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**BUREAU OF LAND
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Northwest California Integrated Draft Resource Management Plan and Environmental Impact Statement

Volume 3 (Appendixes B–G)



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**US Department of the Interior
Bureau of Land Management**

Cover Photos (clockwise from top): Yuki Wilderness; Sacramento
River Bend; Ma-le'l Dunes

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Appendix B

Approach to the Environmental Analysis

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Appendix B. Approach to the Environmental Analysis

B.1 INTRODUCTION

This appendix presents the background for and approach to identifying the environmental, social, and economic impacts on the human and natural environment that are predicted to result from implementing the alternatives presented in **Chapter 2**. The goals, objectives, and management actions described in **Chapter 2** by alternative are plan-level decisions and do not result in direct, on-the-ground changes. Plan-level decisions establish allocations that identify the uses that are allowed, restricted, or prohibited on BLM-administered lands and federal mineral estate. These allocations set the stage to guide future land management actions and subsequent site-specific or implementation decisions and the corresponding resource use levels.

Because the alternatives provide a broad management framework, the exact location, timing, and level of development or resource extraction are not known and cannot be accurately predicted. The actual levels of activities may be more than or less than the levels estimated for analysis purposes; however, the estimated levels allow the BLM to analyze and display the relative differences among the alternatives.

Impact analyses and conclusions are based on interdisciplinary team knowledge of the resources and the planning area, information provided by experts in the BLM, monitoring data and information contained in pertinent literature, and professional judgment. The baseline used for the impact analysis is the current condition or situation, as described in the *Affected Environment* section of **Chapter 3**.

The methodology for the impact assessment conforms to the guidance found in the following sections of the Council on Environmental Quality regulations for implementing the National Environmental Policy Act (NEPA): 40 Code of Federal Regulations (CFR) 1502.23 (Methodology and Scientific Accuracy), 40 CFR 1502.16 (Environmental Consequences) and cumulative impacts as defined in 40 CFR 1508.1. Direct, indirect, and cumulative methodology is included in **Section 3.1** of **Chapter 3**.

B.1.1 Past, Present, and Reasonably Foreseeable Future Actions

Recent environmental reports, surveys, research plans, NEPA compliance documents, and other source documents were evaluated to identify past, present, and reasonably foreseeable future actions. These actions were assessed to determine if they were speculative and would occur within the analytical timeframe of the NCIP. Projects and activities considered in the cumulative effects analysis are summarized in **Table B-1**.

**Table B-1
Past, Present, and Reasonably Foreseeable Future Actions Considered in the Cumulative
Effects Analysis**

Human and Natural Actions that Contribute to Cumulative Impacts	
Energy and Minerals Development – Mineral Materials	Outside of BLM-administered permits (see BLM2021a), there are several large aggregate mines on private land within the planning area, including several along Clear Creek Road, the Trinity River, and in the Bend area.
Water Resources – Water Quantity	<p>Water demands continue to increase with population increase and climate change continues to exacerbate streamflow issues (i.e., decreasing summer low flows). Summer low flows have decreased in Northern California coastal streams and this trend is expected to continue. Flow variability is expected to increase, and for California as a whole, higher winter flows are expected. The extent and seasonality of snowpack is expected to decrease in response to climate change. Snow depths are expected to decrease over the winter months and the period of accumulation is expected to shrink by 1 month (EcoAdapt 2016; Cayan et al. 2008; Snyder et al. 2004; Thorne et al. 2015). These changes in snow accumulation will affect the magnitude and duration of streamflows. Drought frequency is expected to increase over the coming century. Over the next several decades, drought years are twice as likely to occur, with increased risk of multi-year droughts exacerbated by warming air temperatures (EcoAdapt 2016; Diffenbaugh et al. 2015; Griffin and Anchukaitis 2014).</p> <p>Lower Klamath Dam Removals (Federal Energy Regulatory Commission): The Lower Klamath Project is located along the Klamath River, in Siskiyou County, California, and in Klamath County, Oregon. The project would remove four dams (JC Boyle, Copco No. 1 and No. 2, and Iron Gate) to and restore formerly inundated lands. Water flows in the lower Klamath watershed would more closely mimic natural variability and water quality related to low flows and high-water temperature will be improved.</p> <p>Trinity River Restoration Program (TRRP) Winter Flow Variability (Bureau of Reclamation [BOR]): The TRRP is updating the timing of restoration flows from Lewiston Dam in the winter period to meet geomorphic, fish habitat, and temperature objectives. Expected to occur in Winter 2023.</p> <p>Corral Gulch Restoration (USFS Hayfork Ranger District): The Forest Service will work with the Watershed Center of Hayfork, CA to restore floodplain function, raise the groundwater table, increase streamflow, decrease water temperatures, and decrease erosion and sedimentation, ultimately improving wildlife habitat.</p>
Water Resources – Water Quality	<p>Increased water demands and a changing climate continue to compromise water quality across the planning area. Increases in water temperatures are expected as air temperatures increase. Increased sediment loading associated with wildfires is expected to contribute to degraded water quality across the planning area.</p> <p>In the Redding FO boundary, restoration and rehabilitation projects are taking place along the Mainstem Trinity River, Clear Creek, and side channels of the Sacramento River. Additionally, the North Coast and Central Valley Water Board Non-Point Source Pollution programs are revising and implementing their non-point source pollution waiver process to include federal lands. These programs including best management practices, correcting legacy issues, monitoring, and reporting.</p>
Water Resources – Groundwater	<p>Recent drought conditions have led to an increasing reliance on groundwater resources for agricultural and residential demands. These trends are expected to continue in light of increasing population pressures and a changing climate. Groundwater resources will experience increased demands as availability of summer surface water shrinks. Since many of these groundwater sources are linked to adjacent surface waters, reductions in surface water availability will likely translate to reductions in groundwater availability.</p>

Human and Natural Actions that Contribute to Cumulative Impacts

Vegetation

Climate change will likely be a strong vector of potentially dramatic effects on vegetation distribution, reproductive success, and plant-wildlife relationships in the planning area. Impacts to plant survival, reproduction, and gene flow may inhibit many plant communities' ability to adapt in ways that might keep pace with climatological changes. Expansion, contraction, or reorganization of some plant communities will likely occur. Refugia such as riparian areas, topographically diverse or higher-elevation areas, and areas within climatological influence of the coast may be able to accommodate cold-adapted plant communities that are unable to tolerate extended heat or drought. Conversely, warm-adapted plants may expand in areas previously occupied by cold-adapted plants.

Butz and Safford (2010, 2011) report the following projections applicable to the planning area:

- Evergreen conifer forests in inland northwest California show significant declines and subsequent replacement by Douglas-fir–tanoak forest and tanoak–madrone–oak forest under most future climate scenarios.
- Projected vegetation changes along the coast are much less dramatic, due to maritime buffering of changes in temperature and precipitation.
- For inland northern California, a large expansion of grassland was projected, due primarily to increased fire frequency in shrublands and forest; grasslands were not projected to increase notably in moister forest habitats closer to the coast.
- Increased frequency and/or intensity of fire in coniferous forest in California could alter forest species composition and reduce the size and extent of late-successional refugia. Thus, if fire becomes more active under future climates, there may be significant repercussions for old-growth forest and old-growth-dependent biota.

[Reading-Indian Creek Woodland Restoration](#) (BLM Redding FO): Forest health and woodland restoration treatment aimed at improving forest health, enhancing fire resilient characteristics of woodlands, restoring oak woodlands (via removal of encroaching conifer), reducing hazardous fuels around infrastructure and other improvements, and improving habitat of wildlife species.

Rancho Breisgau Oak Woodland Restoration (BLM Redding FO): Restore 300 acres of old walnut orchards to native oak and riparian woodlands.

[Lacks Creek Prairie Pollinator Habitat Enhancement Project](#) (BLM Arcata FO): This project aims to enhance pollinator plant populations within nine prairies located in the Lacks Creek Management Area. Target species will be strategically selected matching current and historic biodiversity of native annual and perennial forbs and shrubs found within the management area.

Beach Layia and Menzie's Wallflower Recovery Project (BLM Arcata FO): In 2003, the BLM began restoration effort aimed at recovering Federally listed (*Layia carnosa*) and Menzie's Wallflower (*Erysimum menziesii*) populations on BLM administered lands. Habitat restoration is accomplished through manual removal of non-native invasive european beachgrass (*Ammophila arenaria*) and iceplant (*Carpobrotus edulis*).

Human and Natural Actions that Contribute to Cumulative Impacts

**Vegetation – Fuels
Treatments**

Vegetation treatments that include mechanical, biological, and chemical treatments and prescribed fire to reduce hazardous fuels and undesirable vegetation were used in the past on BLM-administered land, other federal lands, and private lands in the planning area. These treatments, and maintenance of these vegetation treatments, will likely continue on BLM-administered land, other federal lands, and private lands. There are currently 20 wildland fire management projects proposed within the Redding FO boundary, these include a range of vegetation and fuels treatments, including hazard tree and vegetation removal near critical infrastructure such as powerlines, fuels treatments to include vegetation reduction and prescribed fire, and wildland health treatments in WUIs and other areas where increased fuel loading increases risk of wildland fire, and the construction of fuel breaks. The goals of these projects are to reduce fuel loading, protect critical infrastructure, and create more resilient landscapes to reduce the potential for severe wildfires. Similar projects are occurring nearby on the Klamath National Forest.

There are two wildland fire management projects proposed within the Arcata FO boundary. The goal of these projects is to reduce fuels, improve fire resiliency, and reduce the potential for severe wildfires. One project involves restoration of an area burned during a previous wildfire.

[Hazard Removal and Vegetation Management](#) (BLM Redding FO): This Programmatic EA provides a comprehensive hazard removal and vegetation management treatment framework and analysis for the BLM California State Office. It provides broad, programmatic analysis for hazard tree or vegetation removal near critical infrastructure areas such as roads, powerlines, recreation areas, and water facilities.

[Statewide WUI Fuels Treatment Programmatic EA](#) (BLM Redding FO): The goal of planned fuels treatments is to reduce intensity, severity, and spread of wildfire in and around communities that border BLM lands and reduce the likelihood of loss of life, property, and community infrastructure from catastrophic wildfire.

[Big Chico Creek Ecological Reserve & Phoenix Hill Vegetation Management Plan](#) (BLM Redding FO): Proposed hazardous fuels reduction, prescribed burning, and wildland health treatments within the Big Chico Creek watershed and Phoenix Hill Vegetation Management Plan area of Butte County, California. The project would allow treatments that consist of mechanical and manual thinning of vegetation combined with prescribed burning. NEPA analysis is concluding.

[Weaverville Community Protection](#) (BLM Redding FO): The project would remove dead and dying trees, understory shrubs, overstocked live fuels, and heavy accumulations of downed woody materials to reduce hazardous fuel loading in and around Weaverville, CA. The project would authorize the creation and maintenance of linear fuel breaks on up to 414 acres of BLM-administered public land alongside existing features such as roadways, property boundaries, or infrastructure. All treatments would be limited to 200 feet in width from critical infrastructure.

[Placer West Hazardous Community Protection](#) (BLM Redding FO): The project would create and maintain linear fuel breaks on up to approximately 133 acres of BLM-administered public land in the west Redding area. Fuel breaks will be created alongside existing features such as roadways, property boundaries, or infrastructure by removing dead and dying trees, understory shrubs, overstocked live standing and dead downed fuels. Fuels breaks will be created and maintained to reduce overall fuel loadings and continuity from pre-treatment conditions. All treatments would be limited to 200 feet in width from identified features.

[Lewiston Community Protection Fuels Reduction](#) (BLM Redding FO): The project includes the creation and maintenance of linear fuel breaks on up to 237 acres of BLM-administered public land alongside existing features such as roadways, property boundaries, or infrastructure. All treatments would be limited to 200 feet from critical infrastructure.

Human and Natural Actions that Contribute to Cumulative Impacts

Vegetation – Fuels
Treatments (cont.)

[August Fire Restoration Project – Phase 2](#) (USFS Yolla Bolla Ranger District): Restoration activities on approximately 3,000 acres in order to treat the long-term impacts from the August Complex Fire. Activities may include fuels reduction, reforestation, road maintenance, and restoring priority watershed conditions.

Trinity Priority Landscape (Forest Service): 900,000 acres of the Shasta-Trinity and Rivers National Forests are now designated as priority landscapes by the Forest Service will receive funding from the Bipartisan Infrastructure Law to complete wildfire risk reduction treatments around high-risk communities.

[Trinity Unit Campground Forest Health](#) (USFS Weaverville Ranger District): Approximately 1,450 acres including 17 recreation sites within the Trinity Unit of the Whiskeytown-Shasta-Trinity National Recreation Area. Thinning w/in developed campgrounds. Fuels reduction without commercial removal of trees w/in dispersed camping areas or adjacent to developed campgrounds. Fuels reduction with commercial removal of trees between or adjacent to developed campgrounds.

[Butte Creek and Larabee Buttes Hazardous Fuels Reduction and Fire Resiliency](#) (BLM Arcata FO): This project will remove dead and dying trees and decrease stand densities along the roads in the Butte Creek and Larabee Buttes parcels to achieve the goals of hazardous fuels reduction, improved fire resiliency for the area, and increased landscape resiliency to fire and pathogen spread. The project would accomplish this via a combination of cutting, removal, and slash treatment methods.

[Mad River August Complex Restoration Project](#) (USFS Mad River Ranger District): The proposal would treat 10,781 acres targeting post-fire fuels management, safety, native plant, oak and wildlife habitat restoration, economic recovery of timber salvage and installing a new radio repeater on Grizzly Peak. Project area is near Three Forks, Berry Creek, Kettenpom and Hettenshaw Valleys, and populated areas near town of Ruth, Long Ridge, Haman Ridge, and Hoaglin Valley in California.

Forestry

Forest health is anticipated to decline across the planning area as a result of insects, disease, and changing climatic conditions. These changes could result in increased mortality for some tree species.

Forestry treatments by the BLM and other agencies, particularly the US Forest Service, to address changes in forest health and increase ecosystem resiliency are anticipated to increase in the future with more acreage treated each year.

Future forestry use of woody biomass for energy production could occur.

The BLM is undertaking two forest health and habitat enhancement projects within the Redding FO boundary totaling approximately 300 acres:

- [Oregon Mountain Forest Health Thinning and Fuels Reduction Project](#)
- [Baker Cypress Restoration](#)

There are two additional projects within the Arcata FO boundary totaling approximately 500 acres:

- [Butte Creek and Larabee Buttes Hazardous Fuels Reduction and Fire Resiliency Project](#)
 - [Cahto Peak Oak Woodland Restoration](#)
-

Human and Natural Actions that Contribute to Cumulative Impacts	
Lands and Realty – Linear Rights-of-Way	<p>The Redding FO processes about 30 applications for linear ROWs and other uses (for example, utility lines, access roads, waterlines) each year. Applications for linear ROWs and other uses within the Arcata FO boundary are less common. Combined, the BLM typically receives 30–40 new applications for linear ROWs each year within the planning area. Of this total, approximately 20 are applications for new access ROWs (roads) per year. It is likely that improvements to major transportation infrastructure will be ongoing. This may include bridge replacements and fixing roads and highways. The number of new developments related to residential use that would precipitate small access ROWs is expected to remain static.</p> <p>Digital 299 Broadband Project (Third party; BLM is a Cooperating Agency): A regional telecommunications network project that would support portions of Shasta, Trinity, and Humboldt counties between Cottonwood and Eureka, California, with improved broadband infrastructure. The proponent would build a broadband network following California State Route (SR) 299, with portions crossing jurisdictional lands or waters managed by the BLM, National Park Service, U.S. Forest Service, U.S. Army Corps of Engineers, U.S. Bureau of Reclamation, California Public Utilities Commission, California Department of Transportation, California Department of Fish and Wildlife, State Lands Commission, State Water Resources Control Board, and Hoopa Reservation. The project would include the installation of 300 miles of underground fiber optic cable buried along existing roadways to connect nearby communities and include direct connections to existing utility poles, public buildings, and to customers.</p> <p>Klamath River Rural Broadband Initiative (Karuk Tribe): This project is a 104-mile middle-mile and last-mile broadband project in Humboldt County.</p> <p>Wildfire Risk Reduction, Reliability and Asset Protection Project (Trinity Public Utilities): The Trinity Public Utilities District and the Western Area Power Administration are proposing a proactive ROW expansion and vegetation management project to reduce fire risk to the surrounding communities and public lands as well as to increase electrical reliability to maintain critical services in the local communities.</p> <p>State of California Middle Mile Initiative (State of California): In July 2021, Governor Gavin Newsom signed into law Senate Bill 156 to create an open-access middle-mile network to bring equitable high-speed broadband service to all Californians. The bill provides \$3.25 billion to build the necessary infrastructure to bring internet connectivity to homes, businesses, and community institutions. CalTrans ROWs and easements will be used for the project.</p> <p>PG&E Master Operations and Maintenance and Consolidation Project: Consolidation and renewal of PG&E ROWs with development of a cohesive Operations and Maintenance Plan. Includes enhanced vegetation maintenance to address forest health and wildfire issues.</p> <p>PG&E Undergrounding Initiative. PG&E plans to underground 10,000 miles of powerline throughout the state in high-risk areas. Currently, the Redding FO has one ongoing undergrounding project of several miles.</p>
Recreation and Visitor Use	<p>Continued development of trail systems and the linking of trails to the City of Redding’s recreation sites and trails will further increase use of BLM-administered lands within the urban interface. The BLM is also constructing 7 miles of new motorized trails within the Chappie-Shasta OHV area that will connect with and parallel existing heavy-use roads.</p> <p>Trinity River Recreation Improvements (BLM): This project would develop recreational infrastructure at three established recreation sites along the Trinity River. This includes developing approximately six existing campsites, creating approximately 16 new campsites for a total of 22 designated camping spots. Other amenity upgrades include installing an additional vault toilet and a septic system, developing an additional trash receptacle site, and a three-mile-long trail that connects recreation sites along Steiner Flat Road.</p>

Human and Natural Actions that Contribute to Cumulative Impacts	
Recreation and Visitor Use (cont.)	<p>Ewing Reservoir Trails (BLM): This project would build, in partnership with Friends Enjoying Ewing Trails and members of the Watershed Research and Training Center, approximately 10 miles of non-motorized trail on BLM-administered public lands (and approximately 1 mile on USFS land) surrounding Ewing Reservoir near Hayfork. The proposed trail system would connect with the existing trail system on Waterworks District land immediately surrounding the reservoir.</p> <p>Cascade and Sierra Foothills Trails (Paradise Recreation and Parks District): Funded and proposed multi-use natural surface 15-mile trail loop to connect the community to recreational resources. The project will provide an amenity that helps promotes healing through nature in a community traumatized by the Camp Fire. Trail system will pass through BLM, Town of Paradise, and USFS parcels. To be completed in 2024.</p> <p>Weaver Basin Trail Improvements (USFS – Weaverville Ranger District): Up to 50 miles of trails for hiking, running, biking and horseback riding, with multiple entry points around the town of Weaverville. Project is ongoing.</p> <p>Great Redwood Trail (Sonoma-Marin Area Rail Transit): The Great Redwood Trail is envisioned as a 316-mile, multi-use, rail-to-trail project connecting California’s San Francisco and Humboldt Bays. Draft plan expected 2024.</p>
Fish and Wildlife – Habitat Restoration	<p>The Trinity River Restoration Program (TRRP) is a multi-agency program that implements the 2000 DOI ROD directing the agency to restore the fisheries of the Trinity River impacted by dam construction and related diversions of the Trinity River Division. Several projects are ongoing or proposed as part of this program, including those listed below.</p> <p>Trinity River Watershed Restoration Project (BLM and USFS): The Bureau of Reclamation’s (Reclamation) TRPP, US Forest Service’s Shasta-Trinity National Forest, and the BLM’s Redding FO are preparing a Programmatic Environmental Assessment to evaluate aquatic habitat restoration activities in the Trinity River watershed in Trinity and Humboldt Counties. The analysis will focus on restoration activities that improve the quality and quantity of accessible cold-water aquatic habitat.</p> <p>Oregon Gulch Channel Rehabilitation (TRRP): This is an ongoing channel restoration project. The activities are in two phases: excavation/removal of mine tailings to Eagle Rock (on Highway 299, approximately 3 miles from Oregon Gulch) in the first phase (2021 up to 2025) and in-river channel/floodplain rehabilitation work in the second (between 2023 to 2026). Phase I has commenced.</p> <p>Initial excavation and hauling of up to 500,000 cubic yards of mine tailings will continue, as funding is available, for approximately 1.5 – 4 years prior to commencement of in-river restoration work planned in the second phase. The intensity of trucking materials to Eagle Rock would substantially decrease if the project duration is extended.</p> <p>When the bulk excavation and transport of mine tailing material is completed, work would shift to in-channel restoration work. In-river work would occur between July 15 and Oct. 15, and take an additional one to two seasons (summer and fall). The second phase of the project work could extend through 2026.</p> <p>Full revegetation efforts would not start until fall following in-river construction.</p> <p>Channel Rehabilitation and Sediment Management for Remaining Phase I Activities (TRPP): This project includes several in-channel activities at each of the Remaining Phase I sites, as well as at least one temporary river crossing at most of these sites. Excavation activities associated with the remaining Phase I sites are expected to yield more than 400,000 cubic yards of alluvial material. Collectively, the sites have the capacity to place (dispose of) nearly 500,000 cubic yards of excavated material. Riverine activities on both sides of the Trinity River would use adjacent upland and staging areas within the boundaries of the sites for disposing of and/or stockpiling excavated or processed materials. NEPA analysis in progress.</p>

Human and Natural Actions that Contribute to Cumulative Impacts	
Fish and Wildlife – Habitat Restoration (<i>cont.</i>)	<p>Trinity River Restoration Program New Gravel Augmentation (TRPP): TRPP is proposing to permit four new high flow sites for sediment augmentation in the Trinity River upstream of the Indian Creek confluence. Augmentation at these sites could take place during the authorized in-channel work period (July 15 through October 15) or in synchronization with spring restoration releases, which generally begin on April 15. Activities would involve in-channel placement of sediment that is up to 5 inches in diameter during spring releases or summer low-flow. Sediment augmentation may also include larger sediment (cobbles and/or small boulders) to support long-term gravel bar and instream habitat development in the placement area.</p> <p>Six Rivers Aquatic Restoration Project (USFS): This project addresses recovery actions for listed salmonids and aquatic habitat restoration including riparian treatments, large woody debris recruitment and placement, off-channel winter rearing habitat, and invasive species management.</p>
Spread of Noxious/Invasive Weeds	Manual, biological, chemical, and mechanical treatments of noxious weeds and invasive plants on BLM-administered lands are likely to continue in the foreseeable future. The Redding FO is implementing an Integrated Vegetation Management program to control invasive weeds and other target species using chemical, mechanical, and manual means. Treatment is limited to 300 acres per year.
Drought	For much of the last decade, most of the western US has experienced drought. California regularly goes through periods of drought that may be statewide, region-wide, or within a more localized area. Agriculture, shifts in vegetation communities, drinking water supplies, and wildland fires are all impacted by drought.
Habitat loss	<p>Terrestrial wildlife habitat will follow the trends of the vegetative communities. Climate change is likely to result in a less productive landscape and associated habitats. In general, less productive habitats will be able to support less wildlife. Warmer and drier conditions due to climate change also influence wildlife habitat by increasing the frequency and severity of wildfires (CARB 2020). Wildlife habitat loss and alterations due to fire can be expected to continue into the future.</p> <p>There will continue to be a loss of aquatic habitat within the planning area, however, efforts by the BLM and other federal agencies to preserve and protect these areas are expected to increase.</p> <p>The BLM and other agencies will continue to emphasize preservation and protection of special status species and habitats through programs such as the Aquatic Conservation Strategy.</p> <p>Cannabis cultivation also has the potential for environmental damage to terrestrial and aquatic habitats. The increase of marijuana production in the planning area has polluted water with fertilizers, fuels, and pesticides, and triggered erosion that buries the habitats where the native fish spawn (Levy 2020). Garbage and trash, including hazardous substances, is an associated problem (Turner 2014).</p>

B.2 RESOURCE METHODOLOGY, INDICATORS, AND ASSUMPTIONS

For organizational purposes, **Chapter 3** is divided into sections by subject area (such as water resources, wildlife, and recreation) from the land use planning handbook, BLM Handbook H-1601-1. Though they are described and analyzed in discrete sections, these subjects are dynamic and interrelated. A change in one resource can have cascading or synergistic impacts on other resources. For example, erosion affects water quality, which in turn affects fish populations, which could have implications on other human outcomes, such as health and sociocultural systems. As a result, there is some overlap among the resource sections in **Chapter 3**, and the impacts described in one section may depend on the analysis from another section.

During the writing process, resource specialists shared data and discussed interrelated aspects of the analyses to better capture the interrelated nature of environmental resources. The indicators, analysis areas, and assumptions used for each resource analysis are detailed below. The impact analyses for direct, indirect, and cumulative impacts for all resources are found in **Chapter 3**.

B.2.1 Analytical Assumptions

The BLM made several assumptions to facilitate the analysis of potential effects. Below are general assumptions that apply to all resources. These assumptions set guidelines and provide reasonably foreseeable projected levels of development that would occur within the NCIP planning area during the planning period. These assumptions should not be interpreted as constraining or redefining the management objectives and actions proposed for each alternative in **Chapter 2**. Specific resource assumptions are found in the resource sections below:

- Acres are approximate projections for comparison and analytical purposes. Readers should not infer that they reflect exact calculations.
- Land allocations do not compel or authorize any ground-disturbing actions. Future actions and development proposals could be brought forward that will be subject to additional site-specific environmental study and permitting requirements.
- The discussion of effects is based on the best available data. Where data are limited, the BLM used knowledge of the planning area and professional judgment, based on observation and analysis of conditions and responses in similar areas.
- Surface-disturbing actions related to fluid mineral development will comply with Gold Book surface operating standards (and subsequent updates).
- Lands recommended for withdrawal would require a separate action of the Secretary of the Interior or the US Congress to withdraw lands from locatable mineral entry.

