

COW CREEK PLANNING UNIT

Cow-Battle Creek Watershed

Existing Conditions & Uses

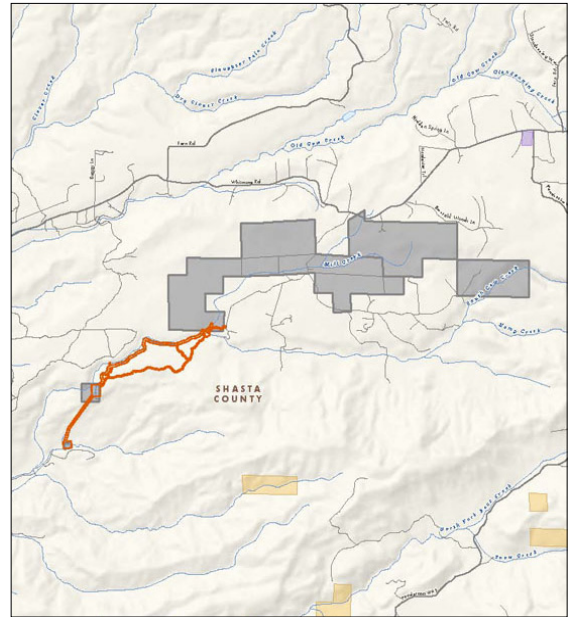
Overview

- 2,310 acres of semi-timbered rangeland in Shasta County
- 2,292 acres outside the FERC boundary; 18 acres inside the FERC boundary
- Part of the Kilarc-Cow Creek Project (FERC #606); License expired March 2007

As shown in Figure CB-5, the Cow Creek Planning Unit is located in Shasta County, just southwest of the rural community of Whitmore and approximately 16 miles east of the City of Redding. The planning unit includes infrastructure associated with the Kilarc-Cow Creek FERC Project (FERC #606), specifically facilities associated with the Cow Creek portion of the project that are located on South Cow Creek. Although there are a few hydropower facilities within the planning unit, nearly all (99.3%) of the planning unit is outside the FERC boundary. Planning unit lands are composed of semi-timbered grazing land surrounded by private property. The surrounding private lands are primarily ranches, timberlands, and rural



Mill Creek



Cow Creek Planning Unit
Shasta County

residential developments including a large rural subdivision named Mill Creek Estates (see Figure CB-5).

Decommissioning Process

The current FERC license for the Kilarc-Cow Creek Project expired on March 27, 2007. PG&E filed a Notice of Intent to File Application for a New License for the project in early 2002 and started the relicensing process. However, PG&E signed the Kilarc-Cow Creek Project Agreement in 2005 with resource agencies and other project stakeholders. PG&E will seek to decommission the Kilarc-Cow Creek FERC Project, through the process and timeline to be submitted to FERC in a surrender application. PG&E will continue to operate the project under the terms and conditions of the existing license until the license expires, and then on annual licenses issued by FERC until the project is decommissioned. Currently, PG&E is operating the Kilarc-Cow Creek Project under a one year license extension, issued by FERC, until March 31, 2008.

COW CREEK PLANNING UNIT

Cow-Battle Creek Watershed

Fish, Plant, and Wildlife Habitat

The Cow Creek Planning Unit provides riparian and aquatic habitat at the forebay and along Mill Creek and South Cow Creek, which run through the center and eastern portions of the planning unit, respectively. Because this FERC Project has not been relicensed in many years, specific (i.e., confirmed) habitat and species information for the FERC lands within the planning unit is very limited. In addition, the vast majority of the planning unit is not included within the Kilarc-Cow Creek FERC boundary, and it is likely that no habitat or species composition studies have been performed.

Many bird species may forage and breed within the riparian areas, along the creeks or at the Cow Creek Forebay. Additionally, foothill yellow-legged frog and northwestern pond turtle may occur. The planning unit is within critical winter range for deer, and the Whitmore area is considered a corridor for deer migrating to fawning and summering areas. Feral pigs have also been observed within the Whitmore area, and evidence of these animals was identified at the planning unit on a site visit. At least three noxious weed species were observed on planning unit lands during a site visit: medusahead, yellow star-thistle, and Himalayan blackberry.

