

LAKE MCCLOUD PLANNING UNIT

Pit-McCloud River Watershed

Existing Conditions & Uses

Overview

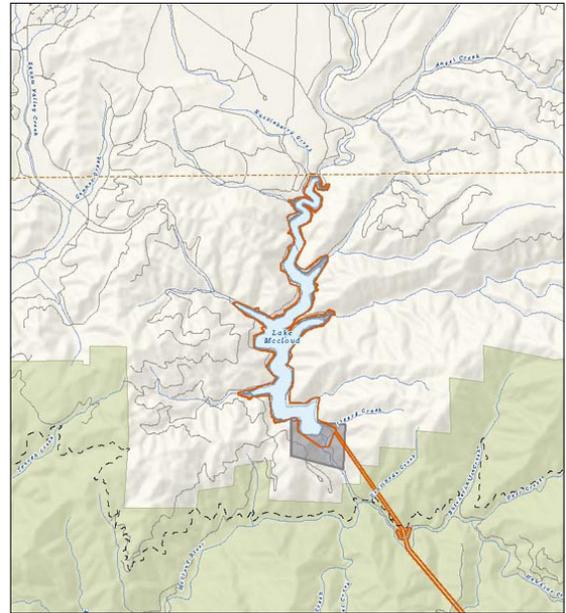
- Scenic reservoir surrounded by steep, forested terrain
- 833 acres in Shasta County; 184 acres outside the FERC boundary and 649 acres inside the FERC boundary
- Part of the McCloud-Pit Project (FERC #2106), currently undergoing relicensing (License expires in 2011)

The Lake McCloud Planning Unit is located in northern Shasta County, approximately 10 miles from the town of McCloud, 37 miles from the City of Redding, and 6 miles northwest of Iron Canyon Reservoir. The site includes Lake McCloud, a 520-acre reservoir with 14 miles of shoreline at normal pool elevation. Hydropower infrastructure in the planning unit includes the dam at the south end of the lake and a portion of the McCloud Tunnel (see Figure PM-17).

The Lake McCloud area is immediately surrounded by USFS lands and Hearst Corporation property. From Tarantula Gulch and Star City Creek south, the USFS (Shasta-Trinity National Forest) administers a narrow



Lake McCloud



Lake McCloud Planning Unit
Shasta County

band of land between the high water line and the road around the lake. The Hearst Corporation owns the shoreline and surrounding lands from Tarantula Gulch and Star City Creek north to the top of the lake and beyond along the McCloud River. The Hearst family summer retreat at Wynton, built by William Randolph Hearst in the 1930s, is just north of the lake.

The majority of the planning unit located above the high water mark is found near the dam along the southern shore of the lake. The McCloud River from the dam south to Lake Shasta is generally referred to as the lower McCloud River and is managed under the McCloud River Coordinated Resource Management Plan. The Lake McCloud Planning Unit contains about 80 acres of land south of the dam that are part of the lower McCloud River and are therefore managed under this plan.

The McCloud River Coordinated Resource Management Plan was adopted in July 1991 to maintain the remarkable values of the potentially wild and scenic McCloud River. The management plan establishes guidelines to coordinate management activities with the principal landowners in the McCloud River drainage area and public agencies that administer



Lake McCloud Planning Unit

Existing Conditions

- PG&E Lands Preliminary Designated for Retention
 - PG&E Lands Preliminary Designated for Disposition
 - BIA
 - BLM
 - BOR
 - DOD
 - NPS
 - Other/NGO
 - State
 - USFS
 - Federal Wilderness
 - Boat Launch
 - Campground
 - Dam
 - Day Use
 - Feature of Importance
 - Fishing
 - Fish Barrier Dam
 - Gate
 - Lodging
 - Non-Motorized Boating
 - Parking
 - Powerhouse
 - Private Camp
 - Ranch
 - Trailhead
 - Whitewater Put-In/Take-Out
 - FERC Boundary
 - Stream / River
 - Canal / Ditch
 - Pipeline
 - Highly Valued Stream
 - Primary Roads
 - Secondary Roads
 - OHV Roads
 - Trail
- All symbols may not appear on the map

