

NARROWS PLANNING UNIT

Yuba-Bear River Watershed

Existing Conditions & Uses

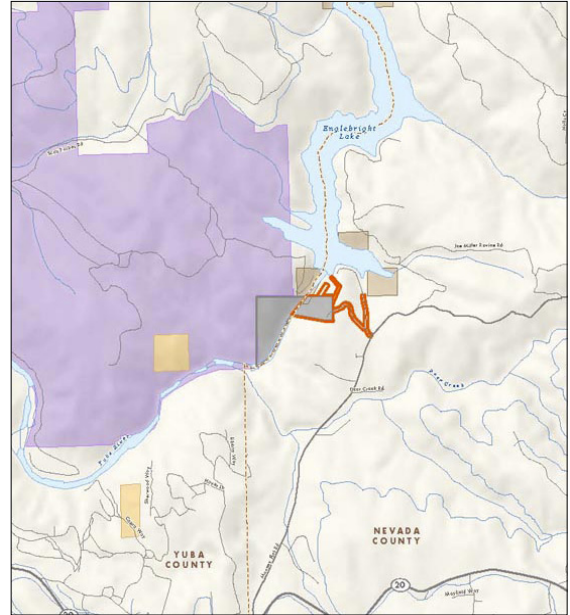
Overview

- Over 80 acres on the border of Nevada and Yuba Counties
- Rocky slopes with grey pine-oak forest overlooking the lower Yuba River, which provides one of the last remaining wild runs of chinook salmon and steelhead trout
- Comprises the Narrows Project (FERC # 1403); New License issued in 1993 and expires in 2023
- 59 acres outside the FERC boundary; 23 acres inside

As shown in Figure YB-7, the Narrows Planning Unit contains two parcels of open space on the rocky slopes of the lower Yuba River, about 0.25 miles downstream of the Englebright Dam. At an elevation of 800 feet, the Narrows Planning Unit is located 16 miles west of Grass Valley and 24 miles east of Marysville. The site can be reached from Highway 20 and Mooney Flat Road. The eastern parcel is accessible via private roads, and the western parcel is accessible through the Sierra Foothill Research and Extension Center (SFREC) of the University of California, Davis. The



View south from Englebright Dam



Narrows Planning Unit
Nevada & Yuba Counties

parcels about U.S. Department of Defense (DOD), State, BLM, and private lands.

The Narrows Planning Unit is found in a reach of the Yuba River between two dams, the Englebright Dam and Daguerre Point Dam. Both dams are operated by the U.S. Army Corps of Engineers (USACE) and were constructed in the early half of the 20th century to store hydraulic gold mining debris. Through contracts with USACE and the Yuba County Water Agency (YCWA), PG&E regulates water releases from Englebright Lake. In addition to the PG&E-operated powerhouse, a second powerhouse is located on the other side of the lower Yuba River and is owned and operated by the YCWA. The YCWA's powerhouse also utilizes water stored in Englebright Lake for hydroelectric power generation. Upstream of the planning unit, the 40-mile reach of the Yuba River between the Spaulding and Englebright Lakes is designated as a State Wild and Scenic River.

Mining is an historic activity in the area and the effects of widespread hydraulic mining are evident today. Mining in the Yuba and Bear River Watersheds have resulted in increased amounts of mercury and methylmercury in these aquatic systems. Various groups have been