B.2.2 Air Quality and Climate

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
BLM management decisions involve the link in the permitting process to Best Management Practices/SOPs to meet National Ambient Air Quality Standards/California AAQS. BLM-permitted activities have the potential to impact air quality in Class I and Class II Sensitive areas, sensitive receptors, urban interface areas, National Landscape Conservation System units, and in or near areas that contains sensitive resources in the planning area; analysis and mitigation will be considered on a case-by-case basis.	Avoid or minimize impacts to various components of air quality. Greenhouse gas (GHG) impacts are covered under the Climate Change IAP Worksheet.	Qualitative assessment (map) of areas warranting site specific analysis coupled with an estimate of the number and nature of permitted activity over the life of the plan. Link of that activity with qualitative discussion to indicate projected emissions associated with activities based on known emission factors.

Action Affecting Resource	Type of Impact	Impact Indicators
<p>BLM management decisions related to mineral or renewable development, and travel management could result in increased potential for air pollution, including dust.</p> <p>Transportation right-of-ways near communities may require dust abatement or road hardening/stabilization.</p>	<p>Increase in particle emissions and fugitive dust.</p>	<p>Miles existing routes open/closed/limited to OHV. Past permit history and best estimate/forecast of the number and nature of activities estimated over the life of the RMP (including acres of surface disturbance and miles of new roads from RFD and Affected Environment/Reasonably Foreseeable Trends and Actions impacts scenario).</p>
<p>Wildland fire management.</p>	<p>Increase in particulate (smoke and dust from roadways) and combustion pollutants (including criteria, HAP, and GHG) from vehicles and equipment.</p> <p>Changes to smoke production based on fuel treatments.</p>	<p>Qualitative discussion of criteria pollutant emissions based on annual assumptions of prescribed burns and wildland fire.</p>
<p>Management decisions (e.g., Forest Management) that could result in changes in carbon sequestration.</p>	<p>Potential increase in GHGs.</p> <p>Changes in carbon sequestration from native grasses.</p>	<p>Acres identified for harvest by alternative and estimate of GHGs not sequestered based on timber type/amount.</p> <p>If acres by alternative are not available, better to look at goals for timber harvest and management.</p>

Impact Analysis Area

- Direct/Indirect—For air quality and AQRVs: the planning area airshed (APCD/AQMD within planning area).
- Cumulative—For air quality and AQRVs: APCD/AQMD within the planning area. For GHGs: the analysis area is the planning area, the state of California, and the United States.

Analysis Assumptions

- Air quality is good throughout the planning area, although a small portion of the Southern Sacramento Valley Region (Butte County) of the planning area is out of attainment with some of the federal NAAQS criteria pollutants (8-Hour ozone and PM2.5). Additionally, a portion of the Sacramento Valley, extending up to Shasta County, is out of attainment with the CARB standards for ozone. Generally, problems occur around cities and towns located in valleys from winter wood burning, particularly during temperature inversions. Motor vehicle use throughout the year, seasonal prescribed fire, and timber operations are some of the more notable pollution sources. Some pollutants in the planning area originate from the heavily populated Sacramento metropolitan area to the south, outside of the planning area, and are transported in the air northward. Exceptional events may occur throughout the planning area, most notably during summer wildfires.
- Activity and emission inventories may be based on standard formulations by area and populations. Specific activities and emissions may be too small or temporary to be accurately identified.

- Smoke from wildfires will be geographically episodic.
- Current emissions factors are available for burning of representative vegetation types and for use of representative vehicles.

B.2.3 Soil Resources

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
<p>Restrictions and allowable disturbance related to the following resource or resource use management:</p> <ul style="list-style-type: none"> • Leasable, locatable and salable decisions (open) • Open to Grazing • Permitted surface disturbing activities • Open and Limited OHV areas • Utility corridors • Fire and vegetation management or suppression using heavy equipment • Timber harvest, thinning, and site preparation for reforestation 	<p>All of these management actions would surface disturbance to soils</p>	<p>Acres open to surface disturbing activities, particularly in highly erosive soils.</p> <p>For mineral development with an RFD, actual estimated disturbance acreage would be calculated.</p> <p>Analysis would consider BMPs and restoration requirements under MCA and how that would minimize these disturbance impacts.</p>
<p>BLM would develop and implement a multi-tier sediment source assessment that would identify watersheds and evaluate and inventory sediment inputs. BLM would use this information to prioritize watersheds for treatment to address sediment sources and reduce sedimentation</p>	<p>Identification and management of sedimentation in priority watersheds</p>	<p>Estimated acreage of watershed that would be prioritized for treatment (if possible). If not possible, qualitative discussion of watershed impacts from this process.</p>
<p>Maintain and restore native grasslands</p>	<p>Grasslands sequester carbon.</p>	<p>Acres of existing native grasslands and grasslands projected for restoration, estimate of amount of carbon sequestration for those areas if data are available.</p>
<p>Prioritize research on rare biocrusts, serpentine soils, and coccidiomycosis (Valley Fever). Identify and implement strategies to restore biocrusts and serpentine soils and manage hazards associated with Valley Fever.</p>	<p>Increase protection and or restoration of rare biocrusts and serpentine soils. Mitigate dust emissions from soil surfaces and potential spread of Valley fever.</p>	<p>Acres of anticipated restoration of biocrusts and serpentine soils; if data are unavailable, estimate the acreage of damaged biocrusts and serpentine soils, assume these soils would eventually be restored during the life of the plan. Estimate acreage of potential Valley Fever hazard areas. and location parameters</p>

Action Affecting Resource	Type of Impact	Impact Indicators
Support effort to protect prime and unique farmlands under the federal Farmland Protection Policy Act.	Maintain or increase protection of farmlands with special designations.	Acres of prime and unique farmlands
Identify and establish working relationships with potential partners who can help provide information, inventory, monitoring, or restoration implementation support for soils resources.	Increase potential availability of informational, monitoring, and land management resources.	Number of potential partners. Qualitative description of resources that can be provided by partners that would support soil resources management.
Identify highly erodible or sensitive soils in the planning area that may need special protection or management intervention. Protection may include limitations on development in the following: NSO leasable, no surface disturbing activities, ROW avoidance or exclusion, no commercial timber harvest. Soils that require special consideration include: <ul style="list-style-type: none"> • Steep and/or unstable terrain • Decomposed granite • Ultramafic/serpentine • Biocrusts/crypobiotic • Anthropic • Bioturbation agents such as ground squirrel, wild pigs, weed infestation, etc. 	Identification and management strategies for highly erodible and other sensitive soils. Any limitations on development would potentially decrease surface disturbance to these soils.	Acres of known occurrence of these soils (if available), and where management intervention or limitations may be needed. Qualitative description of how management actions would protect or impact that those acreages.
BLM will require general performance standards for all BLM-permitted surface-disturbing activities. Operator would be required to use equipment, devices, and practices (BMPs and mitigation measures) that would meet the performance standards of the surface management regulations. Any authorized activities (road building, mining, and OHV use) would be required to comply with site specific stipulations and mitigation measures set out by the BLM, including requirements for concurrent reclamation efforts.	Minimize soil degradation from surface disturbing activities.	Qualitative discussion of impacts from application of performance standards and mitigation activities, supported by a description of the permitting process.

Action Affecting Resource	Type of Impact	Impact Indicators
BLM will require that operators meet specific performance standards for mining waste and demonstrate their reclamation efforts.	Minimize effects of surface disturbing activities.	Qualitative discussion of impacts supported by a description of the permitting process.
BLM will implement management of recreation, vegetation, forest, and post-fire treatment activities to maintain, enhance, and restore ecosystem function. Specifically, the BLM will manage authorized activities to make progress towards properly functioning soil conditions with soil properties appropriate to specific climate and landform.	Minimize soil degradation and increase soil function.	Qualitative discussion of impacts to soil resources, which would be supported by a discussion of management activities. Acres of proposed management and treatment activities (if data are available) for various soil types.
BLM will identify and implement strategies to monitor and mitigate impacts of climate change on soil resources.	Minimize soil degradation associated with climate change.	Qualitative discussion of management impacts to soil resources, which would be supported by a discussion of expected impacts from various types of management activities.
BLM will implement grazing management strategies that protect soil resources, supporting long-term ecological resilience.	Minimize soil degradation and improve condition of soil resources.	Qualitative discussion of management impacts to soil resources, which would be supported by a discussion of expected impacts from various types of management activities. Acres of proposed management and treatment activities (if data are available) for various soil types.

Impact Analysis Area

- Direct/Indirect—NCIP decision area
- Cumulative—NCIP decision area.

Impact Analysis Assumptions

- Soils occur on all land within the management area except those covered by a body of water or extensive bedrock outcropping.
- Information about the amount of surface-disturbing activities, specific types of soil resources, and management activities can be drawn or generalized from relevant reports and spatial data.
- Ground disturbing activities associated with management actions could result in wind and water erosion, soil compaction, soil nutrient losses, and degradation leading to a decrease in soil function and productivity.
- Sediment loading to surface waterbodies varies based on: topography, soil texture, hydrological intensity of precipitation events (including duration and runoff), vegetation structure and condition, and distance to waterbody.

- Disturbance on steeper slopes would cause greater erosion potential than equal disturbances on flat or moderate slopes.
- The removal of soil cover (e.g., loss of vegetation, biocrusts, or natural mulch) increases susceptibility of soils to wind and water erosion.

B.2.4 Water Resources

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
BLM would develop and implement a multi-tier sediment source assessment that would identify watersheds and evaluate and inventory sediment inputs based on watershed condition, road density, past management and acres of BLM managed land within the watershed. BLM would use this information to prioritize watersheds for treatment to address sediment sources and reduce sedimentation	Identification and management of sedimentation in priority watersheds	<p>Estimated acreage of watershed that would its reasonably foreseeable would be prioritized for treatment (if possible). If not possible, qualitative discussion of watershed impacts from this process.</p> <p>Road density inventory map would provide information on ways to reduce sediment delivery into streams.</p> <p>Proportion of watersheds managed by BLM</p> <p>Documentation of fine sediment in select waterways (if data available)</p> <p>Note if watershed 303d listed (TMDL) for sediment.</p>
Water resources MCA/BMPs to reduce the impacts surface disturbing activities on water quality/quantity.	Water could be adversely impacted from a variety of potential developments on BLM, including roads, mining, logging, collection of natural resources, erosion, and various types of discharges.	Qualitative description of how BMPs will reduce water resource impacts throughout the planning area.
Dredging not allowed in certain special designations or certain resource areas	Impacts or reduction in disturbance from dredging or not dredging	<p>Miles of stream where dredging would and would not be allowed and qualitative description of impacts of dredging.</p> <p>Guidelines on accepted dredging techniques</p> <p>Dredging permit required; however, dredging is not conducted at the moment, but need to consider among actions</p>
Land tenure adjustment along key riparian corridors to improve riparian connectivity and maintain riparian habitat integrity.	Improving riparian connectivity and intact riparian systems	Estimated acres of lands that would be acquired in riparian corridors (if acquisition parcels or areas are identified).
Disposal of lands	Potential loss of riparian habitat and riparian connectivity	Qualitative acreage assessment. Estimated acres of lands in riparian corridors that would be disposed of (if disposal parcels or areas are identified)

Action Affecting Resource	Type of Impact	Impact Indicators
Leasable, locatable and salable decisions (open) Grazing	These activities would cause surface disturbance with attendant risk of sedimentation impacts on water quality.	Acres open to surface-disturbing activities in watersheds supporting perennial water bodies.
Permitted surface disturbing activities Open OHV areas Utility corridors Fire and vegetation management or suppression using heavy equipment Post-burn management and how effects water quality Timber harvest, thinning activities, and site preparation for reforestation	Runoff in post-burn areas could affect water resources through poor water quality and have direct impacts on aquatic biota with increased sedimentation and ash input into waterways.	Leasable, locatable, and salable mineral overlay with highly erodible soils layer; however, it is unclear if this highly erodible soils layer is available. It could also be done for OHV open areas assuming a certain level of vegetation loss and for prescribed fire and wildland fire use if there is an estimate of how much of that would occur annually over the life of the plan. Fire frequency data exists for plan area as well as fire history. Water quality exceedances
Areas closed to above surface disturbing activities because of resource management allocations (i.e., ACECs, Wilderness, LWC as a priority)	Prevention of surface disturbance to soils in watersheds supporting perennial waterbodies	Acres closed to surface-disturbing activities in watersheds supporting perennial water bodies.
Water Rights: BLM would pursue water rights for rivers in the planning area and may prioritize doing this for certain waterbodies Restrictions on water ROW permits across BLM lands that access seeps and springs	Avoid or minimize impacts to water quantity. The action could increase year-round flows to sustain aquatic habitat.	The number and location of these waterbodies that may have increased water for this management. The number and location of other water rights in the basins and analyses of possible impacts to those reservations (may not be possible). There are existing water rights.
Forestry and vegetation management (riparian management areas, Oak Woodlands, LSRs, non-LSR forested areas, other vegetation cover types)	Vegetation management has implications for risk of surface disturbance affecting sedimentation, as well as amount and type of vegetation, which affects sedimentation and runoff volume	Acres of vegetation managed a certain way in watersheds supporting perennial waterbodies with a qualitative discussion of impacts of this management on water resources. Analysis of riparian management area widths for alternatives.
Restrictions on water rights-of-ways (in land uses section)	Certain activities (diversions, wells) that may impact water quantity (and related water quality issues) would be restricted – leading to potential improvements in water quality	Acres/miles of streams potentially protected.

Impact Analysis Area

- Direct/Indirect—NCIP decision area
- Cumulative—NCIP planning area

Analysis Assumptions

- An estimate can be made of reasonably foreseeable annual prescribed fire, and wildland fire treatments and wildfire acreages.
- An estimate can be made of reasonably foreseeable annual prescribed fire, and wildland fire treatments and wildfire acreages.
- Ground disturbing activities associated with management actions could result in wind and water erosion, resulting in sedimentation and increased impairment to waterbodies.
- Sediment loading to surface waterbodies varies based on topography, soil texture, hydrological intensity of precipitation events (including duration and runoff), vegetation structure and condition, and distance of ground disturbance to waterbody.
- Disturbance on steeper slopes would cause greater erosion potential than equal disturbances on flat or moderate slopes.
- The removal of vegetation increases susceptibility of soil surface to wind and water erosion resulting in increased sedimentation and impacts to waterbodies.
- Water resource impacts are generally greater with increasing area and magnitude of surface disturbance. Acreage of potential surface disturbance can serve as a comparative tool for evaluating potential water resource impacts between various management strategies and alternatives.
- The following areas are deemed to have lower impact to water resources based on acreage serving as a proxy for potential magnitude of water quality impacts:
 - Areas closed to surface disturbing activities, or where certain management activities minimize surface disturbance such as grazing, fire and vegetation suppression using heavy equipment, and utility corridors (note grazing and utility use will vary depending on the nature of the activity, topography, and vegetation).
 - Lands protected through purchase and set aside versus losses of protected lands disposed through sales.
 - Lands where dredging and other maintenance would or would not be allowed.
 - Areas where streamside and floodplain road density and associated culvert repair or removal have been reduced.
- Water quality in the planning area is higher quality in upstream catchment areas and it has the potential to degrade downstream as withdrawals of supply and inputs of pollutants increase. As water flows downstream, biological, physical, and chemical parameters deteriorate water quality. Water quality is generally better in areas where riparian vegetation is native and in good condition. One main exception being the Klamath River where cold water inputs below the dams are generally thought to improve flows and water temperatures as accretions occur.

B.2.5 Vegetation

Impacts and Indicators – Vegetation Cover Types

Action Affecting Resource	Type of Impact	Impact Indicators
Activities in vegetation cover types based on Forestry decisions related to riparian management areas, Oak Woodlands, LSR, and non-LSR forested areas.	Restrictions and allowable activities would either disturb or retain/enhance vegetation cover types in these forestry categories.	Acres of vegetation cover type within these categories
Vegetation, Forestry, and Wildland Fire management decisions: <ul style="list-style-type: none"> • Fire and vegetation management or suppression using heavy equipment • Timber harvest, thinning activities, site preparation for reforestation, and young stand improvement activities 	Restrictions and allowable activities for vegetation, forestry, and fuels would either disturb or retain/enhance vegetation cover types	Acres of vegetation cover type within these categories
Special designation management: <ul style="list-style-type: none"> • National Scenic and Historic Trails • Wild and Scenic Rivers • Wilderness, Wilderness Study Areas • Lands with Wilderness Characteristics • Areas of Critical Environmental Concern • Others 	This would conserve/maintain vegetation. Some short-term disturbing management to enhance long-term conservation (e.g., prescribed fire, other vegetation treatments)	Acres of vegetation cover types managed in special designation areas
Fish and wildlife species management	This would conserve/maintain vegetation that is habitat for fish and wildlife species.	Acres of vegetation cover types in wildlife range (critical deer winter range, others) Acres of vegetation cover types in riparian management areas
Restrictions on activities in sensitive soils or areas such as serpentine soils.	This would prevent damage to vegetation associated with those sensitive areas	Acres of vegetation protected by limiting disturbance in sensitive soils (for example, implementing BMPs for surface disturbing activities; this would likely be accounted for above in decisions to have areas open or closed to activities that remove vegetation.)
Livestock Grazing	Areas open to livestock grazing would experience low-intensity, widespread effects that could alter the vegetation cover structure or function Livestock grazing range improvements would cause localized removal or disturbance of vegetation	Acres open and unavailable to livestock grazing

Action Affecting Resource	Type of Impact	Impact Indicators
Leasable, locatable, and mineral materials decisions	Mineral allocations and allowable mineral activities would disturb vegetation cover types	Acres of vegetation cover types converted or lost due to surface-disturbing activities associated with minerals decisions. If an RFD for mineral development is available, estimates of direct disturbance to vegetation types could be inferred.
Recreation management	Management decisions in ERMA and SRMA would affect vegetation cover. Typically, management would result in disturbance/removal, impact intensity would vary depending on specific direction in the RMA.	Acres of SRMA and ERMA
Travel and transportation management decisions	Limiting or prohibiting OHV use would protect special status species from disturbance or habitat degradation. Limitations within Travel Management Areas would protect any special status species within those areas.	Miles of trails or acres designated as open, limited or closed to motorized use within vegetation cover types. Acres of vegetation cover types within Travel Management Areas.
VRM classifications	Managing for visual resources can impact/limit how vegetation management is conducted.	Acres of vegetation cover types managed as VRM I and II and how it would impact the vegetation and forestry management, and subsequently, the vegetation. This would likely overlap with areas designated for no surface occupancy for other development.
Lands and realty decisions (Land tenure adjustment, land use authorizations)	Retaining, acquiring, or disposing of land would impact vegetation cover types by removing it from public lands management. Acres of vegetation cover types converted or lost due to surface-disturbing activities associated with land use authorizations (ROWs, communication towers) Rare plant populations and habitat and vulnerable vegetation communities would be maintained in areas where native pollinator populations are maintained. Prohibiting apiaries in areas near rare plants and vulnerable communities would facilitate this.	Acres of vegetation cover types retained/acquired or disposed of and qualitative discussion of impacts of changed land use on that habitat Acres of vegetation cover types potentially disturbed by land use authorizations

Action Affecting Resource	Type of Impact	Impact Indicators
Renewable energy	Renewable energy developments (wind, solar, geothermal, biomass) and ROWs could disturb vegetation cover types No designated leasing or variance areas – case-by-case decisions only	Acres of vegetation cover types converted or lost due to surface-disturbing activities associated with renewable energy development /ROWs
Reseeding requirements and vegetation salvage requirements	Use of native seed and propagules and requirements for salvage of topsoil and vegetative mat, would allow for effective revegetation efforts and prevent introduction of nonnative invasive species.	Qualitative discussion on impacts of this BMP. If there is an a reasonably foreseeable disturbance scenario where this would be applied, this can be related to actual acreage of impact where this would be applied.
AIM monitoring and use of state and transition models to adjust vegetation management	This would provide for flexible management to adapt to changing vegetation conditions and manage for fire, fuel loading and vegetation condition in response to climatic changes	Qualitative discussion on impacts of this management

Impacts and Indicators – Special Status Species

Action Affecting Resource	Type of Impact	Impact Indicators
Incorporate protection measures for rare habitats into fire response agreements	These would provide additional protection for sensitive vegetation species during fire suppression and/or treatment activities.	Acres of habitat for special status species flora or unique ecosystems that could be protected by this, as appropriate. Qualitative discussion of these impacts.
Restrictions on activities in vegetation cover types based on Forestry decisions related to riparian management areas, Oak Woodlands, LSR, and non-LSR forested areas.	Restrictions and allowable activities would either disturb or retain/enhance special status plant habitat in these forestry categories.	Acres of special status species habitat within these categories
Same resource and resource use management decisions discussed for vegetation, above.	Decisions that would result in vegetation disturbance would also potentially remove special status plant populations, seedbanks, and suitable habitat, while protective decisions would conserve or enhance special status plants.	Acres or numbers of special status plant populations (for example, number of element occurrences potentially affected) Acres of special status plant habitat.

Impacts and Indicators – Invasive, Non-native Plants

Action Affecting Resource	Type of Impact	Impact Indicators
All actions implemented or authorized by the BLM would include measures to prevent the introduction and spread of invasive plants.	Invasive plants may out-compete native species for resources, change predator-prey relationships, alter the availability of forage for wildlife, and generally alter ecosystem structure and function.	Quantitative discussion of impacts in terms of potential for containment or expansion of invasive or non-native species.

Action Affecting Resource	Type of Impact	Impact Indicators
<p>Herbicide use will be consistent with procedures and limitations outlined in the Vegetation Treatments on Bureau of Land Management Lands in 17 Western States ROD (2007a, as amended), and Vegetation Treatments Using Aminopyralid Fluroxypyr and Rimsulfuron on BLM Lands in 17 Western States ROD (2016).</p>	<p>This will allow for herbicide to control invasives and non-natives as appropriate.</p>	<p>Qualitative discussion of impacts with tiering to programmatic EIS analysis as appropriate.</p>
<p>Same resource and resource use management decisions discussed for vegetation, above.</p>	<p>Decisions that would result in vegetation disturbance would also increase the potential for nonnative, invasive plant establishment and spread, while protective decisions would minimize this potential. More protective decisions may limit the types of treatments available to control nonnative, invasive species (e.g., herbicide use).</p>	<p>Acres of resource and resource use management decisions (e.g., allocations of special designations areas and areas open and closed to various resource uses) Acres of known noxious weed infestations in the decision area.</p>
<p>When conducting restoration or reclamation, permittees must use native seed and propagules applicable for existing climatic conditions and desired ecosystem function as demonstrated by benchmark areas and/or applicable vegetation outplanting trials (planting of raised nursery plants or seeds into the natural environment). Coordination with the BLM Botany Program Lead must begin during the permitting process and final seed/propagule mixes must receive prior approval by the BLM before restoration or reclamation efforts can begin. Seeds for Success collection guidelines and stands operating procedures (SOPs) must be adhered to during any collection on native plant material that would occur on BLM managed lands.</p>	<p>Use of native seed and propagules, or certified and approved alternatives, would allow for effective revegetation efforts and prevent introduction of invasive plants.</p>	<p>Qualitative discussion of the impacts of this BMP on the potential for nonnative, invasive plant establishment and spread.</p>

Action Affecting Resource	Type of Impact	Impact Indicators
<p>Where practicable, the BLM would require BLM-permitted operators to salvage and store the vegetative mat and topsoils for restoration/reclamation. These would include small scale projects where the vegetation mat can be kept alive and restored in a timely fashion (before the vegetation mat dies). If the BLM decides that vegetative mat and topsoil cannot be salvaged, other measures to protect vegetation and soils would be considered, including (but not limited to) emergency stabilization or importation of native weed-free topsoil and vegetative mat or material from an exterior source.</p>	<p>Salvage and use of vegetative mats where practicable would facilitate effective restoration/reclamation efforts while minimizing risk of spreading weeds and prevent introduction of invasive plants.</p>	<p>Qualitative discussion of the impacts of this BMP on the potential for nonnative, invasive plant establishment and spread.</p>

Impact Analysis Area

Vegetation Cover Types, Special Status Species, and Invasive Non-native Plants

- Direct/Indirect—BLM-administered lands in the planning area
- Cumulative—HUC-8 watersheds in which BLM-administered lands are located

Analysis Assumptions

Vegetation Cover Types

- Adaptive management tools would be implemented to test, evaluate and adjust the assumptions, objectives, actions, and subsequent on-the-ground results from the implementation of RMP decisions. This strategy would provide resource managers with the flexibility to respond quickly and effectively to changing resource and user conditions.
- Desired future condition for vegetation cover types would include sustainable ecosystems comprised of natural landscapes that provide connectivity, ecological function, and resilience to disturbance; supporting plant community health, pollination, reproduction, gene flow, adaptation to changes in temperature and/or precipitation trends, and healthy native and special status plant population distributions and sizes.
- Planned vegetation treatment results and success can be estimated from past experience combined with existing data and studies.
- The planning area has low minerals and renewable energy development potential. Reference the RFD if available and incorporate into analysis.
- Desired future conditions for vegetation cover types would be native plant communities that are comprised of predominantly native species with all historic, comparable, or healthy vegetation communities represented and proportional to pre-contact conditions.

- GIS data does not exist for the knobcone and rare cypress vegetation cover types. Qualitative analysis is used for these vegetation cover types.

Special Status Species

- Implementation of all of the alternatives would be in accordance with existing laws, regulations, and standard management guidelines.
- Impacts to special status wildlife species are based primarily on potential impacts to habitats managed by the BLM.
- Precise quantitative estimates of impacts generally are not possible because the exact locations of future actions are unknown, population data for species status species are often lacking, or habitat types impacted by surface-disturbing activities cannot be predicted.
- Actions impacting one species have similar impacts on other species using the same habitats or areas. Measures to protect one species generally will result in long-term benefits to other species occurring within that habitat. Where resources overlap, management actions associated with protecting habitats and cultural resources directly benefit special status plant species.
- The more acreage of habitat protected, the greater the benefit to the targeted species.
- Natural fire and prescribed fire are used to manage vegetative communities and can result in short-term adverse impacts with long-term beneficial impacts to wildlife and wildlife habitats.

Invasive, Non-native Plants

- Standard measures to minimize invasive, non-native plant introductions or spread would be in effect for all applicable projects authorized by the BLM.
- Future human development proposals would be evenly distributed in different habitat types that may be susceptible to invasive plants in proportion to the abundance of those habitat types under the baseline conditions.
- The number and type of invasive plants may increase during the life of the plan, however, would be concentrated and/or facilitated by surface disturbance.
- Increases in introduction and spread of invasive plants could be accelerated by longer growing seasons (climate change).
- Adaptive management tools would be implemented to test, evaluate and adjust the assumptions, objectives, actions, and subsequent on-the-ground results from the implementation of RMP decisions. This strategy would provide resource managers with the flexibility to respond quickly and effectively to changing resource and user conditions.

