College Campground Rehabilitation Project

Environmental Assessment

July 2012

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1.0 INTRODUCTION

The United States Department of Agriculture-Forest Service (USDA-FS) has prepared the College Campground Rehabilitation Project (Project) Environmental Assessment (EA) to provide analysis of the direct and indirect effects of the No-Action Alternative and construction-related effects of the College Campground Rehabilitation Project (Proposed Action) on air quality, biological, cultural, recreation, and vegetation and silviculture resources. These are the resources that may be impacted from implementation of site-specific designs for rehabilitation of the College Campground.

Implementation of the College Campground Rehabilitation Project is required as part of the collaboratively agreed upon Settlement Agreement (SA) and USDA-FS 4(e) conditions developed during the Big Creek Alternative Licensing Process (ALP) for the Big Creek Nos. 1 and 2 Project (FERC Project No. 2175). The Big Creek Nos. 1 and 2 Project is one of four Big Creek Projects that are part of the Big Creek ALP and are currently undergoing relicensing by the Federal Energy Regulatory Commission (Commission or FERC).

The rehabilitation of College Campground has undergone environmental analyses by the Commission in the Final Environmental Impact Statement (FEIS) for Hydropower Licenses: Mammoth Pool Project—FERC Project No. 2085; Big Creek Nos. 1 and 2 Project—FERC Project No. 2175; Big Creek Nos. 2A, 8, and Eastwood Project—FERC Project No. 67; and Big Creek No. 3 Project—FERC Project No. 120 (FERC 2009). This document is part of the project record that supports the Commission's prospective issuance of a new license for the four projects. (The license is expected to be issued in 2012.) The document may be viewed on the FERC e-library website: http://www.ferc.gov/docs-filing/eLibrary.asp. Analysis included in the FEIS is pertinent to the rehabilitation of College Campground and is hereby incorporated by reference into this analysis. Information in the FERC FEIS incorporated into this document includes the analysis of Big Creek ALP level aquatic resources, terrestrial resources, threatened and endangered species, recreation, cultural resources, land use and aesthetic resources, air quality and noise and the project's cumulative effects on these resources (see Appendix C for the FEIS Executive Summary that lists the environmental impacts of the FEIS Project of which the rehabilitation of College Campground is only a small component). A summary of the key relicensing activities, including FERC Project FEIS scoping, is provided in Table 1.

The Commission's FEIS includes detailed environmental analyses of the Protection, Mitigation, and Enhancement (PM&E) measures recommended for inclusion in the new project licenses. These measures included implementation of a program to rehabilitate recreation facilities located in the vicinity of the four Big Creek ALP Projects. College Campground is one of the facilities identified for rehabilitation in the program. Rehabilitation includes reconditioning or replacement of an existing facility to restore the functionality of the site.

As campground rehabilitation is occurring in advance of FERC making a decision based on the FEIS that is completed and issuance of the new license, the Forest Service is the decision-maker in allowing the rehabilitation to move forward at this time. The Forest

Service, as the federal decision-maker, must complete USDA-FS compliant National Environmental Policy Act (NEPA) analysis prior to making a decision. NEPA regulations are clear that other environmental analysis documents covering the same action can be incorporated by reference and summarized in another agency's document to avoid duplication of analysis. The USDA-FS is utilizing the FERC FEIS for this purpose.

USDA-FS proposes to implement the following actions to rehabilitate campground facilities and to protect and/or restore sensitive biological resources:

- Replace, recondition, and develop College Campground facilities and amenities including:
    - Campsites and associated amenities (e.g., picnic tables, fire rings, and food storage containers);
    - Restroom and waste management facilities;
    - Water and electrical utilities;
    - Campground roads and trails;
    - Parking facilities (i.e., campsite parking spurs and overflow parking areas);
    - Directional and informational signage; and
    - Vista points
- Upgrade a percentage of College Campground facilities and amenities to meet Forest Service Outdoor Recreation Accessibility Guidelines (FSORAG), Forest Service Trail Accessibility Guidelines (FSTAG), and Architectural Barriers Act (ABA) Accessibility Standards (ABAAS).
- Remove and/or relocate facilities as necessary to protect biologically sensitive resources in the campground.

1.1 PURPOSE AND NEED FOR ACTION

The existing College Campground facilities are in a deteriorated state and are in need of rehabilitation. The purpose of this Proposed Action is to rehabilitate College Campground to improve the conditions of the facility, meet accessibility standards and to satisfy the requirements of the SA and USDA-Fs 4(e) conditions while preserving or enhancing public safety, and the campground's scenic character and recreation setting. Implementation of these actions would provide aesthetically pleasing year-round seasonal services at College Campground that will meet the public's recreation needs over the term of the new license for the Big Creek Nos. 1 and 2 Project.

1.2 DECISION NEEDED

The District Ranger of the High Sierra Ranger District on the Sierra National Forest (SNF) is the responsible official for determining whether the Proposed Action would have a significant effect on the human environment. The decision needed is whether to allow rehabilitation of College Campground as described in the Proposed Action. The

District Ranger would determine whether a Finding of No Significant Impact (FONSI) is applicable.

1.4 REGULATORY SETTING

College Campground and adjacent lands administered by the Sierra National Forest are managed in accordance with the Sierra National Forest Land and Resource Management Plan (LRMP), as amended (USDA-FS. 1992). The purpose of the LRMP and its amendments is to guide the integrated protection and use of Forest resources. College Campground falls within the LRMP Analysis Area 47 (Huntington Lake) that is designated as a Developed Recreation Management Area (USDA-FS. 1992).

The following LRMP Forest-wide Goals and Objectives, Future Conditions, and Management Standards and Guidelines (S&Gs) apply to the College Campground Rehabilitation Project. The S&Gs are categorized and numbered per the sections listed in the LRMP.

4.2 Forest-wide Goals and Objectives

1. Provide a broad spectrum of dispersed and developed recreational opportunities in accord with identified needs and demands and meet Recreation Opportunity Spectrum (ROS) class objectives shown on ROS element maps.

29. Encourage use of the Forest by disadvantaged, handicapped and minority persons.

4.3 Future Conditions

4.3.4 Recreation

There will be a moderate increase in the number of developed sites to accommodate increased use. Some new development will be done by existing commercial permittees and/or licensees and through appropriated dollars as a requirement for new or relicensed water projects. Development emphasis will be in high use areas and in the 5 Rural and Roaded Natural Recreational Opportunity Class zones. Full service management will be provided in most developed sites. Existing sites will be rehabilitated.

4.3.5 Visual Resources

The visual resources will be managed for the highest quality in areas significant to recreation.

4.3.12 Integrated Pest Management

Pest management activities will be moderate to high, particularly in developed recreational areas and on land managed for timber production.

4.4 Management Prescriptions

4.4.7 Developed Recreation

This prescription emphasizes developed recreational opportunities at levels of development and intensities expressed by management direction and standards and guidelines. These opportunities include public campgrounds, picnic areas, visitor information centers, vistas, resorts, organization camps and recreation residences. Rural and road-accessible natural recreational opportunities are stressed. Diseased and hazardous trees are removed from the developed site.

4.5 Management Standard and Guidelines

4.5.2.1 Recreation

1. Provide moderate increases in intensively used recreational developments.
3. Encourage use of Forest by disadvantaged, disabled, and minority persons. Provide for their needs when designing facilities.
6. Increase capacity of developed sites about 7% by 2000**.** Use the FERC hydroelectric licensing/relicensing process to develop recreational facilities necessary to accommodate project-induced recreational needs.

4.5.2.2 Visual Resources

26a. Manage activities affecting vegetative cover type or structure to be visually buffered after completion.
26c. Timber removals will generally be limited to sanitation and salvage, with complete slash treatment.
26d. Design and install structures to be compatible with and subordinate to the landscape's natural characteristics.
26e. Roads are to be designed and constructed to be subordinate to the landscape's natural characteristics. Sierra Nevada Forest Plan Amendment

Incidental Removal of Vegetation and Down Woody Material

Incidental removal of vegetation and down woody material for activities such as administering special use permits; maintaining recreation developments; constructing, reconstructing, and maintaining roads, trails, and rights of way; expanding resorts based on approved development plans; and removing trees that present imminent safety hazards may deviate from vegetation management standards and guidelines.

Road Construction, Reconstruction, and Relocation

To protect watershed resources, meet the following standards for road construction, road reconstruction, and road relocation: (1) design new stream crossings and replacement stream crossings for at least the 100-year flood, including bedload and debris; (2) design stream crossings to minimize the diversion of streamflow out of the channel and down the road in the event of a crossing failure; (3) design stream crossings to minimize disruption of natural hydrologic flow paths, including minimizing diversion of streamflow and interception of surface and subsurface water; (4) avoid wetlands or minimize effects to natural flow patterns in wetlands; and (5) avoid road construction in meadows.

Standards and Guidelines Associated with Riparian Conservation Objective (RCO) #2:

Maintain and restore the hydrologic connectivity of streams, meadows, wetlands, and other special aquatic features by identifying roads and trails that intercept, divert, or disrupt natural surface and subsurface water flow paths. Implement corrective actions where necessary to restore connectivity.

Standards and Guidelines Associated with RCO #4:

Assess roads, trails, OHV trails and staging areas, developed recreation sites, dispersed campgrounds, special use permits, grazing permits, and day use sites during landscape analysis. Identify conditions that degrade water quality or habitat for aquatic- and riparian-dependent species. At the project level, evaluate and consider actions to ensure consistency with standards and guidelines or desired conditions.

1.5 NEPA Process and Public involvement

NEPA requires that a federal agency, when preparing an EA, seek the involvement and input of other agencies and the public whenever possible. The FERC FEIS (including the assessment of the rehabilitation of College Campground) was developed based on the input of a number of stakeholders in the Big Creek ALP, including governmental resource agencies, non-governmental organizations, Native American tribes, and interested public members. A total of 360 meetings were held during the relicensing process for the development of the SA and the PM&E measures, as well as to support USDA-FS in the development of their 4(e) Conditions (Table 1). The Project has been posted on the Sierra National Forest website on the Schedule of Proposed Actions beginning January 1, 2012.

The SNF posted the preliminary EA for public review on the SNF website for 30 days on April 30, 2012 and no public comments were received.