Freshwater marsh or seeps are common within the region and may occur near South Cow Creek and the Cow Creek Powerhouse and Forebay. Wetlands are located near the springs at the headwaters of Mill Creek. The creek also supports both wet and dry meadows adjacent to the creek channel. Aquatic species found in South Cow Creek include brown and brook trout, native resident fishes, and fall-run chinook salmon and steelhead. Late fall-run and possibly spring-run chinook salmon also utilize South Cow Creek. Other aquatic species that could be present within South Cow Creek include foothill yellow-legged frog (documented occurrence below the forebay) and California red-legged frog, both special status species. The need for analysis of species and habitats will likely be addressed in the decommissioning process;

however, decommissioning studies may include only a very small portion of the planning unit.

Open Space

The Shasta County General Plan recognizes that agricultural lands provide privately maintained open space, contributing to both the rural character of the county and its open, natural landscape. Open space values are found throughout the planning unit. The primary land uses are grazing and timber production and there is a lack of development and recreation facilities. These land uses are congruent with the surrounding 50,000+ acres of agricultural and timber lands.

Outdoor Recreation

There is very little recreation use within the planning unit due to limited access; many secondary unimproved dirt roads in the planning unit are not well maintained or signed and navigation can be difficult. There is some recreation at the Mill Creek Bridge (see Figure CB-5). The bridge provides local people with an area to swim in the creek, as evidenced by a rope swing and rock dam swim area. Additionally, some hunting for deer and turkey occurs within the planning unit, and unauthorized OHV use has also been noted. LaTour State Forest and Lassen National Forest are located within approximately



Annual grassland

COW CREEK PLANNING UNIT

Cow-Battle Creek Watershed



Mixed oak woodland & grassland

ten miles. These public recreation areas, together with the recreation areas in the nearby Kilarc Reservoir Planning Unit, provide a larger variety and quantity of recreation activities and facilities than those available within the planning unit and thus receive greater use.

Forest Resources

Forest resources include mixed conifer forest consisting of ponderosa pine, grey pine, California black oak, incense-cedar, and blue oak. A diverse shrub component includes dense stands of Himalayan blackberry, poison oak, willow species, Oregon grape, manzanita, and scattered California buckeye. Below the canopy are annual grasslands and open meadows.

There is one PG&E Timber Management Unit (TMU) for the planning unit consisting of 1,007 timbered acres. The TMU is managed under a Sustainable Timber Management prescription, meaning that sustained timber production is regarded as the highest and best use of the land while also placing an emphasis on protecting water quality, wildlife and fisheries habitat, soils, carbon sequestration, and cultural resources. The forebay and powerhouse parcels (not included in the TMU) are small and consist of oak and grey pine.

Recently, there has been a brush removal project in the planning unit to remove manzanita from the powerline right-of-way as well as from

the large northwestern area that is not grazed. Currently, approximately 300 acres of brush have been cleared in preparation for conifer replanting, with 220 acres of the 300 acres already replanted and the remaining 80 acres scheduled for replanting in the spring of 2008. Replanting of conifers on cleared areas has (and will) create even-age plantations. PG&E also plans on harvesting and rehabilitating (i.e., back to conifer from brush) the entire planning unit in 2007. The Timber Harvesting Plan filed for the 2007 harvest identifies removing unhealthy or overmature overstory trees, leaving a portion of healthy overstory trees, and removing dead, dying, and diseased understory trees. According to one of the grazing lessees, the most recent harvest was 30 years ago.