B.2.6 Wildlife

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
<p>Permitted surface disturbing activities, such as:</p> <ul style="list-style-type: none"> • Leasable, locatable and salable decisions (open) • Grazing • Open and Limited OHV areas • Utility corridors/communication tower sites • Fire and vegetation management or suppression using heavy equipment • Timber harvest 	<p>All of these activities would cause removal of vegetation/habitat and disturbance (noise, injury, mortality) which would affect wildlife and their habitat.</p>	<p>Change in the quantity and quality of wildlife habitat:</p> <ul style="list-style-type: none"> • Acres of wildlife habitat open or closed to surface-disturbing activities (where available) • Qualitative discussion on impacts of types of activities on wildlife habitat. • If an RFD for mineral development, projected timber harvest, and projected fire management is available, estimates of direct disturbance to wildlife habitat could be produced. <p>Potential for disturbance (noise, injury, mortality) leading to reduced species survivorship:</p> <ul style="list-style-type: none"> • Acres of wildlife habitat at risk to disturbance based on acres open or closed to the surface-disturbing activities (where available) • Qualitative discussion of the potential for disturbance of different activity types. • Qualitative discussion of potential increase in edge habitat due to activities (e.g., wildlife species would be at risk for increased predation by perching raptors on utility lines/communication towers or at risk of bird strike mortalities.
<p>Wildlife management, including BMPs/stipulations to protect wildlife habitat (seasonal restrictions, etc.)</p>	<p>Management to enhance and protect habitat or to avoid or mitigate impacts to wildlife from BLM activities and externally-permitted projects</p>	<p>Change in the quantity and quality of wildlife habitat:</p> <ul style="list-style-type: none"> • Acres of habitat and/or species protected through BMPs (where available) with qualitative discussion of impacts and effectiveness of BMPs. • Qualitative discussion of BMPs ability to maintain or improve wildlife habitat. <p>Potential for disturbance (noise, injury, mortality, disease transmission [bats]):</p> <ul style="list-style-type: none"> • Qualitative discussion of BMPs effectiveness in reducing disturbances.

Action Affecting Resource	Type of Impact	Impact Indicators
Vegetation/Forestry management (riparian management areas, LSRs, non-LSR Forested, other vegetation cover types)	<p>Vegetation/Forestry management will impact wildlife habitat through changes in species assemblages or seral stage; it would also cause short-term disturbance and habitat alterations.</p> <p>Vegetation/understory removal for fuels reduction reduces nesting habitat</p>	<p>Change in the quantity and quality of wildlife habitat:</p> <ul style="list-style-type: none"> • Qualitative discussion of impacts on representative wildlife species; alternatives do not call out total acres treated, so this will be a qualitative discussion; project-specific BMPs may include nesting bird surveys, temporal restrictions; project pace and funding are increasing; focus will be on planning level - alternatives may emphasize areas for treatments (WUI), types of treatments, and areas to avoid (wilderness/special designations) <p>Potential for disturbance (noise, injury, mortality) leading to reduced species survivorship:</p> <ul style="list-style-type: none"> • Qualitative discussion of the potential for disturbance due to treatments, equipment, etc.(short-term) vs. long-term benefit from improved conditions, decreased fire, invasives
Management of SRMAs and ERMAs	Management for high density recreation would create potential conflict between wildlife and recreationists and would potentially decrease wildlife habitat suitability and increase disturbance for some species	<p>Change in the quantity and quality of wildlife habitat:</p> <ul style="list-style-type: none"> • Acres of wildlife habitat managed for recreation • Qualitative discussion of how the different recreationists would affect representative wildlife species and habitat. <p>Potential for disturbance (noise, injury, mortality, disease transmission [bats]):</p> <ul style="list-style-type: none"> • Qualitative discussion of the potential for disturbance due to noise, human presence, etc.

Action Affecting Resource	Type of Impact	Impact Indicators
Fire management, including restrictions on fire management and suppression	Fire management causes short-term loss or shifts in wildlife habitat and often long-term improvement; it would also cause short-term disturbance	<p>Change in the quantity and quality of wildlife habitat:</p> <ul style="list-style-type: none"> • Acres of wildlife habitat projected to receive fire management and where restricted (where available) • Qualitative analysis of impacts from management and restrictions on wildlife habitat in short- and long-term <p>Potential for disturbance (noise, injury, mortality):</p> <ul style="list-style-type: none"> • Qualitative discussion of the potential for disturbance due to management activities
VRM Class I and II designation	Areas designated as VRM Class I or II would include limitations on vegetation manipulation that may benefit wildlife species using that habitat.	<p>Change in the quantity and quality of wildlife habitat:</p> <ul style="list-style-type: none"> • Acres of wildlife habitat impacted VRM Class I and II within the planning area (where available) • Qualitative analysis of impacts on wildlife habitat due to restrictions on surface disturbing activities.
Management of land for wilderness characteristics	Management of land for wilderness characteristics would benefit wildlife because it would include measures protective of wildlife habitat. Conversely, lack of vegetation/fire treatments would make habitats less resilient to disturbances (fire, insects, invasives)	<p>Change in the quantity and quality of wildlife habitat:</p> <ul style="list-style-type: none"> • Acres of wildlife habitat impacted by management of lands managed for wilderness characteristics. • Qualitative analysis of impacts on wildlife habitat due to restrictions on surface disturbing activities.
ACEC designation and management	Designation of areas as ACECs would impact wildlife because it often would include measures protective of wildlife habitat.	<p>Change in the quantity and quality of wildlife habitat:</p> <ul style="list-style-type: none"> • Acres of wildlife habitat impacted by ACEC management. • Qualitative analysis of impacts on wildlife habitat due to restrictions on surface disturbing activities.
Decisions regarding Wild and Scenic River designations	Measures to protect WSR corridors would generally be protective of wildlife habitat.	<p>Change in the quantity and quality of wildlife habitat:</p> <ul style="list-style-type: none"> • Acres of wildlife habitat impacted by WSR management. • Qualitative analysis of impacts on wildlife habitat due to restrictions on surface disturbing activities.

Methodology

The environmental consequences to wildlife from implementing each of the alternatives are described in Chapter 3. For NCIP, management direction that may alleviate or exacerbate threats to ecological conditions is evaluated at a programmatic level. The RMP does not authorize site-specific projects or activities, and, therefore, it does not analyze site-specific impacts. Direct and indirect site-specific effects

will be analyzed when future projects are proposed. Although potential short-term consequences from implementing the programmatic approach may be described in the environmental consequences sections below, where appropriate, this analysis focuses on longer-term indirect and cumulative effects that may occur over the 20-year life of the plan.

The BLM identified potential effects of decisions and management actions on species, populations, and habitats by reviewing the best available science and using qualitative and quantitative data related to impact indicators. To best reflect the scale and magnitude of these effects, the BLM used GIS data and overlays of resources and resource uses to quantify areas where impacts from management decisions could potentially occur. Because the exact locations of future actions are unknown, precise quantitative estimates of impacts generally are not possible. The analysis also relies on a qualitative analysis of potential effects from different types of land uses.

Impact Analysis Area

- Direct/Indirect—NCIP decision area
- Cumulative—NCIP planning area

Analysis Assumptions

- The BLM is responsible for managing habitats, whereas state and federal wildlife management agencies (e.g., USFWS, California Department of Fish and Wildlife) oversee management of wildlife species. Therefore, this analysis primarily relies on changes to vegetation types to estimate impacts to wildlife habitats.
- Disturbance impacts to wildlife are evaluated by comparison to current management practices in the planning area; increased protection in time or space is beneficial, whereas reduced protection results in adverse impacts.
- Natural and prescribed fire are tools used to manage vegetative communities and can result in short-term adverse impacts with long-term beneficial impacts to wildlife and wildlife habitats.
- Management actions aimed at benefiting specific wildlife species can have adverse or beneficial impacts on other wildlife species.
- The BLM will use the best available information, management and conservation plans, and other research and related directives, as appropriate; to guide wildlife habitat management on BLM-administered lands.
- Design features, such as seasonal and spatial restrictions, would limit direct impacts on some species. The more acreage of habitat protected, the greater the benefit to the targeted species.
- Implementation of the alternatives would be in accordance with existing laws, regulations, and standard management guidelines.
- Precise quantitative estimates of impacts generally are not possible because the exact locations of future actions are unknown, population data for special status wildlife species are often lacking, or habitat types impacted by surface-disturbing activities cannot be predicted.

B.2.7 Fish and Aquatic Species

Impacts and Indicators – Fish and Aquatic Habitat

Action Affecting Resource	Type of Impact	Impact Indicators
Managing for Aquatic Conservation Strategy requirements, including allowing or not allowing surface disturbing activities, including grazing, within riparian/watersheds supporting fisheries	Surface disturbing activities within watershed can alter stream processes and degrade fish habitat.	Acres of watershed subject to mining, development, and timber harvest in close proximity to waterbodies. Linear miles of sensitive stream habitat and/or anadromous fish habitat available and closed to grazing
Actions that allow for or prohibit mineral development	Mining if withdrawals lifted or no mining if withdrawn.	Miles of stream open or closed to mineral development. Anadromous stream miles open or closed to mining.
Impacts of managing for riparian management areas	Management would affect how projects impact fish habitat, including direct disturbance impacts and indirect impacts from sedimentation.	Acres of watershed and miles of stream subject to specific types of management and qualitative discussion of the impacts of that management
Watersheds and riparian areas open to timber and forest products harvest and the BMPs required for that harvest.	Forest products and timber harvest can alter sediment transport across the landscape potentially increasing sediment loading in streams and can degrade fish habitat.	Acres of watershed and miles of stream where harvest would be allowed and qualitative discussion of impacts of that harvest.
Special recreation permits (SRPs) in RCAs require the containment and removal of human wastes.	Concentrated recreational use can increase nutrient inputs to streams and can alter aquatic productivity either beneficially or adversely; stream habitats can be degraded	Number of SRPs in proposed RCAs. Linear miles of stream habitat subject to potential concentrated recreation Linear miles of sensitive stream habitat subject to potential concentrated recreation (e.g., spawning habitat)
Travel and transportation decisions (Open, closed, or limited to OHVs)	Summer stream crossings with OHVs can create localized degradation of fish habitat and affect fish passage. Winter stream crossings with OHVs can affect sensitive fish overwintering habitat (including eggs of summer/fall spawning species)	Linear miles of stream habitat subject to OHV crossings during summer/winter. Linear miles of sensitive stream habitat subject to OHV crossings during summer/winter. (e.g., spawning/overwintering habitat) Miles of road within watersheds supporting anadromous fish streams that are OHV open and OHV limited to existing routes

Action Affecting Resource	Type of Impact	Impact Indicators
Prioritize/Pursue instream water rights for rivers/streams supporting fisheries; limitations of Water ROWs	Water withdrawal for industrial/domestic purposes can reduce water quantity and water quality thereby potentially degrading fish habitat and/or inhibiting fish passage.	Number of streams where water rights may be pursued. Linear miles of stream potentially susceptible to water withdrawals that would be beneficially impacted by pursuing water rights or by limitations on water ROWs. Acres of pond/lake habitat potentially susceptible to water withdrawals that would be beneficially impacted by pursuing water rights or by limitations on water ROWs.
Prioritizing acquisition of lands to provide for riparian/stream connectivity	Land acquisition would allow consistent federal land management of fisheries habitat	If possible, estimate the number of stream miles where land acquisition would provide for increased connectivity.
Prioritizing management actions that would improve or restore ecological function	Short term construction effects (localized sedimentation), long term beneficial habitat improvement and/or connectivity	Linear miles of stream habitat impacted or reconnected. Acres of tidelands or waterbodies affected.

Impacts and Indicators – Special Status Species

Action Affecting Resource	Type of Impact	Impact Indicators
For any BLM-authorized surface disturbing activity in known habitat for special status species (SSS) fish or unique ecosystems (as determined by the BLM), applicants would be required to conduct a survey using BLM-approved protocol. The map of known habitat would be revised when new information becomes available.	Without pre-disturbance surveys, any adverse impacts to SSS fish species from surface-disturbing activities would be unknown.	Acres of known habitat for special status species or unique ecosystems.
Soil and water protection BMPS.	Measures that are protective of soil and water quality would benefit special status species by preserving habitat.	Acres of land protected by required BMPs.
Vegetation and Fire Management decisions.	Measures that are protective of vegetation may benefit special status species.	Acres of land protected by regulations.
Restrictions on casual use timber sale operations regarding timing to avoid long-term disturbance to underlying soils and prohibiting operations within the flood-prone width of perennial rivers and streams, and riparian zone of perennial streams for house log harvesting.	Special status species that use the flood-prone width and riparian zone of perennial rivers and streams would benefit from that habitat being protected from timber harvest.	Acres of habitat with the flood-prone width of perennial streams. Acres of riparian zone of perennial streams.

Action Affecting Resource	Type of Impact	Impact Indicators
Travel management decisions.	Limiting or prohibiting OHV use would protect special status species from disturbance or habitat degradation. Limitations within Travel Management Areas would protect any special status species within those areas.	Miles of trails or acres designated as open, limited or closed to motorized use (include a subset of acres of riparian management areas that would be closed/open to OHV use). Acres within Travel Management Areas.
VRM Class I and II designation.	Areas designated as VRM Class I or II would include limitations on vegetation manipulation that may benefit special status species using that habitat.	Acres of VRM Class I and II within the planning area.
Management of land for wilderness characteristics.	Management of land for wilderness characteristics may benefit special status species because it would include measures protective of potential habitat.	Acres of lands managed for wilderness characteristics.
ACEC designation and management.	Designation of areas as ACECs may benefit special status species because it would include measures protective of potential habitat.	Acres of lands designated as ACECs.
Decisions regarding Wild and Scenic River designations.	Measures to protect WSR corridors would generally be protective of potential special status species habitat.	Acres of land within WSR corridors.

Impacts and Indicators – Aquatic Invasive Species

Action Affecting Resource	Type of Impact	Impact Indicators
All actions implemented or authorized by the BLM would include measures to prevent the introduction and spread of aquatic invasive species.	Aquatic invasive species may out-compete native species for resources, change predator-prey relationships, alter the availability of forage for wildlife, and generally alter ecosystem structure and function.	Estimated acreage at risk for invasions based on existing invasive species populations based on acreages available for management or permitted activities that spread invasive species combined with consideration of with proposed measures to prevent species spread.
Wildland fire management would include the following management measures to prevent exotic species introductions	Wildland fires and efforts to manage them may contribute to the spread of aquatic invasive species.	Acreage of burned and adjacent areas at risk of invasion by aquatic invasive species as a result of fire management activities.

Impact Analysis Area

Fish and Aquatic Habitat, Special Status Species, and Aquatic Invasive Species

- Direct/Indirect—NCIP decision area and connected downstream waters within 1.0 mile of BLM-administered lands.
- Cumulative—Watersheds within the NCIP planning area in which BLM-administered lands occur.

Analysis Assumptions

Fish and Aquatic Habitat

- Development associated with mining/timber harvest, development in general, stream crossings, water withdrawal, etc. would be evenly distributed, as allowed by the NCIP alternatives within any given watershed/drainage.
- Specific measures of change – TDS, stream hydro-geomorphics, fish population estimates etc. are not available adequately to use as landscape level indicators for this evaluation.
- Areas of unique fish habitat are captured under the ACEC descriptions.

Fish – Special Status Species

- Implementation of all of the alternatives would be in accordance with existing laws, regulations, and standard management guidelines.
- Impacts to special status fish species are based primarily on potential impacts to habitats managed by the BLM.
- Precise quantitative estimates of impacts generally are not possible because the exact locations of future actions are unknown, population data for species status species are often lacking, or habitat types impacted by surface-disturbing activities cannot be predicted.
- Actions impacting one species have similar impacts on other species using the same habitats or areas. Measures to protect one species generally will result in long-term benefits to other species occurring within that habitat. Where resources overlap, management actions associated with protecting habitats and cultural resources directly benefit special status plant species.
- The more acreage of habitat protected, the greater the benefit to the targeted species.
- Natural fire and prescribed fire are used to manage vegetative communities and can result in short-term adverse impacts with long-term beneficial impacts to fish habitats.
- Because of the migratory nature and relative mobility of some special status these species are impacted by actions on non-BLM-administered land more so than other species. In the case of migratory species, impacts to winter and migration habitats could adversely impact the viability of some species. Winter and migration habitats are assumed to be at least as important to long-term viability of these species as breeding and nesting habitats.

Aquatic Invasive Species

- Future human development proposals would be evenly distributed in different habitat types that may be susceptible to aquatic invasive species in proportion to the abundance of those habitat types under the baseline conditions.
- The number and type of aquatic invasive species may increase during the life of the plan but would be concentrated around areas of human activity (e.g., rivers, trails, roads).
- Increases in introduction and spread of aquatic invasive species could be accelerated by longer growing seasons (climate change).
- Adaptive management tools would be implemented to test, evaluate and adjust the assumptions, objectives, actions, and subsequent on-the-ground results from the implementation of RMP decisions. This strategy would provide resource managers with the flexibility to respond quickly and effectively to changing resource and user conditions.

B.2.8 Coastal Resources and Management

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
Land tenure adjustment in coastal areas.	Loss or gain of coastal lands.	Acres of coastal lands gained or lost by alternative, and qualitative discussion of how the addition or loss of coastal lands relates to coastal resilience to climate change.
Management of recreational access and type of recreation in coastal areas.	Increased or decreased disturbance from recreationists.	Acres of coastal lands subject to recreational use and qualitative discussion of how recreational uses would impact coastal lands and resources.
Revegetation/Restoration of coastal areas.	Increased coast habitat integrity and resilience. Increased opportunities for carbon sequestration through restoration and protection of coastal habitats.	Project acres of coastal lands planned for restoration. Qualitative discussion of highest and best use of coastal habitats as it pertains to coastal plant and animal species, carbon sequestration, coastal resiliency to sea level rise, ground water inundation, and climate change.
Allowing or not allowing locatable, salable, or leasable mineral development in coastal areas.	Increased or decreased disturbance due to permitted activities.	Acres of coastal lands that could be subject to disturbance and qualitative discussion of types and impacts of that disturbance.
Allowing or not allowing surface-disturbing permitted activities in coastal areas.	Increased or decreased disturbance due to permitted activities.	Acres of coastal lands that could be subject to disturbance and qualitative discussion of types and impacts of that disturbance.
Management of OHVs in coastal areas.	Increased or decreased disturbance to coastal resources, impacts to air quality (dust and emissions), soils (erosion and compaction), increased noise disturbance to coastal wildlife species.	<p>Acres of coastal lands subject to direct OHV disturbance and acres subject to indirect noise disturbance (estimated based on noise attenuation calculations and typical noise levels of OHVs).</p> <p>Acres of coastal lands for open riding and miles for designated trail use that are surrounded by endangered plant protection areas. Additionally, acres of coastal lands for open riding and miles for trail use and potential impacts to soils.</p> <p>The amount of OHV use will not be greater than attainment levels for air quality.</p>
Issuance and management of ROWs within the coastal area.	Physical loss of ROW or restrictions to ROW due to transitioning habitats within the coastal area.	Acres of coastal lands subject to sea level rise, dune migration, and/or coastal erosion.

Impact Analysis Area

- Direct/Indirect—BLM-administered coastal areas within the NCIP planning area
- Cumulative—The coastal strip within the planning area; defined by the BLM as 1,000 yards from mean high tide line.

Analysis Assumptions

The BLM made several assumptions to facilitate the analysis of potential effects. Below are general assumptions that apply to all resources. These assumptions set guidelines and provide reasonably foreseeable projected levels of development that would occur within the Northwestern California planning area during the planning period. These assumptions should not be interpreted as constraining or redefining the management objectives and actions proposed for each alternative in **Chapter 2**. Specific resource assumptions are found in **Appendix I**, Approach to the Environmental Analysis:

- Acres are approximate projections for comparison and analytical purposes. Readers should not infer that they reflect exact calculations.
- Land allocations do not compel or authorize any ground-disturbing actions. Future actions and development proposals could be brought forward that will be subject to additional site-specific environmental study and permitting requirements.
- The discussion of effects is based on the best available data. Where data are limited, the BLM used knowledge of the planning area and professional judgment, based on observation and analysis of conditions and responses in similar areas.
- Surface-disturbing actions related to fluid mineral development will comply with Gold Book surface operating standards (and subsequent updates).
- Recreation use within the planning area will increase over the next 20 years, given the increase in population and popularity of coastal recreation areas.
- Climate change and sea level rise would continue to increase the potential for inundation of and damage to coastal resources from high force wave events.

B.2.9 Wildland Fire Ecology and Management

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
BLM would use NFPORs, WFDSS, and IFTDSS as well as subsequent fire planning and decision support tools. BLM would also promote community engagement and partnerships, such as co-stewardship, in fire planning, wildfire risk management, and response through continued engagement in the California Management Agreement.	This would increase pre-fire planning and agency/community collaboration in identifying new fire management and suppression approaches.	Qualitative discussion on how this would impact vegetation and wildland fire in the planning area.

Action Affecting Resource	Type of Impact	Impact Indicators
Restrictions on the use of prescribed fire or wildland fire use because of resources	Prescribed fires or wildland limitations may cause limitations on the amount of type of vegetation treatment, with subsequent impacts on vegetation loading and/or fire behavior.	Identification of locations and acreages where prescribed fire and wildland fire use would be restricted and qualitative discussion of what that would mean for fire management and subsequent fire and vegetation conditions.
Restrictions on fire suppression activities (not allowing heavy equipment, not allowing chemical suppressants, etc.)	Restrictions on how suppression is done may limit the ability to control a wildland fire.	Acres and locations where fire suppression is restricted and qualitative description on how that would impact fire suppression success under varying wildland fire scenarios.
Areas where vegetation/fire management tools (prescribed fire and wildland fire use, chemical, mechanical) are allowed to meeting resource objectives (fuel loading, SOD, etc.)	Use of all available fire management tools provides more flexibility and greater effectiveness in managing in addressing long-term vegetation loading and fire behavior and returning the fire regime to more natural conditions or conditions more appropriate to maintain public health and safety or meet resource objectives.	Locations and acreages where fire management actions are allowed with qualitative discussion of what that would mean for fire management and subsequent fire and vegetation conditions.
General MCA/BMPs that apply across planning area (ES/BA, reclamation, use of MIST, etc.)	BMPs/MCA for fire management reduce post-fire environmental degradation, decrease potential risks to public safety, and would help protect sensitive resources.	Qualitative discussion of how general MCA/BMPs would impact fire management and resulting vegetation condition, fire behavior, and public health and safety.
Prioritization of areas for fire management (DPAs, Wilderness, WSAs, wildlife habitat areas, traditional Tribal uses, critical infrastructure, ROWs, etc.)	Prioritizing certain areas provides a greater likelihood that fuel loading will be controlled in those areas, thus reducing the likelihood of catastrophic fire events that can cause significant damage to resource values/function.	Acres and type of areas prioritized for fire management and qualitative description of how that would impact fire risk to those resources/uses.
Visual Resources Management (VRM)	Potential restrictions on the size, type and location of fuel treatments.	Acres of VRM Class I and II lands and qualitative discussion on how that would impact fire management activities.
Vegetation and Forestry management actions (thinning of vegetation, timber harvest, site preparation for reforestation, management of riparian management areas, Oak Woodlands, LSRs, non-LSR forested areas, other vegetation cover types, etc).	Vegetation management actions can affect fuel loading and change vegetation fuel types, which, in turn, can affect fire management and fire behavior.	Acres and type of forestry and vegetation management with qualitative discussion on what this management would do to fire behavior and fire management.
OHV designations and locations managed for high recreational use	OHV Open and Limited areas and areas with high recreational use create an additional risk of inadvertent ignitions along with concerns that establishing fuel breaks would increase OHV use within them.	Acres of areas classified as OHV Open or Limited and SRMAs with high recreational use with qualitative discussion of how this impacts ignition risk.

Action Affecting Resource	Type of Impact	Impact Indicators
Areas managed as infrastructure sites and/or utility corridors	Placement of utilities impacts fire management priorities and methods.	Acres of high fire risk/return interval that overlap with proposed infrastructure sites and existing utility corridors, and qualitative analysis on how that would impact fire ignition risk and fire management priorities.
Areas open/closed to these uses: <ul style="list-style-type: none"> • Locatable Minerals • Leasable Minerals • Mineral Materials • Utility Corridors • Permitted surface disturbing activities • Timber harvest • Harvest of forest products 	Areas open for these public land uses would increase the potential for human caused fires because of the presence of motorized construction equipment, transportation of chemicals or fuel, refueling. Additionally, the present of constructed infrastructure/facilities would increase suppression needs and change suppression priorities.	Acres open and closed to these activities and qualitative discussion of how that would impact fire ignition risk and fire management priorities.

Impact Analysis Area

- Direct/Indirect—NCIP planning area
- Cumulative—NCIP planning area

Analysis Assumptions

- Fuel treatments would reduce the potential spread and intensity of wildfire.
- Fire is an important functional, natural disturbance in many of the ecological systems found in the planning area.
- A direct relationship exists between the density of human use within the planning area and the frequency of human-caused fires.
- A direct relationship exists between fuel loading and potential fire intensity and severity.
- Human-caused wildfires would be suppressed.
- Demand for fuels treatments would likely increase over the life of this plan.
- Most fires in the planning area have natural causes (e.g., lightning strikes).