1.6 Potential Issues and Permitting Requirements

The FEIS for the Big Creek ALP (FERC 2009) assesses the potential effects of the recreation rehabilitation projects required by the Recreation Management Plan included in the Big Creek ALP SA (SCE 2007a). As described in the FEIS, the following

guidelines will be used in implementing each rehabilitation project, including the rehabilitation of College Campground:

- Relocate and reconstruct campsites, picnic sites, parking spurs, and restroom structures, if located in environmentally or culturally sensitive areas.
- Rehabilitate and stabilize erosive areas and inoperative water drainage facilities (culverts). At locations where ongoing resource damage occurs, the ground surface would be re-graded and re-vegetated with native materials to stabilize the area and prevent further resource damage.
- Clear overgrown vegetation, if necessary. Thinning of trees and removal of overgrown brush may be conducted to improve accessibility and safety at the campground.
- Develop universally accessible facilities. The number of assets at each developed recreational facility that would need to be upgraded would be determined and reviewed with the Forest Service. Universally accessible facilities would be located where the topography is relatively flat and near other developed facilities, such as restrooms.

This EA provides additional analysis of potential effects of the Proposed Action and No-Action Alternative on air quality, biological, cultural, recreational, and vegetation/silviculture resources not analyzed in the FEIS, based on internal and external scoping. The USDA-FS considered analyzing hydrologic resources in this document; however, with the hydrologic resources protection measures included in the Proposed Action (Measures 2 and 3) it has been determined that potential impacts to hydrologic resources are negligible and, therefore, analysis is not required. The USDA-FS also considered analyzing aesthetic (scenery/visual) resources in this document. However, the concerns related to visual resources (i.e., construction-related tree removal and stump heights) were addressed in the Engineering Design Plans (Construction Plans) to comply with the Retention visual quality objective (VQO) and other LRMP visual resources management direction specified under the Regulatory Setting section of this document and, therefore, analysis is not required. The following potential issues were used to determine the range of alternatives to be evaluated and analyzed for environmental effects:

- Construction activities and ground disturbance could potentially result in temporary disturbance of recreation opportunities and of special-status biological resources.
- Tree removal associated with construction could potentially result in temporary disturbance to special-status species or their habitat.
- Rehabilitation of the campground could potentially affect attributes that may be contributing elements of the Sierra National Forest Historic Recreation Facilities Discontiguous District which may be eligible for listing in the National Register of Historic Places (National Register).

If it is determined that the Proposed Action would result in impacts to any species listed under the federal Endangered Species Act (ESA), USDA-FS would initiate inter-agency consultation, as appropriate.

2.0 PROPOSED ACTION AND ALTERNATIVES

This section provides information on the regional setting and project Location. It also provides a description of the alternatives being analyzed – the No-Action Alternative and the Proposed Action. Avoidance and protection measures to be implemented as part of the Proposed Action are also described.

2.1 REGIONAL SETTING AND PROJECT LOCATION

The Project is located in the San Joaquin Watershed in Fresno County. The Project is on SNF lands, which are administered by the USDA-FS (Figure 1). The land is managed for multiple uses, including visual resource management, hunting programs, and year-round recreation. The closest population center is the town of Big Creek on the western slope of the Sierra Nevada, approximately 65 miles northeast of the City of Fresno, California.

College Campground is located on the northeastern shore of Huntington Lake near Highway 168. College Campground, with an approximately 2-acre footprint, is a developed campground with 11 campsites, as shown in Figure 3. Facilities at the campground are designed to support tent camping only. There are no Recreational Vehicle (RV) hookups at the site. The overall condition and accessibility of College Campground facilities was evaluated as part of the Recreation Resources Analysis and Facility Inventory Assessment; and compliance with Americans with Disabilities Act (ADA) Assessment technical studies conducted for the Big Creek ALP (SCE 2003).

Huntington Lake is a man-made, high-elevation reservoir that stores water from backcountry lakes and diversions. In addition to flows from Ward Tunnel and Portal Powerhouse, Huntington Lake is supplied by several named and unnamed tributary streams, including Big Creek, Rancheria Creek, Potter Creek, Bear Creek, Billy Creek, Line Creek, Home Camp Creek, and Coon Creek. The Kaiser Wilderness is located immediately north of the lake. The elevation of Huntington Lake is approximately 7,000 feet above mean sea level (msl). The primary road access to Huntington Lake is via State Highway 168, Sierra Heritage National Forest Scenic Byway. Figure 2 provides a map of the Huntington Lake vicinity and the surrounding recreation facilities.

2.2 NO-ACTION ALTERNATIVE

This discussion is provided in compliance with NEPA, which requires inclusion of a No-Action Alternative. Under the No-Action Alternative, the rehabilitation activities described in the Proposed Action would not be implemented and the College Campground would continue to be used in its current condition. The No-Action Alternative does not meet the Project objectives, but is included as a baseline for the purpose of comparing the effects of the Proposed Action. Refer to Figure 3 for a schematic of the existing campground, including the current location of campsites,

roads, and campground facilities and amenities. The following describes the current conditions of College Campground (No-Action Alternative).

2.2.1 Campsites

The campground currently has 11 single-capacity campsites. Picnic tables, fire rings with grill grates, and bear-proof food storage containers are available at each site. All campsites have an adjacent parking spur.

2.2.2 Roads and Overflow Parking

A one-way, one-lane road that enters/exits off Huntington Lake Road provides vehicular access to College Campground. This campground road is paved and is approximately 12 feet wide. However, the existing pavement is exhibiting multiple forms of failure such as rutting, fatigue cracking, and surface bleeding. The campground has a 20-foot-by-20-foot overflow parking area for cars.

2.2.3 Storm Water Drainage

There are no existing culverts within College Campground. There is a single 18-inch culvert located under Huntington Lake Road and discharges storm water runoff north of the campground entrance.

2.2.4 Restroom Facilities

College Campground currently has two restroom facilities that house a total of six toilets. This includes one vault toilet building with two toilets and one flush toilet building with four toilets. A septic system is associated with the flush toilet building.

2.2.5 Trash Enclosures

The campground currently has two existing trash enclosures. The trash enclosures are simple concrete slabs with a wooden fence structure surrounding three sides of the slab. The trash enclosures are currently in poor condition.

2.2.6 Water Distribution System

The existing water system in College Campground is supplied by a larger community water system. The water supply line runs east, along the south side of Huntington Lake Road, into the west side of the campground. Upon entering the campground, the underground water distribution system supplies water to the flush toilet building and three existing water faucets. A drain valve for the campground water system is located between the campground and the lake.

2.2.7 Electrical System

Power within the campground is supplied from a large overhead power line that runs along the north side of Huntington Lake. This power line supplies electricity to the existing flush and vault toilet buildings.

2.2.8 Gates

One existing gate controls access to College Campground. The gate is a standard Forest Service single-bar gate that is painted dark brown.

2.2.9 Trails

College Campground has several existing trails, including one trail that connects campsite #3 to the flush bathroom facility, and one trail that provides access from the campground to Huntington Lake. There are also several existing informal paths that provide access in and around the campground to Huntington Lake. Some of these paths run through an existing wetland area located on the eastern side of the campground.

2.2.10 Signage

Existing signage at the College Campground includes a standard USDA-FS campground entrance sign, informational signage (bulletin board), directional signage along the roads, and campground number markers.

2.3 PROPOSED ACTION

This section describes specific construction activities associated with the removal, replacement, and/or rehabilitation of existing College Campground facilities, including campsites, roads and parking areas, a storm water drainage ditch, restroom facilities, trash enclosures, water distribution system, electrical system, gates, trails, vista points, signage, and construction-related tree removal.

Figure 4 provides an engineering site plan for the campground. Photographs and schematics of proposed new facilities are provided as Appendix A. The proposed construction schedule is included as Table 2.

During the construction period, existing campsites or other previously disturbed ground within College Campground would serve as staging areas for construction equipment and materials. Ground-disturbing activities associated with the Proposed Action may include, but are not limited to, timber removal, asphalt removal, re-grading, leveling, trenching, widening, lengthening, and/or resurfacing. Table 3 provides a list of construction equipment that would be used for the implementation of the Proposed Action. Asphalt removed from the existing paved roads would be recycled onsite and used as a base for the roads. Timber removed would be removed off site and either chipped or burned.

2.3.1 Campsites

The Proposed Action would require the rehabilitation and replacement of the existing College Campground campsites and associated parking spurs to update campground facilities, and meet current accessibility standards. Following completion of the Proposed Action, College Campground would have a total of ten campsites, two of which would be designed as universally accessible sites (i.e., consistent with FSORAG and ABAAS guidelines). The ten campsites would include:

- Eight single-capacity sites (two universally accessible),
- Two double-capacity sites.

Rehabilitation of the campsites would include the following specific actions:

- Retain the eight existing single-capacity sites,
- Combine three existing single-capacity sites into two double-capacity sites.

Campsite and parking spur removal would require the removal and disposal or off-site storage of existing picnic tables, food storage containers, and fire rings. All material would be either disposed of at an approved refuse disposal site, or stored by USDA-FS in an existing storage facility. All campsites would be regraded using earth-moving equipment (e.g., motor graders and excavators) to restore natural contours or to level the site to meet accessibility standards and to better conform to existing topography.

Rehabilitation of a single-capacity campsite would include development of a camp living area (approximately 25 feet wide and 18 feet long), tent pad area (approximately 16 feet wide and 16 feet long), and a parking spur (approximately 10 to 16 feet wide and 30 to 40 feet long). The new double-capacity campsites would include a camp living area (approximately 30 feet wide and 26 feet long), two tent pad areas (each approximately 16 feet wide and 16 feet long), and a parking spur (approximately 20 to 36 feet wide and 30 to 40 feet long).

The rehabilitated campsite living areas would be composed of compacted aggregate and equipped with new universally accessible picnic tables, bear-proof food storage containers, and fire rings. Tent areas would consist of compacted onsite soils. Parking spurs associated with each site would be paved with bituminous asphalt. Access routes to restrooms and parking facilities from the accessible campsites would comply with universally accessible slope and surface requirements.

2.3.2 Roads and Parking Areas

The Proposed Action would require reconstruction of the existing campground road and entrance. The existing asphalt would be removed, ground, and re-compacted to form the composite base for the new road. The new composite base would follow the existing road grades except for several areas that would require minimal re-grading to conform to current safety design criteria. The new asphalt roads will include a 20-foot-wide two-lane entrance road and a 12-foot-wide one-lane campground road.

Under the Proposed Action the existing overflow parking area would be removed and a new parking area that includes five 10-foot by 20-foot parking spaces, including one van accessible parking stall, would be developed. Materials used for the parking area would be the same as those described above for the roads.

2.3.3 Storm Water Drainage

A single 18-inch culvert is located under Huntington Lake Road and discharges storm water runoff north of the campground entrance. To prevent this storm water from

draining into the campground, a new rock-lined ditch would be constructed from the outlet of the culvert and around the north-eastern perimeter of the campground where storm water will be allowed to infiltrate into the ground. The new drainage ditch will be approximately 282 feet long, 4 feet wide, 2 foot deep.