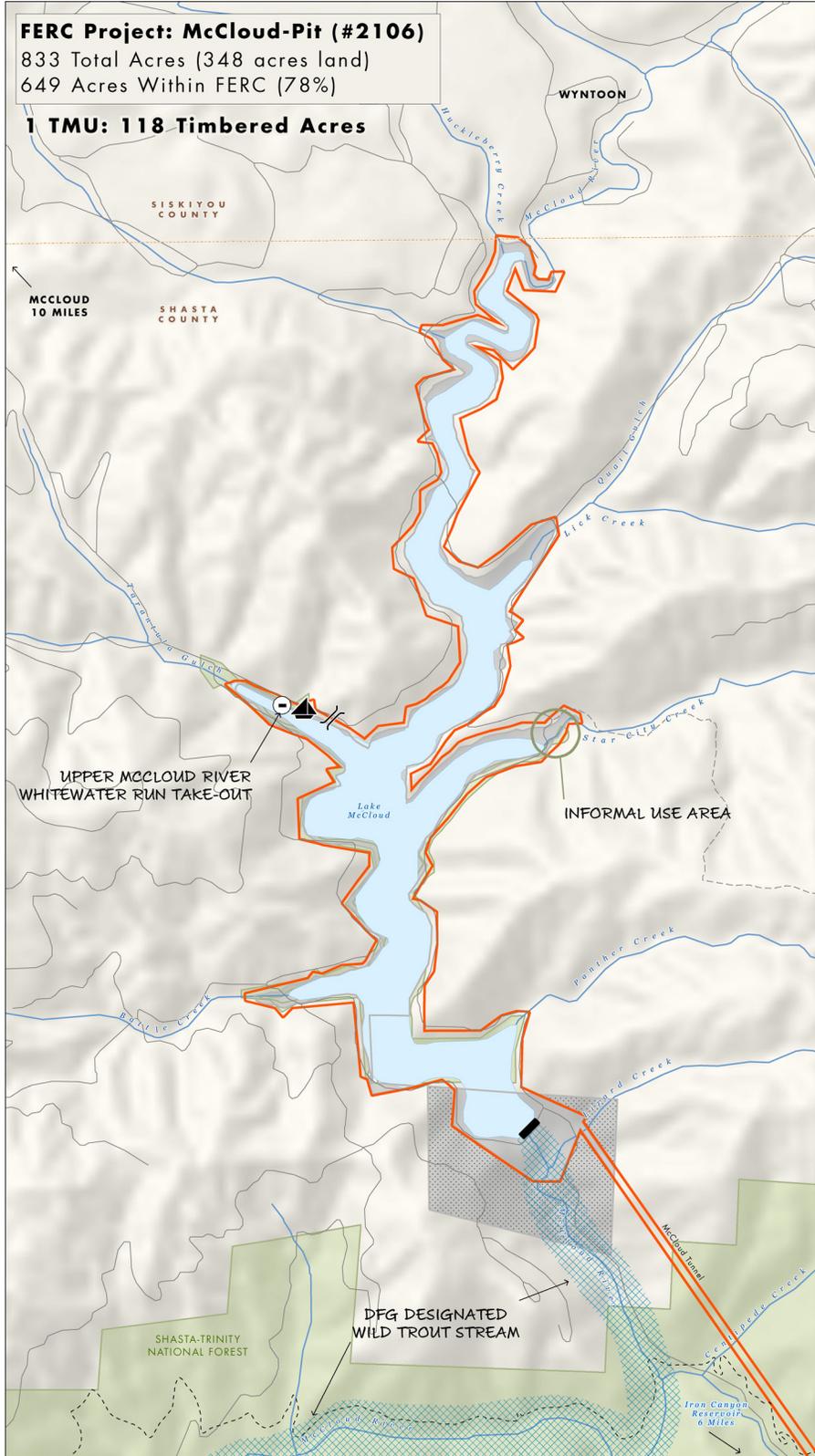


Figure PM-17

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programs in the area. The main objective of the plan is to improve management of the area's resources to allow for multiple uses while protecting the natural environment and private property rights. Signatories of the McCloud River Coordinated Resource Management Plan include Bollibokka Land Company, Crane Mills, USFS, McCloud River Co-Tenants, PG&E, CalTrout, Sierra Pacific Industries, DFG, Hearst Corporation, and The Nature Conservancy.

Fish, Plant, and Wildlife Habitat

The planning unit provides aquatic, riparian, and forest habitats, including part of Lizard Creek, the McCloud River, and the canyon area around the river (Figure PM-17). There are two bald eagle nests at the lake, and there have been sightings of wintering bald eagles. Most of the USFS land south of Lake McCloud is designated as a Late Successional Reserve (LSR), protecting high quality habitat for late successional habitat dependent species such as the spotted owl. Many species potentially occur within the planning unit including several types of salamanders, frogs, bats, mollusks, and birds such as hawks and spotted owls. Mammals that may occur in the planning unit include beaver, black bear, fox, otter, skunk, and weasel. Nine species of noxious weeds are known to occur within the McCloud-Pit FERC Project area including a population of yellow starthistle at the boat ramp at Lake McCloud. There are also more than 10 special status plants that are known or likely to occur within the McCloud-Pit FERC Project area.

As for aquatic species, Lake McCloud contains rainbow and brown trout (stocked by DFG), as well as Sacramento sucker, Sacramento pikeminnow, hardhead and riffle sculpin. The McCloud River and Lake McCloud were refugia for the last population of bull trout in the State; however, it is now believed that this species has been extirpated. As shown on Figure PM-17, the lower McCloud River is a DFG-designated Wild Trout stream, from the dam south, for approximately 10 miles. The McCloud-Pit FERC Project is currently undergoing relicensing,