B.2.10 Cultural Resources

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
<p>Use Class I inventory and model to help prioritize surveys of cultural resources or areas that are sensitive/vulnerable. These include:</p> <ul style="list-style-type: none"> • ACECs with relevance and importance (R&I) for cultural resources. • Areas at risk due to climate change or other environmental factors. • Areas where scientific interest for continued research exist. • Areas with potential for future surface disturbing activities. 	<p>Climate change impacts, high recreational use, high fire risk, permitted development and erosion and sedimentation could damage sensitive cultural resources. Survey of vulnerable sites and areas allow hardening, data recovery, curation or other methods to protect those resources.</p>	<p>Number of specific sensitive, protected sites, and acres of survey coverage.</p>
<p>BMPs/stipulations under Management Common to All to help avoid/mitigate impacts to cultural resources from resource management activities and permitted projects.</p>	<p>BMPs/stipulations include survey and avoidance, reclamation and restoration, and monitoring sensitive cultural sites</p>	<p>Impacts of implementing BMPs/stipulations for cultural resources would be analyzed qualitatively; for BMPs/stipulations with requirements for specific sites or areas, acreages and numbers of sites that would be subject to BMPs would be used as an indicator.</p>
<ul style="list-style-type: none"> • Leasable, locatable, and salable decisions (open). • Grazing. • Permitted surface disturbing activities. • OHV use areas. • Utility corridors. • Fire and vegetation management or suppression using ground disturbing methods. • Timber harvest. • Reforestation and associated site preparation activities. 	<p>All of these decisions cause surface disturbances which has the potential to disturb or destroy cultural sites. They also cause visual and noise impacts which can affect the setting and integrity of cultural sites.</p>	<p>Acres open and closed to these surface disturbing areas, particularly in areas with high likelihood of finding significant cultural resources (if data is available). Analysis would include a qualitative description of the impacts these respective activities can have on cultural resources.</p>
<p>VRM class allocations.</p>	<p>Visual impacts can alter character, integrity, association and feeling of prehistoric, historic, and Tribal traditional use or sacred sites.</p>	<p>Acres managed at VRM class IV in areas with known sensitive cultural resources or high likelihood of finding cultural resources.</p>

Action Affecting Resource	Type of Impact	Impact Indicators
Areas that have a high probability for cultural sites eligible for fuels reductions and removal of hazardous trees	Wildfires could adversely affect surface, and shallowly buried historic properties and cultural resources, or impact integrity, character, nature, feeling or use of cultural resources. Cultural resources in planning area will experience greater risk of damage or destruction by wildfire as frequency and extent of wildfires increases.	Acres with high probability of cultural sites that would have decreased risk due to fuels reduction
Designate ACECs with cultural R&I and manage to maintain that R&I, including closing those areas to casual use metal detecting.	Managing for cultural R&I would protect significant cultural resources and cultural setting of these areas.	Acres of ACECs designated for cultural R&I and qualitative description of how management of these ACECS would protect cultural resources.
Closing or developing routes, including non-motorized/non-mechanized routes or acquiring lands to increase public access.	Human access to significant cultural sites increases risk of damage and vandalism.	Number of known significant cultural sites or acres of land with high likelihood of significant cultural resources within 100 meters of existing and proposed access routes/areas (see <i>Chasing Ghosts: A GIS Analysis and Photographic Comparison of Vandalism and Site Degradation in Range Creek Canyon, Utah, Utah Museum of Natural History Occasional Papers 2006-1</i>).
Land tenure adjustment.	Retaining, acquiring or disposing of lands impacts how cultural resources are managed. Lands retained in BLM ownership provide a mandated level of protection to cultural resources that would not be provided if lands are outside of federal ownership, including lands transferred to fee ownership (with the exception of transfer of lands to tribal entities for whom the cultural resources have special significance).	Acres of land with high likelihood of significant cultural resources that are retained/acquired or disposed of with a qualitative analysis of these changes in land use would impact cultural resources.
Areas or locations subject to past recurring vandalism, looting, illegal excavation.	Results in direct, physical alterations and disruption of significant context, historic integrity, and the cultural resource itself.	Acreage of lands where known vandalism, looting, and illegal excavations have occurred.

Impact Analysis Area

- Direct/Indirect—BLM-administered surface lands where ground-disturbing activities would be permitted.

- Cumulative—NCIP planning area. In some instances, the cumulative analysis area may extend into adjacent areas with shared historic, prehistoric, and ethnographic contexts and identified thematic areas of significance.

Analysis Assumptions

- Impacts to archaeological sites and historic properties in the planning area could result from activities associated with surface and subsurface disturbance such as development projects, recreational use/OHV travel, erosion and fire management. Sites are irreplaceable.
- Impacts to cultural resources such as Tribal sacred sites and historic structures could result from management decisions from non-surface disturbing activities that create auditory and/or visual effects that affect cultural setting. or limit or prohibit access to scientists.
- Impacts to Tribal traditional sites may result from management decisions that restrict traditional access or use of such sites.
- Transferring lands with cultural resources out of federal ownership removes the federally-mandated protection and decision-making process for those resources that is mandated under the NHPA.

B.2.11 Paleontological Resources

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
Prioritize research in PFYC 4 and 5* areas.	Inventory and monitoring of fossil localities is integral to managing, preserving and protecting important resources from damage or destruction	Acreage of PFYC 4 and 5* geologic units. Number of known significant paleontological locales (if applicable).
Prioritize fuels and vegetation management projects in areas with known or high probability of vertebrate fossils or significant non-vertebrate fossils to prevent wildfire related damage to those resources	Wildfires could adversely affect surface, and shallowly buried paleontological resources. Paleontological resources in planning area will experience greater risk of damage or destruction by wildfire as frequency and extent of wildfires increases	Number of known significant paleontological locales or acres of area with high likelihood of vertebrate fossils subject to fuels and vegetation management projects.

Action Affecting Resource	Type of Impact	Impact Indicators
<p>Inadvertent discovery stipulation to be included on all permitted actions. These stipulations would be consistent with Chapter III of BLM Handbook 8270-1 and would include the following steps:</p> <ul style="list-style-type: none"> • An assessment by the BLM paleontologist (or other qualified paleontologist approved by the BLM) of the threat of damage to the resource. • A determination of whether avoidance of the resource is possible. • If avoidance is not possible, an assessment of appropriate mitigation for project impacts to the resource. • BLM would work with project applicant and/or other parties (if applicable) to develop a mitigation plan to address resource impacts. 	<p>ROW and other surface-disturbing actions and development could damage or destroy unidentified significant fossils</p>	<p>Qualitative or quantitative discussion on how the relative amount of ROWs and other surface-disturbing action that would be issued under the alternative would impact/benefit paleontological resources</p>
<p>An on-the-ground survey prior to approval of surface disturbing actions would be required for all activities authorized within PFYC Class 4 and 5* formations and depending on the proposed activity may be required within Class 3 formations where important paleontological resources have been found in the same geologic unit in the planning area.</p> <p>If discoveries are made, then management common to all described above would apply.</p>	<p>Surface-disturbing activities in PFYC Class 4 and 5 formations, and some PFYC Class 3 formations have the potential to damage or destroy significant paleontological resources</p>	<p>Amount (acreage) of areas subject to surface-disturbing activities surveyed and/or monitored; number of significant paleontological localities identified and managed as a result</p>

Action Affecting Resource	Type of Impact	Impact Indicators
<ul style="list-style-type: none"> • Leasable, locatable, and salable decisions (open) • Grazing • Permitted surface disturbing activities • Open OHV areas • Utility corridors, rights-of-ways • Fire and vegetation management or suppression using heavy equipment • Timber harvest, thinning activities, and site preparation for reforestation • Recreation • Land tenure, including disposal. • Other resource management that minimizes or eliminate surface disturbance or human use (e.g., ACECs, LWC, VRM) 	<p>These surface disturbing activities and actions resulting in increased human use/activity have the potential to impact paleontological resources</p>	<p>Acres of PFYC 4 and 5* that that overlap with areas that are open to these surface disturbing activities or changes in use. May include PFYC U, as managed as PFYC 4 or 5*, and PFYC 3.</p>

*Note that no PFYC 5 geologic units are identified within the NCIP planning area.

Impact Analysis Area

- Direct/Indirect—BLM-administered surface lands and split-estate lands where applicable (i.e., mineral entry and leasing)
- Cumulative—NCIP planning area

Analysis Assumptions

- Impacts to paleontological sites (fossil resources of vertebrate and invertebrate animals) in the planning area could result primarily from activities associated with surface and subsurface disturbance such as development projects, mineral extraction; recreational use/OHV travel, erosion and fire management.
- Increased human activity/use through authorized/unauthorized collection or intentional/unintentional vandalism can impact paleontological resources.
- Implementation of all of the alternatives would be in accordance with existing laws, regulations, and standard management guidelines.
- Precise quantitative estimates of impacts to paleontological resources generally are not possible because the exact locations of future actions are unknown, precise location data for fossil localities are often lacking, locations of significant fossil resources are largely unknown, most of planning area has not been inventoried for paleontological resources, and the planning area has a refined PFYC analyses.
- Fossils including paleontological resources are part of the surface estate; therefore, actions on split-estate lands are only covered by PRPA if surface is USFS or DOI.

B.2.12 Visual Resources

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
Visual Resource Management (VRM) allocations (VRM I, II, III, and IV). These allocations are made to protect scenic areas, as well as in response to other resources or resource uses.	Impacts visual resources in terms of what types of activities are consistent or not consistent with these VRM Class Objectives	Acres managed in each VRM class compared with acreage in each class of the VRI (assumption being that if you manage at a certain VRM class, the landscape will eventually inventory at that class)
<p>Lands and Reality</p> <ul style="list-style-type: none"> • Utility corridors • Renewables • Communication <p>Leasable Fluid Materials</p> <p>Locatable Minerals</p> <ul style="list-style-type: none"> • Leasable, locatable and salable decisions (open) • Permitted surface disturbance activities, exposed soils <p>Trail and Travel Management</p> <ul style="list-style-type: none"> • Open OHV areas <p>Wildland Fire Management</p> <ul style="list-style-type: none"> • Fire and vegetation management or suppression using heavy equipment <p>Vegetation</p> <ul style="list-style-type: none"> • Timber harvest, thinning activities, and site preparation • Restoration and rehabilitation <p>Recreation and Visitor Services</p> <ul style="list-style-type: none"> • Facilities and infrastructure <p>Soils and Minerals (e.g., Serpentine).</p> <ul style="list-style-type: none"> • Potential color impact 	All of these land use planning decisions may result in implementation of projects or activities resulting in surface disturbance that may impact visual resources. Many of the impacts of these resource uses are accounted for in the VRM allocation with associated objectives and associated impacts analysis described above.	Acres of area open to surface disturbing activities that would impact visual resources with a qualitative discussion of what those respective impacts could look like. This would defer to the proposed VRM classification as necessary.

Action Affecting Resource	Type of Impact	Impact Indicators
<p>Areas closed to surface disturbing activities due management decisions for other resources or resource allocations (certain ACECs, WSRs, NHTs, Wilderness, etc.)</p> <p>Wilderness and Wilderness Study Areas</p> <p>National Scenic and Historic Trails</p> <p>Lands with Wilderness Characteristics</p> <p>Wild and Scenic Rivers</p>	<p>All of these decisions would preclude surface disturbing activities that have the potential to impact visual resources. Many of these are accounted for in the VRM assignments and associated impacts analysis described above.</p>	<p>Acres of area closed to surface disturbing activities that would impact visual resources with a qualitative discussion of what that would mean for visual resource impacts.</p>

Impact Analysis Area

- Direct/Indirect—NCIP decision area
- Cumulative—NCIP decision area

Analysis Assumptions

- Protection of visual resources would be commensurate with standards identified in each VRM class objective.
- VRM class objectives apply to all program areas and would be adhered to through project design, avoidance, or mitigation. An estimate can be made of reasonably foreseeable annual prescribed fire, and wildland fire treatments and wildfire acreages.
- Visual design considerations will be incorporated into all surface-disturbing projects or activities regardless of size, potential impact, or VRM class.
- Activities that cause the most contrast and thus are the most noticeable to the casual viewer would be considered to have the greatest effect on scenic quality. The severity of a visual effect depends on a variety of factors, including the size and scale of a project, vegetation and landform manipulation, and the overall visibility of disturbed areas. The more protection that is associated with the management of other resources and special designations, the greater the benefit to visual resources of the surrounding viewsheds.
- Projects/actions would be designed to meet VRM class objectives. If a project could not be designed to meet VRM objectives, the project/ action would not be approved, or a plan amendment would be necessary.
- Recent wildfire perimeters in relation to Scenic Quality Class: vegetation is assumed to be a dynamic component and part of the changing landscape.
- Visitors to BLM-administered public lands or residents living near BLM-administered public lands are sensitive receptors for impacts on visual quality.
- The magnitude (or dominance) of a visual effect depends on a variety of factors, including the size of a project (i.e., area disturbed, physical size of structures), the location and design of roads and trails, and the overall visibility of disturbed areas.

- Visual resource design techniques and BMPs would be implemented to mitigate potentially harmful impacts.
- Visual contrast ratings would be required for all projects that fall within VRM Classes I, II, III, and IV to determine conformance to the RMP VRM decisions, and for all projects introducing significant change to identify ways to reduce visual contrast. The visual contrast rating system would be used as a guide to analyze site-specific impacts of projects as well as facility design and placement. These facilities would be designed to minimize their visual impacts to conform to the area’s VRM class objective. This would allow the BLM to reduce impacts on a site-specific basis to ensure compliance with the assigned VRM class.

B.2.13 Lands with Wilderness Characteristics

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
Lands with wilderness characteristics management decision (managing for wilderness characteristics as a priority, managing for wilderness characteristics while allowing for other use, or not managing for wilderness characteristics).	Not managing for wilderness characteristics could result in development or other uses that lead to a loss of naturalness, outstanding opportunities for solitude or primitive and unconfined types of recreation.	Acres of land managed for wilderness characteristics by management “tier” (managed as a priority, managed for with other resource management but not as a priority, not managed for wilderness characteristics).
Travel decision: open and limited	OHV use could cause surface disturbance and lead to a loss of naturalness, outstanding opportunities for solitude or primitive and unconfined types of recreation.	Acres of land with wilderness characteristic as a priority that are affected by these decisions.
Leasable minerals decisions: open under standard terms and conditions, moderate constraints (CSU), and major constraints (NSO)	Mineral development causes surface disturbance and may lead to a loss of naturalness, outstanding opportunities for solitude or primitive and unconfined types of recreation.	Acres of land with wilderness characteristic as a priority that are affected by these decisions.
Mineral materials decision: open and open with special terms and conditions	Mineral development causes surface disturbance and may lead to a loss of naturalness, outstanding opportunities for solitude or primitive and unconfined types of recreation.	Acres of land with wilderness characteristic as a priority that are affected by these decisions.
Locatable mineral decision: Open to mineral entry; recommended or previously recommended for withdrawal	Mineral development causes surface disturbance and may lead to a loss of naturalness, outstanding opportunities for solitude or primitive and unconfined types of recreation.	Acres of land with wilderness characteristic as a priority that are affected by these decisions.
ROW decision: open and ROW avoidance area	Land use authorization may lead to a loss of naturalness, outstanding opportunities for solitude or primitive and unconfined types of recreation.	Acres of land with wilderness characteristic as a priority that are affected by these decisions.

Action Affecting Resource	Type of Impact	Impact Indicators
Land tenure decisions	Land retention, acquisition, or disposal decision could improve or adversely affect management of natural values or primitive activities.	Acres of land with wilderness characteristic as a priority that are affected by these decisions.
OHV decision: open and limited	OHV use may lead to a loss of naturalness, outstanding opportunities for solitude or primitive and unconfined types of recreation.	Acres of land with wilderness characteristic as a priority that are affected by these decisions.
VRM decision: VRM Class II, III, and IV	VRM classification guide permitting decision that may affect wilderness characteristics.	Acres of land with wilderness characteristic as a priority that are affected by these decisions.
Grazing decision: available	Grazing authorization may lead to a loss of naturalness or integrity of the ecosystem and native vegetation communities.	Acres of land with wilderness characteristic as a priority that are affected by these decisions.
Commercial woodland harvest	Harvest may lead to a loss of naturalness and native vegetation communities.	Acres of land with wilderness characteristic as a priority that are affected by these decisions. Qualitative discussion if acres are not available.
Wildland fire management	Fire management may include techniques to minimize impacts to naturalness from activities such as construction of fire roads and vegetation clearing, and to restore native vegetation communities.	Acres of land with wilderness characteristic as a priority that are affected by these decisions. Qualitative discussion if acres are not available.
Vegetation and wildlife	Vegetation and wildlife management decisions may include techniques to minimize impacts to naturalness, restore native vegetation communities or otherwise protect wilderness character.	Acres of land with wilderness characteristic as a priority that are affected by these decisions. Qualitative discussion if acres are not available.

Impact Analysis Area

- Direct/Indirect—NCIP decision area
- Cumulative—NCIP decision area

Analysis Assumptions

- The wilderness characteristic inventory includes an assessment of all BLM-administered lands within the planning area.
- Lands with wilderness characteristics could lose their natural character and opportunities for solitude and primitive recreation due to surface disturbances, such as permitted mineral location and entry, ROW authorizations, OHV use designated as open, and the construction of structures.
- Actions consistent with VRM Class II, III, and IV could potentially result in a loss of natural character.
- Potential impacts on lands managed for wilderness characteristics from subsequent undertakings (implementation of the planning decisions or site-specific project proposals) require separate compliance with NEPA.

B.2.14 Cave and Karst

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
Decisions to allow or not allow surface disturbing activities in or around cave karst areas.	Surface disturbance to cave karst.	Acres and/or actual sites that do or do not have the potential to be disturbed.
Decisions to limit or not limit recreational access to cave karst areas.	Human disturbance and increased risk of transmission of white nose syndrome, or impacts to other sensitive species.	Acres and/or actual sites that do or do not have the potential to be disturbed.
Scientific and management access as well. Fence installation to preclude cattle impacts of a rock shelter could impact cultural resources.	Disturbance of cultural resources.	
Decisions to survey cave karst resources.	Increased knowledge and ability to adaptively manage cave karst resources.	Acres and/or actual site that will have enhanced information and therefore better adaptive management.
	Spread of WNS or other adverse impacts to sensitive species.	Consideration of Tribal preservation of the resources.
	Impacts to cultural resources.	

Impact Analysis Area

- Direct/Indirect—The analysis area for cave and karst resources covers cave karst areas on BLM-administered lands within the planning area and would include all land not covered by a waterbody without regard to potential use since caves are ubiquitous and may be altered due to changes outside an area of development. Coastal sea caves, and caves that extend underground to adjoining lands or vice-versa are also considered.
- Cumulative—BLM-administered lands within the planning area

Analysis Assumptions

- Caves and karst resources that occur on all land within cave and karst areas within the management area except those covered by a permanent body of water.
- Information about the amount of surface-disturbing activities can be drawn or generalized from relevant re-ports.
- Impact assessment would be qualitative coupled with a description of the various processes envisioned under each alternative.

B.2.15 Forestry

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
Forestry decisions related to managing riparian management areas, LSRs, Oak Woodlands, and non-LSR Forested Areas	Impacts to forest stand composition, stand health, and resiliency to fire and pests/pathogens due to management associated with buffer widths and vegetation management (canopy coverage, cohort management, etc.) in riparian management areas, LSRs, Oak Woodlands, and non-LSR Forested Areas	<p>Acres of forestry type that would be impacted by management (based on buffer widths and known forestry types) combined with a qualitative description of how that management would impact that acreage.</p> <p>Acres of forest stand development/age class that would be impacted by riparian management area buffer widths and LSR designation.</p> <p>Acres of Oak Woodlands choked out or converted by conifer encroachment.</p>
Travel management decisions.	<p>Limiting or prohibiting OHV use may limit access to forest products. Exceptions will limit impacts on collection of products for subsistence use.</p> <p>Road decommissioning and permanent road closures would result in reducing access for timber harvest, thinning activities, and/or site prep and reforestation.</p> <p>Increase road use, road opening or construction.</p>	<p>Miles of trails or acres designated as open, limited, or closed to motorized use overlaid with commercial woodland harvest area.</p> <p>Miles of roads that have been decommissioned/permanently closed and acres of BLM managed lands not accessible for timber, thinning and reforestation due to closures.</p>
Forestry BMPs for soil protection.	<p>Limiting timber sale operations in the flood zone of perennial rivers and streams (riparian management areas), in sensitive soil types, and during certain soil conditions (i.e., during thaw conditions or heavy rainfall) would result in site specific limitations on timber harvest, thinning activities, and site prep for reforestation, potentially impacting overall volume of harvested acres and acres treated for pre-commercial thinning or reforestation.</p> <p>Limiting timber harvest in riparian zones of perennial streams would impact ability to recruit wood for downed woody debris (DWD) to promote wildlife habitat and to be utilized for instream restoration projects in site specific areas.</p>	<p>Acres of flood zone of perennial rivers and streams overlaid with non-LSR Forested Areas.</p> <p>Acres of riparian zone for perennial streams overlaid with non-LSR Forested Areas.</p>

Action Affecting Resource	Type of Impact	Impact Indicators
Limitations on timber and/or forestry products harvest.	Limiting or prohibiting commercial woodland and timber harvest could potentially impact overall volume of harvest.	Acres of areas where timber or forestry products would not be allowed or would be limited; if possible, estimates on number of board feet or cords of wood no longer available for harvest. Acres of areas where timber or forestry products would not be allowed to be harvested or would be limited, that have insect and disease infestations, blowdown or windthrow, and/or fire mortality.
Migratory Birds and raptors management.	Seasonal limitations on disturbance and vegetation clearing would result in seasonal, site specific limits on timber harvest, forest thinning, and site prep for reforestation.	Migratory bird and raptor habitat (if mapped) overlaid with timber harvest areas and non-LSR forested areas; acres subject to seasonal limitations and qualitative description of impacts.
VRM Class I and II designation.	Areas designated as VRM Class I or II would impose limitations on vegetation manipulation that may impact ability to conduct timber harvest, pre-commercial thinning, site prep, and reforestation.	Acres of VRM Class I and II overlaid with areas available for timber and forestry products harvest, thinning activities, site prep and reforestation.
Management of land for wilderness characteristics.	Management of areas for wilderness characteristics would include the prohibition on timber harvest, thinning, site prep, reforestation, and/or firewood cutting and SFR removal, resulting in site specific limitations on ability to harvest products.	Acres of lands managed for wilderness characteristics as a priority in areas where timber or forestry products harvest occurs or could be a desired management option.
ACEC designation and management.	Closures to timber harvest or commercial forest product harvest in specific ACECs would result in limits on the ability to harvest timber and other woodland products. In ACECs open to harvest, other measure to protect sensitive resources may result in restrictions on the method, timing or location or harvest.	Acres of ACEC designation with closure or limitations on timber or commercial forestry products harvest overlaid with timber or forestry products harvest areas. Acres closed to timber harvest for ACEC designation (by ACEC).
WSR impacts.	Measures to protect WSR corridors may result in restrictions on the method, timing or location of timber harvest, thinning activities, and/or site prep for reforestation.	Acres of WSR corridors overlaid with commercial timber or forestry products harvest areas and areas where site prep and reforestation are planned to occur.

Impact Analysis Area

- Direct/Indirect—BLM-administered lands in the planning area
- Cumulative—All counties within NCIP planning area

Analysis Assumptions

- Management actions related to protecting such resources as water quality, air quality, cultural resources, riparian areas, soils, fisheries, wildlife, special status plants, and ACECs, affect the acres and output of forest products, the ability to conduct pre-commercial forest thinning activities for fuels reduction or habitat improvement, and site prep for reforestation.
- Forest products available for harvest may be impacted by factors outside of BLM management decisions including but not limited to wildland fires, change in vegetation due to shifts in vegetation cover type or precipitation levels, drought, insect infestations, and disease pathogens.
- Levels of demand for forest products would remain relatively stable over the life of the plan and will primarily consist of subsistence uses.
- There is a demand from industry to provide commercial timber harvest and from adjacent landowners to use timber harvest as a tool to reduce fuels commercially and improve forest health
- The BLM will continue to provide for permitting the harvest of forest products under sustained yields.
- The BLM will continue to utilize pre-commercial thinning and timber harvest when needed to reduce fuels and improve stand health and habitat.
- The demand for utilizing a variety of forest management tools, including timber harvests, to reduce fuels and increase stand resiliency will likely increase due to community and industry demand and under climate change.
- The need for post-disturbance salvage sales, site preparation activities, and reforestation is likely to increase.
- Necessary funding for forestry projects will be available, and forestry projects will be pursued across the decision area.
- Analysis of land management decisions regarding forestry often involves the allowable sale quantity (ASQ) and the calculation of the potential sale quantity (PSQ), as described in the Land Use Planning Handbook, Appendix C, page 13 and 14 (BLM 2011). Forestry activities prioritized by the goals and objectives under the NCIP will focus on treating forested areas to achieve the desired condition. As such, the PSQ is a less meaningful metric for impact analysis under the alternatives, and it will not be used.
- Precise quantitative estimates of impacts generally are not possible because the exact locations and nature of future forestry activities are unknown.

B.2.16 Lands and Realty

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
Locatable and Leasable Mineral and Other Withdrawals.	Existing withdrawals would be recommended to be continued and new withdrawal proposals for locatable and leasable minerals would ensure those lands are not open to mining and oil/gas exploration and potential development.	Number of acres proposed for mineral and non-mineral withdrawal

Action Affecting Resource	Type of Impact	Impact Indicators
ROW Avoidance and Exclusion Areas.	<p>ROW exclusion (except for existing ROWs or designated corridors) would not allow future opportunities for new ROW actions.</p> <p>ROW avoidance may allow future opportunities for new ROW actions with special considerations, if there are no other feasible alternatives. Existing ROWs in avoidance areas are permitted to continue and collocation would be encouraged.</p>	<p>Acres of land in exclusion areas.</p> <p>Acres of land in ROW avoidance areas and a qualitative description of impacts on resource(s) (see assumptions, below).</p> <p>Number/acres of existing ROWs within ROW avoidance areas</p>
Designated Section 368 ROW corridors.	<p>Will be a preferred location for existing and future authorizations and is suitable to accommodate similar or compatible uses within the corridor.</p> <p>May limit flexibility of utilities in routing across BLM lands.</p>	Total linear miles of available corridors for linear projects.
VRM Class II and III	VRM classifications may further limit areas where ROWs are permitted even if not within a ROW avoidance or exclusion area	VRM Class II and/or III acreage that is outside ROW a/e areas
Apiary permit restrictions	Reduction in the availability of apiary permits	Acres available for apiary permits
Communications site restrictions	Reduction in availability of new communications sites	Acres available for communications sites
Water ROW restrictions	Reduction in availability of new water ROWs	Acres available for water ROWs

Impact Analysis Area

- Direct/Indirect—NCIP planning area
- Cumulative—NCIP planning area

Analysis Assumptions

- Analysis will be based on the official survey records, land status records system, surface management agency (SMA), public land survey system dataset (PLSSDS) and GIS. Reference for this is the survey records and the land status records are authoritative sources, the SMA and PLSSDS are secondary sources, and GIS, for land status data, is based on the others. ROW avoidance areas would only be impacted if no other ROW option was available.
- Resource changes in land use would be assessed under the specific resource being impacted. For the purpose of this analysis, this section would only focus on changes related to land status and use.