Narrows Planning Unit

Existing Conditions

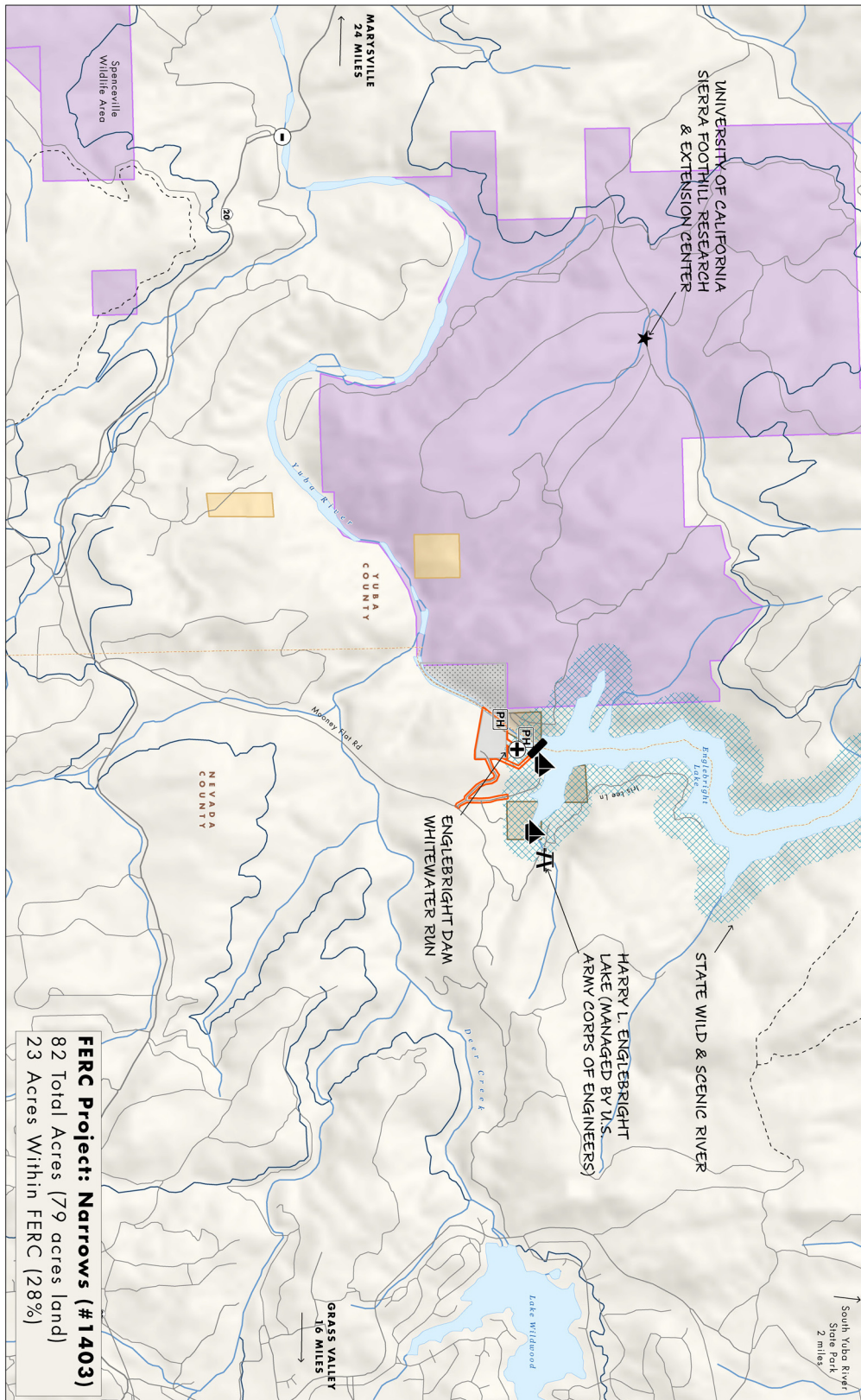
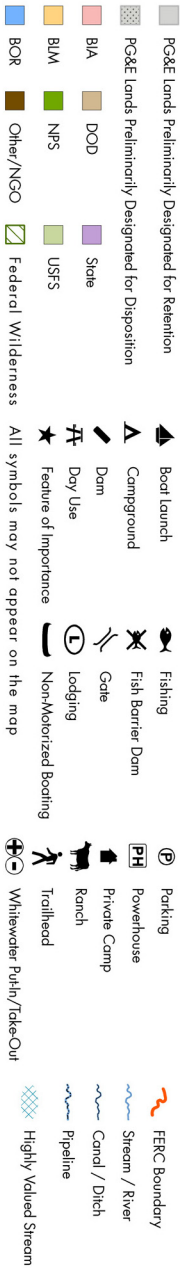


Figure YB-7

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examining this critical health concern over the past few years.¹ One study focused on fish and found that mercury concentrations in smallmouth and spotted bass in Englebright Lake were greater than the Environmental Protection Agency (EPA) and Office of Environmental Health Hazard Assessment's threshold.

Fish, Plant, and Wildlife Habitat

The steep, exposed slopes of the Yuba River Canyon provide a dramatic setting for the grey pine-oak forest and grasslands, which sparsely populate the area around the Narrows Planning Unit. This vegetation type provides wildlife habitat for many species such as special status raptors, including golden eagle, peregrine falcon, and bald eagle, which have been recorded within one mile of the FERC boundary. Over 100 bird species have been recorded in the nearby oak forests of the SFREC. Given the occurrence of special status bird species, an enhancement plan for bald eagles at Englebright Lake as well as a raptor protection plan have been undertaken by PG&E.