Agricultural Uses

According to Jan Thielemann's book on the history of the community of Whitmore, ranching has been vital to the Whitmore area since it was first settled in the mid-1800s. There are several ranches nearby, primarily south of the planning unit on the south side of South Cow Creek. Most of the planning unit lands outside the FERC boundary are currently grazed under two grazing leases. One lease covers the majority of the lands (1,467 acres) within the planning unit. The second lease (324 acres) covers the eastern parcel. Approximately 473 acres are not under a lease due to the lack of available forage.



Mill Creek meadows, mixed oak forest & chaparral

COW CREEK PLANNING UNIT

Cow-Battle Creek Watershed

Around 75 to 80 head of cattle are grazed each year on the larger leased area from the beginning of October to March. Hay is used to supplement feed from December to March. The grazing lessee for the larger area has been grazing cattle in this planning unit for 55 years and also grazes cattle at the Burney Gardens Planning Unit. This lessee has performed some controlled burns in the western portion of the planning unit to reduce manzanita in an attempt to provide more forage. Grazing information for the second, smaller grazing lease is not available.

Historic Resources

The Cow Creek Planning Unit lies within the ancestral territory of the Central Yana people. Skirmishes between Yana populations and European settlers led to massacres between 1847 and 1867, leaving the Yana population at less than 100 individuals.¹ The South Cow Creek Hydroelectric System was constructed in 1907 to supply electricity for copper mining activities, and was acquired by PG&E in 1919 from the Northern California Power Company.

There are three recorded sites within the FERC Project area. The primary grazing lessee noted that evidence of the Miller homestead is visible within the planning unit, indicating there are likely additional cultural resources within the planning unit. Most of the five cultural resource studies that have been previously conducted for the FERC Project were not performed within the planning unit and were not performed to current standards. Documentation of the presence of and impacts to cultural resources may be addressed in the decommissioning process; however, these studies will likely only cover a very small portion of the planning unit.



Mill Creek swimming hole

Stewardship Council Recommendations

The Stewardship Council recommends that the land and land uses at the Cow Creek Planning Unit be preserved and enhanced by focusing on enhancing agricultural uses and cultural resources, while also protecting natural resources and enhancing sustainable forestry management. In presenting the Recommended Concept provided here (see Figure CB-6), our objective is to protect and enhance agricultural uses, cultural and biological resources, as well as enhance sustainable forestry. While most of the acreage is outside the FERC boundary, all recommended measures must be coordinated with the decommissioning process to avoid inconsistent or duplicative recommendations. When the decommissioning process is completed, the planning unit will need to be re-evaluated based on the outcome, in close coordination with community stakeholders and all interested parties.

COW CREEK PLANNING UNIT

Cow-Battle Creek Watershed

Objective: Preserve and enhance biological, cultural and agricultural resources, and enhance sustainable forestry management.

As shown on Table CB-3, the Stewardship Council has identified a number of preservation and/or enhancement measures that may contribute to the conservation management program for the Cow Creek 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.

Wetlands, meadows, marsh, and seeps that occur or may occur within the planning unit suggest there could be special status species present, though little study of habitat resources within the planning unit has occurred. In order to preserve and enhance the habitat and resources found here, the Stewardship Council recommends that baseline studies and plans be



Oak woodland

developed to gain a clear understanding of the resources. If special status species are found and protection and/or enhancement measures appear to be needed or feasible, a wildlife and habitat management plan could be developed as appropriate. Management of the property to preserve and enhance habitat will also include addressing noxious weeds. We recommend close coordination with grazing lessees, the Cow Creek Watershed Management Group, and other resource-focused organizations working in the area. All planning should be considered in conjunction with the rangeland management plan.

Open Space

Objective: Preserve open space in order to protect natural and cultural resources, viewsheds, and agricultural land uses.

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 recreational management in order to provide appropriate recreation use.

