APPENDIX C
RECREATION IMPROVEMENTS

Upper North Fork Feather River Hydroelectric Project

Revised Draft
Environmental Impact Report

State Water Resources Control Board
Sacramento, CA

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Appendix C. Recreation Improvements

As discussed in Chapter 3 of the EIR, the recreation improvement measures in the Settlement Agreement are not evaluated in the EIR because specific details are not known at this time (i.e., specific locations of buildings, campsites, or parking areas). The Settlement Agreement describes recreation facility development, operation and maintenance, monitoring, plan review and revision, resource integration, and interpretation and education programs at PG&E and USFS facilities around Lake Almanor and Butt Valley reservoir and along the North Fork Feather River, but it does not provide sufficient details for analysis purposes. Prior to implementation of the improvements, PG&E would finalize its UNFFR Project Recreation Resource Management Plan within one year of issuance of a new license and in consultation with the USFS and Plumas County to describe the details of each recreation improvement.

Because the specific details of the recreation improvements are not known at this time (i.e., they would be defined in the Final Recreation Resource Management Plan), it would be too speculative to evaluate the environmental impacts of the improvements. EIRs are not required to speculate about environmental impacts. According to the CEQA Guidelines, if a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (California Code of Regulations, tit. 14, § 15145). In the interest of providing the State Water Board decision-makers and the public with as much information as possible about the potential recreation improvements, a general discussion of the types of environmental effects that could result from implementation of the recreation improvements and the types of measures that could reduce their environmental effects is provided in this appendix. Some of the recreation improvements would likely require environmental review prior to their implementation, if, for example, Special Use Permits from the USFS or grading or other permits from the County are required.

Table C-1 provides a brief description of the recreation improvements listed in the Settlement Agreement. Table C-2 provides a general discussion of the types of environmental effects that could result from implementation of the recreation improvements and the types of measures that could reduce their environmental effects.

Table 1. Recreation Improvements from Upper North Fork Feather River Project (FERC No. 2105-089) Settlement Agreement

Settlement Agreement (Appendix A), Section 7. Recreation: *Implement recreation facility development, operation and maintenance, monitoring, plan review and revision, resource integration, and interpretation and education programs over the term of the license; finalize the UNFFR Recreation Resource Management Plan within 1 year of license issuance in consultation with FS and Plumas.*	
1. Recreation Facilities Development Program	
Implement recreation facility enhancement measures below based on target completion dates and recreation monitoring indicators and standards in the Draft Recreation Resource Management Plan.	
1a. Lake Almanor, Last Chance Family and Group Campground	Modify 2 campsites and existing toilet buildings; provide access route to nearby creek (150 feet); complete within 1-3 years after license issuance.
1b. Lake Almanor, Rocky Point Campground and Day Use Area	Convert Loop 3 overflow camping area to day use swim area; relocate 20 campsites in Loop 3 overflow area to Loop 1 camp overflow area and provide double vaulted toilet building; provide new entrance kiosk, 3 fee-based shower facility buildings, and bear-proof food lockers at each of the 151 campsites; revegetate or harden significantly disturbed areas affected by erosion; implement accessibility improvements throughout campground; replace older Klamath stoves with campfire rings; complete within 5-10 years after license issuance.
1c. Lake Almanor, Forest Service Almanor Shoreline Facilities	Provide matching funds annually for first 13 years after license issuance for FS improvements at Almanor Family Campground and Amphitheater (reconstruction north and south loops, upgrade sanitation facilities, provide utility hook ups, construct amphitheater), Almanor Group Campground (construct camping loops, group gathering area, and trailer dump station, rehabilitate, restore, and revegetate decommissioned overflow and group camp), Almanor Picnic Area (define and upgrade picnic sites, shade structures, and interpretation/orientation facilities), and Almanor Beach (expand sandy beach area and parking area, construct swim buoy); if maximum funds not provided per Agreement by 13th year after license issuance, construction up to 28 campsites in a third loop at the Almanor Beach and East Shore Family Campground using remaining funds.
1d. Lake Almanor, East Shore Group Camp Area	Convert existing East Shore Picnic Area to group reservation camp area, including widening and improving roads; provide one accessible parking space; provide bear-proof food lockers at each of the 16 sites; construct a non-paved trail to shoreline and implement erosion control measures; complete within 1-3 years after license issuance.
1e. Lake Almanor, North Shore Public Boat Launch	Provide new and expanded public boat launching facility at North Shore Campground, including dredging a boat channel for access; provide public access to boat launch facility; relocate 22 campsites within the project boundary that would be affected by the boat launch facility; complete within 3-5 years after license issuance.
1f. Lake Almanor, Stover Ranch Day Use Area	Provide improved Lake Almanor shoreline access for Chester residents, including a gravel parking area, a double vaulted toilet building, 4 picnic tables, a non-paved trail to the shoreline, and an interpretive site; construct an RV site for the new seasonal Lake Almanor caretaker; complete within 3-5 years after license issuance.
1g. Lake Almanor, Marvin Alexander Beach	Completed improvements to the sandy beach and additional facility improvements at day use area (formerly PSEA Swim Beach).