which will provide more specific habitat and species information through proposed studies that will include surveys for special status species, classify and map vegetation community types, map and assess noxious weeds, and characterize fish populations within the project reservoirs (including Lake McCloud) and project-affected stream reaches.

Open Space

Due to lack of development, steepness of the area, and minimal recreation facilities, open space values are found throughout the planning unit. The primarily undeveloped shoreline provides excellent views for lake visitors. The Shasta County General Plan recognizes that rivers, creeks and associated riparian corridors, and floodplains within the county are major open space resources.

Outdoor Recreation

Recreational activities at Lake McCloud include boating, fishing, and informal camping. There are no developed recreation facilities on planning unit lands. The USFS operates a boat ramp on the west side of the lake (Figure PM-17). There is some waterskiing and personal watercraft use on the lake, in addition to boat fishing. The boat ramp site is also the take-out for the upper McCloud River whitewater run, a ten-mile Class III run. The run passes through private property where a boater take-out is disallowed, therefore



Road across dam

LAKE MCCLLOUD PLANNING UNIT

Pit-McCloud River Watershed



Lake McCloud

the boat ramp is the first publicly accessible take-out location. Fishing is the primary recreational use of Lake McCloud, and is conducted from boats and the shoreline via several access trails. Shoreline access is limited due to steepness and private property. The McCloud River is a well-known and popular fishing destination, with special fishing regulations for the McCloud River Wild Trout Area.

Currently, there are no overnight facilities at Lake McCloud. There was a USFS day use area at Star City Creek, but it has been removed due to unauthorized camping that was occurring at the site. Visitors still informally camp in this area, however, as it is one of the few flat spots around the lake. Several studies regarding recreation use are proposed in relicensing, including studies assessing existing and future recreation demand, assessing recreation supply and recreation use impacts, as well as determining if recreation management, access, or development improvements are needed.