2.3.4 Restroom Facilities

Two existing restroom facilities, one flush and one vault, would be removed and replaced with one flush and one vault that meet current accessibility standards. The new flush restroom facilities would house a total of two toilet seats and the new vault restroom facility would also house a total of two toilet seats.

Prior to demolition and removal of the existing restroom facilities, each vault or septic tank would be pumped and waste materials would be removed from the site and disposed of by a permitted septic hauler. Each building would then be demolished using an excavator. Materials would be loaded into a dump truck and disposed of at a USDA-FS approved location. Following demolition, the lid of the vault or septic tank would be removed, and disposed of at an approved facility. Exposed vault or septic tank walls would then be collapsed.

The absorption fields of the existing flush toilet facility would be abandoned in place. The construction of an absorption field for the new flush toilet facilities would be designed to avoid the existing absorption field where possible.

The new restroom facilities would be constructed as pre-fabricated concrete buildings. The buildings would have a peaked, concrete roof with simulated delta ribbed metal. The base of the building would have a unique rock texture, and the walls would have wood-like, textured paneling in light, natural colors (i.e. beige, browns, and grays). The buildings would include cast-in doors and windows, directional outdoor lighting, and roof-top ventilation pipes or exhaust fans. All buildings would meet current accessibility standards.

The flush toilet building would have a footprint of 17 feet by 10 feet, and would reach a height of 13 feet at the peak. The flush toilet building would sit on a 6-inch, compacted, aggregate base. The two-seat flush toilet building would be plumbed into one 1,500-gallon septic tank. The septic tank would be a pre-cast concrete septic tank with at least one baffle, and would include an effluent filtration screen. The septic tank effluent would then flow into an absorption field, designed for the soil and site characteristics of the Project area.

The vault toilet building would have a footprint of 15 feet by 12 feet, and would reach a height of 12 feet at the peak. The vault toilet building would sit on two 1,000-gallon vault lined with a cast-in ABS plastic liner. The vault would slope to the rear of the building, where an access hatch would be located for pumping the waste.

2.3.5 Trash Enclosures

Under the Proposed Action, the two existing trash enclosures would be removed. The wooden enclosures around the trash bins would be demolished, and the concrete slab

would be broken up and removed. Two new enclosures would be constructed adjacent to each of the restroom facilities. Each would consist of a 10-foot by 12-foot concrete slab with a 5-foot-high wooden enclosure along three sides.

2.3.6 Water Distribution System

As a part of the College Campground rehabilitation, the existing distribution system and features within the campground would be abandoned in place. Any features that are above ground or exposed during construction would be removed and disposed of. The existing water supply line running into the west side of the campground will continue to be used to supply water to the campground.

Under the Proposed Action, approximately 250 linear feet of HPC piping would be installed underground for the water distribution system. HPC piping would also be used for lateral connections from the main water lines to restroom facilities and water spigots. The water system would also include gate valves, ball valves, air release valves, drain valves and pressure reducing valves throughout the system as necessary. Installation of the pipe would require digging trenches (e.g., using a trencher) approximately 2.5 feet wide and approximately 2 to 3 feet deep. Four new water spigots, including two stand-alone spigots and two spigots adjacent to restroom facilities, would be installed. A gravel drain would be constructed at the base, and filled with soil and gravel. A pipe and water faucet would be attached to posts and to a concrete bowl that would channel the water and allow it to leach into the gravel drain.

2.3.7 Electrical System

Under the Proposed Action, a new transformer and electrical panel would be installed near the existing overhead primary lines. From this point, approximately 320 feet of new power line would be trenched underground to the new flush and vault toilet buildings. Installation of the system would require digging trenches (e.g., using a trencher) approximately 2.5 feet wide and approximately 2 to 3 feet deep. After installation, any soil removed would be replaced.

2.3.8 Gates

Under the Proposed Action, the existing entrance gate will be replaced (similar style to the existing gate). The gate would be replaced in a similar location and would provide a similar function of restricting vehicle access to the campground.

2.3.9 Trails

Under the Proposed Action, the one existing trail would be repaired and upgraded and two new trails would be developed. This would include the following specific actions:

- Develop an approximately 50-foot-long universally accessible trail from campsite #3 to the flush restroom facility. This trail would be would be approximately three feet wide and would comply with FSORAG, and would be constructed with hardened aggregate to provide a firm and stable surface.

- Repair and upgrade the existing 120-foot-long trail from the campground road to Huntington Lake. This trail would meet current FSORAG guidelines for Outdoor Recreation Access Routes (ORAR), and would be approximately 5 feet wide and composed of a hardened aggregate base.

- Develop a loop lake trail starting from the campground road just before the overflow parking area that continues toward Huntington Lake (intersecting with the end of the existing trail described above) and loop back to the campground road near campsite #4. The trail would be approximately 520 feet long and approximately 5 feet wide and composed of a hardened aggregate base. This trail would also meet ORAR FSORAG requirements.

In addition, rehabilitation of the existing trail and construction of two new trails under the Proposed Action will direct recreational users and allow for several existing informal trails that are located in the wetland area east of the campground to return to their native condition. The proposed action also includes installing removable bollards in front of the trail the crosses the wetland area east of the campground to prevent vehicular access during the recreation season. The trail is a snowmobile trail, so the removable bollards would be removed during the winter recreation season.

2.3.10 Vista Points

Two new vista points would be developed along the loop lake trail to provide scenic views of Huntington Lake. Each vista point would be approximately 25 feet by 10 feet and consist of two benches and two wheelchair-accessible seating areas. The ground surface would be constructed with hardened aggregate to provide a firm and stable surface.

2.3.11 Signage

New signage would be installed within the Project area for the purpose of directing traffic around the campground road loop and would include (but is not limited to) speed limit, campground number markers, and stop signs. In addition, new entrance, accessibility, bulletin board, and trail signs would also be installed within the campground to replace or supplement the existing signage. Signs would be constructed from suitable materials (i.e., wood, metal, or recycled plastic) in accordance with all state and federal specifications.

2.3.12 Construction Related Tree Removal

The rehabilitation of College Campground (including a two-foot-buffer around the construction footprint) will require the removal of approximately 93 trees. This includes an estimated 13 trees measuring between 8 and 11 inches diameter at breast height (DBH), an estimated 59 trees between 12 and 23 inches DBH, 20 trees between 24 and 35 DBH, and one tree greater than 36 inches DBH.

2.3.13 Slash Removal as a Result from Related Tree Removal

All slash from the related tree removal and construction activities will be removed from the campground facility.

2.3.14 Proposed Schedule

Currently SCE intends to begin construction on College Campground in the summer or early fall of 2012. The project is expected to take approximately 6 to 8 weeks to complete. The proposed Project schedule is included as Table 2.

2.3.15 Measures Built Into the Proposed Action to Avoid or Minimize Effects

Provided below is a summary of measures that have been built into the Proposed Action to minimize effects to biological, cultural, and recreation resources. Details on potential effects to these resources are provided in Section 3.0.

Measure 1: General Construction Measures

- All contractors and equipment operators will be made aware of the ecological values of the site, and will be given instructions to comply with the avoidance and protection measures, and best management practices listed in this document.
- Construction activities will have the required state permit (re: 404 and Stormwater Pollution and Prevention Plan and 404 – Water Quality permits) and shall be limited to a designated work area (including the work corridor and staging area). The work area shall be clearly identified on the construction drawings and shall be staked and flagged where necessary prior to initiation of construction activities.
- Construction shall be limited to the hours between 7 a.m. and 7 p.m. on weekdays.

Measure 2: Avoidance and Protection of Drainages and Seasonal Wetland Habitats.

The emergent wetland area identified in the *Preliminary Jurisdictional Determination Report for the College Campground Rehabilitation Project* (Appendix B) will be flagged prior to initiation of construction activities. No vehicles or construction equipment may enter this area during implementation of the Proposed Action.

Measure 3: Implementation of USDA-FS Best Management Practices (BMPs)

Updated BMPs from the Soil and Water Conservation Handbook (FSH2509.22 Chapter 10, R5 Supplement, 2011) will be incorporated in the planning and implementation of the Proposed Action. A complete list of applicable BMPs is included in Appendix D. Based on a Managing Agency Agreement (MAA) with the State Water Quality Control Board, implementing and monitoring BMPs is the method by which the Forest Service complies with the Clean Water Act in California.

Measure 4: Avoidance of Active Raptor Nests.

- A preconstruction survey will be conducted within 30 days prior to initiation of construction by a qualified biologist to determine if there are active raptor nests present within 500 feet of the Proposed Action.
- If the biologist determines that the area surveyed does not contain any active nests, construction activities will proceed as scheduled.
- If active raptor nests are found, construction shall not occur within 500 feet of an active nest until the young have fledged, as determined by a qualified biologist, or until site-specific avoidance and protection measures are agreed upon with the appropriate resource agencies.

Measure 5: Prevention of the Introduction or Spread of Noxious Weeds

- Field vehicles and equipment previously used on non-paved surfaces outside of the watershed will be thoroughly cleaned before entering the Project area. These vehicles will be washed with power or high pressure washers to remove soil, seeds, vegetation, or other seed bearing material before the equipment enters the Project area.

Measure 6: Accidental Discovery of Archaeological Resources

In the unlikely event that previously unknown or unexpected archaeological artifacts, features, or cultural deposits are discovered during construction or rehabilitation of the College Campground facilities, all earth-moving activity within and around the immediate discovery area would be diverted until a qualified archaeologist can assess the nature and significance of the find. The discovery would be treated in accordance with the *Big Creek Hydroelectric System Historic Properties Management Plan* (HPMP) (SCE 2005). The HPMP requires that the location of discovered resources are reported to appropriate authorities; that any activities with the potential to disturb the resource are halted until a determination is made as to how to proceed; and that the protocol detailed in the HPMP's "Unanticipated Discovery Plan" is followed.

Measure 7: Accidental Discovery of Human Remains

In the event that human remains are discovered during project construction, operations or maintenance activities at the College Campground, further disturbances and activities shall cease in any area or nearby area suspected to overlie remains and the County Coroner contacted. If the remains are thought to be Native American, SCE will comply with the Native American Graves Protection and Repatriation Act (NAGPRA) pursuant to 25 U.S.C. 3001 et seq. and implementing regulations at 43 CFR Part 10. SCE will comply with the current USDA-FS NAGPRA protocol.