B.2.17 Energy and Minerals

Impacts and Indicators – Leasable Minerals

Action Affecting Resource	Type of Impact	Impact Indicators
Leasable Minerals		
Stipulations for leasable (Standard Stips, NSO, Timing and controlled surface use).	Stipulations indicate what limitations are placed on leasable development. NSO would not allow surface occupancy and would require operators to access resource through directional drilling.	Acres managed under each stipulation.
Reasonably foreseeable development.	Extracts a finite resource and therefore decreases future availability.	Volume of leasable minerals removed based on any RFD or rate of development.
Closed to leasable.	Precludes leasable extraction.	Acres closed and open to leasable mineral development, particularly in high potential areas.
Geothermal		
Unless already closed to mineral development the BLM will allow development of other leasable minerals/products (geothermal, phosphate, etc.) within the planning area.	Provide opportunity to develop alternative leasable minerals/products in the planning area.	Acres closed and open to geothermal, particularly in high potential areas.
Other resource decisions.	Other resource decision impacts on leasables are captured through the stipulations which need to be consistent with other resource management decisions.	Addressed by indicators above.

Impacts and Indicators – Locatable Minerals

Action Affecting Resource	Type of Impact	Impact Indicators
Areas open and withdrawn from locatable entry (the bulk of other resource decisions are reflected in these decisions as they were made to ensure consistency of mineral development with other resource uses).	This determines where mining can and cannot happen.	Acres open and closed, particularly in high mineral potential areas.
BLM will manage mining related activities in accordance with 43 CFR 3809, 3802, and 3715.	Prevent unnecessary degradation of public lands by operations authorized by the mining laws.	Permit application, monitoring and reclamation as per 43 CFR 3800. Qualitative description of impact on mining.
BLM will require zero discharge facility in sensitive resource areas.	Prevent unnecessary degradation of public lands by operations authorized by the mining laws.	Permit application, monitoring and reclamation as per 43 CFR 3800. Qualitative description of impact on mining.
BLM will require that all mine development in the planning area must be reclaimed in accordance with an approved reclamation plan that meets all applicable criteria outlined in 43 CFR 3600.	Prevent unnecessary degradation of public lands by operations authorized by the mining laws.	Permit application, monitoring and reclamation as per 43 CFR 3800. Qualitative description of impact on mining.

Action Affecting Resource	Type of Impact	Impact Indicators
VRM decisions.	VRM decisions for surrounding lands can affect how mining projects are implemented	Acres of open to mining in high mineral potential areas that are also managed as VRM I and II.
Decisions on allowing dredging (for locatable development; dredging decisions for recreational mining are covered in the recreation worksheet).	Not allowing dredging reduces the effectiveness of placer mining.	Miles of stream with high mineral potential where dredging is not allowed.
ACECs closed to metal detecting if they have a cultural R&I value	Limiting casual use metal detecting	Acres closed to casual use metal detecting.

Impacts and Indicators – Mineral Materials

Action Affecting Resource	Type of Impact	Impact Indicators
Decisions on what areas are open and closed to salable development as a result of other resource management actions.	This would determine where salable development could occur.	Acres of area open and closed to salable development, including areas with high salable potential.
Visual management.	Visual management could direct how and if salable development could be done.	Acres of areas open for salable development that are managed as VRM I or II, particularly areas with high salable potential.

Impact Analysis Area

Leasable, Locatable, Mineral Materials

- Direct/Indirect—BLM-administered lands in the planning area
- Cumulative—NCIP planning area

Analysis Assumptions

Leasable Minerals

- Oil, gas and geothermal are the only leasable mineral resources known to exist in potentially recoverable amounts within the planning area.
- No development of oil or gas resources is expected to occur during the planning period due to lack of economically viable resource deposits.
- Geothermal potential exists in the southern portion of the Arcata Field Office.
- No surface occupancy does not preclude development but does change how the resource is accessed.
- Due to the lack of potential, coal leasing is not considered in this RMP. Any future decision to lease coal would require an RMP amendment.

Locatable Minerals

- Mining laws prescribe much of the management of locatable minerals.

Mineral Materials

- The NCIP Mineral Potential Report includes locations and acreages of high salable potential or BLM has GIS data that can be used to estimate that.

B.2.18 Recreation and Visitor Services**Impacts and Indicators**

Action Affecting Resource	Type of Impact	Impact Indicators
Management for open, limited, and closed for OHV travel	The location, timing, and acreage of limitations on OHVs may reduce or increase recreational opportunities associated with these modes of travel. (i.e., Increasing the opportunity for conflict between competing or different recreation activities).	Total acres where OHV management actions result in long-term increase or decrease of basic recreation and visitor services and desired outcomes.
Fire management –suppression, fuels management, and (if applicable) post-fire rehabilitation	<p>Fire management actions can result in long-term elimination or reduction of basic recreation experience and desired outcomes.</p> <p>There would be short term impacts from wildfire smoke on recreation. This is because smoke may interfere with recreational opportunities and experiences.</p>	<p>Acres of fire management actions that eliminate or reduce basic recreation experience and desired outcomes.</p> <p>Depending on the location, smoke could affect the recreational experience and desired outcomes in the short term. This would include a qualitative analysis related to how management would affect recreational experience.</p>
Managing lands with wilderness characteristics	<p>Managing lands to protect wilderness characteristics would preserve opportunities for non-motorized recreation over the long term.</p> <p>Are there any impacts to the converse (i.e., reduction in motorized access? If so, disclose them).</p>	Acres of land managed for wilderness characteristics that provide opportunities for wilderness recreation. (Conversely, a reduction of opportunity for a non-wilderness activity such as motorized recreation)
ACEC management	<p>Improvement in recreational experiences/qualities and conditions/stewardship due to the reduction in human waste in these areas.</p> <p>Impact on recreational experiences/qualities and conditions/stewardship could result from lack of management of human waste in these areas.</p> <p>Closing trails would reduce opportunities for recreation if rerouting is not feasible.</p>	Acres of ACECs managed involving recreational experience and desired outcomes.
Management of SRPs	<p>There would continue to be opportunities for commercial and dispersed recreation along NTMC trails.</p> <p>Changes in allowed use could affect recreation opportunities.</p>	If applicable, the estimated number of SRPs existing today that would be modified, added, or terminated (such as by the creation of an SRMA) and how that would impact both permitted, especially guides and outfitters, and casual use recreationists.

Action Affecting Resource	Type of Impact	Impact Indicators
Management of SRMAs and ERMAs	SRMAs and ERMAs would be managed to provide certain recreational experiences and desired outcomes (depending on the RMA management. Closing trails would reduce opportunities for recreation if rerouting is not feasible.	Acres of SRMA or ERMA managed.
Permitted surface disturbing activities: <ul style="list-style-type: none"> • Leasable, locatable and salable decisions (open) • Grazing • Utility corridors • Timber harvest 	These activities result in noise or some other type of disturbance (such as lighting) that decreases recreational experience.	Acres where these respective resource uses would occur overlapped with SRMAs and ERMAs.
Land tenure decisions	Disposal or retaining/acquiring lands moves land from public access, thereby decreasing recreational opportunities.	Acres of land retained or acquired that provide recreational experience or recreational access. Acres of land disposed of that provide recreational experience or recreational access.
Wild and Scenic Rivers	This limits development and improves access/scenery.	Miles of WSRs
Riparian management area restoration	This limits development and improves access/scenery for intermittent/perennial streams.	Acres of restoration or miles of intermittent/perennial streams restored
E-bikes	How e-bike decisions will impact recreational experience (both good and bad)	Miles of trail open to e-bike use – qualitative description of changes in recreational experience.
Camping closures	How proposed camping restrictions (day use only designations) would impact camping availability and experience	Acres of planning area open/closed to camping outside of designated campgrounds and qualitative discussion on how that would change the experience (both good and bad).
Shooting closures (of various types)	How shooting closures would impact shooting availability as well as other recreational uses in an area.	Acres open/closed to shooting

Impact Analysis Area

- Direct/Indirect—BLM-administered lands in the planning area
- Cumulative—NCIP planning area

Analysis Assumptions

- Summer recreation levels are likely to increase and winter recreation levels may decrease with the expected lengthening of the summer season and warmer summer temperatures.
- Improved vehicle technology will result in increased demand for summer OHV recreation opportunities.
- Overall, recreation use in the planning area is very high and is likely to continue to grow.

- Demand for SRPs will increase during the life of the plan.
- Areas not managed as SRMAs or ERMAs allow recreation activities to occur, but recreation is not emphasized. These areas are managed to allow recreation uses that are not in conflict with the primary uses for these lands or significant cultural and natural resources.
- Individual SRMAs are managed to protect and enhance a targeted set of activities, experiences, benefits, and desired RSCs.
- Individual ERMAs are managed to support and sustain the principal recreation activities and the associated qualities and conditions of the ERMA. Management of ERMAs is in balance with the management of other resources and resource uses.
- Analysis of the economic impacts of user fees and SRP management on guides and outfitters would be described under the Socioeconomics section in Chapter 4.
- Analysis of public safety, such as during recreation, would be described under the Public Health and Safety section in Chapter 4.
- Summer use levels on undeveloped trails will become more impacted each year as use levels increase throughout the planning area in areas with soils not well- suited to OHV travel.
- RMAs have identified recreation outcomes tied to desired experiences and settings. These areas can be analyzed more specifically than undesignated areas. Accordingly, the focus of the impact analysis will be on SRMAs and ERMAs, with less analysis for undesignated areas.
- Changing access to BLM-administered lands may increase recreational demand in some areas, while decreasing demand in other areas by dispersing recreation throughout the decision area.
- Recreation use would increase over the next 20 years, given the increase in population and popularity of coastal recreation areas. As a result, adverse impacts to coastal resources would potentially increase.
- Climate change and sea level rise would continue to increase the potential for inundation of and damage to coastal resources from high force wave events.
- All acreage calculations are rounded to the nearest 100.

B.2.19 Travel and Transportation Management

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
OHV designations – Open, Limited to Designated Routes, Closed	Depending on the chosen management direction, these allocations could limit or increase OHV access	Acres of proposed OHV designations in each of these categories; Miles of OHV trails available in limited areas and not available in closed areas
Development of trails and/or connecting trails between existing transportation routes	Developing trails would increase the existing trail network and create greater access to BLM-managed surface lands	Estimated miles of developed trails and connecting trails that could be constructed within the life of the plan with qualitative discussion of how they link with current travel network
Development of e-bike trail use direction and management	Increased access to existing trails by e-bike users	Miles of trail with e-bike access Miles of trail formerly not available to e-bikes that are now available with qualitative discussion

Action Affecting Resource	Type of Impact	Impact Indicators
Land tenure adjustment for access	Retaining or acquiring additional lands could increase access to the transportation network within BLM-managed surface lands	Acres of land retained or acquired that provides or has the potential to provide access to public land or connections between public lands or travel networks
Land tenure adjustment - disposals	Disposal may get rid of lands that could eventually provide connection between trail networks or isolated parcels of public lands	Acres of lands disposed that provide or have the potential to provide access to public land or connections between public lands or travel networks
LWC	Restrictions on future perm road development in LWC areas	Acres of area with restriction on new perm road construction

Impact Analysis Area

- Direct/Indirect—NCIP decision area
- Cumulative—NCIP planning area

Analysis Assumptions

- Degradation of roads and trails in the planning area from natural processes (e.g., erosion) will continue regardless of avoidance of human caused impacts.
- Natural processes are not considered impacts to roads and trails.

B.2.20 Livestock Grazing

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
ACEC decisions – closing certain ACECs to grazing	Potential future closing of ACECs to grazing would reduce the number of acres available for livestock grazing.	Acres projected to be unavailable due to closure of ACECs.
Leasable development.	Surface disturbance from leasable development reduces the number of acres available for livestock grazing.	Acres projected to be unavailable due to leasable development based on RFD (which is not anticipated to occur).
OHV decisions – open, limited, closed.	In both open and limited OHV areas, livestock could be subject to harassment by motorized recreationists. Furthermore, recreationists in open and limited OHV areas may vandalize grazing infrastructure such as water troughs and fences/gates.	Acres within recreation management areas where motorized use is the primary use. Costs associated with repairs/replacement of fencing and water troughs. OHV closed areas that overlap with allotments due to access issues for livestock management.
Recreation management	Within recreation management areas livestock could be subject to harassment by recreationists, hikers with dogs, equestrians, mountain bikes, shooting. Furthermore, recreationists may vandalize/damage grazing infrastructure such as water troughs and fences/gates.	Acres of grazing allotments that overlap with recreation management areas.
Grazing decisions – open or closed.	Would determine how many acres are available for grazing in planning area.	Total acres open and closed to grazing within the planning area. Number of allotments/acres allotted open or closed to grazing.

Action Affecting Resource	Type of Impact	Impact Indicators
Fire management decisions related to prescribed fire.	Prescribed fire removes vegetation, and may temporarily reduce or exclude grazing.	Qualitative discussion of the impacts (socioeconomic) to grazing lessees as a result of temporary suspension of grazing during prescribed fire.
Forestry operations including timber harvest.	Forest health practices (timber harvest, fuel reduction etc.) may result in conflicts with grazing operations such as damage to fences, and grazing infrastructure.	Qualitative discussion of the impacts (socioeconomic) to grazing lessees as a result of required repairs/replacement of grazing infrastructure.

Impact Analysis Area

- Direct/Indirect—BLM-administered lands within the planning area
- Cumulative—BLM-administered lands in the planning area, plus connected watersheds and riparian areas upstream and downstream, and adjacent lands with grazing operations.

Analysis Assumptions

- Grazing operations that overlap multiple land ownerships are accounted for in the analysis.
- Reasonable projections of ongoing and future vegetation shifts due to climate or other factors are available.
- Grazing is compatible with wilderness values.
- Lessees are currently complying with grazing regulations on BLM-administered lands within the planning area.

B.2.21 Renewable Energy

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
Closures to solar or wind energy development, including ROW avoidance/exclusion areas, VRM I and VRM II areas, areas with no permitted surface disturbing activities	This would impact whether development could occur or not.	Acres open to solar and wind development in relation to high wind potential and high solar potential areas
Designation of corridors	Corridor designation would impact routes for transmission from facilities and in between population centers	Miles and locations of corridors in relation to high wind, solar, and geothermal potential areas
Areas open and closed for commercial forest products harvest	This would impact development of biomass	Acres open and closed to commercial forest products harvest and estimate of biomass availability if supported by data.
Areas open or closed to geothermal leasing	Would impact the ability to develop geothermal	Acres open and closed for leasing in relation to high geothermal potential areas.

Impact Analysis Area

- Direct/Indirect—NCIP decision area
- Cumulative—NCIP planning area

Analysis Assumptions

- The main renewable energy sources are assumed to be solar, wind, geothermal, biomass, and hydro/microhydro.

B.2.22 Areas of Critical Environmental Concern

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
ACEC management decisions.	Impacts to R&I values because of ACEC management decisions.	Acres of ACEC that would be managed for R&I and impact of ACEC management on that R&I.
<u>Leasable minerals decisions:</u> open under standard terms and conditions, moderate constraints (CSU) and major constraints (NSO).	Impacts are specific to the ACEC and are based on the impact that management action(s) would have on the R&I values of an ACEC.	<u>For cultural/wildlife/plants/scenic/recreation resources ACECs:</u> Total acres within each ACEC where R&I values of the ACEC are affected by surface occupancy or surface-disturbing activities.
<u>Locatable mineral decisions:</u> Open to mineral entry; recommended or previously recommended for withdrawal		<u>For fish ACECs:</u> Total stream miles within each ACEC where R&I values of the ACEC are affected by surface occupancy or surface-disturbing activities.
<u>Mineral materials decisions:</u> <ul style="list-style-type: none"> • Open; open with special terms and conditions. • ROW exclusion area/ROW avoidance area • OHV decisions (Limited/closed). • VRM Class (VRM I, II, III, or IV). • Grazing decisions (Available, unavailable). • Commercial woodland harvest • Wildland or prescribed fire use • Vegetation and wildlife decisions 		

Impact Analysis Area

- Direct/Indirect—The acreage of BLM-administered lands within each potential ACEC within the planning area.
- Cumulative—NCIP planning area where R&I values of ACECs are present.

Analysis Assumptions

- Although management actions for most resources and resource uses could have planning area-wide application, ACEC management prescriptions apply only to those lands in each specific ACEC, as outlined.
- ACEC designation provides protection and focused management for relevant values beyond that provided through general management of the parent resource (e.g., the cultural resource ACECs)

will receive greater recognition and protection than the general management action regarding cultural resources).

- Specific impacts to relevant and important values would depend on the type of mineral entry activity and effectiveness of subsequent reclamation, its interaction (both spatially and temporally) with that value. Impacts resulting from locatable minerals would be subject to 43 CFR Subpart 3809, intended to: (1) prevent unnecessary or undue degradation of the land and reclaimed disturbed areas, and (2) provide for maximum possible coordination with State agencies to avoid duplication and to ensure that operators prevent unnecessary or undue degradation of public lands.

B.2.23 National Scenic and Historic Trails

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
<p>BLM would designate a national trail management corridor (NTMC); management in that corridor would include:</p> <ul style="list-style-type: none"> • Closing to OHV. • VRM II. • NSO Leasing. • Withdrawn from locatable. • Closed to salable. • Open to grazing. • No surface disturbing activities that are not consistent with trail values. 	<p>Activities such as ROW authorizations that cross trail segments or project development, such as wind energy, in the trail’s viewshed can contribute to a decrease in overall trail quality. These actions may cause a change to the visual or historic character and possibly destroy important scientific information related to the trail.</p> <p>Direct impacts on trails that typically result from actions that disturb the soil or alter characteristics of the surrounding environment.</p> <p>Impacts on characteristics of the surrounding environment are visual elements that are out of character with, or alter, the trail settings. Impacts may also include wildfire damage, such as erosion or downed trees. Indirect impacts are actions that result in data collection and proactive preservation of trails (e.g., partnerships that encourage research or a greater understanding of the trail historic character).</p>	<p>Acres of trail corridor with this management and how it impacts trail integrity (e.g., setting, feeling, and association) or destruction of physical remnants of a trail, including ruts, swales, and associated sites, features, or artifacts, whether that loss results from erosion due to increased use, looting, or vandalism, which in turn results in a loss of archaeological information.</p>
<p>Areas in and around the trail corridors would be managed as VRM II or III.</p>	<p>Audible, pollution, and visual effects can diminish the integrity of the trail’s historic character.</p>	<p>Miles of trails directly or indirectly affected by change in the cultural landscape due to visual management on surrounding lands.</p>
<p>Areas immediately adjacent to the trail corridor that are open to leasable, salable, and locatable mineral development.</p>	<p>Noise and visual impacts from this development would impact trail integrity if seen or heard.</p>	<p>Miles of trails directly or indirectly affected by change in the cultural landscape due to visual or noise impacts from mineral development on surrounding lands.</p>

Action Affecting Resource	Type of Impact	Impact Indicators
Fire and vegetation management, and grazing	Fire and vegetation management can cause short-term impacts to trail integrity due to noise and visual impacts but can also provide for long-term protection of trail integrity. Grazing can damage trail features and artifacts.	Miles of trail that would be subject to fire management and vegetation and potential impacts to long and short-term trail integrity. Miles of trails in a grazing allotment and numbers of AUMs.

Impact Analysis Area

- Direct/Indirect—National Historic Trail management corridor (NTMC; 150-feet either side of trail centerline) on BLM-administered lands in the planning area, which includes consideration of physiographic breaks and viewshed, in the planning area. Indirect effects could include side trail blockage or degradation outside the NTMC.
- Cumulative—National Historic Trail management corridor where present in the planning area.

Analysis Assumptions

- National trails and related sites are protected in accordance with federal laws, BLM regulations and policy, and interagency or partnership agreements. Specifically, BLM Manual 6280 states that the BLM may not permit proposed uses along national trails that would substantially interfere with the nature and purposes of the trail.
- The BLM will follow 36 CFR, Part 800 and Section 106 of the National Historic Preservation Act when addressing federal undertakings; therefore, adverse impacts on historic trails would be appropriately mitigated.
- Degradation of the national trail from natural processes (e.g., erosion) will continue regardless of avoidance of human-caused impacts. Natural processes are not considered impacts to trails.
- Potential impacts on historic trails and its setting from subsequent undertakings (implementation of the planning decisions or site-specific project proposals) require separate compliance with the NEPA and Section 106 of the National Historic Preservation Act.

B.2.24 Wild and Scenic Rivers

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
WSR management decision	Managing for WSR would maintain ORVs	Acres of WSR corridor (or drainage) managed for ORVs
Mineral Decisions	Surface disturbance has the potential to result in erosions and sedimentation that may affect WSR. Tailings piles associated with placer mining may affect ORVs	Qualitative discussion of impacts related to any authorized proposals introducing new pollutant effects in the WSR corridor. Acres of land within WSR corridor that would be at risk for impacts and effects on ORVs.
Wildland Fire decisions	Fire suppression tactics would cause surface disturbance and lead to impacts to ORVs. Minimum impact suppression tactics may help maintain ORVs	Acres of land within the WSR corridor that would be open/closed to standard suppression tactics and effects on ORVs.

Action Affecting Resource	Type of Impact	Impact Indicators
ROW decisions (open/avoidance/exclusions areas)	ROW authorizations on slopes near riparian zones would cause surface disturbance leading to sedimentation and impacts to ORVs.	Acres of land within the WSR corridor managed as a ROW avoidance area or subject to protective buffers and effects on ORVs.
Land tenure decisions	Acquisition or disposal of lands within a Wild River corridor could result in future impacts to ORVs. Acquisition could improve management opportunities	Acres of land within the WSR corridor that would be open to land disposal or acquisition and either managed or not managed for ORVs.
Visual resource management	Impacts to visual resources within the WSR corridor could impact ORVs.	Acres of land within the WSR corridor managed as VRM Class I or II and effects on ORVs.
Commercial timber harvest decisions	Commercial woodland harvest would impact ORVs.	Acres of land within the WSR corridor where commercial woodland harvest is permitted and effects on ORVs.
Travel decisions (open/limited/closed)	OHV use could impact ORVs	Acres of land within the WSR corridor as open/limited/closed to OHV use and effects on ORVs.

Impact Analysis Area

- Direct/Indirect—0.25-miles of either side of the ordinary high-water mark of eligible, suitable, and previously designated river segments.
- Cumulative—up to 0.5-miles of either side of the ordinary high-water mark of all eligible, suitable, and previously designated river segments in the planning area.

Analysis Assumptions

- Although management actions for most resources and resource uses have field office-wide application, WSR management prescriptions apply only to those lands in WSR corridor, as outlined.
- Permitted activities will not be allowed to impair the relevant and important values for which the WSR are designated.
- WSR designation provides protection and focused management for relevant values beyond that provided through general management of the parent resource (e.g., the scenic Wild River designation will receive greater recognition and protection than the general management action regarding scenic resources; whereas a recreation Wild River designation will offer greater protection of recreation resources and focused management).
- Special management prescribed in WSRs are included in other resource and resource use management decisions (e.g., travel restrictions in WSRs are brought forward in travel management and will be recognized during future travel management planning).

B.2.25 Wilderness and Wilderness Study Areas

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
Wilderness decisions	Areas managed for wilderness would preserve wilderness characteristics.	Acres of wilderness.
WSA decisions	Areas managed for WSAs would preserve wilderness characteristics.	Acres of WSA.

Action Affecting Resource	Type of Impact	Impact Indicators
Travel decisions: open and limited	OHV use could cause surface disturbance and lead to a loss of naturalness, outstanding opportunities for solitude or primitive and unconfined types of recreation.	Acres of wilderness and WSA that are affected by these decisions.
Leasable minerals decisions: open under standard terms and conditions, moderate constraints (CSU), and major constraints (NSO)	Mineral development causes surface disturbance and may lead to a loss of naturalness, outstanding opportunities for solitude or primitive and unconfined types of recreation.	Acres of wilderness and WSA that are affected by these decisions.
Mineral materials decision: open and open with special terms and conditions	Mineral development causes surface disturbance and may lead to a loss of naturalness, outstanding opportunities for solitude or primitive and unconfined types of recreation.	Acres of wilderness and WSA that are affected by these decisions.
Locatable mineral Decision: Open to mineral entry; recommended or previously recommended for withdrawal	Mineral development causes surface disturbance and may lead to a loss of naturalness, outstanding opportunities for solitude or primitive and unconfined types of recreation.	Acres of wilderness and WSA that are affected by these decisions.
ROW decision: open, and ROW avoidance area	Land use authorization may lead to a loss of naturalness, outstanding opportunities for solitude or primitive and unconfined types of recreation.	Acres of wilderness and WSA that are affected by these decisions.
Land tenure decisions	Land retention, acquisition or disposal decision could improve or adversely affect management of natural values or primitive activities.	Acres of wilderness and WSA that are affected by these decisions.
OHV decision: open and limited.	OHV use may lead to a loss of naturalness, outstanding opportunities for solitude or primitive and unconfined types of recreation.	Acres of wilderness and WSA that are affected by these decisions.
VRM decision: VRM Class II, III, and IV	VRM classification guide permitting decision that may affect wilderness characteristics	Acres of wilderness and WSA that are affected by these decisions.
Grazing decision: available	Grazing authorization may lead to a loss of naturalness or integrity of the ecosystem and native vegetation communities	Acres of wilderness and WSA that are affected by these decisions.
Timber harvest, thinning activities, and site preparation for reforestation	Harvest may lead to a loss of naturalness and native vegetation communities	Acres of wilderness and WSA that are affected by these decisions. Qualitative discussion if acres are not available.
Recreation decisions: SRMA and ERMA	Recreation permitting and casual use have potential to adversely affect naturalness or wilderness character. Management emphasis on primitive recreation settings, experiences, and uses in special recreation management areas may protect outstanding opportunities for solitude or primitive and unconfined types of recreation.	Acres of wilderness and WSA that are affected by these decisions.