Forest Resources

The Lake McCloud Planning Unit contains one PG&E Timber Management Unit (TMU) consisting of 118 timbered acres. Forest resources include mature Sierra mixed conifer stands, consisting of species such as ponderosa pine, Douglas-fir, and incense-cedar, with some old-growth trees. The TMU is currently managed by PG&E under a Multiple-Use

prescription, meaning that although sustained timber production is an important management component, protection and uses of other resources and facilities may preclude sustained timber management as the highest and best use of portions of the TMU.

Agricultural Uses

No agricultural uses occur in this area. Planning unit lands have low potential for grazing due to steep topography. According to the McCloud River Coordinated Resource Management Plan, livestock use is inconsistent with lower McCloud River area planning objectives and will not be permitted.

Historic Resources

Little is known about the cultural constituents and early settlement of the McCloud-Pit FERC Project area, with less than 40% of the total McCloud-Pit Project FERC cultural resource study area (currently all lands within the FERC boundary) having undergone some cultural resource identification effort in the past. Previous identification efforts have yielded 74 sites within or adjacent to the study area. Many of the previous surveys are more than 10 years old and do not meet current standards. Numerous prehistoric sites have been recorded within the lower McCloud River area, mostly associated with the McCloud River Wintun Tribe. Two relicensing studies are proposed that would survey and assess archaeological and historic-era properties as well as identify and document traditional cultural properties.¹

Stewardship Council Recommendations

The Stewardship Council recommends that the land and land uses at the Lake McCloud Planning Unit be preserved and enhanced by focusing on habitat values, recreation, and sustainable forestry. In presenting the Recommended

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Concept provided here, our objective is to preserve and enhance habitat, manage recreation, while also enhancing important forest resources. We recommend this effort be conducted in close coordination with PG&E and FERC relicensing efforts for the area.

Objective: Preserve and enhance biological resources, as well as enhance sustainable forestry and recreation management.

As shown on Table PM-9, the Stewardship Council has identified a number of preservation and/or enhancement measures that may contribute to the conservation management program for the Lake McCloud Planning Unit. Additional detail and background regarding these potential measures can be found in the Supporting Analysis for Recommendations, provided under separate cover. These measures are intended to be illustrative in nature, not prescriptive, and will be amended, deleted, or augmented over time in coordination with future land owners and managers to best meet the objective for this planning unit.

Fish, Plant, and Wildlife Habitat

Objective: Preserve and enhance habitat in order to protect special biological resources.

The Lake McCloud Planning Unit offers high value aquatic habitat for recreational and wild trout fisheries, as well as some late successional forest habitat. In order to preserve and enhance the habitat and resources found here, the Stewardship Council recommends that baseline studies and plans be developed to gain a clear understanding of the resources (particularly outside the FERC boundary where little information is currently available or will be provided by relicensing studies). Management of the property to preserve and enhance habitat will also include addressing noxious weeds. In addition, the Stewardship Council recommends working with the USFS to investigate stability

measures for the area around the access road below the dam to reduce erosion. We encourage close coordination with the USFS and other resource-focused organizations working in the region. All planning be considered in conjunction with the forest management plan and any FERC license required measures developed as part of relicensing.

Open Space

Objective: Preserve open space in order to protect natural and cultural resources and the recreation setting.

This concept would preserve open space through permanent conservation easements. Conservation easements would describe all prohibited uses to maintain open space values, including the level of uses allowed and the requirement to maintain scenic qualities.

Outdoor Recreation

Objective: Enhance recreation management in order to provide appropriate recreation use.

Currently, there is no information on fishing use below the dam and Lake McCloud is not included within the Recreation Plan for the McCloud-



Lake McCloud & mixed conifer forest

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Pit Project. As shown in Figure PM-18, the Stewardship Council looks to enhance recreation opportunities by monitoring recreation use below the dam along the McCloud River and managing this use consistent with the McCloud River Coordinated Resource Management Plan.

These measures would describe the process for addressing any cultural materials found during ground-disturbing activities. Throughout this effort, the Stewardship Council recommends close coordination with Native American entities.