The planning unit is not a recreation destination and current recreation use is probably low. With the presence of nearby large recreation areas such as Lassen National Forest, Thousand Lakes Wilderness, and LaTour State Forest, development of extensive recreation facilities within the planning unit is not warranted. However, the Whitmore area is becoming more developed, and therefore, local resident use of the planning unit may increase. The Stewardship Council recommends monitoring recreation use within the planning unit to identify any problems or impacts from recreation and the need for additional management of recreation use. If

COW CREEK PLANNING UNIT

Cow-Battle Creek Watershed

additional facilities or management is needed, efforts should be coordinated with the grazing lessees and management of forest and agricultural resources.

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 and fire management.

The Cow Creek Planning Unit forest resources are currently undergoing changes to enhance timber production and forest health. Additionally, the planning unit is situated near expanding rural development in a fire-prone area. 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, fuels management, fire management and response, and management of plantations. The fuels, fire management and response, and forest management plans should be developed in conjunction with rangeland, and noxious weed management plans. We expect that all of these plans would be developed in coordination with adjacent landowners, CDF, the community of Whitmore, Cow Creek Watershed Management Group, and grazing lessee management and practices as appropriate.

Agricultural Uses

Objective: Preserve and enhance grazing in order to support associated economic benefits, as well as to protect open space and habitat resources.

Grazing currently occupies almost 1,800 acres of the planning unit and has been vital to the region since it was first settled in the mid-1800s. The Stewardship Council looks to preserve this resource and important economic use as part of



Mixed oak & ghost pine woodlands

the long-term management of the Cow Creek area. To support this effort, we anticipate a baseline conditions report will be required to describe current agricultural, physical, and overall conditions of the area, including current uses and state of improvements. From this, specific determinations can be made to identify and manage grazing practices in balance with other uses and values of the property. To provide better livestock management, the Stewardship Council recommends updating deteriorating fencing and evaluating the need for additional fencing.

The planning unit could also provide opportunities to educate local residents and visitors on appropriate grazing and sustainable forestry practices to enhance their perceptions and appreciation for working landscapes and their value to habitats and local economies. The Stewardship Council recommends evaluating the potential for educational facilities/programs in coordination with grazing lessees, the community of Whitmore, CDF, Cattleman's Associations, and the Cow Creek Watershed Management Group.

Preservation of Historic Values

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

There are homesteads and potentially other cultural resources within the planning unit. The

COW CREEK PLANNING UNIT

Cow-Battle Creek Watershed

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 resource studies be conducted to understand the resources found in the Cow Creek Planning Unit and that appropriate management plans be developed and implemented. Throughout this effort, the Stewardship Council recommends close coordination with Native American entities.

Endnote

¹ The Pit River Tribe now represents the Yana people, as some members of the Tribe are of Yana decent.