Surveys conducted since 1993 for special status species found no occurrences. A rare plant survey within the one-mile buffer of the FERC boundary resulted in a similar finding.

The lower Yuba River provides unique spawning and rearing habitat for one of the last wild runs of chinook salmon and steelhead in the Central Valley.² Currently, the Englebright Dam is the upstream limit of fish migration. A post-licensing PG&E Habitat Conservation Plan determined that the Narrows Project is not expected to detrimentally affect steelhead and spring-run chinook salmon or their habitat due to project impacts on instream flows, water temperatures, and water quality in the lower Yuba River.³ After relicensing, PG&E developed a Fisheries Enhancement Plan which supports efforts such as ongoing biological evaluations in the lower Yuba River and screening and fish passage improvements. PG&E completes a yearly report that outlines proposed fisheries enhancements for the upcoming year.

Since 2002, the YCWA has been collaborating with a coalition of agricultural, environmental, and fisheries interests to draft a proposal for the Lower Yuba River Accord.⁴ Planned for implementation in 2006, the Lower Yuba River Accord includes a 24-mile reach of the Yuba River, extending from Englebright Dam to the Feather River confluence. The Fisheries Agreement of this accord seeks to improve habitat in the lower Yuba River for steelhead and chinook salmon populations through higher flow requirements and improved stream habitat conditions. The Yuba Accord River Management Team will also conduct long-term scientific fisheries studies, monitoring, and physical restoration projects in the reach.

Adjacent to planning unit lands on the northern shore of the South Yuba River, the SFREC extends over 5,721 acres. This facility conducts research on range and pasture development, livestock health and management, and natural resource management. Once primarily focused on research that supported livestock and agronomic productivity, the center has expanded its research breadth over the past decade to include wildlife, open space, and watershed management. Present research includes oak woodland ecology and regeneration.

Open Space

The planning unit is situated in a remote area abutting grey pine-oak forest and provides scenic



Englebright Dam viewpoint & interpretive signs

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views downstream of the Englebright Lake visitor's viewpoint. The planning unit exhibits the natural, open space character of the area.

Outdoor Recreation

No recreation opportunities are available in the Narrows Planning Unit due to limited public access, steep and rocky banks, sensitive fisheries habitat, and concerns related to public safety. The reach of the Yuba River below Englebright Dam is regarded as a high quality fishing spot, but access is limited because it is a fish hatching area. Downstream of the parcels on the South Yuba River, DFG provides angling opportunities to a limited number of people via a raffle. Below the Englebright Dam, there is a put-in for a six-mile, Class III whitewater run. Outside of the Narrows Planning Unit, recreation facilities are found in the vicinity at South Yuba River State Park, Spencerville Wildlife Area, and Englebright Lake.⁵

Forest Resources

The Narrows Planning Unit contains one PG&E Timber Management Unit (TMU) which includes no timbered acres. No timber extraction takes place within the planning unit.

Agricultural Uses

No agricultural activities take place within the planning unit. However, the Sierra Foothill Research and Extension Center conducts agricultural research on adjacent lands. The SFREC serves as a national and international center for research, extension, and teaching related to agriculture and natural resources management.

Historic Resources

The Southern Maidu and Washoe once lived in the area around the Narrows Planning Unit. Eighty percent of the land within the

FERC boundary has been surveyed for cultural resources and two sites have been identified. No cultural resources within the FERC boundary have been determined to be eligible for the NRHP. The Yuba Powerhouse Foothill Preserve dates back to 1898 and is located in the vicinity of the planning unit.

Stewardship Council Recommendations

The Stewardship Council recommends that the land and land uses in the Narrows Planning Unit be preserved and enhanced by focusing on the important terrestrial and aquatic habitat values, opportunities for research and restoration, cultural resources, and viewsheds available within the planning unit. In presenting the Recommended Concept provided here (see Figure YB-8), our objective is to preserve and enhance biological resources, and preserve cultural resources and open space. We recommend this effort be conducted in close coordination with PG&E.

Objective: Preserve and enhance biological resources while preserving cultural resources and open space.