Action Affecting Resource	Type of Impact	Impact Indicators
Wildland fire management	Fire management may include techniques to minimize impacts to naturalness from activities such as construction of fire roads and vegetation clearing, and to restore native vegetation communities.	Acres of wilderness and WSA that are affected by these decisions. Qualitative discussion if acres are not available.
Vegetation and wildlife	Vegetation and wildlife management decisions may include techniques to minimize impacts to naturalness, restore native vegetation communities or otherwise protect wilderness character	Acres of wilderness and WSA that are affected by these decisions. Qualitative discussion if acres are not available.

Impact Analysis Area

- Direct/Indirect—BLM-administered wilderness areas and wilderness study areas within the planning area.
- Cumulative—BLM-administered wilderness areas and wilderness study areas within the planning area

Analysis Assumptions

- Actions consistent with VRM Class II, III, and IV could potentially result in a loss of natural character.
- Potential impacts on lands managed for wilderness characteristics from subsequent undertakings (implementation of the planning decisions or site-specific project proposals) require separate compliance with NEPA.

B.2.26 Social and Economic Conditions

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
Management decisions affecting local economies and non-market economic values for communities (pull from grazing, minerals, forest products, recreation sections)	How each alternative supports the local economy and non-market economic values	<p>Economic activity indicators:</p> <ul style="list-style-type: none"> • Acres open/closed to forest products and timber harvest • Acres open for locatable and mineral materials • Acres of permitted grazing areas (or total billed and permitted AUMs) • Acres of land withdrawn to mineral entry • Acres of land in ROW exclusion • Acres open, limited, and closed for OHV travel • Acres designated as ERMA • Acres designated as SRMA • Acres identified for disposal <p>Non-market values indicators:</p> <ul style="list-style-type: none"> • Acres of land managed for wilderness characteristics • Acres of land designated as ACECs • Miles of stream within WSR corridors • Acres of known habitat for special status species • Linear miles of stream habitat subject to development, grazing, logging, and OHV and ROW crossings • Anticipated changes to recreation levels and/or use (from recreation section -to support discussion of non-market recreational values • Acres identified for fuels treatment (to support discussion of potential air and water quality impacts from wildfire)

Impact Analysis Area

- Direct/Indirect—Counties overlapping with the NCIP planning area
- Cumulative—Counties overlapping with the NCIP planning area

Analysis Assumptions

- The BLM has the potential to contribute to economic activity in the planning area through recreation, mining, forest products, grazing, infrastructure, and BLM operations. The alternatives also could differ in terms of their provision of non-market resources (protection of wildlife and fisheries habitats, and others). These are re-sources which are valued, but not bought or sold

through markets. The effects will be described relative to existing conditions (+ - =), consistent with the other portions of the socioeconomic analysis.

- Community leaders and residents would like the BLM to be a good neighboring landowner, in addition to how re-sources and opportunities are addressed on BLM-managed lands. A key aspect of the BLM being a good neighboring landowner is how effectively the BLM coordinates and collaborates with communities and whether communities feel that their input and views are being considered by the BLM. Another aspect is the extent to which actions taken on BLM-managed lands are consistent with local and regional plans, and whether BLM management facilitates, impedes, or is neutral to achievement of community goals as stated in those plans.

B.2.27 Environmental Justice

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
Management decisions for all resources will be considered in the context of potential disproportionate adverse effects on environmental justice populations. Environmental justice populations to include geographically defined populations and non-geographically defined groups with common uses or interests (i.e. Tribes, homeless/displaced populations)	Effects on each EJ population (community group) and whether there are any disproportionate beneficial or adverse effects.	Rating of whether baseline level of indicator (No Action alternative) would stay the same, increase, or decrease under each alternative for low-income and minority populations, and whether there would be a disproportionate effect to those populations. Utilizing and referring to analysis in other resources sections.
Management decisions affecting homeless and displaced people and their use or non-use of public lands.	Impacts on homeless or displaced people and their use of public lands.	Acres designated as day use. Camping regulations/restrictions.

Impact Analysis Area

- Direct/Indirect—Counties overlapping with the NCIP planning area; will include county-level examinations of EJ communities
- Cumulative—Counties overlapping with the NCIP planning area

Analysis Assumptions

- None

B.2.28 Tribal Interests

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
Increased recreation opportunities and visitor use – both motorized and non-motorized use	Increased visitor use has the potential to directly impact resources important to tribes as well as displace or interrupt tribal activities within the decision area.	Increasing visitation trends and visitor use of areas where there are known, or the potential for, tribal resources and/or interest (i.e., cultural sites, plant gathering, etc.)
Ground disturbing activities, such as –wildland fire management, travel and access, etc.	Ground disturbing activities have the potential to impact natural and cultural resources that continue to be used by tribes. Impacts may include loss of access or diminished access to important resource locations as well as loss in resource integrity and/or destruction of a resource.	Qualitative description of proposed ground disturbing activities that may the potential to impact tribe interests. Discussion of plants and animals considered important to tribes and their presence within the monument.
<ul style="list-style-type: none"> • Leasable, locatable and salable decisions (open). • Grazing. • Permitted surface disturbing activities. • OHV use areas. • Utility corridors. • Fire and vegetation management or suppression using ground disturbing methods. • Timber harvest. • Reforestation and associated site preparation activities. 	<p>All of these decisions cause surface disturbances which have the potential to disturb or destroy tribal resources and disrupt tribal use. They also cause visual and noise impacts which can affect the setting and integrity of cultural sites.</p> <p>These uses can also impact tribal access to areas, or impede other resources that are significant to tribal interests.</p>	<p>Consultation with tribes</p> <p>Acres open and closed to these surface disturbing activities, particularly in areas with high likelihood of finding significant cultural resources (if data is available). Analysis would include a qualitative description of the impacts these respective activities can have on cultural resources.</p> <p>Acres of land associated with high-use and limited use areas and the percentage of overlap with areas identified as having tribal significance.</p>
VRM class allocations.	Visual impacts can alter character, integrity, association and feeling of prehistoric, historic, and Tribal traditional use or sacred sites.	Acres managed at VRM class IV in areas with known sensitive cultural resources or high likelihood of finding cultural resources.
Areas that have a high probability for cultural sites eligible for fuels reductions and removal of hazardous trees	Wildfires could adversely affect surface, and shallowly buried historic properties and cultural resources, or impact integrity, character, nature, feeling or use of cultural resources. Cultural resources in planning area will experience greater risk of damage or destruction by wildfire as frequency and extent of wildfires increases.	Acres with high probability of cultural sites that would have decreased risk due to fuels reduction

Action Affecting Resource	Type of Impact	Impact Indicators
Land tenure adjustment.	Retaining, acquiring or disposing of lands impacts how cultural resources are managed. Lands retained in BLM ownership provide a mandated level of protection to cultural resources that would not be provided if lands are outside of federal ownership (with the exception of transfer of lands to tribal entities for whom the cultural resources have special significance).	Acres of land with high likelihood of significant cultural or other tribal significant resources that are retained/acquired or disposed of with a qualitative analysis of these changes in land use would impact cultural resources.

Impact Analysis Area

- Direct/Indirect—NCIP decision area
- Cumulative—NCIP planning area; the cumulative analysis area may extend beyond the planning area in relation to specific impacts associated with use and access.

Analysis Assumptions

- The BLM has the responsibility to ensure that meaningful consultation and coordination concerning Tribal treaty rights and trust resources are conducted on a government-to-government basis with federally recognized Tribes. The BLM and other federal agencies have an obligation to consult with federally recognized tribes during the planning process and for all undertakings that have the potential to impact tribal resources.
- California BLM will also perform outreach and consultation with non-federally recognized tribes at an equivalent government-to-government basis.
- There are sacred sites and TCPs present in the planning area, Some locations are known to BLM; however most locations and uses are unknown to BLM and can only be identified through consultation.
- The extent of current Tribal practices and trends involving natural resource use and spiritual and religious ceremonies in the planning area is not known.
- Protecting cultural resources and certain vegetation communities, which may have special significance in Indigenous communities, across alternatives would provide protections to traditional use areas and tribally important areas and resources.
- Tribes historically used numerous places in the planning area for habitation, foraging, hunting subsistence, and spiritual and religious ceremonies. Practices that continue today include Tribal groups visiting rock art sites, burial areas, and traditional camp and ceremonial sites, as well as gathering plants and minerals for traditional use.

B.2.29 Public Health and Safety**Impacts and Indicators**

Action Affecting Resource	Type of Impact	Impact Indicators
Requirements for storage and spill prevention of hazardous materials.	Prevention measures to alleviate the uncontrolled release of hazardous materials to sensitive receptors.	Qualitative analysis of impact analysis (no unit of measure).
No hazardous materials storage within 0.25 miles the centerline of designated VWSR's.	Prevention measures to alleviate the uncontrolled release of hazardous materials to sensitive receptors.	Qualitative analysis of impact analysis (no unit of measure).
Requirements for fueling on BLM lands.	Prevention measures to alleviate the uncontrolled release of hazardous materials to sensitive receptors.	Qualitative analysis of impact analysis (no unit of measure).
All BLM permitted activities for hazardous materials would have to comply with BMP's.	Prevention measures to alleviate the uncontrolled release of hazardous materials to sensitive receptors.	Qualitative analysis of impact analysis (no unit of measure).
Operators required for cleanup associated with their activities.	Remediation of sites where most appropriately determined based on selected criteria; however, unaddressed sites or partially addressed sites would remain on a case-by-case basis.	Qualitative analysis of impact analysis (no unit of measure).
Removal and cleanup of trespass agricultural grow sites, education of adjacent agricultural operations.	Remediation of sites where most appropriately determined based on selected criteria; however, unaddressed sites or partially addressed sites would remain on a case-by-case basis.	Acres of BLM lands with adjacent agriculture that would be no longer be subject to inadvertent pesticide or herbicide contamination.
Management to control lead contamination from target shooting.	Prevention measures to alleviate the uncontrolled release of hazardous materials to sensitive receptors.	Acres of BLM lands at risk for lead contamination that would have reduced risk.
Coordinate with other agencies to address any spills.	Remediation of sites where most appropriately determined based on selected criteria; however, unaddressed sites or partially addressed sites would remain on a case-by-case basis.	Qualitative analysis of impact analysis (no unit of measure).
Identify material cleanup criteria.	Remediation of sites where most appropriately determined based on selected criteria; however, unaddressed sites or partially addressed sites would remain on a case-by-case basis.	Qualitative analysis of impact analysis (no unit of measure).
Identify measures to reduce the risk of wildland fires and enhance public health and safety during fire emergencies.	Prevention measures to reduce hazardous fuels accumulations, close or block unused two-track roads to prevent unauthorized vehicle entry, and have ROW grant holders provide vegetation control for their lease area.	Qualitative analysis of impact analysis (no unit of measure).

Action Affecting Resource	Type of Impact	Impact Indicators
Identify the locations of abandoned mine lands that have been exposed by wildland fires and measures to mitigate the associated safety hazards.	Prevention measures to gate/block mine entrances, ventilation shafts, and associated mine facilities (e.g., buildings, spoils piles, tipples, etc.), and install warning signs about safety hazards at mine facilities.	Qualitative analysis of impact analysis (no unit of measure).
Identify caves and abandoned mines with important bat resources. Coordinate with the State of California Abandoned Mines Program as applicable to provide bat access and egress from abandoned mine facilities.	Conduct cave and abandoned mine surveys to identify new locations and map the interior where safe and prudent to do so. Conduct bat studies in caves and abandoned mines, as appropriate, to assess health and safety risks associated with bat populations. Post health and safety information at identified cave and mine locations to advise resource users of risks involved with cave and mine exploration and encounters with bats	Qualitative analysis of impact analysis (no unit of measure).

Impact Analysis Area

- Direct/Indirect—NCIP decision area
- Cumulative—NCIP decision area

Analysis Assumptions

- Cleanup levels will not be lowered or altered, and that new contaminants of concern will not be added.
- Public health and safety issues are a priority consideration in the management of public lands.
- Activities and resources available in and around the planning area would continue to be important to the health and safety of current and future residents.
- With increasing numbers of public land users and continued development of wildland urban interface areas, the likelihood of wildland fires will increase as will fire-related public health and safety concerns.
- Resource development activities identify any possible generation of hazardous waste.
- Abandoned mine sites, including those that have been exposed by recent wildland fires, present safety hazards that must be identified, characterized, and mitigated.
- All past and present hazardous materials and waste sites in the planning area have been identified and characterized.
- New hazardous materials uses and/or waste generation will be minimized within the planning area.
- The BLM coordinates with county and state emergency response agencies in response to all hazardous material releases on public surface lands and emergency cleanup actions are implemented on sites posing a substantial threat to the public health and safety and/or the environment.

B.2.30 Interpretation and Environmental Education

Impacts and Indicators

Action Affecting Resource	Type of Impact	Impact Indicators
Requirements for storage and spill prevention of hazardous materials.	Prevention measures to alleviate the uncontrolled release of hazardous materials to sensitive receptors.	Qualitative analysis of impact analysis (no unit of measure).
No hazardous materials storage within 0.25 miles the centerline of designated VWSR's.	Prevention measures to alleviate the uncontrolled release of hazardous materials to sensitive receptors.	Qualitative analysis of impact analysis (no unit of measure).
Requirements for fueling on BLM lands.	Prevention measures to alleviate the uncontrolled release of hazardous materials to sensitive receptors.	Qualitative analysis of impact analysis (no unit of measure).
All BLM permitted activities for hazardous materials would have to comply with BMP's.	Prevention measures to alleviate the uncontrolled release of hazardous materials to sensitive receptors.	Qualitative analysis of impact analysis (no unit of measure).
Operators required for cleanup associated with their activities.	Remediation of sites where most appropriately determined based on selected criteria; however, unaddressed sites or partially addressed sites would remain on a case-by-case basis.	Qualitative analysis of impact analysis (no unit of measure).
Removal and cleanup of trespass agricultural grow sites, education of adjacent agricultural operations.	Remediation of sites where most appropriately determined based on selected criteria; however, unaddressed sites or partially addressed sites would remain on a case-by-case basis.	Acres of BLM lands with adjacent agriculture that would be no longer be subject to inadvertent pesticide or herbicide contamination.
Management to control lead contamination from target shooting.	Prevention measures to alleviate the uncontrolled release of hazardous materials to sensitive receptors.	Acres of BLM lands at risk for lead contamination that would have reduced risk.
Coordinate with other agencies to address any spills.	Remediation of sites where most appropriately determined based on selected criteria; however, unaddressed sites or partially addressed sites would remain on a case-by-case basis.	Qualitative analysis of impact analysis (no unit of measure).
Identify material cleanup criteria.	Remediation of sites where most appropriately determined based on selected criteria; however, unaddressed sites or partially addressed sites would remain on a case-by-case basis.	Qualitative analysis of impact analysis (no unit of measure).

Impact Analysis Area

- Direct/Indirect—NCIP decision area
- Cumulative—NCIP decision area

Analysis Assumptions

- Cleanup levels will not be lowered or altered, and that new contaminants of concern will not be added.

Appendix C

Laws, Regulations, Policy, and
Related Planning Documents

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Appendix C. Laws, Regulations, Policy, and Related Planning Documents

C.1 INTRODUCTION

This appendix first provides a description of laws, regulations, and policy applicable to the resources and resource uses considered in the development of the NCIP. This list is not exhaustive but is intended to be representative of items to be considered by the BLM during the planning process.

Additionally, this appendix identifies land use plans related to the NCIP. According to guidance found in 43 CFR 1610, the NCIP must be consistent, to the extent practical, with officially approved or adopted resource-related plans of state and local governments, other federal agencies, and Tribal governments, to the extent that those plans are consistent with the purposes, policies, and programs of federal laws and regulations applicable to public lands. Plans formulated by federal, state, local, and Tribal governments that relate to managing lands and resources have been reviewed and considered as the RMP/EIS has been developed. Through this process, the BLM confirmed that management direction in this RMP does not conflict with management direction in existing BLM-adopted resource-specific plans and will not be amending those plans.

The BLM's RMPs must also be consistent with the purposes, policies, and programs of FLPMA and other federal laws and regulations applicable to public lands, including federal and state pollution control laws (see 43 CFR 1610.3-2 (a)).

Before the BLM approves the proposed RMP decisions, the Governor of California will have 60 days in which to identify inconsistencies between the proposed plan and state plans and programs and to provide written comments to the BLM State Director.

C.2 LAWS, REGULATIONS, POLICIES, AND OTHER PLANNING DOCUMENTS FOR ALL RESOURCES AND RESOURCE USES

C.2.1 General Federal Laws, Statutes, Regulations

- The National Environmental Policy Act of 1969
- The Federal Land Policy and Management Act of 1976, as amended (43 USC. 1701 et seq.)
- Executive Order 11514, Protection and Enhancement of Environmental Quality, March 5, 1970 (35 FR 4247), as amended by Executive Order 11991, May 24, 1977
- 40 CFR 1500–1508, Council on Environmental Quality Regulations Implementing NEPA (last updated on September 14, 2020)

USDI and BLM Manuals and Handbooks

- BLM H-1601-1, Land Use Planning Handbook (USDI BLM 2010b)
- BLM H-1790-1, National Environmental Policy Act
- BLM H-3160-5, Inspection and Enforcement Documentation and Strategy Development Handbook

- BLM H-3809-I, Surface Management Handbook
- BLM H-6840, Special Status Species Management

Memorandum of Agreements, Informational Bulletins, Instructional Memoranda

- IM 2011-003, Solar Energy Development Policy (USDI BLM 2010d)
- IM 2017-096, Wind Energy Development Policy (2017)

C.2.2 Resources

Air

- Federal laws, statutes, and regulations
 - Clean Air Act of 1990, as amended (42 USC 7401)
 - National Ambient Air Quality Standards (40 CFR 50.4-50.12)
- USDI and BLM manuals and handbooks
 - BLM Manual 7000, Soil, Water, and Air Management
 - BLM Manual 7300, Air Resource Management Program

Cave and Karst Resources

- Federal laws, statutes, and regulations
 - Federal Cave Resources Protection Act of 1988 (16 USC 4301 et seq.)
- USDI and BLM manuals and handbooks
 - BLM Manual 8380, Cave and Karst Resources Management
- Agreements, informational bulletins, instructional memoranda
 - IM WO 2010-181, White-nose Syndrome

Climate Change

- Federal laws, statutes, and regulations
 - Energy Policy Act of 2005
 - Secretarial Order 3289, Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources, September 14, 2009
- California State laws, statutes, and regulations
 - California Coastal Commission Sea Level Rise Policy Guidance—Interpretive Guidelines for Addressing Sea Level Rise in Local Coastal Programs and Coastal Development Permits

Coastal Resources and Management

- Federal laws, statutes, and regulations
 - Coastal Zone Management Act of 1972
- California state laws, statutes, and regulations
 - California Coastal Act Public Resources Code Division 20
 - Humboldt County Beach and Dunes Management Plan (1992)

Cultural Resources

- Federal laws, statutes, and regulations
 - Historic Sites Act of 1935 (16 USC. 461)
 - National Historic Preservation Act of 1966, as amended (16 USC 470)
 - Native American Graves Protection and Repatriation Act, as amended (25 USC. 3001 et seq.)
 - Antiquities Act of 1906 (P.L. 59-209; 34 Stat. 225; 16 USC 431–433)
 - Archaeological Resources Protection Act of 1979, as amended (16 USC 470)
 - 36 CFR 78 (Waiver of Federal Agency Responsibilities under Section 110 of the National Historic Preservation Act)
 - 36 CFR 79 (Curation of Federally Owned and Administered Archaeological Collections)
 - 36 CFR 60 (National Register of Historic Places)
 - 36 CFR 800 (Protection of Historic Properties)
 - 43 CFR 3 (Preservation of American Antiquities; implementing regulations for the Antiquities Act)
 - 43 CFR 7 (Protection of Archaeological Resources)
 - 43 CFR 10 (Native American Graves Protection and Repatriation Act Regulations; Final Rule)
 - Executive Order 13007—Indian Sacred Sites
- USDI and BLM manuals and handbooks
 - BLM Manual 8100, The Foundation for Managing Cultural Resources
- Agreements, informational bulletins, instructional memoranda
 - Information Bulletin (IB) WO-2002-101, Cultural Resource Considerations in Resource Management Plans (2002)
 - IB WO-2003-093, Implementation of Executive Order (EO) 13287 and Preserve America Initiative
 - IB WO-2004-154, Amendments to 36 CFR 800, Protection of Historic Properties
 - IM WO-98-131, Disposition Policy on Native American Graves Protection and Repatriation Act Repatriated Museum Collections
 - IM WO-2003-147, Application for Permit to Drill, Process Improvement No. 3—Cultural Resources
 - IM WO 2004-020, Guidance for Recording Cultural and Paleontological Resource Locations for the Bureau of Land Management (BLM) using Global Positioning System (GPS) Technology
 - IM WO-2004-052, Assessing Tribal and Cultural Considerations as Required in IM-2003-233, Integration of the Energy Policy and Conservation Act Inventory Results into the Land Use Planning Process
 - IM WO-2005-003, Cultural Resources and Tribal Consultation and Fluid Minerals Leasing
 - IM WO-2005-027, National Historic Preservation Act Section 106 and Oil and Gas Permitting
 - IM 2007-002, BLM Reburial Policy on BLM Lands (USDI BLM 2006)
 - IM 2012-067, Clarification of Cultural Resources Considerations for Off-Highway Vehicle Designations and Travel Management

- State Protocol Agreement among the California State Director of the Bureau of Land Management and the California State Historic Preservation Officer and the Nevada State Historic Preservation Officer Regarding the Manner in Which the Bureau of Land Management Will Meet its responsibilities under the National Historic Preservation Act and the National Programmatic Agreement among the BLM, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (Revised 2019)
- Programmatic Agreement among the Bureau of Land Management, The Advisory Council on Historic Preservation, and the National Conference of State Historic preservation Officers Regarding the Manner in Which the BLM Will Meet Its Responsibilities under the National Historic preservation Act February 9, 2012

Fish and Wildlife and Special Status Species

- Federal laws, statutes, and regulations
 - Endangered Species Act of 1973, as amended (16 USC 1531 et seq.)
 - Fish and Wildlife Coordination Act (16 USC 661 et seq.)
 - Migratory Bird Conservation Act of 1929, as amended (16 USC 715)
 - Migratory Bird Treaty Act of 1918, as amended (16 USC 703-712)
 - Establishment of the Klamath River Basin Fisheries Task Force (16 USC 460ss-3)
 - Anadromous Fish Conservation Act (16 USC 757 et seq.)
 - Federal Aid in Sport Fish Restoration Act (Dingell-Johnson Act) (16 USC 777, et seq.)
 - Magnuson-Stevens Fishery Conservation and Management Act of 1976 (16 USC. 1801 et seq.)
 - Salmon and Steelhead Conservation and Enhancement Act of 1980 (16 USC 3301 et seq.)
 - Marine Life Protection Act (1999)
- USDI and BLM manuals and handbooks
 - BLM Manual 6500, Wildlife and Fisheries Management
 - BLM Manual 6720, Fisheries and Aquatic Resources Management
 - BLM Manual 6780, Habitat Management Plans
 - BLM Manual 6840, Special Status Species Management
- Memorandum of agreements, informational bulletins, instructional memoranda
 - Memorandum of Understanding between the US Department of the Interior Bureau of Land Management and the U. S. Fish and Wildlife Service To Promote the Conservation of Migratory Birds (2010)
 - Memorandum of Understanding, Federal Lands Hunting, Fishing, and Shooting Sports Roundtable (2014)
 - Rangewide Conservation Agreement for the Conservation and Management of Interior Redband Trout (2014)
 - Secretarial Order 3356, Hunting, Fishing, Recreational Shooting and Wildlife Conservation Opportunities and Coordination with States, Tribes and Territories
 - Secretarial Order 3362, Improving Habitat Quality in Western Big Game Winter Range and Migration Corridors
 - IM 2017-036, Considering Backcountry Conservation Management in Land Use Planning

- IM 2017-040, Bald and Golden Eagle Protection Act–Eagle Incidental Take Permit Guidance for Renewable Energy Development
- IM 2018-062, Addressing Hunting, Fishing, Shooting Sports, and Big Game Habitats, and Incorporating Fish and Wildlife Conservation Plans and Information from Tribes, State Fish and Wildlife Agencies, and Other Federal Agencies in Bureau of Land Management (BLM) National Environmental Policy Act (NEPA) Processes
- IM 2023-005, Habitat Connectivity on Public Lands
- Endangered species recovery plans
 - Revised Recovery Plan for the Northern Spotted Owl (2011b)
 - Recovery Plan for the Red-Legged Frog (2002)
 - Recovery Plan for the Pacific Coast Population of the Western Snowy Plover (2007b)
 - Recovery Plan for the Marbled Murrelet (1997)
 - Valley Elderberry Longhorn Beetle Recovery Plan (1984)
 - Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon (2005)
 - Recovery Plan for Seven Coastal Plants and the Myrtle’s Silverspot Butterfly (1998) Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Four Vernal Pool Crustaceans and Eleven Vernal Pool Plants (2006)
 - Recovery Plan for Sacramento River Winter-Run Chinook Salmon, Central Valley Spring-Run Chinook Salmon, and California Central Valley Steelhead (2014)
 - Draft Recovery Plan for the Giant Garter Snake (*Thamnopsis gigas*) (1999)
 - Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*) (2002)
 - Revised Recovery Plan for the Lost River Sucker and Shortnose Sucker (*Deltistes luxatus* and *Chasmistes brevirostris*) (2013)

Forestry

- Federal laws, statutes, and regulations
 - Healthy Forest Restoration Act (2003) (P.L. 108-148)
 - CFR Subchapter E - Forest Management (5000)
 - Part 5000 (Administration of Forest Management Decisions)
 - Part 5040 (Sustained Yield Forest Units)
 - Part 5400 (Sales of Forest Products; General)
 - Part 5410 (Annual Timber Sale Plan)
 - Part 5420 (Preparation for Sale)
 - Part 5430 (Advertisement)
 - Part 5440 (Conduct of Sales)
 - Part 5450 (Award of Contract)
 - Part 5460 (Sales Administration)
 - Part 5470 (Contract Modification - Extension - Assignment)
 - Part 5500 (Nonsale Disposals; General)
 - Part 5510 (Free Use of Timber)

Lands with Wilderness Characteristics

- Federal laws, statutes, and regulations
 - Wilderness Act, as amended (16 USC 1131 et seq.)
- USDI and BLM manuals and handbooks
 - BLM Manual 6310, Conducting Wilderness Characteristics Inventory on BLM Lands
 - BLM Manual 6320, Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process (USDI BLM 2012b)
- Memorandum of agreements, informational bulletins, instructional memoranda
 - The Healthy Forests Initiative and Healthy Forests Restoration Act Interim Field Guide (2004)
 - Healthy Forests Restoration Initiative (2002)

Minerals

- Federal laws, statutes, and regulations
 - Mining and Mineral Policy Act of 1970 (30 USC 181 et seq.)
 - Surface Mining Control and Reclamation Act of 1977 (30 USC 1201 et seq.)
 - The Mineral Leasing Act of 1920, as amended
 - The Mineral Leasing Act for Acquired Lands of 1947, as amended
 - The United States Mining Laws of 1872
- California state laws, statutes, and regulations
- The Surface Mining and Reclamation Act 1975 USDI and BLM Manuals and Handbooks
 - BLM H-3042-I, Solid Minerals Reclamation Handbook
 - BLM H-3150-I, Onshore Oil and Gas Geophysical Exploration Surface Management Requirements
 - BLM H-3420-I, Competitive Coal Leasing
 - BLM H-3600-I, Mineral Materials Disposal Handbook
 - BLM H-3720-I, Abandoned Mine Land Program Policy Handbook
 - BLM Manual 2881, Mineral Leasing Act—General
 - BLM Manual 3720, Abandoned Mine Land Program Policy
 - BLM Manual 3800, Mining Claims Under the General Mining Laws
- Memorandum of agreements, informational bulletins, instructional memoranda
 - Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development: The Gold Book (USDI and USDA 2007)

Paleontology

- Federal laws, statutes, and regulations
 - Paleontological Resources Preservation Act (16 USC 473 et seq.)
- USDI and BLM Manuals and Handbooks
- BLM Manual 8270, Paleontological Resource Management

- BLM IM 2009-011, Guidelines for Assessment and Mitigation of Potential Impacts to Paleontological Resources
- BLM IM 2016-124, Potential Fossil Yield Classification (PFYC) System for Paleontological Resources on Public Lands
- USDI, 2000. Assessment of Fossil Management on Federal & Indian Lands.
- Forest Service, Paleontological Resources Preservation. *Federal Register* vol 80, no. 74, 2015.