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1h. Lake Almanor, Canyon Dam Day Use Area	Provide an approximately 0.3-acre sandy beach above the high water level (4,494-foot elevation, PG&E datum), swim area delineator, informational kiosk, improved vehicle circulation, and 8 new accessible picnic tables; modify 8 existing picnic tables to meet accessibility requirements and provide an accessible parking space and accessible route to the high water level swim beach area; reserve approximately 1 acre of land adjacent to the day use area for future development; complete within 1-3 years after license issuance.
1i. Lake Almanor, "East Shore" Day Use Area	Designate a swimming area in existing cove adjacent to the proposed new East Shore Campground; provide day use area with 5 picnic tables, non-paved shoreline access trails, a single vaulted toilet building, and parking area; complete within 1-5 years after license issuance.
1j. Lake Almanor, Westwood Beach	Provide gravel parking area, 6 picnic tables, accessible single vaulted toilet building, 0.1-acre sandy beach, swim delineator, and directional signage; implement shoreline erosion control measures to protect shoreline from wind caused wave action; complete within 1-3 years after license issuance.
1k. Lake Almanor, Stumpy Beach	Provide 5 picnic tables, directional signage, 0.7-acre sandy beach above the high water level, swim delineator, toilet building, parking spaces with trails connecting to the beach's northern and southern portions, and benches; implement shoreline erosion control measures to protect shoreline from wind caused wave action; complete within 1-3 years after license issuance.
1l. Lake Almanor, Catfish Beach	Negotiate a reasonable easement across private lands to provide public road access and install a single vaulted toilet building; complete within 3-5 years after license issuance.
1m. Lake Almanor, Almanor Scenic Overlook	Provide accessible parking and route to toilet building; remove or control vegetation, as appropriate, to maintain views of Lake Almanor, Mt. Lassen, and the Canyon Dam; complete within 1-5 years after license issuance.
1n. Lake Almanor, Southwest Shoreline Access Zone	Provide 4 shoreline access points at existing informally used locations along Lake Almanor's southwest shoreline between Prattville and Canyon Dam; provide 4 gravel parking areas with vehicle barriers, signs, gravel access roads, and toilet buildings if appropriate; close and rehabilitate other user-created vehicular access routes to the southwest shoreline as depicted in Site Plan 15 (see Draft RRMP) and in consultation with FS; complete within 1-5 years after license issuance.
1o. Lake Almanor, Camp Connery	Provide accessible parking space and new bunk house cabin; complete within 1-5 years after license issuance.
2a. Butt Valley Reservoir, Powerhouse Trails	Provide an improved angler access trail approximately 200-feet from the existing gravel parking area next to the Butt Valley Powerhouse down the steep slope east of the powerhouse to the levee below, including stairs if needed; provide an accessible powerhouse trail along the Prattville-Butt Valley Road near the Butt Valley Powerhouse and extending approximately 700 feet to the eastern shoreline of the inlet near the levee, including a compacted base rock trailhead parking area with barriers; complete within 5-10 years after license issuance.