Deer Creek from Mooney Flat Road

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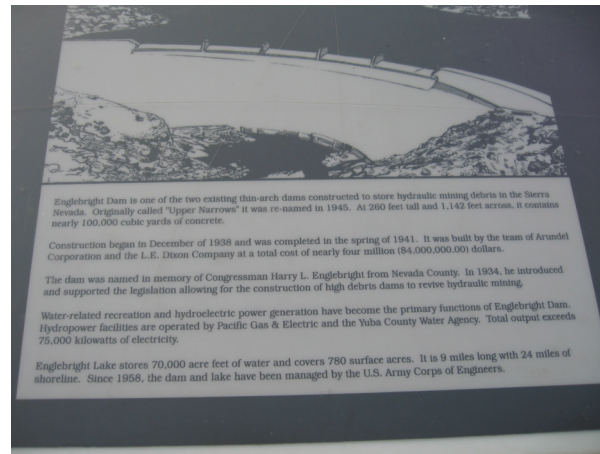
As shown on Table YB-4, the Stewardship Council has identified a number of preservation and/or enhancement measures that may contribute to the conservation management program for the Narrows Planning Unit. Additional detail and background regarding these potential measures can be found in the Supporting 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 grasslands and grey pine-oak forest of the Narrows Planning Unit support a variety of species. The Yuba River is also home to unique spawning and rearing habitat for one of the last wild runs of chinook salmon and steelhead trout in the Central Valley. 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 relicensing study area where little information is currently available). These studies will likely be followed by management plans to ensure implementation of preservation and enhancement measures for specific resources. Management of the property to preserve and enhance habitat will also include addressing noxious weeds.

We also recommend supporting oak and river restoration efforts in the area, including fisheries habitat monitoring. Support (including providing access to the planning unit) of mercury contamination research, monitoring, and restoration efforts carried out by interested stakeholders is also recommended by the Stewardship Council in order to more fully understand this complex situation throughout



Interpretive sign at the Englebright Dam viewpoint

the watershed. We encourage close coordination with the resource-focused organizations working in the area. Habitat preservation and enhancement measures should be consistent with FERC license requirements.

Open Space

Objective: Preserve open space in order to protect natural and cultural resources and viewsheds.

This concept would preserve open space by limiting construction to minor alterations associated with restoration efforts, as well as 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.

Preservation of Historic Values

Objective: Identify cultural resources in order to ensure their protection.

A few cultural resources are known to be present in the Narrows Planning Unit and there is a high likelihood that additional resources are present. The Stewardship Council aims to support an increased understanding of these resources and ensure they are appropriately protected. To meet this objective, we recommend that cultural

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PG&E FERC project sign, Narrows Project

resource studies be conducted to understand the resources found in the Narrows Planning Unit (particularly outside the FERC relicensing study area where less information is available). Throughout this effort, the Stewardship Council recommends close coordination with Native American entities.

Endnotes

¹ Recently, the EPA, in coordination with Federal and local agencies, removed mercury-contaminated gravels and sluice box wood from the Polar Star Mine tunnel in the Bear River Planning Unit. This was the first attempt to clean up an abandoned mine in the area and serves as a trial for future remediation and restoration efforts. The CALFED Bay-Delta Program, the State Water Resources Control Board, and other programs targeting water quality problems have also provided insight to the issue of mercury contamination; however, there is no comprehensive assessment of mercury loading, accompanying monitoring of the aquatic systems, or impacts to human and wildlife populations.

² Central Valley steelhead and spring-run chinook salmon are currently listed as threatened under the Federal Endangered Species Act (ESA), and the Central Valley late fall-run chinook salmon has been designated as a candidate for listing, under the Federal ESA.

³ Flow fluctuations, however, have the potential to contribute to dewatering and stranding of steelhead and chinook salmon redds and juveniles. An ongoing monitoring and evaluation plan was developed by the YCWA in 2002 to assess the impacts of flows on these special status anadromous fish.

⁴ The Lower Yuba River Accord is a collaborative agreement that addresses the issue of instream flow requirements in the lower Yuba River.