Table CB-3 Objectives to Preserve and/or Enhance – Recommended Concept

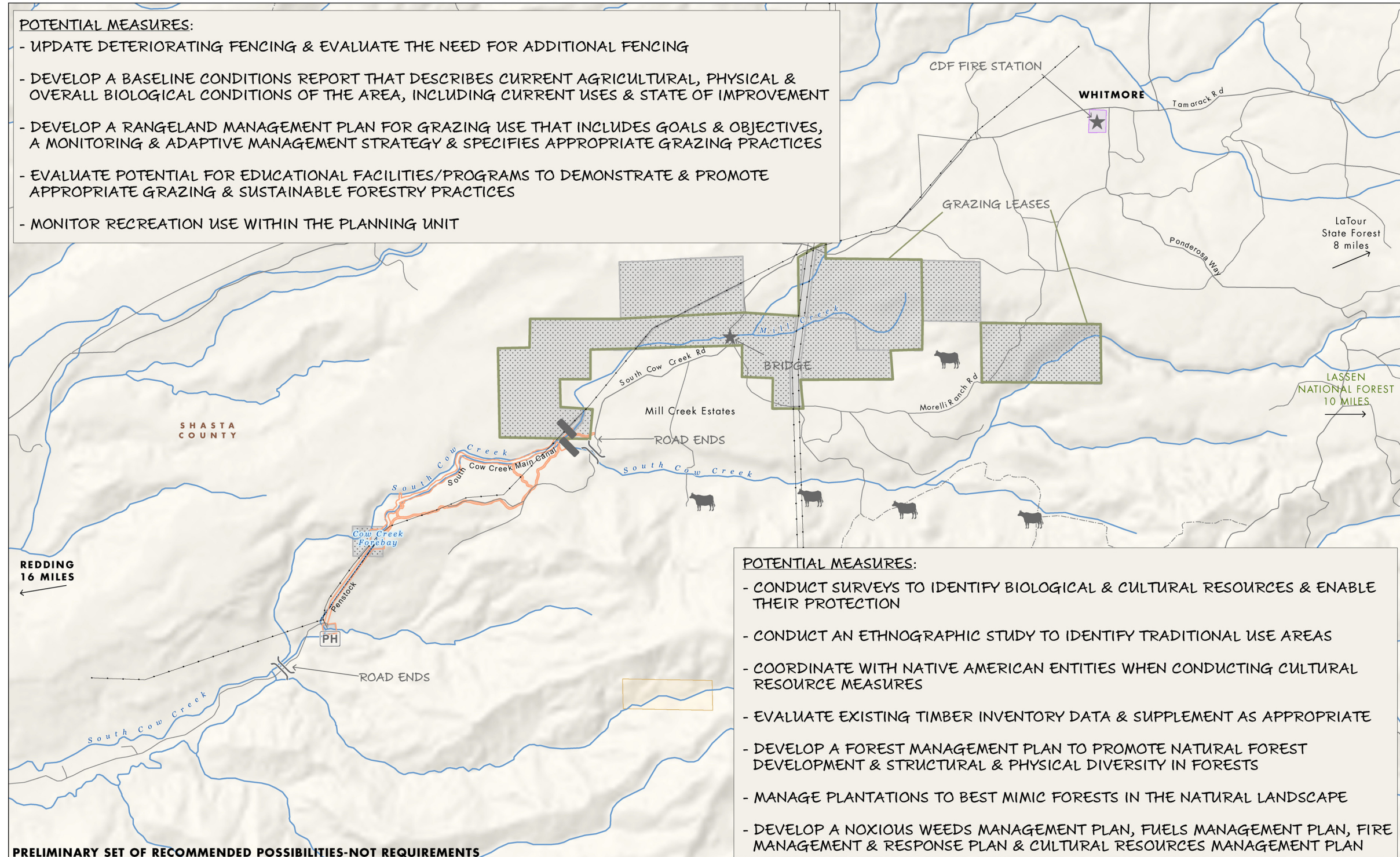
Planning Unit Objective: Preserve and enhance biological, cultural and agricultural resources, and enhance sustainable forestry management.		
Beneficial Public Value	Objective	Potential Measures to Preserve and/or Enhance BPVs – Not Requirements*
Protection of the Natural Habitat of Fish, Wildlife, and Plants	Preserve and enhance habitat in order to protect special biological resources.	<ul style="list-style-type: none"> • Conduct surveys of the planning unit to identify biological resources and enable their protection. • Develop a noxious weed management plan for the planning unit.
Preservation of Open Space	Preserve open space in order to protect natural and cultural resources, viewsheds, and agricultural land uses.	<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 within the planning unit.
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 and fire management.	<ul style="list-style-type: none"> • Develop a fuels management plan for the planning unit to ensure long-term forest health and reduce fuel loading and fire hazard. • Develop a fire management and response plan for the planning unit to ensure fire preparedness. • 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. • Manage plantations to best mimic forests in the natural landscape.
Agricultural Uses	Preserve and enhance grazing in order to support associated economic benefits, as well as to protect open space and habitat resources.	<ul style="list-style-type: none"> • Update deteriorating fencing and evaluate the need for additional fencing. • Develop a baseline conditions report that describes current agricultural, physical, and overall biological conditions of the area, including current uses and state of improvement. • Develop a rangeland management plan for grazing use that includes goals and objectives and a monitoring and adaptive management strategy, and specifies grazing practices that address soil and water conservation, erosion control, pest management, nutrient management, vegetation management, habitat protection, and cultural resources management. • Evaluate the potential for educational facilities/programs to demonstrate and promote appropriate grazing and sustainable forestry practices.
Preservation of Historic Values	Identify and manage cultural resources in order to ensure their protection.	<ul style="list-style-type: none"> • Conduct surveys of the planning unit to identify cultural resources and enable their protection. • Conduct an ethnographic study of the planning unit to identify traditional use areas. • Develop a cultural resources management plan for the planning unit. • Coordinate with Native American entities when conducting cultural resource measures.