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2b. Butt Valley Reservoir, Ponderosa Flat Campground	Provide a single person, non-heated outdoor shower; improve facilities to be accessible (modify 4 existing non-accessible sites, retrofit existing accessible sites, replace vault toilets, provide access route, provide swimming area with 0.4-acre sandy beach and swim delineator, provide new fishing access trail and pier or platform north of overflow area), complete within 5-10 years after license issuance.
2c. Butt Valley Reservoir, Cool Springs Campground	Provide two-person, non-heated outdoor shower; provide 1 new accessible campsite; complete within 5-10 years after license issuance.
2d. Butt Valley Reservoir, Alder Creek Boat Launch	Expand existing parking area; modify boat launch to be accessible; provide accessible parking space near toilet building; complete within 5-10 years after license issuance.
3a. Belden Forebay, Belden Forebay Access	Provide car-top boat launch, portable toilet building, and gravel parking area at the existing undeveloped parking area; provide suitable access for launching small, car top watercraft at the forebay; post signs regarding Plumas County ordinance limiting boat engine horsepower, if passed; complete within 5-10 years after license issuance.
3b. Belden Forebay, North Fork Fishing Trail	Improve fishing trail from Belden Forebay parking area to upstream side of Caribou Powerhouse 1, including retrofitting metal trail decking and railing, providing trail directional signs, and providing wider, non-paved trail along the chain-link fencing at the powerhouse yard and along Caribou Road from the parking area; complete within 1-3 years after license issuance.
4a. Bypass River Reaches, Upper Belden Reach River Access	Provide a river access point at upstream end of Belden Reach at the spoil pile area, including a seasonal toilet, dumpster, and non-paved parking area; complete prior to initiation of any recreation river flow release.
4b. Bypass River Reaches, Belden Reach Trails	Provide and maintain 4 trails to Belden Reach shoreline from existing informal parking areas; complete within 1-3 years after license issuance.
4c. Bypass River Reaches, Belden Rest Stop	Relocate existing picnic tables to lower level and disperse within area from Eby Stamp Mill to gazebo near creek; replace 2 tables with accessible tables and provide accessible routes to the gazebo, overlook area, and Eby Stamp Mill historical features; close upper level area and remove cooking grills; provide interpretive and educational elements at rest stop; implement erosion control measures on slope between parking lot and upper picnic area; complete within 3-5 years after license issuance.
4d. Bypass River Reaches, Lower Belden Reach River Access	Provide funds to FS for construction of non-project river access to lower Belden Reach; provide only if scheduled recreation river flow releases are implemented.
2. Future Recreation Enhancement Measures	
Implement additional future facility improvements below during term of license if recreation monitoring standards in the Draft RRMP are achieved.	
A1. Lake Almanor, Camp Connery Reservation Group Camp Area	Provide new group reservation camping area adjacent to existing Camp Connery Group Camp, including space for 16 RVs, a bear-proof food container, 2 indoor shower buildings, and flush toilets; repair and resurface existing access road.