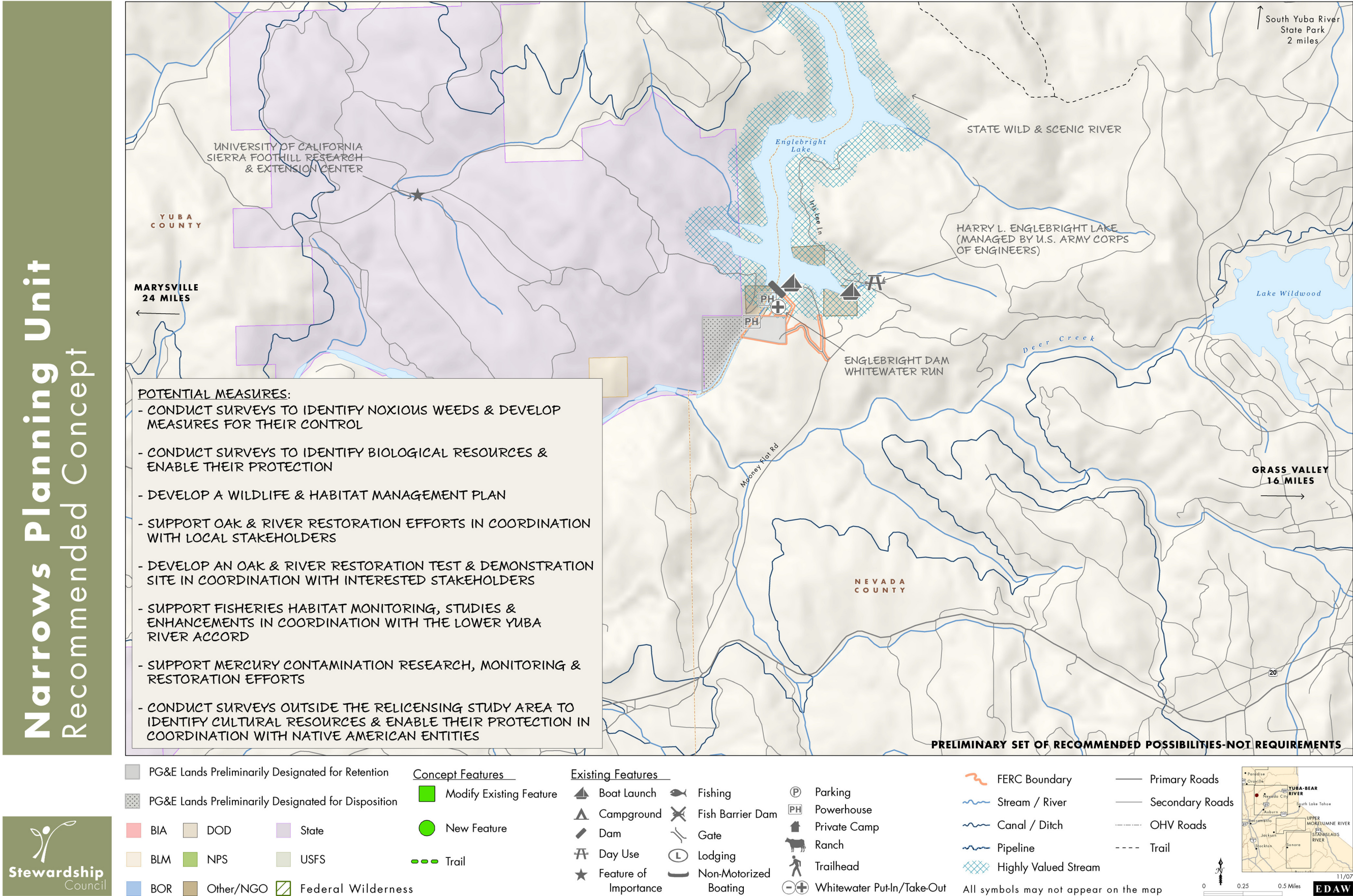
⁵ Englebright Lake offers picnicking, angling, camping, and boating. A fishing access provides angling opportunities for rainbow trout (5,000 of which are stocked by PG&E annually), large and small mouth bass, and catfish. Boating enthusiasts are provided with two paved boat launches and over 100 boat-in campsites with grills and picnic tables.

Table YB-4 Objectives to Preserve and/or Enhance – Recommended Concept

Planning Unit Objective: Preserve and enhance biological resources while preserving cultural resources and open space.		
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.	• Conduct surveys outside the FERC relicensing study area to identify biological resources and enable their protection. • Conduct surveys throughout the planning unit to identify noxious weeds and develop measures for their control. • Develop a wildlife and habitat management plan for the planning unit. • Support oak and river restoration efforts in coordination with local stakeholders. • Develop an oak and river restoration test and demonstration site in coordination with interested stakeholders. • Support fisheries habitat monitoring, studies, and enhancements in coordination with the Lower Yuba River Accord. • Support mercury contamination research, monitoring, and restoration efforts.
Preservation of Open Space	Preserve open space in order to protect natural and cultural resources and viewsheds.	• Apply permanent conservation easements to ensure a higher level of open space protection.
Outdoor Recreation by the General Public		None proposed.
Sustainable Forestry		None proposed.
Agricultural Uses		None proposed.
Preservation of Historic Values	Identify cultural resources in order to ensure their protection.	• Conduct surveys outside the FERC relicensing study area to identify cultural resources and enable their protection 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.