Measure 8: BMP Compliance

Comply with all applicable watershed standards and guidelines from the SNFPA ROD (S&Gs #95-124) (USDA-FS 2004), the existing SNF- LRMP direction (S&Gs #120-131) (USDA-FS 1992), and design measures to protect water quality and ensure watershed

health that are detailed by R5 FSH 2509.22 - Soil and Water Conservation Handbook; CHAPTER 10 - Water Quality Management Handbook; Amendment No.: 2509.22-2011-1 (USDA-FS 2011).

MONITORING

Erosion control will be monitored after each rain event.

All applicable BMPS will be monitored for effectiveness.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section provides an analysis of the potential effects of the Proposed Action and No-Action Alternative on air quality, biological, cultural, recreational, and vegetation/silviculture resources. No college campground campsites are located on or adjacent to areas supporting sensitive cultural and/or biological resources or within 100 feet of the full-pool water surface elevation of Huntington Lake.

3.1 AIR QUALITY

This project is located within the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) a "Serious Non-attainment Area" for National Ambient Air Quality Standards (NAAQS) for particulate matter less than 10 microns (PM_{10}) and Nitrous Oxides (NOx) The Clean Air Act prohibits Federal Agencies from permitting or approving any activity, which does not conform to the State Implementation Plan (SIP) The SIP recognizes prescribed burning projects that do not exceed 70 tons per acre of PM_{10} or 50 tons per acre of NOx per year as meeting conformity.

Actions taken or supported by Federal Agencies must be consistent with efforts pursuant to achievement of NAAQS. With-in a non-attainment area, Federal Agencies are required to determine if their projects conform to SIP. If a project's total emissions are less than the established de minimus levels for that area and the emissions are not regionally significant, the project is considered to conform.

Total emissions for this project were calculated and compared to threshold levels. The proposed action would generate x tons of PM_{10} and x of NOx. Based on emissions outputs this project will not violate the SIP or regulations set by SJVUAPCD.

The project is considered to conform to the SIP and is assumed not to constitute a significant impact of air quality of the SJVUAPCD. The Conformity Determination for this project details the assumptions and calculations used to determine total project emissions. This document is available for review at the SNF Supervisor's Office and is incorporated by reference.

3.2 BIOLOGICAL RESOURCES

This section describes special status aquatic, terrestrial, and botanical resources in the vicinity of College Campground and the northeastern shore of Huntington Lake, and

provides an evaluation of the potential effects of the Proposed Action and the No-Action Alternative on these resources.

3.2.1 Description of Existing Conditions

This section summarizes the methods and results of the studies completed to characterize existing conditions in the Project Area.

Information on the biological resources described in this section is based on a literature review and resource studies and surveys conducted as part of the Big Creek ALP, as well as focused biological surveys for the College Campground Rehabilitation Project, as described below.

A literature review was conducted to determine the available biological information, including existing survey data for the study area. This included a review of the following resources: (1) FERC's FEIS for the Big Creek ALP (FERC 2009); (2) CDFG California Natural Diversity Database (CNDDB) (CDFG 2011); (3) USDA-FS List of Sensitive Plant Species by Forest (USDA-FS 2007a); (4) USDA-FS List of Sensitive Wildlife Species by Forest (USDA-FS 2007b); (5) the Sierra Nevada Forest Plan Amendment (USDA-FS 2004); (6) USFWS Species List (USFWS 2011); (7) the California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Plants of California (CNPS 2011); and other pertinent information that is referenced, as appropriate.

In addition, extensive technical biological resource studies were conducted from 2002 through 2005 as part of the Big Creek ALP to document terrestrial resources present in the campground vicinity. The following technical studies were reviewed for this section:

- TERR 1 – Vegetation Communities (SCE 2003)
- TERR 2 – Invasive/Exotic Plant Species (SCE 2003)
- TERR 3 – Special-Status Plant Populations (SCE 2003; 2004)
- TERR 8 – Raptors (SCE 2003)
- TERR 9 – Bald Eagle and Osprey (SCE 2003)
- TERR 10 – Great Gray Owl (SCE 2003)
- TERR 12 – Special-Status Bats (SCE 2003)
- TERR 13 – Mesocarnivores (SCE 2003)
- CAWG 8 – Amphibians and Reptiles (SCE 2003)
- CAWG 7 – Fish Populations (SCE 2003)
- Biological Assessment/Biological Evaluation for Southern California Edison's Big Creek Hydroelectric Projects (SCE 2007b)

Additional project-specific biological field surveys were conducted for the College Campground Rehabilitation Project in 2008, 2009, and 2011 following completion of the site-specific design plans developed for the Proposed Action. These surveys include the following:

- Special-status plant surveys;
- Reconnaissance-level wildlife surveys; and
- Wetland delineation (Appendix B, Preliminary Jurisdictional Determination Report for the College Campground Rehabilitation Project).

Provided below is a summary of the information obtained from the literature review and results of the 2008–2011 biological surveys.

Vegetation Communities

This description of vegetation communities in the project area is based on a review of the FERC FEIS developed for the Big Creek ALP Projects (FERC 2009) and the wetland delineation for the College Campground Rehabilitation Project (Appendix B).

A description of these vegetation communities is provided below.

Pine-Fir Forest

Jeffrey pine-fir forest occurs on drier slopes and flats and on coarse soils. Jeffrey pine (*Pinus jeffreyi*), and white fir (*Abies concolor*) dominate the tree layer, but lodgepole pine (*Pinus contorta*), western juniper (*Juniperus occidentalis*), and red fir (*Abies magnifica*) are also common. Lodgepole pine becomes a co-dominant species in some higher-moisture areas along the lake. Western juniper is common on many of the drier slopes in the study area, and red fir occurs on the northern side of Huntington Lake. The understory is dominated by shrub species, including greenleaf manzanita (*Arctostaphylos patula*), mountain whitethorn (*Ceanothus cordulatus*), Sierra gooseberry (*Ribes roezlii*), wax currant (*Ribes cereum*), and mountain sagebrush (*Artemisia tridentata*). While the herbaceous layer is generally sparse in forested areas, common herbaceous species include spreading dogbane (*Apocynum androsaemifolium*), diffuse gayophytum (*Gayophytum diffusum* ssp*. parviflorum*), and naked buckwheat (*Eriogonum nudum* ssp*. deductum*).

Common wildlife species that associated with this habitat include red-tailed hawk (*Buteo jamaicensis*), common raven (*Corvus corax*), mountain chickadee (*Poecile gambeli*), American robin (*Turdus migratorius*), western tanager (*Piranga ludoviciana*), California ground squirrel (*Spermophilus beecheyi*), and mule deer (*Odocoileus hemionus*) (SCE 2004).

Emergent Wetlands

One emergent wetland was identified within the eastern perimeter of the Project Area, adjacent to Huntington Lake, during the wetland delineation conducted in August 2011. A map and a detailed description of the wetland are included in the Preliminary Jurisdictional Determination Report for the College Campground Rehabilitation Project (Appendix B). Based on the review of preliminary data, field surveys, mapping, and data analysis, this wetland area consists of a total of 0.4 acres of potential jurisdictional wetlands within the Project Area. The emergent wetland is characterized by wetland plant species such as small fruited bulrush (*Scirpus microcarpus*), sierra checkermallow

(*Sidalcea reptans*), field sedge, western panic grass (*Panicum acuminatum*) and American bistort (*Polygonum bistortoides*). This wetland area is fed by an ephemeral drainage located to the northeast and outside of the Project Area which was dry during the wetland delineation field survey.

The Project area generally slopes from north to south and sheet flows toward Huntington Lake and the emergent wetland to the east. A culvert located near the campground entrance, outside the Project Area, collects runoff from adjacent upland areas and the roadway north of the site and discharges into the campground. No evidence of upstream wetlands or waters were observed associated with this culvert during wetland delineation and the area lacked a distinct bed, bank, or wetland vegetation. Additionally there was no distinct roadside drainage or ditch either up- or down-slope of the culvert. A portion of the flows in this area sheet-flow through the campground, while some flow diverts east along the campground road and causes minor erosion within the roadway.

Open Water

The campground is located along the shores of Huntington Lake, which represents open water habitat.

Special-Status Plant Species

For the purposes of this document, a special-status plant species is defined as any species that is granted status by a federal agency. Federally listed species are defined as those species granted status by the U.S. Fish and Wildlife Service (USFWS) under the federal Endangered Species Act (ESA) and include threatened (FT), endangered (FE), proposed threatened or endangered (FPT, FPE), candidate (FC), or listed species proposed for delisting (FPD); or by the USDA-FS as a Forest Service Sensitive (FSS) species. Plant species that are granted special-status by a state agency are also addressed in this document. Based on survey results and on an evaluation of the location and elevation of the Proposed Action and vegetation communities present, 20 special-status plants could potentially occur in the Project Area (Table 4). However, none of these species were identified in the Project Area during special-status plant surveys.

The closest known occurrences of special-status plants include a record for subalpine fireweed (*Epilobium howelii*, FSS, CNPS 1B.3) located approximately 0.6 mile to the northeast of the Project area (SCE 2003). In addition, three-ranked hump moss (*Meesia triquetra*, FSS, CNPS 4.2) was identified approximately 0.5 mile east of the Project area (Figure 5) on the opposite side of Huntington Lake.

Special-Status Wildlife Species

A special-status wildlife species is defined in this document as any species that is granted status by a federal agency. Federally listed species are those granted status by federal agencies as FT, FE, FPT, FPE, FC, FPD, or FSS. Also included are those species listed by USFWS as Birds of Conservation Concern (BCC) which include

"species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act ESA of 1973" (USFWS 2008). In addition, this document includes raptor species protected under Section 3503.5 of the Fish and Game Code and bird species protected under the Migratory Bird Treaty Act (MBTA) (16 USC 703–711). Wildlife species granted special-status by a state agency are also addressed in this document. National Forest Management Indicator Species (MIS) are addressed separately in the College Campground MIS Report (SCE 2011).

Based on survey results and on an evaluation of the location and elevation of College Campground and wildlife habitats present, 13 special-status wildlife species are known to occur or could potentially occur in the Project area (Table 5). The status of each of these wildlife species within the Project area is provided below. Refer to Figure 5 for the location of documented wildlife occurrences in relation to the Project area.

Special-Status Fish Species

No federal listed or FSS fish species are known to occur in Huntington Lake or its tributaries.

Special-Status Amphibians

Two special-status amphibians, Sierra Nevada yellow-legged frog (SNYLF) and Yosemite toad, have the potential to occur in the vicinity of the Project. Their potential for occurrence within College Campground is described below.