Sustainable Forestry

Objective: Develop and implement forestry practices in order to contribute to a sustainable forest, preserve and enhance habitat, as well as to ensure appropriate fuel load management.

Forest stands are located along the McCloud River and include some old-growth trees, which could provide habitat for a variety of late successional habitat dependent species. The Stewardship Council recommends that future care and management of the land include developing a long-term vision for forest management in the area, addressing silvicultural practices, holistic watershed management, and fuels management. The forest management plan should be consistent with the McCloud River Coordinated Resource Management Plan. We expect that these plans would be developed in coordination with relicensing efforts, as well as with adjacent landowners and USFS management and practices as appropriate.

Preservation of Historic Values

Objective: Document and manage cultural resources in order to ensure their protection if discovered in the future.

Non-inundated planning unit lands are very steep and therefore there is a low likelihood of cultural resources being present. However, in order to ensure any cultural resources found within the planning unit in the future are protected and appropriately managed, we recommend that cultural resource protection measures be incorporated into conservation easements.

Endnote

¹Unless required by the Forest Service on National Forest Lands, PG&E does not propose to conduct eligibility evaluations for previously unevaluated sites. Instead, PG&E proposes to treat all unevaluated sites as if they are eligible for NRHP listing unless avoidance or elimination of potential adverse effects to a particular site is not feasible.

