses	100.0	100.0	100.0
"N" = (total number of respondents)	7	7	6

FIGURES

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