- Sierra Nevada Yellow-Legged Frog (*Rana sierrae*) FC, FSS, California Species of Concern (CSC)

  SNYLF are known from historic occurrences to occur in Huntington Lake, the most recent being a 1955 record along the north shore of the lake. Good-to moderate stream habitat for SNYLF, which includes primarily larger streams with open sunny reaches and large exposed cobbles, boulders, or bedrock for basking sites, was identified in the vicinity of Rancheria Creek (located approximately 0.5 mile northeast of the Project area) during technical studies conducted for the Big Creek ALP. SNYLF may also use large high-elevation ponds and lakes for breeding. There are no creeks within College Campground to support breeding populations of SNYLF, and no large ponds representing potential SNYLF habitat for all life stages within the campground. Huntington Lake would be considered potential habitat under the California Wildlife Habitat Relationship (CWHR) Program. Potential habitat would extend 165 feet from the lake shoreline based on CWHR. While modeled as potential habitat, reservoirs are noted as disrupting native aquatic amphibians through exposed shoreline, fluctuating water levels that disrupt reproduction, and introductions of predatory species. Therefore, while SNYLF may occur in the vicinity of Huntington Lake, they are not likely to occur within the boundaries of the Project area.

- Yosemite toad (*Bufo canorus*) FC, FSS, CSC

There is a record for Yosemite toad occurring at Rancheria Creek (approximately 0.5 mile northeast of the Project Area), where five adults and two tadpoles were detected in 1993. College Campground supports one 0.4-acre emergent wetland along the eastern perimeter of the Project area. However, this area has not been identified under the CWHR as providing potential habitat for Yosemite toad. Forest-wide surveys for Yosemite toad did not locate this species within or adjacent to College Campground. Several breeding meadows are known to occur within 2 miles of the campground, but these sites are not within the CWHR projected dispersal distance (900 meters), or within 1500 meters as evaluated by studies of toad movements on the Sierra National Forest. Based on the most recent information on the current distribution and abundance of Yosemite toads, it is unlikely that this species would occur in the project area.

Special-Status Raptors

Provided below is a summary of the status of special-status raptors in the Project area.

- Bald eagle (*Haliaeetus leucocephalus*) FSS, California Endangered (CE), California Fully Protected (CFP)

  Bald eagles are known to winter and have been observed foraging at Huntington Lake. In addition, two bald eagle nests are located approximately 0.5 mile east of the Project area on the opposite shore of Huntington Lake. The first bald eagle nest was identified at Huntington Lake in 2003, after the breeding season. In 2004, one juvenile was observed that fledged the nest (Smith, pers. comm., 2005). In 2005, this nest produced two fledglings (Sorini-Wilson, pers. comm., 2005). One juvenile was observed on the nest in 2006 (Byrd, pers. comm., 2006). It is not known whether this chick fledged successfully. In 2011, the nest was occupied but offspring were unsuccessful. The second nest, which was located 500 feet south of the first nest, is believed to be an alternate nest.

  USFWS has developed the National Bald Eagle Management Guidelines (USFWS 2007) which recommend buffer zones of up to 660 feet around nest trees to protect nesting eagles. The Project area is outside of this buffer zone.

- Northern goshawk (*Accipiter gentilis*) FSS, CSC

  There are numerous records for northern goshawk in the vicinity of Huntington Lake, however there are no known goshawk nests. Forested areas surrounding the campground represent appropriate nesting and foraging habitat for northern goshawk (i.e., mature, dense coniferous forests from approximately 2,500 to 10,000 feet in elevation). However, because of the degree of human activity within the campground during the recreation season, this species is unlikely to occur within the Project area.

- American peregrine falcon (*Falco peregrines anatum*) Former FE (Delisted on 8/20/99; nesting), CE, CFP

There are no records for American peregrine falcon in the vicinity of Huntington Lake, although a pair was known to have nested on Powerhouse No. 1 and at Sunset Point in the vicinity of the town of Big Creek. Forested areas surrounding the campground represent potential foraging habitat for American peregrine falcon, which generally consists of woodland or forested areas near wetlands, lakes, rivers, or other water in the vicinity of high cliffs or banks. However, because of the degree of human activity within the campground during the recreation season, this species is unlikely to occur within the Project area.

- Great gray owl (*Strix nebulosa*) FSS, CE

  The nearest records for great gray owl are at Black Point, several miles west of Huntington Lake. Appropriate nesting and foraging habitat for great gray owl, which includes large meadows (at least 10 acres in size) situated within 300 feet of dense conifer forest containing large broken-top snags, was identified on the northwest shore of Huntington Lake during technical studies conducted for the Big Creek ALP (SCE 2003). The Project area does not represent potential foraging or nesting habitat for this species, because the wet meadows within the campground are too small to support foraging owls.

- California spotted owl (*Strix occidentalis occidentalis*) FSS, SNF MIS, CSC

  There are several occurrence records for California spotted owl in the vicinity of Huntington Lake and a USDA-FA California spotted owl Protected Activity Center (PAC) is located approximately 0.6 mile east of College Campground, on the opposite side of Huntington Lake. The nest tree within the PAC is located approximately 2 miles southeast of the Project area. Forested areas surrounding the campground may provide foraging habitat for California spotted owl (intermediate-to-late successional forests with greater than 40% canopy cover (USDA-FS 2006a). However, the campground does not represent nesting habitat, which is generally characterized as forested areas having canopy cover greater than 70%, with medium to large trees and a multi-storied structure.

Other Special-Status Bird Species

In addition to the species described above, the Project area represents potential foraging and/or nesting habitat for a variety of raptors and passerines protected under the MBTA and BCC, CFP, or CSC bird species. This includes birds such as purple martin (*Progne subis*) (CSC), yellow warbler (*Dendroica petechia brewsteri*) (CSC, MIS), osprey (*Pandion haliaeetus*) and Cooper's hawk (*Accipiter cooperii*). An osprey nest was documented in 1996 approximately 0.3 mile east of the Project area on the opposite side of Huntington Lake. However, the USDA-FS determined in 2010 that the nest is no longer present. There are several other osprey nests documented along the shoreline of Huntington Lake. Although appropriate habitat is present for many species, there are no known occurrences of any other MBTA, BCC, CFP, or CSC birds within the Project area.

Special-Status Bats

Provided below is a summary of the status of special-status bats in the vicinity of the Proposed Action.

- Pallid bat (*Antrozous pallidus*) FSS, CSC

  While there is one record for pallid bat in the vicinity of Huntington Lake, there are no known roosts in the Project vicinity. Pallid bats are found in a variety of habitats, including coniferous forests, with rock outcroppings, caves, hollow trees, buildings, and bridges for roost sites. Pallid bats are year-round residents that hibernate during the winter months. The Project area contains potential foraging and roosting habitat for pallid bats.

- Townsend's western big-eared bat (*Corynorhinus townsendii*) FSS, CSC

  There are no records for Townsend's big-eared bat in the vicinity of Huntington Lake. Forested habitats in The Project area represent potential foraging habitat for this species. Townsend's big-eared bats are year-round residents that hibernate from October through April. Because Townsend's big-eared bat primarily use caves and abandoned mines for roosts, the Project area does not support roosting habitat for this species.

- Spotted bat (*Euderma maculatum*) CSC

  Spotted bats were detected foraging in an area several miles south of Huntington Lake during surveys conducted for the Big Creek ALP. There are no known roosts in the Project vicinity. Spotted bats prefer to roost in rock crevices in cliffs, and are nocturnal foragers (detected primarily after midnight). Little is known about the migratory habits of spotted bats. They may be year-round residents or may migrate to lower migrations during the winter. The Project area represents potential foraging habitat for spotted bats.

- Western red bat (*Lasiurus blossevillii*) FSS

  Western red bats are known to occur in the vicinity of Huntington Lake. This solitary bat is known to roost in trees in a variety of habitats, including riparian areas and chaparral. Western red bats migrate to coastal areas south of San Francisco Bay during the winter (September–October) returning to other areas throughout their range in March–May. Western red bats hibernate in winter. The Project area represents potential foraging and roosting habitat for western red bats.

Special-Status Mesocarnivores

Provided below is a summary of the status of special-status mesocarnivores in the Project area.

- Sierra Nevada red fox (*Vulpes vulpes necator*) FSS, California Threatened (CT)

  There are several historical records for Sierra Nevada red fox in the vicinity of Huntington Lake, including one occurrence along Highway 168 near Big Creek, approximately 5 miles southwest of the Project area. Forested areas in the Project area represent potential foraging habitat for Sierra Nevada red fox, which includes high-elevation (above 7,000 feet above msl) open areas such as wet meadows bordered by forested habitats. However, because of the degree of human activity within the campground during the recreation season, this species is unlikely to occur within the Project area.

- Ringtail (*Bassariscus astutus*) California Fully Protected (CFP)

  There are no records for ringtail in the vicinity of the Project. Ringtail are found in most forest or shrub habitats in proximity to water, often near riparian areas. This species is often found in close proximity to human structures and activity. Therefore, ringtail may potentially forage or breed in the forested areas surrounding the campground.

- American marten (*Martes americana*) FSS, SNF MIS

  There are several records for American martens in the Huntington Lake area, including one approximately 0.5 mile east of College Campground, on the opposite side of Huntington Lake. There are no known dens present in the vicinity of Huntington Lake. Potential foraging habitat is present in forested areas of the Project Area, where there is at least 40% canopy cover. However, because of the degree of human activity within the campground during the recreation season, this species is unlikely to occur within the Project area.

- Pacific fisher (*Martes pennanti pacifica*) FC, FSS, CSC

  There are several records for Pacific fisher in the Huntington Lake vicinity, and the Project area is within the Southern Sierra Fisher Conservation Area, an elevational band from 3,500 to 8,000 feet on the Sierra and Sequoia National Forests. There are no known dens present in the vicinity of Huntington Lake, and the Project area does not represent appropriate denning habitat for Pacific fisher (defined as having canopy closure of 80% or greater (USDA-FS 2004)). The Project area supports potential foraging habitat (generally, mature, dense forest stands with snags and greater than 40% canopy cover). However, because of the degree of human activity within the campground during the recreation season, this species is unlikely to occur within the Project area.

Noxious Weeds and Invasive Plant Species

Noxious weed is a term used for non-native invasive plants that have been defined as pests by law or regulation (California Department of Food and Agriculture (CDFA 2007)). The California Invasive Plant Council (Cal-IPC) defines non-native plants as those species introduced to California after European contact and as a direct or indirect result of human activity. Invasive non-native plants are plants that (1) are not native to, yet can spread into, wildland ecosystems, and that also (2) displace native species,

hybridize with native species, alter biological communities, or alter ecosystem processes (Cal-IPC 2006).

Invasive plants are defined as those exotic species (any species growing out of its native range), which are not native to a region, that persist without human intervention, and potentially have serious impacts on their new environment. The term invasive as used in this document, applies to those exotic plant species that have been defined as invasive or noxious weed species by resource agencies.