* 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.

COW CREEK PLANNING UNIT

Cow-Battle Creek Watershed

Cow Creek Planning Unit Recommended Concept



<ul style="list-style-type: none"> 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 	<p>Concept Features</p> <ul style="list-style-type: none"> Modify Existing Feature New Feature Trail 	<p>Existing Features</p> <ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> FERC Boundary Stream / River Canal / Ditch Pipeline Highly Valued Stream Primary Roads Secondary Roads OHV Roads Trail Transmission Line
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All symbols may not appear on the map

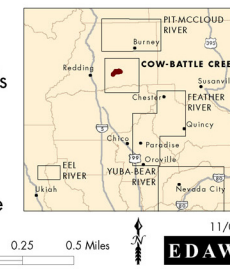


Figure CB-6

Cow Creek Planning Unit

All recommended measures must be coordinated with the decommissioning process to avoid inconsistent or duplicative recommendations. When the decommissioning process is completed, the planning unit will need to be re-evaluated based on the outcome, in close coordination with community stakeholders and all interested parties.

Fish, Plant, and Wildlife Habitat

Potential Measure:

- *Conduct surveys of the planning unit to identify biological resources and enable their protection.*

The planning unit is minimally associated with a FERC Project and likely has not been surveyed or studied, except possibly for previous timber harvests, the last of which was potentially 30 years ago. Wetlands, meadows, marsh, and seeps that occur or may occur within the planning unit suggest there could be special status species present. Therefore, the Stewardship Council recommends conducting surveys of the planning unit to identify biological resources and enable their protection. Survey efforts should be coordinated with any similar efforts by the Cow Creek Watershed Management Group. If special status species are found and protection and/or enhancement measures appear to be needed or feasible, a wildlife and habitat management plan could be developed as appropriate.

Potential Measure:

- *Develop a noxious weed management plan for the planning unit.*

It is unknown to what extent noxious weed infestations occur within the planning unit, one of the grazing lessees had attempted to control known infestations when they became apparent. Therefore, the Stewardship Council recommends developing a noxious weed management plan for the planning unit. Development of the noxious weed management plan should be coordinated with existing PG&E noxious weed efforts, and the rangeland, fuels, and forest management plans.

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 within the planning unit.*

Current recreation use is probably low due to limited access, lack of activities available, short recreation season (due to weather), and presence of several well-known recreation areas close by. Local residents are likely the primary visitors to the planning unit as it is not a recreation destination. Due to nearby recreation areas such as Lassen National Forest, Thousand Lakes Wilderness, and LaTour State Forest, development of extensive recreation facilities within the planning unit is not warranted. The Whitmore area has become more developed, and there are several proposals for large, rural residential developments in the area. Therefore, local resident use of the planning unit may increase as more people move to the area. The Stewardship Council recommends monitoring recreation use within the planning unit to identify any problems or impacts from recreation and the need for additional management of recreation use. If identified as needed based on monitoring, a recreation management plan would be developed. If additional facilities or management is needed, efforts should be coordinated with the grazing lessees and management of forest and agricultural resources.