Table PM-9 Objectives to Preserve and/or Enhance – Recommended Concept

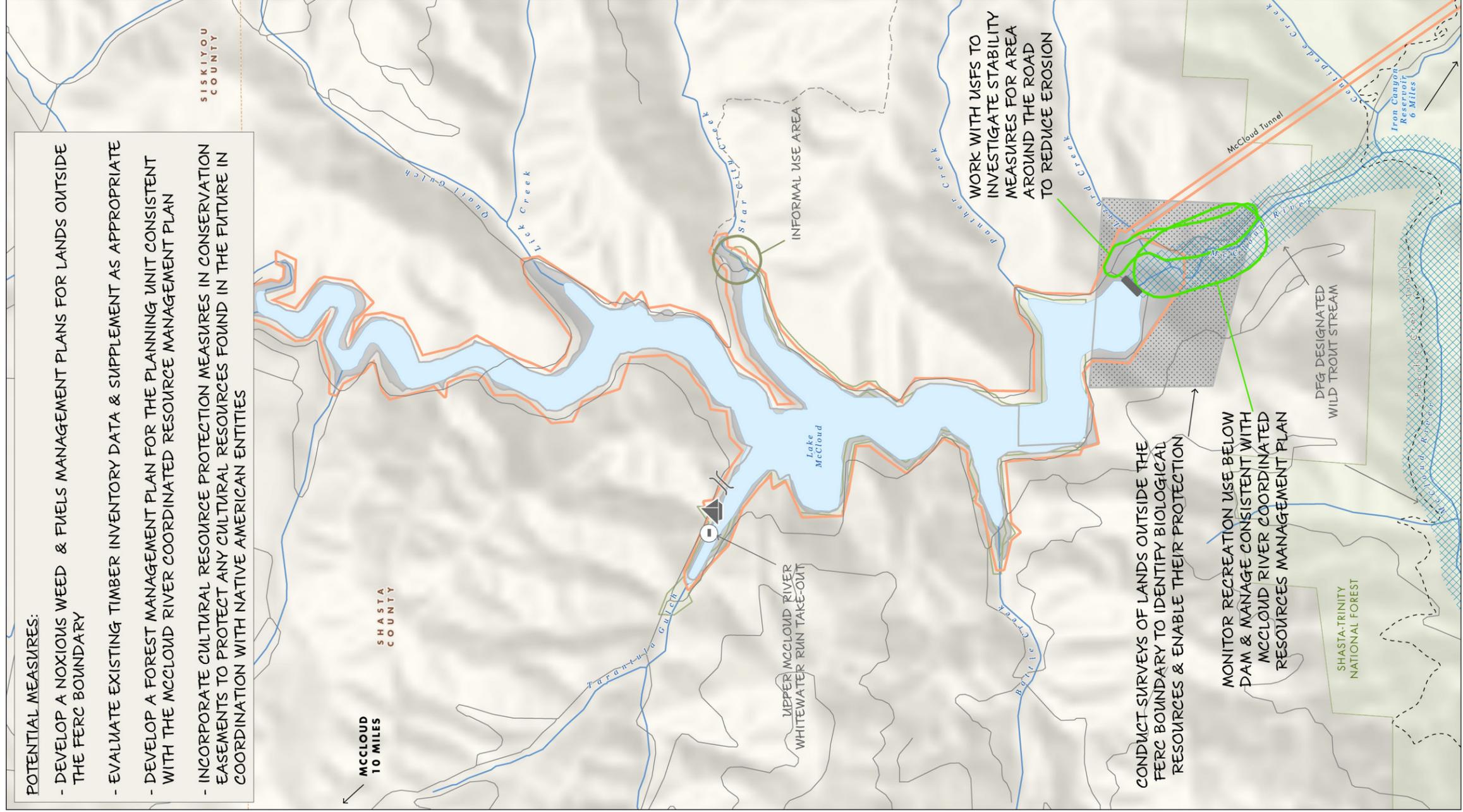
Planning Unit Objective: Preserve and enhance biological resources, as well as enhance sustainable forestry and recreation management.		
Beneficial Public Value	Objective	Potential Measures to Preserve and/or Enhance BPVs – Not Requirements*
Protection of the Natural Habitat of Fish, Wildlife, and Plants	Preserve and enhance habitat in order to protect special biological resources.	<ul style="list-style-type: none"> • Conduct surveys of lands outside the FERC boundary to identify biological resources and enable their protection. • Work with the USFS to investigate stability measures for the area around the access road below the dam to reduce erosion.** • Develop a noxious weed management plan for lands outside the FERC boundary.
Preservation of Open Space	Preserve open space in order to protect natural and cultural resources and the recreation setting.	<ul style="list-style-type: none"> • Apply permanent conservation easements to ensure a higher level of open space protection.
Outdoor Recreation by the General Public	Enhance recreation management in order to provide appropriate recreation use.	<ul style="list-style-type: none"> • Monitor recreation use below the dam along the McCloud River and manage recreation use consistent with the McCloud River Coordinated Resource Management Plan.**
Sustainable Forestry	Develop and implement forestry practices in order to contribute to a sustainable forest, preserve and enhance habitat, as well as to ensure appropriate fuel load management.	<ul style="list-style-type: none"> • Evaluate existing timber inventory data and supplement as appropriate. • Develop a forest management plan for the planning unit to promote natural forest development and structural and physical diversity in forests for long-term ecological, economic, social, and cultural benefits, consistent with the McCloud River Coordinated Resource Management Plan. • Develop a fuels management plan for lands outside the FERC boundary to ensure long-term forest health and reduce fuel loading and fire hazard.
Agricultural Uses		None proposed.
Preservation of Historic Values	Document and manage cultural resources in order to ensure their protection if discovered in the future.	<ul style="list-style-type: none"> • Incorporate cultural resource protection measures in conservation easements to protect any cultural resources found in the future in coordination with Native American entities.

* This is a set of recommended possibilities for the preservation and enhancement of BPV's, and is not intended to be a set of requirements for future land management.