No noxious weed or invasive plant species are known to occur in the Project Area. However three noxious weed species are known to occur in the vicinity of Huntington Lake. Cheatgrass (*Bromus tectorum*) and woolly mullein (*Verbascum thapsus*) were identified as occurring in the vicinity of Huntington Lake, while bull thistle (*Cirsium vulgare*) is known to occur within China Peak Ski Area, approximately 1.5 miles southeast of the Project area.

3.2.2 Environmental Consequences

This section describes the potential impacts of the Proposed Action and No-Action Alternatives on biological resources in the vicinity of the Project area and the eastern shore of Huntington Lake, including vegetation communities and wildlife habitat, special-status species, and noxious weeds and invasive ornamental plant species. Effects of the Project on MIS are evaluated in the College Campground Rehabilitation Project Management Indicator Species Report (SCE 2011).

No-Action Alternative

Under the No-Action Alternative, College Campground would continue to be operated and maintained under current conditions; no rehabilitation would take place. Therefore, there would be no construction activities that might result in short-term effects to biological resources. The informal trails that currently cross the jurisdictional wetland would also continue to be used, preventing the reversion of this area to its native condition. Storm water from the culvert under Highway 168 would also continue to drain into the campground, rather than being diverted by the proposed drainage ditch around the northeastern perimeter of the campground. Additionally, vegetation density will remain stable or will increase without treatment. Trees may begin to become increasingly subject to attacks from insects. Densities will continue to provide screening to meet the visual and recreation objectives. However, stand density may increasingly produce hazardous tree conditions and accumulations of fuels. Without thinning, the campground will remain at a level where insect attack and inter-tree competition may result in increased mortality. Recent research indicates that smaller trees are strong competitors for site resources. These small trees especially compete with larger pines found scattered across the stand. The existing tree stands are highly dense, placing trees to be stressed and at imminent risk for insect attack and catastrophic fire.

Proposed Action

Special-Status Plant Species

Implementation of the Project would not result in effects to special-status plant species.

There are no known occurrences of special-status plant species in the vicinity of the Project. Therefore, the Project would not adversely affect any plant species granted special-status by a federal or state agency. In addition, rehabilitation of the existing trail and construction of the new trail under the Proposed Action would direct recreational use and allow for the several existing informal trails that are located in the wetland area east of the campground to return to their native condition. This would enhance potential habitat for special-status plants in the Project area.

Implementation of the Project would not result in alteration of wetland habitat.

Implementation of construction activities associated with the Project could result in alteration of the 0.4-acre emergent wetland located along the eastern perimeter of the campground. Potential impacts from construction would include ground disturbance in the vicinity of wetlands and drainages, or sedimentation and impacts to water quality resulting from construction activities, including road repair, regrading of campsites, installation of new water distribution and septic systems, and the construction of a storm water drainage ditch around northeastern perimeter of campground. Measures 2 and 3 described in Section 2.4 of this EA would be implemented to avoid and protect these wetlands and drainages during construction. These include flagging the wetland prior to construction, prohibiting entry into or removal of vegetation from the wetland, and implementation of USDA-FS Best Management Practices (BMPs) to protect water quality.

Implementation of the Proposed Action could potentially benefit wetland habitats and hydrology within the campground in the following ways. As described in Section 2.3, several existing informal trails that are located in the wetland area east of the campground would be allowed to return to their native condition. This is in conformance with RCOs outlined in the Sierra Nevada Forest Plan Amendment (USDA-FS 2004). Specifically, RCOs #2 and #5 require that USDA-FS preserve, restore, or enhance special aquatic features (e.g., wetlands) to provide ecological conditions and processes needed to recover or enhance the viability of species that rely on these habitats. Additionally, construction of a stormwater drainage ditch around northeastern perimeter of campground will result in reduced roadside erosion within the campground and would direct runoff from adjacent upland areas and the roadway north of the campground to be discharged north of the wetland, potentially enhancing wetland conditions.

With implementation of Measures 2 and 3, the Proposed Action would not impact the wetland habitat. In addition, allowing the informal trails in the wetland area to return to their natural condition and construction of a storm-water drainage ditch would protect and enhance existing wetland.

Special-Status Wildlife Species

Special-Status Fish Species

Implementation of the Project would not result in effects to special-status fish species.

There are no known occurrences of special-status fish species in the vicinity of Huntington Lake. Therefore, the Project is not likely to adversely affect federal listed or FSS fish species.

Special-Status Amphibians

Implementation of the Project would not result in effects to special-status amphibians.

There are records for two special-status amphibians, SNYLF and Yosemite toad, in the vicinity of Huntington Lake. However, neither species is known to occur within the Project area and potential CWHR habitat for these special-status amphibians is not present within the campground. While modeled as potential habitat for special-status amphibians, reservoirs such as Huntington Lake are noted as disrupting native aquatic amphibians through exposed shoreline, fluctuating water levels that disrupt reproduction, and introductions of predatory species. Although several Yosemite toad breeding meadows are known to occur within 2 miles of the campground, these sites are not within the CWHR projected dispersal distance (900 meters), or within 1500 meters as evaluated by studies of toad movements on the Sierra National Forest. Therefore, the Project is not likely to adversely affect SNYLF or Yosemite toad.

Special-Status Raptors

Implementation of tree removal or construction activities associated with the Project is unlikely to result in disturbance of foraging or nesting bald eagles.

The Project area is outside the 660-foot buffer recommended by USFWS's National Bald Eagle Management Guidelines to protect active bald eagle nests (Figure 5). The Project would be implemented in summer or early fall, potentially overlapping with the bald eagle breeding season, which occurs from January through July. However, because the closest bald eagle nest is approximately 0.5 mile east of the Project area on the opposite shore of Huntington Lake, implementation of the Project is unlikely to result in disturbance to nesting bald eagles.

Construction noise or and human activity associated with the Proposed Action could potentially result in disturbance of eagles foraging on Huntington Lake, which represents aquatic foraging habitat for this species. However, any disturbance would be considered minimal for several reasons. The majority of construction activity would be restricted to the forested area within the campground, which is set back approximately 100 feet from the Huntington Lake shoreline. This will limit the visibility of the Project to bald eagles potentially foraging on the lake, as well as dampen sound from Project activities. In addition, as described in Measure 1, Project construction activities would be restricted to between 7 a.m. and 7 p.m., avoiding dawn and dusk hours when bald eagles tend to forage.

In addition, Huntington Lake experiences a great deal of recreation use during the summer season, which coincides with the bald eagle breeding season. The fact that the bald eagles selected a nest site near ongoing human activity indicates that they are tolerant of and could potentially breed despite these activities.

For these reasons, implementation of the Proposed Action is not likely to result in disturbance of breeding or foraging bald eagles.

Tree removal could potentially result in alteration of bald eagle nesting or roosting habitat.

As described in Section 2.3.12, approximately 93 trees would be removed prior to initiation of construction activities to allow for the regrading and recontouring of campground roads and to ensure public safety. It is not anticipated that tree removal would result in permanent loss or alteration of nesting or roosting habitat. USFWS bald eagle guidelines recommend preserving nesting and roosting habitat for bald eagles through retention of mature trees and snags within 0.5 mile of water (USFWS 2007). Tree removal would include the removal of 21 mature (24 inches DBH or greater) lodgepole pines, and white and red firs within 0.5 mile of Huntington Lake. However, the majority of mature Jeffrey pines and other trees in the upper crown layer, as well as snags, within the campground would be retained and would continue to provide potential habitat for bald eagles. The remaining 72 of the 93 trees to be removed are under 24 inches DBH. Removal of 21 mature trees 24 DBH or greater would not result in a significant alteration of bald eagle nesting or roosting habitat.

Implementation of tree removal or construction activities associated with the Project would not result in effects to nesting California spotted owls.

College Campground is located approximately 0.6 mile east of the edge of a California spotted owl PAC on the opposite side of Huntington Lake. Although tree removal may be conducted during the spotted owl breeding season, which is from March 1 through August 31, it would occur approximately 2 miles away from the spotted owl PAC nest tree. Therefore, construction activities and tree removal would be in compliance with USDA-FS management standards and guidelines for spotted owls, which require a 0.25-mile-buffer around active nest trees during the breeding season. Due to breeding season buffering these activities are unlikely to disturb nesting California spotted owls. In addition, SCE would implement Measure 4, which requires a preconstruction survey within 30 days prior to initiation of construction to determine if any active raptor nests are present within 500 feet of the campground. If active raptor nests are found, construction would be prohibited within 500 feet of the nest until the young are fledged or until site-specific avoidance and protection measures are agreed upon with the appropriate resource agencies. Implementation of this measure would prevent disturbance of California spotted owls or other raptors potentially nesting in the vicinity of the campground. Implementation of these measures result in the Project having a negligible affect on California Spotted Owls.

Tree removal could potentially result in alteration of foraging habitat for California spotted owls.

Forested areas surrounding College Campground may provide foraging habitat (defined as intermediate-to-late successional forests with greater than 40% canopy cover) for California spotted owls. However, California spotted owls are unlikely to forage within the perimeter of the campground. Tree removal activities associated with the Project would not result in alteration of foraging habitat for several reasons. First, tree removal would be conducted only within the perimeter of the campground. In addition, only 21 of the 93 trees to be removed are mature trees which contribute to the canopy cover. The majority of mature trees within the campground would be retained and the overall canopy coverage would not be altered. Therefore, the project would have a negligible effect on California spotted owl foraging habitat outside the campground, and would not result in a significant change in canopy cover within the campground.

Tree removal could potentially result disturbance of nests or in alteration of habitat for other special-status raptors.

The Project area represents potential habitat for northern goshawk, American peregrine falcon, and other raptors protected under the MBTA such as Cooper's hawk. There are currently no known raptor nests within College Campground. To prevent disturbance of any raptors potentially breeding in the vicinity, SCE would implement Measure 4, which requires a pre-construction survey within 30 days prior to initiation of construction to determine if any active raptor nests are present within 500 feet of the campground. If active raptor nests are found, construction would be prohibited within 500 feet of the nest until the young are fledged or until site-specific avoidance and protection measures are agreed upon with the appropriate resource agencies. Implementation of this measure would prevent disturbance of raptors potentially nesting in the vicinity of the campground.

In addition, tree removal could result in the loss of trees representing potential foraging habitat for other special-status raptors. However, as described above, the majority of mature Jeffrey pines and other trees in the upper crown layer would be retained and would continue to provide potential habitat for raptors. 72 of the 93 trees to be removed are less than 24 inches DBH and no snags will be removed. Tree removal would be limited to the interior of the campground, and would not affect potential foraging habitat outside the Project area. Therefore, tree removal would not result in a significant change in canopy cover or mean tree size within the campground and would have a negligible effect on potential foraging habitat for special-status raptors outside the Project area.