Sustainable Forestry

Potential Measure:

- *Develop a fuels management plan for the planning unit to ensure long-term forest health and reduce fuel loading and fire hazard.*

Reducing fire risk is important in this planning unit due to the proximity of the planning unit to the community of Whitmore and numerous housing developments, as well as the presence of fire-prone vegetation throughout the planning unit. There have been many fires within the Whitmore area, including a recent fire that burned many acres just east of the community. There is currently no plan for the management of fuels on planning unit lands, and fuels have likely built up, though there has been an active PG&E brush conversion project since 2003 to remove overmature decadent brush fields and reduce these hazardous fuels. Therefore, the Stewardship Council recommends developing a fuels management plan for the planning unit to ensure long-term forest health and reduce fuel loading and fire hazard. The plan should include development of defensible space along the edge of the planning unit near housing areas to reduce fire risk in the wildland urban interface area. Development of the plan should be coordinated with any related or adjacent fuel reduction projects by the community of Whitmore, CDF, or Cow Creek Watershed Management Group. Development of the fuels management plan should also be coordinated with the noxious weed, rangeland, and forest management plans.

Potential Measure:

- *Develop a fire management and response plan for the planning unit to ensure fire preparedness.*

The Stewardship Council also recommends developing a fire management and response plan for planning unit lands to ensure fire preparedness and guide fire fighting and reporting methods and responsibility. It is important for residents of adjacent housing developments and the grazing lessees to have fire reporting protocols and ways to escape the area if there is a fire. There may be a potential access problem for residents of Mill Creek Estates as the only road access is

through the planning unit from the north; there is no road access to the south. Development of this plan should be coordinated with any related efforts by the community of Whitmore, CDF, or Cow Creek Watershed Management Group.

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.*

The Timber Management Unit (TMU) that covers most of the planning unit is currently managed under a Sustainable Timber Management prescription. The planning unit is in large part sparsely forested and contains little valuable timber such as ponderosa pine or incense-cedar; however, there are currently efforts to enhance timber production, primarily of ponderosa pine, by clearing brush and planting trees to create plantations of harvestable timber. Despite these efforts, there is no overall documented cohesive, coordinated vision for forest and forage management within the planning unit. To enhance sustainable forestry management, the Stewardship Council recommends developing a forest management plan for the planning unit 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. Development of the forest management plan should be coordinated with the noxious weed and fuels management plans, as well as the rangeland management plan as development of forest resources both affects and is affected by agricultural use.

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 included 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:

- *Manage plantations to best mimic forests in the natural landscape.*

Currently, the planning unit contains over 200 acres of conifer plantations. The Stewardship Council recommends managing these plantations to best mimic forests in the natural landscape. The scale and layout of plantation blocks would be consistent with the patterns of forest stands found in the natural landscape. Trees would be selected that are suitable for the natural conditions of the site. Unless unsuitable based on regeneration potential, native species would be selected and exotic species used minimally and only when determined to present no adverse ecological impacts. Plantation management would be included as a component of the forest management plan.

Agricultural Uses

Potential Measure:

- *Update deteriorating fencing and evaluate the need for additional fencing.*

Some fencing within the planning unit is up to 100 years old and needs to be replaced. There may also be areas in need of fencing where it does not currently exist. Therefore, to enhance grazing management, the Stewardship Council recommends updating deteriorating fencing and evaluating the need for additional fencing. Improved fencing may also reduce unauthorized OHV use within the planning unit. Additional fencing needs would also be incorporated into the rangeland management plan.

Potential Measure:

- *Develop a baseline conditions report that describes current agricultural, physical, and overall biological conditions of the area, including current uses and state of improvement.*

Currently, there is no formal range management within the planning unit. Additionally, creeks and other wet areas are not fenced-off from grazing, and several months of grazing use could be impacting these more sensitive areas. It is likely that assessments of range and stream conditions have never been conducted. Therefore, the Stewardship Council recommends developing a baseline conditions report that describes current agricultural, physical, and overall biological conditions of the area, including current uses and state of improvement. This report would help determine appropriate grazing practices, regime, and management.