** Denotes site specific measure.

Lake McCloud Planning Unit

Recommended Concept



POTENTIAL MEASURES:

- DEVELOP A NOXIOUS WEED & FUELS MANAGEMENT PLANS FOR LANDS OUTSIDE THE FERC BOUNDARY
- EVALUATE EXISTING TIMBER INVENTORY DATA & SUPPLEMENT AS APPROPRIATE
- DEVELOP A FOREST MANAGEMENT PLAN FOR THE PLANNING UNIT CONSISTENT WITH THE MCCLOUD RIVER COORDINATED RESOURCE MANAGEMENT PLAN
- INCORPORATE CULTURAL RESOURCE PROTECTION MEASURES IN CONSERVATION EASEMENTS TO PROTECT ANY CULTURAL RESOURCES FOUND IN THE FUTURE IN COORDINATION WITH NATIVE AMERICAN ENTITIES

CONDUCT SURVEYS OF LANDS OUTSIDE THE FERC BOUNDARY TO IDENTIFY BIOLOGICAL RESOURCES & ENABLE THEIR PROTECTION

MONITOR RECREATION USE BELOW DAM & MANAGE CONSISTENT WITH MCCLOUD RIVER COORDINATED RESOURCES MANAGEMENT PLAN

WORK WITH USFS TO INVESTIGATE STABILITY MEASURES FOR AREA AROUND THE ROAD TO REDUCE EROSION



- PG&E Lands Preliminarily Designated for Retention
- PG&E Lands Preliminarily Designated for Disposition
- BIA
- BLM
- BOR
- DOD
- NPS
- Other/NGO
- State
- USFS
- Federal Wilderness
- Concept Features
 - Modify Existing Feature
 - New Feature
 - Trail
- Existing Features
 - Boat Launch
 - Campground
 - Dam
 - Day Use
 - Feature of Importance
 - Fishing
 - Fish Barrier Dam
 - Gate
 - Lodging
 - Non-Motorized Boating
 - Parking
 - Powerhouse
 - Private Camp
 - Ranch
 - Trailhead
 - Whitewater Put-In/Take-Out
 - FERC Boundary
 - Stream / River
 - Canal / Ditch
 - Pipeline
 - Primary Roads
 - Secondary Roads
 - OHV Roads
 - Trail

All symbols may not appear on the map

PRELIMINARY SET OF RECOMMENDED POSSIBILITIES -NOT REQUIREMENTS

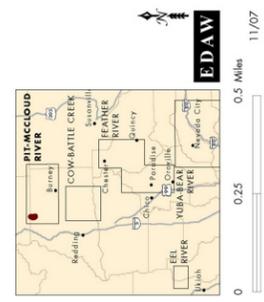


Figure PM-18
PM-82 LCP Volume II

Lake McCloud Planning Unit

Fish, Plant, and Wildlife Habitat

Potential Measure:

- *Conduct surveys of lands outside the FERC boundary to identify biological resources and enable their protection.*

Currently, there is very little biological information available for the planning unit. Though most of the planning unit lies within the FERC boundary and would therefore be incorporated into habitat and species studies conducted for relicensing, it is likely that lands outside the FERC boundary would not be studied as part of relicensing. Therefore, the Stewardship Council recommends conducting surveys of lands outside the FERC boundary, located around and south of the dam, to identify biological resources and thus gain a broader understanding of existing habitats and species to better enable their protection. Such information would be valuable in making future management decisions.

Potential Measure:

- *Work with the USFS to investigate stability measures for the area around the access road below the dam to reduce erosion.*

There are road stability issues with the USFS access road on planning unit lands from the dam south approximately one mile, where landslides are known to occur and the road washes out. Currently, road width has decreased due to rockfall. To reduce further sedimentation and erosion, the Stewardship Council recommends working with the USFS to investigate stability measures for the area around the access road. This measure could also provide safer, more reliable access for recreationists.

Potential Measure:

- *Develop a noxious weed management plan for lands outside the FERC boundary.*

There are potentially nine species of noxious weeds within the McCloud-Pit FERC Project area, including one known population of yellow starthistle at Lake McCloud. The planning unit may also contain several special status plants. There is also potential for vehicles to bring noxious weeds into the planning unit (seeds in the tires) along the access road below the dam, which is located on lands outside of the FERC boundary. To enhance habitat for native and special status plants, the Stewardship Council recommends developing a noxious weed management plan for lands outside the FERC boundary, consistent with existing PG&E noxious weed efforts, and relevant measures and/or plans developed as part of relicensing.