<u>Special-Status Bats</u>

Implementation of the Project would not result in effects to special-status bat species.

It is not anticipated that removal of trees and construction activities associated with the Proposed Action would affect habitat for western red bat, spotted bat, Townsend's big-eared bat, or pallid bat for several reasons.

Tree removal is not likely to adversely affect spotted bat, Townsend's big-eared bat, or pallid bat because these species are not known to use trees for roosting. Western red

bat is a solitary tree-roosting species that is known from the Huntington Lake vicinity. Therefore, tree removal could potentially result in short-term, temporary disturbance of western red bats and their roosting habitat. However, tree removal would be limited in nature, in that it is restricted to the campground, and would include removal of only 21 mature trees. The majority of mature trees within the campground would be retained to provide potential habitat for bats or other wildlife. Removal of 21 mature trees would not represent a significant impact to western red bats or their roosting habitat.

Pallid bats roost in caves and mines, while Townsend's big-eared bats are known to use caves, mines, and manmade structures for roosting. Spotted bats prefer to roost in rock crevices in cliff habitats. The Proposed Action would not result in disturbance to potential roosting habitat such as cliffs, caves, and rock cavities. In addition, there are no known roosts for these species in structures associated with the campground, so construction activities such as the removal of buildings (e.g., toilets) would not result in effects to roosts.

Finally, the Proposed Action would not result in impacts to or disturbance of foraging bats, because all activities would be conducted between 7 a.m. and 7 p.m. Therefore, no activities would be conducted during dusk or dark when bats would be actively foraging. Impacts to special-status bats would be considered negligible.

Special-Status Mesocarnivores

Implementation of tree removal or construction activities associated with the Project could result in temporary disturbance of mesocarnivores potentially foraging in the Project area.

Mesocarnivores, including Sierra Nevada red fox, ringtail, American marten, and Pacific fisher, could potentially use forested areas outside the campground as foraging habitat. It is not anticipated that tree removal or construction activities associated with the Project will result in disturbance to mesocarnivores potentially foraging in the vicinity of the Project area for the following reasons. While there are records for these species in the Huntington Lake vicinity, including a record for American marten approximately 0.5 mile east of College Campground, on the opposite side of Huntington Lake, there are no records of denning sites in the immediate vicinity of the Project area. The Project will be implemented in an area that is already developed for recreation use and in which human activity regularly occurs. Construction activities would be limited to the area necessary to complete the Proposed Action, and equipment staging areas would be located on existing roads, campsites, or other areas that have been previously cleared. Therefore, impacts to mesocarnivores are negligible.

Tree removal could potentially result in alteration of foraging habitat for special-status mesocarnivores.

Foraging habitat for Sierra Nevada red fox includes open areas such as wet meadows bordered by forested habitats. Foraging habitat requirements for ringtail are equally general, including most forested or shrub habitats in proximity to water. Because habitat requirements for Sierra Nevada red fox and ringtail are broad, alteration of habitat

resulting from tree removal are not likely to result in significant effects for this species. In addition, restoration of the emergent meadow habitat in the Project area could result in enhanced foraging habitat for these species.

Pacific fisher and American marten are forest specialists that have more specific habitat requirements. Foraging habitat for these species are defined by the USDA-FS as mature forest stands with snags and greater than 40% canopy cover. Tree removal associated with the Project could result in minor alteration of this habitat. However, tree removal would be conducted only within the perimeter of the campground, and only 21 of the 93 trees to be removed are mature trees which contribute to the canopy cover. The majority of mature trees within the campground would be retained and the overall canopy coverage would not be significantly altered. In addition, Pacific fisher and American marten are secretive species that are unlikely to forage within a developed recreation area. Therefore, any impacts to foraging habitat for special-status mesocarnivores would be considered negligible.

Noxious Weeds and Invasive Ornamental Plant Species

No noxious weed or invasive ornamental plant species are known to occur in the Project area. The two noxious weed species identified as occurring in the vicinity of Huntington Lake—cheatgrass and woolly mullein—are present at the Eastwood Lookout, within 1 mile of the Project area. Under the Proposed Action, SCE would implement Measure 5, as described in Section 2.4 of this EA, to prevent the introduction of noxious weeds into the Project area.

3.3 CULTURAL RESOURCES

This section describes the archaeological and historic qualities of the College Campground area and assesses the potential effects of the Proposed Action and No-Action Alternatives on cultural resources.

3.3.1 Description of Existing Conditions

The information in this section was developed based on a cultural resources inventory and a review of available documentation including the FEIS (FERC 2009) and the Amended Preliminary Draft Environmental Assessment (APDEA) (SCE 2007c) for the Big Creek ALP, as well as the associated Historic Property Management Plan (HPMP) (SCE 2005). These documents provide detailed descriptions of the Big Creek ALP Projects' cultural history, area of potential effects (APE) (defined as the area or areas in which a federal undertaking may directly or indirectly affect the character or use of historic properties, if such properties exist), and historic properties identified in the APE for the licensing efforts. The College Campground occurs within this larger APE. These documents may be viewed on the FERC e-library website: http://www.ferc.gov/docs-filing/eLibrary.asp. The HPMP is considered privileged information and must be formally requested from FERC. The detailed descriptions of the environmental setting and cultural background presented in these documents that are relevant to the College Campground rehabilitation are hereby incorporated by reference.

A cultural resources inventory, including a records search and pedestrian field survey, was conducted to determine what cultural resources had been previously identified within the Huntington Lake recreation facilities, including College Campground, plus a 300-foot-buffer. The record search included investigations conducted by SCE to identify and document cultural resources present in the Big Creek ALP Project vicinity as part of their FERC relicensing process. Information reviewed for the Huntington Lake facilities also included supplemental materials provided by the USDA-FS, SNF High Sierra Ranger District (Jackson et al. 2008). Pedestrian surveys were conducted from July 16 through 18, 2008 and all previously recorded sites were found, although sites under water in Huntington Lake were not examined.

The inventory and evaluation of cultural resources conducted for the Big Creek ALP relicensing also considered the recreation development history of the Huntington Lake Basin and, in consultation with the Forest Archaeologist, developed a tentative boundary for the Huntington Lake Historic District (HLHD) (Jackson et al. 2006). Although it was not specifically evaluated during studies conducted for the Big Creek ALP relicensing, College Campground is one of the recreation facilities included within the boundaries of this district.

Cultural History Overview

Human use of the southern Sierra Nevada is documented in the archaeological record for at least the past 7,000 years. Archaeological sites demonstrate Native American use of regional uplands for settlement, food and other resource procurement, trade and travel. Historical records indicate traditional use of the Big Creek Project area by Mono and Paiute people, although other Native American groups (e.g., Miwok and Yokuts) may have used the area as well, especially on trading ventures.

European and American historical influences in the Big Creek region are thought to date back to the 1700s, when early incidental Spanish exploration of the region began. American trappers began exploring the region in the 1830s. A larger influx of Americans and others occurred in the late 1840s and early 1850s with the Gold Rush. The southern Sierra was not the focus of Gold Rush activities but underwent economic development associated with livestock grazing, the timber industry, hydroelectric power generation, and more recently, recreational land use (SCE 2005). Construction of the Big Creek Hydroelectric System was a major factor in the development of the Project area. The Big Creek Nos. 1 and 2 (FERC No. 2175) Project includes some of the earliest components of the Big Creek system, including Huntington dam and reservoir, built between 1911 and 1913 (SCE 2005).

College Campground Historical Background

College Campground, like the other recreation facilities at Huntington Lake, was developed in association with hydroelectric power development in the Big Creek region. This development, beginning around 1911, has been called “The Great Transformation” and included development of Huntington Lake Reservoir by Pacific Light and Power Company. The lake was named for Henry Huntington, the entrepreneur who financed the earliest work to develop the Big Creek system of reservoirs, tunnels and power

houses. In 1918, Pacific Light and Power Company merged with SCE and the Big Creek Hydroelectric System continued to expand into the 1980s. The period between 1913 and 1960 is considered a transformative period for the development and related demand for recreation at Huntington Lake (Marsh 2010).

The specific history and earliest use of the College Campground are not known.

Archaeological Resources

No archaeological resources were identified within the boundaries of College Campground during archaeological investigations conducted for the SCE Big Creek ALP Projects. One archaeological site [CA-FRE-302/3030] was identified outside the Project Area, but within a 300-foot-buffer surrounding the campground (Jackson et al. 2006, Jackson and Larsen 2009). The portion of this site within the FERC project boundary was evaluated as not NHRP eligible, but parts of site outside FERC project were not examined (Jackson et al. 2008).

Historic Properties

The Project area is within the proposed HLHD which comprises buildings and structures associated with recreational land development and use in the Huntington Lake basin between 1913 and 1960. As indicated in the HPMP (SCE 2005), recreational developments within the district primarily have been on the lake, although a ski resort developed in the 1950s expanded the geographic focus of activities in the area. Any substantial changes to the operations or maintenance of facilities that affects the recreational use or activities could constitute an effect on the HLHD.

The Project area is also within a larger historic district, the Big Creek Hydroelectric System Historic District (BCHSHD) involving hydroelectric generating facilities and associated infrastructure, including Huntington Lake and the dams and control structures that impound and regulate the lake. College Campground is not identified as an element of the BCHSHD.

Traditionally Used Plant Species

There are no harvestable stands of traditionally used plan species in College Campground. The HPMP (SCE 2005) identifies a list of plants that Native Americans have identified as important and which are gathered or harvested by Native Americans in or near the Big Creek ALP APE. These plants include those that traditionally have been used by Native Americans and are, or may be gathered or harvested in or near the Big Creek ALP APE.

3.3.2 Environmental Consequences

This section describes the potential effects of the Proposed Action and No-Action Alternative on archaeological and historic resources in the vicinity of College Campground.

No-Action Alternative

Under the No-Action Alternative, College Campground would continue to be operated and maintained under current conditions; no rehabilitation would take place. Therefore, there would be no construction activities that might result in effects to archeological resources, historic properties, or traditionally used plant species.

Proposed Action

Construction-related ground disturbance during the rehabilitation of College Campground could potentially result in effects on cultural resources within the Project area or on any structures that may contribute to the eligibility of the HLHD for listing in the National Register.

Archaeological Resources

Implementation of the Proposed Action would not result in effects to known archaeological resources.