Potential Measure:

- *Develop a rangeland management plan for grazing use that includes goals and objectives and a monitoring and adaptive management strategy, and specifies grazing practices that address soil and water conservation, erosion control, pest management, nutrient management, vegetation management, and habitat protection.*

Once the recommended baseline conditions report is completed, the Stewardship Council recommends developing a rangeland management plan for grazing use that includes goals and objectives and a monitoring and adaptive management strategy, and specifies grazing practices that may address topics including soil and water conservation, erosion control, pest management, nutrient management, vegetation management, habitat protection, and cultural resources management. This plan would ensure that grazing use within the planning unit meets the Stewardship Council policy for agricultural uses on Watershed Lands. This plan would also identify any additional fencing needed within the planning unit, in conjunction with protection and enhancement of habitat. Development of the rangeland management plan should also be coordinated with the noxious weed, fuels, and forest management plans.

Potential Measure:

- *Evaluate the potential for educational facilities/programs to demonstrate and promote appropriate grazing and sustainable forestry practices.*

The Stewardship Council also recommends evaluating the potential for educational facilities and/or programs that could be accommodated at the planning unit to demonstrate and promote appropriate grazing and sustainable forestry practices. Restoration of natural forest function and

enhancement of grazing in the planning unit can be showcased at this planning unit not only to school-aged children from Whitmore, but to adjacent landowners who are interested in similar ideas and practices. Education on grazing and sustainable forestry practices and management could enhance visitors' perceptions and appreciation for working landscapes and their value to habitats and local economies. Identifying potential partners for education projects, access points, demonstration areas, and interactions with existing grazing use would be required. Potential educational facilities include signs, trails, staging areas, and test sites. Potential program topics include grazing practices, forest functions and identification of healthy forest functioning, and methods of restoring habitat. Evaluation of the potential for educational programs or facilities should be coordinated with the grazing lessees, community of Whitmore, CDF, Cattleman's Associations, and Cow Creek Watershed Management Group.

Preservation of Historic Values

Potential Measures:

- *Conduct surveys of the planning unit to identify cultural resources and enable their protection.*
- *Coordinate with Native American entities when conducting cultural resource measures.*

Cow Creek is minimally associated with a FERC Project and has likely not been surveyed for cultural resources, except potentially for previous timber harvests. Any surveys associated with previous harvests may not have been conducted to current standards. The area contains historic resources since there was at least one homestead in the area, remnants of which can still be found. To preserve these resources, the Stewardship Council recommends conducting surveys of the planning unit to identify cultural resources and enable their protection. Documentation of cultural sites should be coordinated with Native American entities.

Potential Measures:

- *Conduct an ethnographic study of the planning unit to identify traditional use areas.*
- *Coordinate with Native American entities when conducting cultural resource measures.*

In addition to surveying, the Stewardship Council recommends conducting an ethnographic (and ethnohistoric) study of the planning unit to identify traditional use areas. Such a study would document historical use of the planning unit and Native American use, if such information is available. As generations pass on, this information is difficult to obtain and valuable historical information may be lost. People within the Whitmore area likely still remember historical use of the planning unit, though Native American use of the planning unit may be difficult to document due to decimation of the Yana people that would have lived in the planning unit area. The study may also provide information that identifies additional cultural sites that surveys cannot or do not identify. The ethnographic study should be coordinated with Native American entities.

Potential Measures:

- *Develop a cultural resources management plan for the planning unit.*
- *Coordinate with Native American entities when conducting cultural resource measures.*

Once the recommended surveying and ethnographic study identify cultural sites and traditional use areas, the Stewardship Council recommends developing a cultural resources management plan for the planning unit to ensure that cultural resources are provided adequate protection in the

future. The plan would include appropriate measures for the identification, evaluation, and treatment of cultural resources (archaeological and historical) and traditional use areas. Treatment measures could include avoidance, specific protective measures (e.g., fencing), site monitoring, and methods to preserve, restore, or enhance cultural resource values through conservation easements, management agreements, or through public interpretation and education programs. Development of the cultural resources management plan should be coordinated with Native American entities.