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Narrows Planning Unit

Open Space

Potential Measure:

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

The Stewardship Council recommends preserving open space through permanent conservation easements. These easements, especially for the western parcel which is bordered by the Sierra Foothill Research and Extension Center (SFREC), would create viewshed continuity in this reach of the lower Yuba River, as well as provide habitat connectivity with the SFREC. As easements would limit or preclude development on the planning unit, the public would be able to appreciate the scenic qualities and natural beauty of this rocky canyon landscape from the Englebright Lake area and surrounding environs.

Fish, Plant, and Wildlife Habitat

Potential Measures:

- *Conduct surveys outside the FERC relicensing study area to identify biological resources and enable their protection.*
- *Conduct surveys throughout the planning unit to identify noxious weeds and develop measures for their control.*
- *Develop a wildlife and habitat management plan for the planning unit.*

The grasslands and grey pine-oak forest of the planning unit support a variety of biological species. The Stewardship Council recommends conducting surveys to identify biological resources outside the FERC relicensing study area. The results of these surveys would supplement biological studies conducted during relicensing in 1993. In addition, a survey of noxious weeds would be conducted throughout the planning unit to determine the presence of noxious species and develop measures for their eradication or control. The information from these surveys would provide the foundation for the development of a wildlife and habitat management plan for the planning unit. This plan would incorporate recommendations from various relicensing evaluations, including the monitoring and evaluation plan for steelhead and chinook salmon developed by the Yuba County Water Agency (YCWA), to create a management vision for the protection and enhancement of biological resources throughout the Narrows Planning Unit.

Potential Measures:

- *Support oak and river restoration efforts in coordination with local stakeholders.*
- *Develop an oak and river restoration test and demonstration site in coordination with interested stakeholders.*

Additionally, the wildlife and habitat management plan would support oak and river restoration efforts in collaboration with local stakeholders, including the YCWA. Regeneration has been a critical issue for this community type. With the results of the aforementioned biological surveys,

which would include a survey of oak woodlands, an oak and river restoration test and demonstration site would be developed on the planning unit lands. The goal of this measure would be to study the structure and dynamics of grey pine-oak forest, a common Sierra foothill ecosystem, as well as conduct research to foster an understanding of oak regeneration in situ. Due to the existence of large oaks in the planning unit as well as the proximity to the ongoing research at the SFREC, the planning unit would provide a unique opportunity to advance restoration efforts in oak woodland landscapes.

Potential Measure:

- *Support fisheries habitat monitoring, studies, and enhancements in coordination with the Lower Yuba River Accord.*

The riparian component of restoration efforts would be coordinated with the proposed Lower Yuba River Accord. The Lower Yuba River Accord aims to improve fisheries habitat, perform long-term fisheries monitoring, and promote physical restoration in the Lower Yuba River. The Stewardship Council recommends supporting riparian enhancements, as well as any subsequent restoration efforts, developed from this multi-institutional effort.

Potential Measure:

- *Support mercury contamination research, monitoring, and restoration efforts.*

Similarly, the Stewardship Council recommends supporting mercury contamination research, monitoring, and restoration efforts in the Yuba River Watershed. The planning unit would be made available for aquatic and wildlife assessments and monitoring led by the various groups involved with this issue. Assessments would relate to mercury loading in streams and soils as well as concentrations in fish and wildlife. Subsequent monitoring would be beneficial to fully understanding this complex situation throughout the watershed. The Stewardship Council recommends supporting and participating in restoration efforts identified and carried out by interested stakeholders.

Preservation of Historic Values

Potential Measure:

- *Conduct surveys outside the FERC relicensing study area to identify cultural resources and enable their protection in coordination with Native American entities.*

Lastly, a survey outside the FERC relicensing study area would be conducted to identify cultural resources in coordination with Native American entities. Based on the results of this survey, necessary protection measures would be developed to preserve cultural resources within the Narrows Planning Unit.

Outdoor Recreation

None recommended.

Recreation opportunities within the planning unit are limited due to the difficult access and steep and rocky slopes. Some opportunities may be supported in the planning unit, such as increased angling access; however, no specific measures have been recommended at this time due to the extensive coordination required between the SFREC and angling groups.

Sustainable Forestry

None recommended.

Agricultural Uses

None recommended.