Only one prehistoric archaeological site was identified within the general vicinity of the College Campground. The site is located outside the Project Area, but within a 300-foot-buffer surrounding the campground. Because this site is outside of the area where construction-related ground disturbance will occur, the Proposed Action would have no effect on this cultural resource.

Construction potentially could affect previously unknown archaeological resource sites if encountered during excavation, grading, or other ground-disturbance.

Construction associated with campground rehabilitation has the potential to encounter previously unidentified archaeological resources. The Proposed Action includes implementation of standard cultural resources protection measures that would be taken in the event an unknown resource is discovered during construction (see Measures 6 and 7, Section 2.4). Therefore there would be no effect of the Proposed Action on previously unknown archaeological resource sites if encountered during excavation, grading, or other ground-disturbance.

Historic Properties

Implementation of the Proposed Action would not be expected to affect structures or features within the College Campground included in, or eligible for inclusion in, the National Register.

Traditionally Used Plant Species

Implementation of the Proposed Action would not result in effects to known harvestable stands of traditionally used plants.

No harvestable stands of traditionally used plant species have been identified in the College Campground APE. Therefore, the Proposed Action would not result in effects to traditionally used plant species.

3.4 RECREATION

This section describes the recreational resources associated with College Campground and provides an evaluation of the potential effects of the Proposed Action and the No-Action Alternative on recreation.

3.4.1 Description of Existing Conditions

College Campground is owned by the USDA-FS, and operated by the California Land Management (CLM), a private concessionaire, which is under contract to the USDA-FS. The facilities and features associated with College Campground are shown on Figure 3.

College Campground is one of seven developed campground facilities at Huntington Lake. Huntington Lake and the surrounding vicinity provide year-round recreational opportunities drawing visitors from throughout California. When filled to the spillway, Huntington Lake has a surface area of approximately 1,435 acres that supports on-water, and water-enhanced recreation activities including sailing, canoeing, windsurfing, swimming, and angling. The lake is renowned by sailing enthusiasts and hosts several sailing regattas each year. Other popular activities at the lake include camping, picnicking, hiking, horseback riding, and winter season recreation. A variety of private sector businesses support recreation use around Huntington Lake. These businesses include restaurants, boat rentals, and lodging facilities.

The peak recreational use begins in mid to late May (around Memorial Day), with the opening of developed public recreational facilities (campgrounds and day-use areas) around the lake. Developed campgrounds around Huntington Lake, including College Campground, are most heavily used from mid-June through August. Shoulder season use (early spring and late fall) is dependent upon the opening and closing of developed recreation facilities, road access, and weather conditions. During this period the recreation use activities are similar to summer use, but with lower attendance.

In 2007 it was estimated that approximately 1,926 people camped at College Campground. In 2010 the campground opened in late June due to late season snow coverage. Recreation use at College Campground in 2010 was estimated to be 1,852 people (S. Burkindine, pers. comm.; USDA-FS 2011). The results of a recreation survey conducted in 2002 during the Big Creek ALP relicensing indicated that approximately 85% of the recreational use at Huntington Lake is associated with overnight visitation and 15% of the visitors are day-users (SCE 2007d). Another recreation use survey of visitors at Huntington Lake was completed during the summer of 2008 to evaluate the current recreation use at SCE's recreational facilities (SCE 2008). This survey indicated that about 68% of visitors stay overnight in facilities around Huntington Lake.

Typically, facility capacity was low for most weekdays during the recreation season and increased for all campgrounds during weekends. Campground occupancies and percent

capacities of campground occupancies were the greatest over the Memorial and the Fourth of July holiday weekends. It is projected that recreation visitation at both campground and day-use areas will increase in the future, based on the assumption that there would be a change in recreation visitation related to future recreational user population and demographic changes. It is estimated that between 2004 and 2040 overall recreation visitation to the Huntington Lake vicinity will increase by approximately 5.8% (SCE 2007d).

3.4.2 Environmental Consequences

This section describes the potential impacts of the Proposed Action and the No-Action Alternative on recreation resources.

No-Action Alternative

Under the No-Action Alternative, College Campground would continue to be operated and maintained under current conditions; no rehabilitation would take place. Therefore, there would be no construction activities that might result in short-term effects to recreation resources. The campground would remain in need of heavy maintenance and without this action, the necessary heavy maintenance would be deferred. The informal trails that currently cross the jurisdictional wetland would also continue to be used, preventing the reversion of this area to its native condition. Storm water from the culvert under Highway 168 would also continue to drain into the campground, rather than being diverted by the proposed drainage ditch around the northeastern perimeter of the campground. Additionally, it is Forest Service (FS) Policy to upgrade facilities to meet FS standards at time of refurbishment. Therefore, the No- Action Alternative would fail to meet the current demands of the visiting public, would continue to defer heavy maintenance, offer camping with limited amenities, and the FS standards that are met would be limited to those standards that were in effect at the time the campground was originally constructed (19XX). Specifically, the campground would continue to not meet accessibility requirements (USDA-FS 2006b), the condition of facilities would remain the same (USDA-FS 2002), and facilities would continue to not meet the needs of diverse cultures, abilities and family structures (USDA-FS 2010).

Proposed Action

Implementation of the Project may result in short-term temporary impacts during construction.

Visitors to Huntington Lake would not be able to camp at College Campground during implementation of the Proposed Action, which is expected to last 6 to 8 weeks and is scheduled for late summer or early fall of 2012, outside the peak recreation use period. During construction, recreation use would be expected to be offset to the seven other campgrounds in the vicinity of Huntington Lake, including nearby Rancheria Campground.

The public would be advised of the closure of College Campground in advance through posted notices and through online campground reservation systems.

The Proposed Action was designed to enhance the recreational experience and adapt the facilities to reflect the diversity of cultures, abilities, family structure and activities in our ever-changing society. The Proposed Action reduces the number of campsites from 11 to ten. The ten campsites would include eight single-capacity sites (two universally accessible), and two double-capacity sites. While there will be a reduction in the number of campsites by one, there would be no associated reduction in the overall occupancy of the campground because of the development of two double-capacity sites. In addition, two of the upgraded campsites would be designed as universally accessible sites (i.e., consistent with FSORAG and ABA ABAAS guidelines). The Proposed Action also upgrades all restrooms, paths of travel to restrooms, and constructed features such as picnic table, fire rings, and bear boxes to be universally accessible. This upgrade allows a greater diversity of visitors to be able to use the facilities at the campground and increases the opportunities for extended families and small groups. The upgraded campground would continue to be able to handle the occupancy for the average weekend and week day use during the summer season. The upgraded campground facility would be upgraded to meet all FS standards.

Finally, the Proposed Action would provide focused access to Huntington Lake from the campground (i.e., through improvement of an existing trail, development of a new trail, and development of two new vista sites) and an improved recreational experience for all users.

Therefore, while the Proposed Action would require temporary closure of the campground, the closures would result in only limited inconvenience to recreators and would occur outside of the peak recreation use period. Seven remaining campgrounds at Huntington Lake would be available to recreators during the closure. In addition, the Proposed Action would result in an increase of occupancy capacity compared to the existing conditions, and, as a result, offer an enhanced recreation experience for a broader diversity of recreators.

3.5 VEGETATION AND SILVICULTURE

This section describes the vegetation within College Campground and provides an evaluation of the potential impacts of the Proposed Action and the No-Action Alternative on vegetation.

3.5.1 Description of Existing Conditions

The campground rehabilitation construction activities will add to the tree stress within and surrounding the campground and is likely to result in increased mortality if implemented without reducing the amount of trees within the stand. Trees may begin to become increasingly subject to attacks from insects. Densities will continue to provide screening to meet the visual and recreation objectives. However, stand density may increasingly produce hazardous tree conditions and accumulations of fuels. The campground will remain at a level where insect attack and inter-tree competition may result in increased mortality. Recent research indicates that smaller trees are strong competitors for site resources. These small trees especially compete with larger pines

found scattered across the stand. The existing tree stands are highly dense, placing trees to be stressed and at imminent risk for insect attack and catastrophic fire.

3.5.2 Environmental Consequences

This section describes the potential impacts of the Proposed Action and the No-Action Alternative on vegetation.

No-Action Alternative

Under the No-Action Alternative, vegetation density will reduce tree vigor without treatment. Trees may begin to become increasingly subject to attacks from insects. Densities will continue to provide screening to meet the visual and recreation objectives. However, stand density may increasingly produce hazardous tree conditions and accumulations of fuels. Without reducing the basal area of stand of trees, the trees in the campground will remain at a level where insect attack and inter-tree competition and is likely to result in increased mortality. Recent research indicates that smaller trees are strong competitors for site resources.

Proposed Action

The Proposed Action will partially reduce tree density by removing the trees within the construction areas. This will contribute to the available water to trees, however the trees in the campground will remain at a level where insect attack and inter-tree competition and is likely to result in mortality. The smaller trees are not within the construction area and are strong competitors for site resources. This potential for insect attack will continue and likely result in the mortality of trees within the campground Mitigation will be necessary to result in increased tree vigor and decrease the potential for tree stress, insect attack and catastrophic fire.

4.0 CUMULATIVE EFFECTS

According to CEQ regulations (40 CFR 1508.7), a cumulative effect is defined as "*the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions*." In addition, the CEQ issued an interpretive memorandum on June 24, 2005 regarding analysis of past actions, which states, "agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions." The cumulative effects of the Big Creek Nos. 1 and 2 Project, including the rehabilitation of College Campground, have already been analyzed under the FERC's FEIS and are incorporated by reference (see Section 1.0).

The effects of site-specific changes resulting from the Proposed Action do not extend beyond the campground boundaries, and during the temporal scope of the construction

(6 to 8 weeks) no other current or reasonably foreseeable projects are anticipated. The direct and indirect effects analyses in this EA considers the existing condition, which incorporates past actions as explained above, and determines the effects of the Proposed Action. There are no current or reasonably foreseeable future actions, therefore there are no cumulative effects. There are only those project related effects described under the direct and indirect effects analysis included in Section 3.0.

8.0 CONSULTATION AND COORDINATION

Provided below is a list of individuals; federal, State, and local agencies; tribes, and non-USDA-FS persons consulted during development of this EA.

- California Department of Fish and Game
- California State Historic Preservation Officer
- Central Valley Regional Water Quality Control Board
- Federal Energy Regulatory Commission
- Southern California Edison Company
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service

9.0 LIST OF PREPARERS

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- Susan Burkindine, Assistant Recreation Officer. Sierra National Forest.
- Teri Drivas, Recreation, Lands, Wilderness, Heritage, and Partnerships Staff Officer. Sierra National Forest.
- Thomas Jackson, Archeologist. Pacific Legacy, Inc.
- Wayne Allen, Relicensing Manager. Southern California Edison.

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