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A2. Lake Almanor, East Shore Family Campground	Provide a new two-loop family campground with 63 new tent and RV campsites, including bear-proof food lockers at each site, 2 shower buildings with toilets, 20 boat moorage slips/buoys, and a camp host site; alternative improvements if matching funds not provided by FS include addition of up to 28 campsites in a third loop at Almanor Beach and East Shore Family Campground.
B1. Butt Valley Reservoir, Ponderosa Flat Campground	Provide approximately 20 new primitive tent campsites (likely to the north of current overflow area) and a new 100-person capacity group camp area in the existing overflow area.
3. Project Boundary Adjustments	
Adjust the FERC project boundary to include all Licensee-owned recreation improvements described in Agreement and the FS Canyon Dam Boat Launch and Day Use Area, Dyer View Day Use Area, and Almanor Boat Launch within 1 year of license issuance; adjust the project boundary again within 6 months after FS has completed improvements at Almanor Family Campground and Amphitheater, Almanor Group Campground, and Almanor Beach to include these facilities.	
4. Recreation Operations and Maintenance Program	
Assume responsibility for operational maintenance and heavy maintenance prior to the start of the first recreation season following license issuance at FS facilities (Dyer View Day Use Area, Canyon Dam Boat Launch and Day Use Area, Almanor Boat Launch) and once improvements are complete at FS Southwest Shoreline Access Zone; collect and retain user fees to offset administrative costs; meet with FS and Plumas every 5 years or as necessary to evaluate funding.	
5. Fisheries	
a. Belden Reach	Provide funding to CDFG to stock approximately 5,000 pounds of catchable trout per calendar year in the waters of the NFFR between its confluence with the East Branch and the Belden Diversion Dam.
b. Lake Almanor	Provide funds annually for CDFG's existing Lake Almanor fisheries program; review augmentations to the program, which may include expansion of pen rearing program or construction of rearing habitat for warm water fish.
c. Annual Funding for Fishery Programs	Provide up to $50,000 in funding for the fishery programs.
6. Interpretation and Education (I&E) Program	
Develop interpretation and education program for recreation facilities in project boundary within 2 years after license issuance; implement program within 1 year of program acceptance by FERC; may include construction or improvement of recreation facilities; prepare Lake Almanor bathymetry map within 1 year of license issuance and post on signs.	
7. Recreation Monitoring Program	
Develop a Recreation Monitoring Program within 12 months of license issuance; implement recreation planning and coordination meetings annually; provide periodic monitoring reports every 6 years, with more in-depth surveys every 12 years; develop a study plan to monitor recreation use during recreation river test flow periods, if appropriate.	

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8. Resources Integration and Coordination Program
Arrange annual meetings with Agreement parties, SWRCB, and the public to discuss recreation and other resource management needs.
9. Recreation Resources Management Plan (RRMP) Review and Revision Program
Update the RRMP every 12 years, or more frequently based on changes in existing conditions, monitoring results, and management responses.
10. River Ranger
Provide annual funding to FS for a River Ranger position.
11. Belden Interagency Recreation River Flow Management Plan
Develop a Belden Interagency Recreation River Flow Management Plan through a Memorandum of Understanding with FS, Plumas, and Caltrans prior to the first full recreation season and once a determination is made to proceed with scheduled recreation river flow releases; terminate MOU and plan if recreation river flow releases are not continued.
12. Traffic Use Survey
Develop a road traffic survey plan for roads used for project purposes located on National Forest System lands within 1 year of license issuance.

Table 2. Environmental Effects of Recreation Improvements

General Environmental Effects	General Mitigation Measures
Land Use	
Construction could generate fugitive dust, tailpipe emissions, and noise. These activities could impair the peaceful enjoyment of nearby recreational and other land uses, including nearby campgrounds, day use areas, the lakes and rivers, residences, and hotels. Disruption of recreational-related land uses would be especially pronounced during the recreation season.	Temporary closure of the sites being improved and some nearby recreation areas would promote public safety and create a buffer from construction noise and air pollutants. Measures to reduce fugitive dust and particulate matter emissions would reduce construction related air quality impacts. A variety of construction noise reduction measures are available to reduce construction noise impacts on nearby land uses including mufflers on construction equipment, avoiding noise sensitive hours, and maintaining low vehicle speeds in construction areas.
Geology	
Construction could cause erosion, resulting in increased sedimentation in the river and reservoirs.	An effective storm water pollution prevention plan with best management practices (BMPs) to reduce erosion and siltation would mitigate this environmental effect.
Water Quality	
Construction could cause sediment or construction-related chemicals to enter surface or ground water and impair water quality.	An effective storm water pollution prevention plan with best management practices (BMPs) to reduce erosion, siltation, and polluted runoff would mitigate this environmental effect.
Fisheries	
The recreation improvements include several measures to enhance fisheries in the project region. This would have a beneficial effect on fisheries.	None expected.
Vegetation, Wildlife, and Sensitive Biological Resources	
Construction could affect special-status wildlife or their habitat through direct impacts on individuals, disturbance, or habitat modification.	Appropriate measures would be tailored to the affected species, and might include avoidance, relocation, or habitat restoration.
Construction could affect special-status plants or their habitat through removal of individuals, habitat modification, or spread of invasive plants.	Appropriate measures would be tailored to the affected species, and might include avoidance, relocation, habitat restoration, or measures to reduce introduction or spread of invasive plants.
Construction could result in direct impacts on wetlands, riparian habitat, or other waters of the United States.	Appropriate measures may include avoidance or habitat restoration.
Recreation	
The recreation improvements would generally have a beneficial effect on recreational opportunities in the project region. Please see Land Use (above) for a discussion of construction related impacts.	None expected.