Open Space

Potential Measure:

- *Apply permanent conservation easements to ensure a higher level of open space protection.*

The Stewardship Council recommends preserving open space values through permanent conservation easements. Conservation easements would describe all prohibited uses to maintain

open space values, including the level of uses allowed. Recommendations do not include development of any new sites and are therefore not expected to decrease the scenic quality of the viewsheds.

Outdoor Recreation

Potential Measure:

- *Monitor recreation use below the dam along the McCloud River and manage recreation use consistent with the McCloud River Coordinated Resource Management Plan.*

The extent to which recreation use immediately below the dam is occurring is unknown, as well as whether any impacts to other resources are occurring. Anglers can access the river via the stairs down to the PG&E stream gage below the dam. It is likely that any recreation use below the dam (perhaps hiking and fishing) is focused on the river area, which is included in the McCloud River Coordinated Resource Management Plan boundary. The plan mandates that recreation within the lower McCloud area be dispersed and accessed by trails. The Stewardship Council recommends monitoring (and documenting) recreation use below the dam around the river and managing any recreation use that is occurring in a manner consistent with the McCloud River Coordinated Resource Management Plan to enhance recreation and protect habitat.

Sustainable Forestry

Potential Measures:

- *Evaluate existing timber inventory data and supplement as appropriate.*
- *Develop a forest management plan for the planning unit to promote natural forest development and structural and physical diversity in forests for long-term ecological, economic, social, and cultural benefits, consistent with the McCloud River Coordinated Resource Management Plan.*

The planning unit contains forest resources primarily below the dam, as this is the main land acreage within the planning unit. Forest stands are located along the access road and the McCloud River and include some old-growth trees, which could provide habitat for a variety of late successional habitat dependent species. The McCloud River Coordinated Resource Management Plan outlines fuels and wildlife management objectives and allowable practices, which apply to 80 acres of planning unit lands below the dam as well as all public and private lands along the McCloud River. The Stewardship Council recommends developing a forest management plan for the planning unit that is consistent with the McCloud River Coordinated Resource Management Plan. The forest management plan would be developed through the evaluation of existing forest inventory data and supplemental information, when appropriate. In addition to supporting natural forest development, the forest management plan would promote holistic watershed management, supporting the enhancement of other BPVs over the long term. Additionally, the forest management plan should be developed in coordination with any relevant plans that are developed as part of relicensing.

In areas where timber extraction is consistent with the forest management plan, timber harvesting techniques would be promoted that maintain mosaics of forest stands of different age, size, and rotation period. In addition to utilizing PG&E's uneven-age selection harvest system, harvesting practices and a monitoring program would be developed to protect watercourses and lakes and

promote the restoration and conservation of natural forests. Post-harvest, a monitoring plan would be developed to ensure that forest management and the proposed harvesting schedule would be consistent with the forest management plan, promoting natural forest development in perpetuity.

Potential Measure:

- *Develop a fuels management plan for lands outside the FERC boundary to ensure long-term forest health and reduce fuel loading and fire hazard.*

To protect late successional habitat and reduce fire risk, the Stewardship Council recommends developing a fuels management plan for lands outside the FERC boundary as most forest resources within the planning unit are located outside of the FERC boundary. The fuels management plan should be consistent with relevant measures and/or plans developed as part of relicensing.

Preservation of Historic Values

Potential Measure:

- *Incorporate cultural resource protection measures in conservation easements to protect any cultural resources found in the future in coordination with Native American entities.*

The Stewardship Council also recommends protecting any cultural resources found in the future through permanent conservation easements that include cultural resource protection measures. These measures would describe the process for addressing any cultural materials found during ground-disturbing activities. Development of appropriate cultural resource protection measures would be coordinated with Native American entities.

Agricultural Uses

None recommended.

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