Table 2. Environmental Effects of Recreation Improvements

General Environmental Effects	General Mitigation Measures
Aesthetics	
Construction could temporarily degrade visual quality in the immediate vicinity of the individual recreation improvements.	Various measures would be available to minimize temporary aesthetic effects. Such measures may include use of existing roads and trails for construction access instead of constructing new access roads. Measures may also include revegetation and restoration of disturbed areas.
Trails, campgrounds, and other recreational facilities are already important components of the visual landscape in the project region. Carefully designed recreation improvements would not be expected to result in substantial degradation of visual quality.	None expected.
Public Services and Utilities	
Construction could result in minor short-term disruption of some utilities.	None expected.
Additional recreation facilities could increase the demand on the local emergency service, particularly during peak use periods, but this increase would likely be minimal and is not expected to result in the need for new or expanded emergency facilities.	None expected.
Hazards and Hazardous Materials	
Construction could require the use of potentially hazardous materials (e.g., oil, fuels) to operate vehicles and construction equipment.	Safe handling of materials in accordance with safety regulations and procedures would reduce the risk of public hazard.
Construction activities and increased recreational use could raise the potential for wildfires and expose people to hazards from wildfires.	Development and implementation of fire safety plans would reduce the risk of wildfire hazards.
Cultural Resources	
Construction could disturb or damage eligible or listed historical or archaeological resources.	Cultural resource surveys would help determine the location of such resources. Resource avoidance or recovery would reduce impacts on cultural resources
Traffic	
Construction would generate a short-term increase in traffic and could affect traffic flow on local highways and roads, but this increase would not be substantial.	None expected.
Construction could increase traffic hazards and impede emergency access.	Development and implementation of a traffic safety control plan would reduce the risk of traffic hazards.
Construction would generate a short-term increase in traffic and could affect traffic flow on local highways and roads, but this increase would not be substantial.	None expected.

Table 2. Environmental Effects of Recreation Improvements

General Environmental Effects	General Mitigation Measures
Increased recreational use could increase traffic and affect traffic flow on local highways and roads, but this increase would not be substantial.	None expected.
Air Quality	
Construction could generate fugitive dust and tailpipe emissions during construction.	Measures to reduce fugitive dust and particulate matter emissions would reduce construction related air quality impacts.
Increased recreational use could increase traffic and thereby increase fugitive dust and tailpipe emissions; however, this increase would likely not be substantial.	None expected.
Noise	
Construction could increase noise levels above acceptable standards and may expose sensitive receptors to excessive noise or groundborne vibrations.	Temporary closure of the sites being improved would create a buffer from construction noise. A variety of construction noise reduction measures are available to reduce construction noise impacts on nearby land uses including mufflers on construction equipment, avoiding noise sensitive hours, and maintaining low vehicle speeds in construction areas.
Increased recreational use could increase ambient noise levels near the recreation facilities; however, the additional noise would blend in with the existing noise environment and would not be expected to substantially degrade the quality of the environment.	None expected.
Climate Change	
Construction and increased recreational use could generate greenhouse gasses, contributing to a cumulative climate change impact.	Measures to reduce greenhouse gas emissions would reduce the project's contribution to climate change.