Soils

- Federal laws, statutes, and regulations
 - Soil and Water Resources Conservation Act of 1977, as amended (16 USC 2001)
- USDI and BLM manuals and handbooks
 - BLM Manual 7000, Soil, Water, and Air Management

Tribal Consultations/Interests

- Federal laws, statutes, and regulations
 - Tribal Forest Protection Act (2004) (P.L. 108)
 - American Indian Religious Freedom Act (49 USC 47125 et seq.)
 - Native American Graves Protection and Repatriation Act, as amended (25 USC 3001 et seq.)
 - 43 CFR 10 (Native American Graves Protection and Repatriation Act Regulations; Final Rule)
 - Executive Order 13007—Indian Sacred Sites
 - Executive Order 13175—Consultation and Coordination with Indian Tribal Governments
- USDI and BLM manuals and handbooks
 - BLM Handbook (H)1780-I, Improving and Sustaining BLM-Tribal Relations (2016)
 - State Protocol Agreement among the California State Director of the Bureau of Land Management and the California State Historic Preservation Officer and the Nevada State Historic Preservation Officer Regarding the Manner in which the Bureau of Land Management Will Meet its Responsibilities under the National Historic Preservation Act and the National Programmatic Agreement among the BLM, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers (revised 2019).

Vegetation, Special Status Species, and Invasive Species

- Federal laws, statutes, and regulations
 - The Endangered Species Act of 1973, as amended.
 - Federal Noxious Weed Act of 1974, Public Law 93-692, as amended (7 USC 2814)
 - Noxious Weed Control and Eradication Act of 2004 (Public Law 108-412)
 - National Invasive Species Act of 1996 (16 USC §4701, et seq.)
 - Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (16 USC 4701).
 - Executive Order 13112, Invasive Species (dated Feb 3, 1999).
 - Public Law 95-250, To amend the Act of October 2, 1968, an Act to establish a Redwood National Park in the State of California, and for other purposes (1978) (discusses the Park Protection Zone)

- USDI and BLM manuals and handbooks
 - BLM H-1740-2, Integrated Vegetation Management
 - BLM H-1745-1, Native Plant Materials Handbook
 - BLM H-6840-1, Special Status Plant Management (USDI BLM 2012a)
 - BLM Manual 1745, Introduction, Transplant, Augmentation, and Reestablishment of Fish, Wildlife, And Plants
 - BLM Manual 6840, Special Status Species Management
 - BLM Manual 9011, Chemical Pest Control
 - BLM Manual 9015, Integrated Weed Management
- Memorandum of agreements, informational bulletins, instructional memoranda
 - Humboldt Weed Management Area Memorandum of Understanding
 - IM 2016-013, Managing for Pollinators on Public Lands
 - IM 2017-078, Instructions for Implementing the Final Programmatic Environmental Impact Statement Using Aminopyralid, Fluroxypyr, and Rimsulfuron on the Bureau of Land Management Lands in 17 Western States
- Endangered species recovery plans
 - McDonald's Rock-cress Recovery Plan (1984)
 - Recovery Plan for Seven Coastal Plants and the Myrtle's Silverspot Butterfly (1998) Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Four Vernal Pool Crustaceans and Eleven Vernal Pool Plants (2006)
 - Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon (2005)
- Federal initiatives and strategies
 - Partners Against Weeds Initiative (USDI BLM 1996)
 - National Seed Strategy for Rehabilitation and Restoration 2015-2020 (USDI 2015)
 - National Strategy to Promote the Health of Honeybees and Other Pollinators (2015)

Visual Resources

- USDI and BLM manuals and handbooks
 - BLM H-8410-1, Visual Resource Inventory (1986)
 - BLM M-8400, Visual Resource Management (1984)

Water

- Federal laws, statutes, and regulations
 - Clean Water Act of 1972 (33 USC 1251 et seq.)
 - Water Resources Development Act of 1974
 - Soil and Water Resources Conservation Act of 1977, as amended (16 USC 2001)
 - Pollution Prevention Act of 1990
 - Executive Order 11990, Protection of Wetlands (dated May 24, 1977).
 - Executive Order 12088, Federal Compliance with Pollution Control Standards, October 13, 1978 (43 FR 47707)

- Executive Order 11988, Floodplain Management (dated May 24, 1977).
- Land and Water Conservation Fund Act of 1965 (16 USC §4601, et seq.)
- Watershed Restoration and Enhancement (Wyden Amendment) (16 USC §1011)
- Water Quality Act of 1987, as amended from the Federal Water Pollution Control Act (Clean Water Act) of 1977 (33 USC §1251 et seq.).
- California state laws, statutes, and regulations
 - Water Quality Control Plan for the North Coast Region, May 2011
 - Water Quality Control Plan for the California Regional Water Quality Control Board Central Valley Region, Fourth Edition, June 2015.
 - Porter-Cologne Water Quality Control Act, January 2016.
 - California Water Code §5101
- USDI and BLM manuals and handbooks
 - BLM Manual 1737, Riparian-Wetland Area Management
 - BLM Manual 6721, Reservoirs
 - BLM Manual 6740, Wetland-Riparian Area Protection and Management
 - BLM Manual 7000, Soil, Water, and Air Management
 - BLM Manual 7250, Water Rights Manual
 - Technical Reference 1737-9, Riparian Area Management, Process for Assessing Proper Functioning Condition
 - Technical Reference 1737-11, Riparian Area Management, Process for Assessing Proper Functioning Condition for Lentic Riparian-Wetland Areas
 - Technical Reference 1737-15, Riparian Area Management, Proper Functioning Condition Assessment for Lotic Areas
- Memorandum of agreements, informational bulletins, instructional memoranda
 - IM 78-410, Policy on Protection of Wetland-Riparian Areas
 - IM 78-523, Compliance with Bureau of Land Management Interim Floodplain Management Procedures
 - IM 87-274, Riparian Area Management Policy

Wildland Fire Management

- Federal laws, statutes, and regulations
 - Federal Fire Prevention and Control Act, October 29, 1974 (88 Stat. 1535, 15 USC 2201)
 - Reciprocal Fire Protection Act of May 27, 1955 (69 Stat. 66; 2 USC 1856, 1856a)
 - Review and Update of the 1995 Federal Wildland Fire Management Policy (2001)
- USDI and BLM manuals and handbooks
 - BLM H-9214-1, Prescribed Fire Management Handbook
 - BLM H-9211-1, Fire Management Planning Handbook
 - BLM H-9238-1, Fire Trespass Handbook
 - BLM Manual 9212, Fuels Prevention

- BLM Manual 9214, Fuels Management and Community Assistance
- USDI Departmental Manual, DM 34, Part 620 Wildland Fire Management, Chapter 1: General Policies and Procedures
- USDI Departmental Manual, DM 34, Part 620 Wildland Fire Management, Chapter 3: Burned Area Emergency Stabilization and Rehabilitation
- Memorandum of agreements, informational bulletins, instructional memoranda
 - Interagency Standards for Fire and Fire Aviation Operations (“The Red Book”) (Federal Fire and Aviation Task Group 2014)
 - Interagency Prescribed Fire Planning and Implementation Procedures Guide (National Wildfire Coordinating Group 2014)
 - Federal Initiatives and Strategies
 - Guidance for Implementation of Federal Wildland Fire Management Policy (2009)
 - 1995 Federal Wildland Fire Management Policy (revised in 2001)
 - A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment: 10-Year Comprehensive Strategy Implementation Plan (2006)
 - A National Cohesive Wildland Fire Management Strategy (2011)
 - The National Strategy: The Final Phase of the Development of the National Cohesive Wildland Fire Management Strategy (2014)
 - National Action Plan: An Implementation Plan for the National Cohesive Wildland Fire Management Strategy (2014)
 - Executive Memorandum, Subject: Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment (2015)

C.2.3 Resource Uses

Comprehensive Trail and Travel Management

- Federal laws, statutes, and regulations
 - National Trails System (16 USC 27)
 - Increasing Recreational Opportunities Through the Use of Electric Bikes (43 CFR 8340)
- USDI and BLM manuals and handbooks
 - BLM H-8342-1, Travel and Transportation
 - BLM H-9113-1, Roads
 - BLM H-9113-2, Roads National Inventory and Condition Assessment
 - BLM H-9215-1, Primitive Roads Design
 - BLM H-9115-2, Roads Natural Inventory & Condition Assessment Guidance & Instructions
 - BLM Manual 1626, Travel and Transportation
- Memorandum of agreements, informational bulletins, instructional memoranda
 - IM 2008-014, Clarification of Guidance and Integration of Comprehensive Travel and Transportation Management Planning into the Land Use Planning
 - IM 2008-069, Addressing National Recreation Trails in the Land Use Planning Process
 - IM 2008-091, Guidance for Signing when Implementing Travel Management Planning

- IM 2010-167, Travel and Transportation Management Performance Measures and Planning updates
- IM 2018-102, Guidance for Implementation of the new Travel Management Area and Plans Data
- BLM-MS-1626, Travel and Transportation Manual
- BLM-MS-9130, Sign Manual
- BLM Technical Notes 422, Roads and Trails Terminology
- BLM Roads and Trails Terminology Report 2006
- BLM Technical Reference 9113-1 Planning and Conducting Route Inventories

Livestock Grazing

- Federal laws, statutes, and regulations
 - Public Rangelands Improvement Act of 1978 (43 USC 869 et seq.)
 - Taylor Grazing Act of 1934 (43 USC 315)
 - Public Rangelands Improvement Act of 1978 (43 USC 1901 et seq.).
- USDI and BLM manuals and handbooks
 - BLM H-4180-1, Rangeland Health Standards
 - BLM Manual 1741-1, Fencing
 - BLM Manual 1741-2, Water Developments
 - Technical Reference 1734-6, Interpreting Indicators of Rangeland Health

Lands and Realty

- Federal laws, statutes, and regulations
 - Recreation and Public Purposes Act of 1926, as amended (43 USC 869 et seq.)
 - Leases, Permits, and Easements (43 CFR 2920)
 - Land Withdrawals (43 CFR 2300)
 - Restorations and Revocations (43 CFR 2370)
 - Disposal Classifications (43 CFR 2430)
 - Sales: Federal Land Policy Management Act (43 CFR 2710)
 - Recreation and Public Purposes Act (43 CFR 2740)
 - ROWs issued under FLPMA (43 CFR 2800)
 - Leases (43 CFR 2910)
 - Airport (43 CFR 2911)
 - Exchanges (43 CFR 2200)
 - Recreation and Public Purposes Amendment Act of 1988
 - Mineral Leasing Act of 1920, as amended
 - Renewable and Alternative Energy Development

- USDI and BLM manuals and handbooks
 - BLM H-2100-I, Acquisition
 - BLM H-2200-I, Land Exchange Handbook
 - BLM H-2710, Land Sales
 - BLM H-2740, R&PP
 - BLM MS-2800, Rights-of-Way Manual
 - BLM H-9320, Trespass
 - BLM H-9600-I, Cadastral Survey Handbook
 - DOI 600 DM 5, Standards for Federal Lands Boundary Evidence

Recreation and Visitor Services

- Federal laws, statutes, and regulations
 - 43 CFR 8340 Off-Road Vehicles, Subparts 8341, 8342, 8343, 8344
 - Increasing Recreational Opportunities Through the Use of Electric Bikes (43 CFR 8340)
 - Executive Order 11644—Use of Off-Road Vehicles on the Public Lands
- USDI and BLM manuals and handbooks
 - BLM H-8320-I, Planning for Recreation and Visitor Services
 - BLM H-2930-I, Recreation Permit and Fee Administration Handbook
 - BLM Recreation Strategy: Connecting with Communities, 2014-2019
- Recreation management plans
 - 2008 Clear Creek Greenway Plan
 - 2014 Foundation Document Whiskeytown National Recreation Area

C.2.4 Special Designations

Areas of Critical Environmental Concern

- USDI and BLM manuals and handbooks
 - BLM Manual 1613, Areas of Critical Environmental Concern

National Scenic and Historic Trails

- Federal laws, statutes, and regulations
 - The National Trails System Act of 1968, as amended (16 USC 1241 et seq.)
- USDI and BLM manuals and handbooks
 - BLM Manual 6280, Management of National Scenic and Historic Trails and Trails Under Study or Recommended as Suitable for Congressional Designation

Wild and Scenic Rivers

- Federal laws, statutes, and regulations
 - Wild and Scenic Rivers Act, as amended (16 USC 1271 et seq.)

- USDI and BLM manuals and handbooks
 - BLM Manual 6400, Wild and Scenic Rivers–Policy and Program Direction for Identification, Evaluation, Planning, and Management
 - Evaluation Report on The Eligibility of Five California Rivers for Inclusion in The National Wild and Scenic Rivers System

Wilderness and Wilderness Study Areas

- Federal laws, statutes, and regulations
 - Wilderness Act, as amended (16 USC 1131 et seq.)
- USDI and BLM manuals and handbooks
 - BLM Manual 6330, Management of Wilderness Study Areas
 - BLM Manual 6340, Management of Designated Wilderness
 - BLM Manual 8561, Wilderness Management Plans
 - BLM Manual 1794, Mitigation

C.2.5 Support

Mitigation

- USDI and BLM manuals and handbooks
- Memorandum of agreements, informational bulletins, and instructional memoranda
 - IM 2014-021 Direction Regarding the Survey and Manage Mitigation Measure as a Result of Court Ruling in Conservation Northwest et al v. Bonnie et al., Case No. 08-1067-JCC (W.D. Wash.)
 - IM 2021-046 Reinstating the BLM Manual Section (MS-1794) and Handbook (H-1794-1) on Mitigation

Social, Economic, Environmental Justice

- Federal laws, statutes, and regulations
 - Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
 - Multiple-Use Sustained-Yield Act of 1960 (16 USC 528-531)
 - Federal-Aid Highway Act of 1958, 1962, 1966, 1968, and 1973, as amended
 - Highway Safety Act of 1966 as amended
 - Architectural Barriers Act of 1968 as amended
 - Surface Transportation Act of 1978 and 1982 as amended
 - Disaster Relief Act of 1974, as amended in 1980 and 1988, Sec. 5121 (42 USC 5121)
 - Environmental Quality Improvement Act, as amended (42 USC 4371 et seq.)
 - Economy Act of June 30, 1932 (47 Stat. 417; 31 USC 686)
 - Federal Grant and Cooperative Agreement Act, 1977 (P.L. 950224, as amended by P.L. 97-258, September 13, 1982)
 - Federal Land Assistance, Management and Enhancement (FLAME) Act (2009)

- Noise Control Act of 1972 (42 USC 4901 et seq.)
- Protection Act of September 20, 1922 (42 Stat. 857; 16 USC 594)
- The Sikes Act of 1974, as amended (16 USC 670 et seq.)
- Appropriations Act of 1952, McCarran Amendment
- Executive Order 11987—Exotic Organisms
- Executive Order 13514, Federal Leadership in Environmental Energy, and Economic Performance, October 5, 2009
- Lacey Act of 1900 (16 USC 3371–3378)
- The Children's Environmental Health Protection Act (California Senate Bill 25, Escutia, 1999)

C.3 COUNTY AND CITY PLANS

The BLM will consider the following county and city plans during the RMP development process for the purpose of consistency.

C.3.1 General Plans

- Butte County General Plan 2030 (2010)
- Del Norte County General Plan (2003)
- Humboldt County General Plan (2017)
- Humboldt County Beach and Dunes Management Plan (1993)
- Humboldt Bay Area Plan of the Humboldt County Local Coastal Program (2014)
- Humboldt County Association of Governments (2008)
- Humboldt County Regional Transportation Plan (2017)
- Humboldt Bay Harbor, Recreation, and Conservation District Economic Development Committee Summary (2010)
- Mendocino County General Plan (2009)
- Shasta County General Plan (2004)
- Siskiyou County General Plan (1980)
- Tehama County General Plan (2009)
- Trinity County General Plan (1988)
- City of Anderson General Plan (2007)
- City of Arcata General Plan (2000)
- City of Chico General Plan (2011, amended March 2017)
- City of Crescent City General Plan (2001)
- City of Eureka General Plan (2018)
- City of Ferndale General Plan (1986—Land Use Element)
- City of Fortuna General Plan (Revised Land Use—2014)
- City of Oroville General Plan (2015)
- City of Redding General Plan (2000)
- City of Redding Parks, Trails, and Open Space Master Plan (2018)
- City of Red Bluff Design Review Guidelines (1980)

- City of Shasta Lake (1999)
- City of Willits General Plan (1992)
- City of Yreka General Plan (2003)
- Town of Paradise General Plan (1994)
- City of Trinidad Local Coastal Program and General Plan (1978)

C.3.2 Community Wildlife Protection Plans (CWPP)

- Butte County CWPP (2015)
- Siskiyou County:
 - Siskiyou County CWPP (2019)
 - Yreka Area Fire Safe Council CWPP (2019)
 - Juniper Flat CWPP (2014)
 - Quartz Hill CWPP (2009)
- Trinity County CWPP (2015)
- Tehama County:
 - Tehama East CWPP (2017)
 - Tehama West CWPP (2017)
- Shasta County:
 - Keswick Basin CWPP (2009)
 - Shingletown CWPP (2011)
- Shasta/Trinity Unit Fire Management Plan/Shasta County CWPP (2008)
- Humboldt County:
 - Humboldt County CWPP (2019)
 - Lower Mattole CWPP (2016)
 - Southern Humboldt CWPP (2013, included in 2019 update)
 - Mad-Van Duzen Watershed CWPP (2019)
- Mendocino County Community Wildfire Protection Plan (2015)

C.4 STATE AGENCY PLANS AND PROGRAMS

- State Wildlife Action Plan (2015)
- California's Statewide Historic Preservation Plan 2013-2017
- California Aquatic Invasive Species Management Plan (2008)
- California Forest Practices Act (1973)
- Water Quality Control Plan for the North Coast Region (2018)
- Water Quality Control Plan for the Sacramento River and San Joaquin River Basins (2018)
- California State Park General Plans (as applicable)
- Recovery Strategy for California Coho Salmon (2004–2012)
- California Coastal Management Program (1978)

- Ecosystem Restoration Program Conservation Strategy for Restoration of the Sacramento-San Joaquin Delta, Sacramento Valley and San Joaquin Valley Regions (2014)¹
- Statewide Integrated Water Management, California Water Plan (2018)
- California Coastal National Monument Resource Management Plan (2005)
- California Wild and Scenic Rivers Act (2022)
- California Air Resources Board
 - Butte District Attainment Plan (Fine Particulate Matter [PM_{2.5}]) (2009) Community Air Protection Program 20
 - San Joaquin Valley Unified Air Pollution Control District PM_{2.5} State Implementation Plan (2018)
 - Attainment Plan for the 1-Hour Ozone Standard (2013)
 - PM₁₀ Maintenance Plan (2007)
 - Wildfire Smoke, A Guide for Public Health Officials (Revised 2019)
 - Coordination and Communication Protocol for Naturally Ignited Fires (2011)
 - California Code of Regulations Title 17, Smoke Management Guidelines for Agricultural and Prescribed Burning (2001)
- Oroville Lake State Recreation Area General Plan (2004)
- California Department of Water Resources – State Water Project
- Strategic Fire Plan for California (2019)
 - CAL FIRE Butte Unit Fire Management Plan
 - CAL FIRE Shasta-Trinity Unit Fire Management Plan
 - CAL FIRE Siskiyou Unit Fire Management Plan
 - CAL FIRE Tehama-Glenn Unit Fire Management Plan
 - CAL FIRE Mendocino Unit Fire Management Plan
 - CAL FIRE Humboldt-Del Norte Unit Fire Management Plan

C.5 FEDERAL AGENCY PLANS

The BLM will consider plans from other federal agencies including but not necessarily limited to those listed below.

C.5.1 BLM

- California Vegetation Management Final Environmental Impact Statement (FEIS) (1988)
- Yokayo Grazing Record of Decision (ROD) (1983)
- Final Redding Grazing EIS (1983)
- Solar Energy Development Programmatic EIS (2012)
- Wind Energy Programmatic EIS (2005)
- Vegetation Treatment on BLM Lands in Thirteen Western States (USDI BLM 1991)

¹ Also a federal plan; plan is a collaboration between CDFW, USFWS, and NOAA Fisheries.

- Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement (USDI BLM 2007a)
- Record of Decision for Vegetation Treatments on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement (USDI BLM 2007b)
- Final Vegetation Treatments using Aminopyralid, Fluroxypyr, and Rimsulfuron on Bureau of Land Management Lands in 17 Western States Draft Programmatic EIS (USDI BLM 2016b)
- National Invasive Species Management Plan 2008-2012 (US National Invasive Species Council 2008)
- Rangeland Health Standards and Guidelines for California and Northwestern Nevada Final EIS (1998)
- National Fire Plan of 2001 (Public Law 106–291)
- Final Environmental Statement for Timber Management (SYU-15) (1976)
- Final Timber Management Environmental Assessment: Sustained Yield Unit 15 (SYU-15) (USDI BLM 1981b)
- Interim Strategy for Managing Anadromous Fish-producing Watersheds on Lands Administered by the Forest Service and Bureau of Land Management in Eastern Oregon and Washington, Idaho, and Portions of California (1995)

C.5.2 BLM Activity and Implementation-Level Plans

- South Spit Management Plan (2002)
- Lacks Creek Management Plan (2008)
- Ma-le'l Dunes Cooperative Management Area Public Access Plan (2010)
- Interlakes Special Recreation Management Area Environmental Impact Statement and Record of Decision (1997)
- Swasey Drive Area Implementation Plan Finding of No Significant Impact and Record of Decision (2004)
- 2009 Redding Resource Management Plan Maintenance Swasey Drive ACEC Boundary (2009)
- Japanese Knotweed Control Protocol (2006) (Programmatic EA for the Arcata FO)

C.5.3 Forest Service

- Northwest Forest Plan (1994)
- Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines (2001)
- Interim Strategy for Managing Anadromous Fish-producing Watersheds on Lands Administered by the Forest Service and Bureau of Land Management in Eastern Oregon and Washington, Idaho, and Portions of California (1995)
- Shasta-Trinity National Forest Land and Resource Management Plan (1995)
- Klamath National Forest Land and Resource Management Plan (1995, amended 2010)
- Lassen National Forest Land and Resource Management Plan (1992)
- Mendocino National Forest Land and Resource Management Plan (1995, amended 2007)

- Plumas National Forest Land and Resource Management Plan (1988)
- Six Rivers National Forest Land and Resource Management Plan (1998, amended 2008)

C.5.4 US Fish and Wildlife Service

Species and Habitat Recovery Plans

- Revised Recovery Plan for the Northern Spotted Owl (2011b)
- Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon (2005)
- Recovery Plan for the Pacific Coast Population of the Western Snowy Plover (2007b)
- Recovery Plan for the Marbled Murrelet (1997)
- Valley Elderberry Longhorn Beetle Recovery Plan (1984)
- McDonald's Rock-creep Recovery Plan (1984)
- Recovery Plan for Seven Coastal Plants and the Myrtle's Silverspot Butterfly (1998)
- Recovery Plan for Sacramento River Winter-Run Chinook Salmon, Central Valley Spring-Run Chinook Salmon, and California Central Valley Steelhead (2014)
- Revised Draft Recovery Plan for the Coterminous United States Population of Bull Trout (*Salvelinus confluentus*) (2014)
- Draft Recovery Plan for the Giant Garter Snake (*Thamnopsis gigas*) (2017)
- Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*) (2002)
- Revised Recovery Plan for the Lost River Sucker and Shortnose Sucker (*Deltistes luxatus* and *Chasmistes brevirostris*) (2013)

Conservation Plans and Agreements

- Humboldt Bay National Wildlife Refuge Complex Comprehensive Conservation Plan (2005)
- Rangewide Conservation Agreement for the Conservation and Management of Interior Redband Trout (2014)
- Conservation Assessment and Strategy for the Humboldt Marten in California and Oregon (2019)
- The Pacific Lamprey Conservation Agreement (2012)
- Habitat Management Guidelines for Amphibians and Reptiles of Northwestern United States and Western Canada (2008)
- Conservation of Fishers (*Martes pennanti*) in South-Central British Columbia, Western Washington, Western Oregon, and California
 - Volume I: Conservation Assessment (2010)
 - Volume II: Key Findings From Fisher Habitat Studies in British Columbia, Montana, Idaho, Oregon, and California (2011)
- Conservation of Fishers (*Martes pennanti*) in South-Central British Columbia, Western Washington, Western Oregon, and California—Volume III: Threat Assessment (2012)
- Sacramento National Wildlife Refuges (2009)

Other Management Plans and Guidelines

- Habitat Management Guidelines for Amphibians and Reptiles of Southwestern United States (2016)
- Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for Four Vernal Pool Crustaceans and Eleven Vernal Pool Plants (2006)
- Memorandum of Understanding between the US Department of the Interior Bureau of Land Management and the U. S. Fish and Wildlife Service To Promote the Conservation of Migratory Birds (2010)
- Birds of Conservation Concern (2008)

C.5.5 National Park Service

- Redwood National and State Parks General Management Plan (2000)
- Whiskeytown Unit: Whiskeytown-Shasta-Trinity National Recreation Area General Management Plan (2000)
- Lassen Volcanic National Park General Management Plan (2003)
- Comprehensive Management and Use Plan and Final Environmental Impact Statement for the California National Historic Trail and Pony Express National Historic Trail (1998)
- Final Environmental Impact Statement, Proposed Designation of Five California Rivers in the National Wild and Scenic Rivers System, Volume I, Appendices, Volume II Parts I & II (1980)

C.5.6 National Oceanic and Atmospheric Administration–National Marine Fisheries Service

- Central California Coast Coho Salmon Recovery Plan (2012)
- Southern Oregon/Northern California Coast Coho Salmon Recovery Plan (2014)
- California Central Valley Salmon and Steelhead Recovery Plan (2014)
- Coastal Multispecies Public Draft Recovery Plan: California Coastal Chinook Salmon ESU, Northern California Steelhead DPS and Central California Coast Steelhead DPS (2015 Public Draft In Review)

C.5.7 Environmental Protection Agency (EPA)

- Eel River (Lower) Sediment and Temperature TMDLs (2007)
- Eel River (North Fork) Sediment and Temperature TMDLs (2002)
- Eel River (Middle Fork) Sediment and Temperature TMDLs (2003)
- Eel River (South Fork) Sediment and Temperature TMDLs (1999)
- Eel River (Middle Main) Sediment and Temperature TMDLs (2005)
- Eel River (Upper Main) Sediment and Temperature TMDLs (2004)
- Mad River Sediment and Turbidity TMDLs (2007)
- Mattole River Sediment TMDL (2002)
- Redwood Creek Sediment TMDL (1998)
- Ten Mile River Sediment TMDL (2000)
- Trinity River Sediment TMDL (2001)

- Trinity River (South Fork) Sediment TMDL (1998)
- Van Duzen River Sediment TMDL (1999)

C.5.8 Bureau of Reclamation (Reclamation)

- Anadromous Fish Restoration Program Comprehensive Assessment and Monitoring Program (2001)
- The Trinity River Mainstem Fishery Restoration Environmental Impact Statement/Environmental Impact Report and Record of Decision (2000)
- Central Valley Project Improvement Act (1992)
- CALFED Bay-Delta Authorization Act FEIS and Record of Decision (2000)

C.5.9 Federal Energy Regulatory Commission

- Draft Historic Properties Management Plan, Klamath Hydroelectric Project (FERC Project No. 2082) PacifiCorps (2004)
- DeSabra-Centerville Hydroelectric Project FERC Project No. 803 (2008)
- Hydropower License Surrender and Decommissioning Lower Klamath Project-FERC Project No. I4803-001 Klamath Hydroelectric Project—FERC Project No. 2082-063 (2022)

C.5.10 Department of Energy—Western Area Power Administration

- North Area Right-of-Way Maintenance Program Operations and Maintenance Plan (2005)
- North Area Right-of-Way Maintenance Program; Western—Bureau of Land Management (2010)

C.6 NON-GOVERNMENT CONSERVATION PLANS AND AGREEMENTS

- Amphibian Conservation Action Plan Proceedings: International Union for Conservation of Nature/Species Survival Commission Amphibian Conservation Summit 2005
- California Partners in Flight (CalPIF) North American Landbird Conservation Plan (2004, 2016 revision)
- CalPIF Coniferous Forest Bird Conservation Plan (2002)
- CalPIF Coastal Scrub/Chaparral Bird Conservation Plan (2004)
- CalPIF Grassland Bird Conservation Plan (2000)
- CalPIF Oak Woodland Bird Conservation Plan (2002)
- CalPIF Riparian Bird Conservation Plan (2004)
- CalPIF Sagebrush Bird Conservation Plan (2005)
- CalPIF Sierra Nevada Bird Conservation Plan (1999)
- North American Waterfowl Management Plan (Original 1986, 1998, 2004, updated 2012 and 2018)
- Fish Habitat Action Plan, California Fish Passage Forum Fish Habitat Partnership, California Fish Passage Forum Strategic Framework 2013-2018 (2013)
- Fish Habitat Action Plan, Desert Fish Habitat Partnership, Framework for Strategic Conservation of Desert Fishes (2015)
- Fish Habitat Action Plan, Pacific Marine and Estuarine Fish Habitat Partnership Strategic Framework 2018–2022 (2018)

- Fish Habitat Action Plan, Reservoir Fisheries Habitat Partnership, A Framework for Strategic Conservation of Fish Habitat In the Reservoir Systems of the United States 2018–2022 (2018)
- Fish Habitat Action Plan, The California Salmon Stronghold Initiative (2012)
- Fish Habitat Action Plan, Western Native Trout Initiative A Plan for Strategic Actions (2007)
- Freshwater Mussels of the Pacific Northwest (2009)
- Green Diamond Forest Habitat Conservation Plan (2018)
- Humboldt Bay Harbor Recreation and Conservation District, Humboldt Bay Management Plan (2007)
- Sierra Pacific Industries Habitat Conservation Plan for Northern and California Spotted Owl (2020)

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Appendix D

Best Management Practices

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Appendix D. Best Management Practices

Best management practices (BMPs) are state-of-the-art resource protection measures applied on a site-specific basis to reduce, prevent, or avoid adverse environmental or social impacts. BMPs can be used to ensure responsible resource development and assist in achieving RMP objectives. The BMPs provided herein are considered a starting point; other creative approaches developed during project specific NEPA analyses or through emerging science may also be appropriate.

D.1 BEST MANAGEMENT PRACTICES

D.1.1 Air Resources

Publication ref: **Air Resource Handbook for BLM California Personnel (H-7300-1)**

Source: Bureau of Land Management, California

Available at: Arcata and Redding Field Offices

Description: This appendix provides BMPs to manage air quality during prescribed burns, projects with the potential to contribute to fugitive dust, oil and gas development, recreation, and travel management, to name a few. The BMPs are not intended to be an exhaustive list but are provided to assist managers in determining the BMPs appropriate for the undertaking.

D.1.2 Climate Change

Publication ref: **US Climate Resilience Toolkit**

Source: United States Global Change Research Program (Managed by NOAA)

Available at: <https://toolkit.climate.gov>

Description: The toolkit is a website designed to help people find and use tools, information, and subject matter expertise to build climate resilience. The toolkit offers information from all access the US federal government.

D.1.3 Water Quality

Publication ref: **Best Management Practices for Water Quality**

Source: Bureau of Land Management, California

Available at: Arcata and Redding Field Offices

Description: This document provides guidelines and BMPs to ensure that water quality standards are met on BLM land and that monitoring is conducted for all federal non-point source permits. It incorporates BMPs to enhance the agencies performance, consistency, and accountability in managing water quality across BLM California.

D.1.4 Riparian Area Management

Publication ref: **Grazing Management Processes and Strategies for Riparian-Wetland Areas (TR 1737-20, 2006)**

Source: Bureau of Land Management

Available at: <https://efotg.sc.egov.usda.gov/references/public/NM/range98-Publication.pdf>

Description: This technical reference provides the most current information to further assist livestock operators and land managers in developing successful riparian-wetland grazing management strategies across a wide array of land types. It is also the core document for the Grazing Management for Riparian-

Wetlands training course. This technical reference does not set forth a specific formula for identifying the type of grazing strategy best suited for an area. Rather, it provides information to help design appropriate grazing strategies so that soil and vegetation aspects, water issues, and wildlife and livestock needs are addressed in a collaborative manner.

D.1.5 Erosion and Sediment Control Practices

Publication ref: **Burned Area Emergency Stabilization and Rehabilitation (HI 742-1, 2007)**

Source: Bureau of Land Management

Available at:

https://www.blm.gov/sites/blm.gov/files/uploads/Media_Library_BLM_Policy_Handbook_h1742-1.pdf

Description: The practices and standards developed by NRCS address water quality, sediment, erosion control, streambank and shoreline protection, weed control, livestock grazing, habitat restoration and other aspects of natural resource management. With the exception of the farming practices, many of the standards and practices have applicability to BLM management and may be applied as needed to protect resources, reduce conflicts, and limit impacts associated with resource use.

D.1.6 Renewable Energy

Publication ref: **Final Programmatic Environmental Impact Statement for Wind Energy Development (Chapter 2, Section 2.2.3.2)**

Source: Bureau of Land Management

Available at: <http://windeis.anl.gov/documents/fpeis/index.cfm>

Description: BLM developed BMPs for each major step of the wind energy development process, including site monitoring and testing, plan of development preparation, construction, operation, and decommissioning. General BMPs are available for each step, and certain steps also include specific BMPs to address the following resource issues: wildlife and other ecological resources, visual resources, roads, transportation, noise, noxious weeds and pesticides, cultural and historical resources, paleontological resources, hazardous materials and waste management, stormwater, human health and safety, monitoring program, air emissions, and excavation and blasting activities.

Publication ref: **BLM Instruction Memorandum 2017-096, Rights-of-Way for Wind Energy**

Source: Bureau of Land Management

Available at: <https://www.blm.gov/policy/im-2017-096>

Description: This Instruction Memorandum provides updated guidance on processing right-of-way applications for wind energy projects on public lands administered by BLM.

Publication ref: **Final Programmatic Environmental Impact Statement for Solar Energy Development (July 2012)**

Source: Bureau of Land Management

Available at: <https://solareis.anl.gov/documents/fpeis/index.cfm>

Description: Provides a set of programmatic design features that would be required for all utility-scale solar energy projects on BLM-administered lands. Addresses the broad possible range of direct and indirect impacts from solar facilities as well as associated transmission facilities, roads, and other infrastructure.

Publication ref: **Best Management Practices for Reducing Visual Impacts of Renewable Energy Facilities on BLM Administered Lands (First Edition 2013)**

Source: Bureau of Land Management

Available at: https://blmwyomingvisual.anl.gov/docs/BLM_RenewableEnergyVisualBMPs_LowRes.pdf

Description: This publication presents 122 BMPs to avoid or reduce potential visual effects associated with siting, designing, constructing, operating, and decommissioning utility-scale renewable energy generation facilities, including wind, solar, and geothermal facilities. The publication includes BMPs for avoiding and reducing visual effects associated with the energy generation components of a facility, such as wind turbines or solar energy collectors, and includes BMPs for reducing visual effects associated with ancillary components, such as electric transmission, roads, and structures.

D.1.7 Hazardous Materials

Publication ref: **Stormwater Best Management Practices – Hazardous Materials Storage**

Source: Environmental Protection Agency

Available at: <https://www.epa.gov/system/files/documents/2021-11/bmp-hazardous-materials-storage.pdf>

Description: Generally, hazardous materials have properties that make them dangerous or capable of having a harmful effect on human health or the environment. Hazardous materials can be in many forms including liquids, solids or gases and sludges. They are often generated from common municipal activities, such as vehicle maintenance and fueling, firefighting, landscaping and park maintenance, roadway repairs and maintenance, and hazardous waste drop-off locations. Proper management, storage and handling of hazardous materials is critical for reducing the possibility of stormwater contamination through leakage and spills.

D.1.8 Visual Resources

Publication ref: **BLM Visual Resource Management Webpage**

Source: Bureau of Land Management

Available at: <https://www.blm.gov/programs/recreation/recreation-programs/visual-resource-management>

Description: Provides numerous design techniques that can be used to reduce the visual effects from surface-disturbing projects. The techniques described should be used in conjunction with BLM's visual resource contrast rating process, wherein both the existing landscape and the proposed development or activity are analyzed for their basic element of form, line, color, and texture.

Publication ref: **BLM Best Management Practices for Artificial Light at Night on BLM Administered Lands**

Source: Bureau of Land Management

Available at: https://www.blm.gov/sites/default/files/docs/2023-04/Library_BLMTechnicalNote457_final.pdf

Description: This technical note provides an easy reference for a variety of ways the BLM can protect night skies and dark environments by reducing or avoiding sources of light pollution from BLM-managed lands to maintain visible clarity of night skies and ensure a healthful dark environment for wildlife and people.

D.1.9 Pasture, Rangelands, and Grazing Operations

Publication ref: **Field Office Technical Guides, USDA Natural Resources Conservation Service**

Source: Natural Resources Conservation Service

Available at: <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/technical/fotg/>

Description: The practices and standards developed by NRCS address water quality, sediment, erosion control, streambank and shoreline protection, weed control, livestock grazing, habitat restoration and

other aspects of natural resource management. With the exception of the farming practices, many of the standards and practices have applicability to BLM management and may be applied as needed to protect resources, reduce conflicts, and limit impacts associated with resource use.

D.I.10 Invasive Species and Noxious Weeds

Publication ref: **Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States**

Source: Bureau of Land Management

Available at: <https://www.worldcat.org/title/final-programmatic-environmental-impact-statement-vegetation-treatments-using-herbicides-on-bureau-of-land-management-lands-in-17-western-states/oclc/145747864>

2016 Update online at: <https://www.blm.gov/programs/natural-resources/weeds-and-invasives/vegetative-peis>

Description: This document outlines the specific decisions, standard operating procedures, and mitigation measures based on the Final Programmatic EIS concerning the use of herbicides in the Bureau of Land Management integrated pest management program.

Publication ref: **National Invasive Species Management Council Management Plan (2016-2018)**

Source: National Invasive Species Council (NISC)

Available at: <https://www.doi.gov/invasivespecies/management-plan>

Description: Directs federal efforts (including overall strategy and objectives) to prevent, control and minimize invasive species and their impacts.

D.I.11 Vegetation and Forestry

Publication ref: **Integrated Vegetation Management Handbook, H-1740-2 (2008)**

Source: Bureau of Land Management

Available at: https://www.blm.gov/sites/blm.gov/files/uploads/Media_Library_BLM_Policy_Handbook_H-1740-2.pdf

Description: The BMPs describe practices to limit impacts of vegetation treatment to:

- Invasive plant species
- Soil resources
- Native plant conservation and revegetation
- Using pesticide and biological controls
- Air quality
- Wildlife habitat
- Cultural and historic resources
- Water quality and wetlands
- Recreation, visual, and wilderness resources

Publication ref: **Burned Area Emergency Stabilization and Rehabilitation Handbook (BLM Handbook H-1472-1)**

Source: Bureau of Land Management

Available at:

https://www.blm.gov/sites/blm.gov/files/uploads/Media_Library_BLM_Policy_Handbook_h1742-1.pdf

Description: This handbook provides detailed information specific to BLM policies, standards, and procedures used in the Burned Area Emergency Stabilization and Rehabilitation (ES&R) programs. This Handbook is intended to be the primary guidance to BLM ES&R activities. It is tiered to the Department of the Interior (DOI) Departmental Manual 620 DM 3 Wildland Fire Management Burned Area Emergency Stabilization and Rehabilitation relative to planning and implementing ES&R projects on public lands administered by the BLM. This guidance incorporates all pertinent information from the Interagency Burned Area Emergency Response and Interagency Burned Area Rehabilitation Guidebooks.

Publication ref: **Best Management Practices for Developing Legislative Maps (BLM Information Bulletin No. 2022-054)**

Source: Bureau of Land Management

Available at: https://www.blm.gov/sites/default/files/docs/2022-08/IB2022-054_att1_0.pdf

Description: This Information Bulletin and attachment provides detailed guidance on a wide variety of legislative maps, Congressionally required maps, and legal boundary descriptions concerning Congressionally-designated areas.

D.1.12 Management of Land Boundaries

Publication ref: **Standards for Federal Lands Boundary Evidence Source: Department of the Interior Departmental Manual, Part 600 Public Land Policy, Chapter 5 (600 DM 5).**

Source: Bureau of Land Management

Available at: <https://www.doi.gov/elips/browse>

Description: This manual provides Department of the Interior managers with discretionary guidance to prepare timely, efficient, and economical standards for Boundary Evidence Certificates for federal interest lands and resources. This manual provides managers of federal interest assets with the means to effectively apply boundary evidence to protect assets and provides Department-wide guidance and instruction to reduce conflicts over Federal interest assets and minimize unnecessary land surveys.

D.1.13 Pollinators

Publication ref: **Pollinator Friendly Best Management Practices for Federal Lands. Attachment I to IM WO-2016-013 “Managing for Pollinators on Public Lands.”**

Source: Bureau of Land Management

Available at: <https://www.blm.gov/policy/im-2016-013>

Description: This attachment summarizes BLM commitments in the US Department of the Interior Pollinator Protection Plan to enhance pollinator habitat on BLM-administered lands and protect pollinators and their habitat during BLM-authorized activities.

D.2 BEST MANAGEMENT PRACTICES FOR WILDLIFE

There are a number of BMPs relevant to NCIP that are designed to reduce adverse effects to wildlife and plants and their habitats. The sections below detail some of the BMPs commonly used by the Field Offices to protect wildlife. They are considered a starting point; other creative approaches developed during project specific NEPA analyses or through emerging science may also be appropriate.

D.2.1 General BMPs

- Discourage the spread of invasive species by removing unneeded roads and powerlines and allowing natural wildfires to burn, where safe.
- Complete activities at individual project sites in a timely manner to reduce disturbance and/or displacement of wildlife in the immediate project area.
- Use existing roadways or travel paths for access to project sites.
- Monitoring is advised for restoration project for a minimum of three years following project completion to ensure that restoration activities implemented at individual project sites are functioning as intended and do not create unintended consequences to fish, wildlife, and plant species and their critical habitats.
- Prior to equipment use, special status plants and habitats shall be well-marked and communicated to equipment operators to avoid adverse effects.
- Environmental awareness training is recommended for construction personnel to brief them on the status of the special status species and the required avoidance measures.
- To protect special status species, BLM will implement the following activities unless authorized by regulatory agencies:
 - (a) trails, roads, and/or areas may be closed during nesting season to ensure that human access does not disturb special status species;
 - (b) prior to habitat and ground disturbing activities, potential habitat for special status species will be evaluated and, if appropriate, presence/absence surveys and additional mitigation measures will be implemented; and
 - (c) the BLM will comply with all terms and conditions resulting from Section 7 Endangered Species Act consultation when specific projects are undertaken.
- Native shrubs, trees, and erosion control seed mixes from local ecotypes shall be used where needed for restoration of disturbed sites. Seedlings, cuttings, and other plant propagules for restoration shall be sourced from local ecotypes.
- Avoid accumulating or spreading slash in upland draws, depressions, intermittent streams, and springs to eliminate or reduce debris flows. Spreading slash would be allowed in drainages where debris placement is recommended for erosion control.
- When appropriate for project objectives, trees shall be felled away from streams, riparian zones, and wetlands whenever possible.
- New facilities shall be sited in previously disturbed areas, to the extent feasible, and shall be designed to avoid sensitive habitats and affect the least amount of native vegetation.
- Prior to construction and ground-disturbing activities, project sites and staging areas shall receive pre-watering and other preparations aimed at maintaining surface soils in stabilized conditions where support vehicles and equipment will operate.
- Habitat disruptive projects should occur outside of the nesting season to comply with the Migratory Bird Treaty Act. If this is not possible, nest surveys should be implemented, and nest sites should be flagged for avoidance until nesting is completed. Avoid treatments during as much of the local nesting season as possible for migratory bird species. Birds of prey are especially sensitive to disturbance during pair bonding and incubation so avoiding treatments during these phases.

D.2.2 Pesticide Application and Integrated Pest Management

- Implement the integrated pest management approach and the best management practices required as part of the IPM Program to reduce potentially adverse effects to wildlife, fisheries, and floral resources.

D.2.3 Air and Noise

- Operation of equipment, machinery, and large vehicles is restricted to daylight hours, unless otherwise specified in writing within the construction contract, special use permit, or by the Field Manager.
- When hauling operations are being conducted, unpaved access routes shall be wetted daily or when airborne dust is present, by the contractor to reduce fugitive dust.

D.2.4 Fire Management

- Small unit sizes, wind direction, fuel load and type, and distance to receptors will be considered to mitigate adverse effects of prescribed burns.
- Fire lines shall be located outside of highly erosive slopes, intermittent streams, riparian areas, vernal pools, wetlands, and sensitive plant and animal habitat.
- The use of fire retardants and foams are prohibited in riparian areas.
- Whenever consistent with safe, effective suppression techniques, natural barriers will be used as fire breaks as extensively as possible.
- Allow wildfires to burn unless predicted fire severity is likely to result in a stand replacing event or structures are threatened.
- Restoration activities that require prescribed burning shall be planned in coordination with the Field Manager and in accordance with the approved Fire Management Plan.
- Prioritize marginally suitable habitats for treatment first. Treatments in marginal habitat including areas in the wildlife urban interface should affect fewer priority species and provide the most benefit for human residents.

Publication ref: **Statewide WUI Fuels Treatments Project**

Source: Bureau of Land Management

Available at: [EplanningUi \(blm.gov\)](http://EplanningUi.blm.gov)

Description: This document establishes a programmatic approach to vegetation management and hazardous fuel removal on public lands.

Publication ref: **Hazard Removal and Vegetation Management Project
Programmatic Environmental Assessment**

Source: Bureau of Land Management

Available at: [EplanningUi \(blm.gov\)](http://EplanningUi.blm.gov)

Description: This document address hazard removal and vegetation management within 200 feet of critical infrastructure on forest and woodlands managed by BLM California.

D.2.5 Recreation

- Any special use permits or management actions within the Samoa Dunes SRMA would need to undergo Section 7 consultation with USFWS on the conservation efforts for the Western Snowy Plover (*Charadrius alexandrinus*).

D.2.6 Livestock Management

- Minimize fencing for livestock and make existing and needed fences wildlife friendly.
- Establish off-spring, creek, and river watering sites for livestock.
- Do not locate salting areas within 0.25 mile of permanent water sources or Riparian Reserve.
- Livestock crossings and off-channel livestock watering facilities shall not be located in areas where compaction and/or damage may occur to sensitive soils, slopes, or vegetation due to congregating livestock. If livestock fords across streams are rocked to stabilize soils/slopes and prevent erosion, material and location shall be subject to the approval of the Field Manager.
- Locate new permanent livestock handling or management facilities (corrals, pens, or holding pastures) outside Riparian Management Areas or 200 feet from waterbodies and on level ground where drainage would not enter surface waters. Make changes as necessary to existing facilities within Riparian Reserve to meet water quality standards and regulations.
- Apply specific livestock grazing strategies for riparian and wetland areas, including timing, intensity, or exclusion for maintenance of proper functioning condition. Fence livestock out of waterbodies, floodplains, and wetlands for as long as necessary to allow vegetation to recover. Control the timing and intensity of grazing to keep livestock off stream banks when they are most vulnerable to damage and to coincide with the physiological needs of target plant species. Add more rest to the grazing cycle to increase plant vigor, allow stream banks to re-vegetate, or encourage more desirable plant species composition. Permanently exclude livestock from ponds, streams, floodplains, and wetlands areas that are at high risk and have poor recovery potential.

D.2.7 Migration/Movement Corridors

- Identify wildlife migration and movement corridors that cross BLM lands.
- Manage areas to protect migration and movement routes for mule deer and other wide-ranging wildlife, and especially keystone species such as wolves, cougars, and other carnivores. This includes identification and mitigation of barriers such as highways, canals, fencing, and man-made dams.
- Prevent habitat loss and fragmentation within the corridor. Use existing conservation programs to enhance habitat in identified corridors.
- Where corridors cross jurisdictional boundaries, coordinate management of the corridor with all relevant agencies, governments, landowners, and other entities.
- Consider identified corridors during management planning processes.

D.2.8 Late Successional Forest (Northern Spotted Owl, Pacific Fisher, Marbled Murrelet)

- Manage forest stands for late successional characteristics such as uneven-aged and multilayered canopy.
- Snags greater than 12" DBH shall be retained on project sites for cavity dependent wildlife species whenever possible.

- Large trees with large cavities, mistletoe clumps, broken tops, deformed branches, and long lateral branches will be maintained for nesting, resting, and roosting sites.
- Maintain a minimum of 60% canopy closure with patches exceeding 80% canopy closure.
- Maintain brushy islands and corridors for dispersal/movement paths for Pacific fishers and other wildlife.

D.2.9 Wetland Habitat

- Construction and habitat management activities shall be implemented during the non-breeding/nesting season for waterfowl to the extent feasible. Disturbance during the breeding/nesting season requires pre-construction surveys to locate active nests and establish buffers around the nest site.
- If human disturbance is a problem, consider closure of trails through and around wetlands during waterfowl breeding season.
- Prioritize water allocation to breeding habitat (e.g., brood ponds and semi-permanent wetlands) during extended droughts, or when water is otherwise limited.
- Consider mosquito abatement when deciding on the timing of wetland flooding.

D.2.10 Riparian Habitat/Water

- Ground-disturbing activities shall incorporate the use of sedimentation and erosion controls.
- Ground-disturbing activities in riparian areas and water bodies will be restricted to the dry season.
- New and upgraded stream crossings will be designed to maintain riparian condition and provide unimpeded passage for aquatic organisms, and will be approved with the conditions that they are removed before the wet season and are restored to pre-crossing contour.
- Streams, riparian zones, and wetlands shall not be used as staging or refueling areas. Equipment shall be stored, serviced, and fueled a minimum of 150 feet from active streams.
- Standard measures shall be implemented to minimize construction impacts on fish and wildlife, including avoiding unnecessary disturbance to habitats by driving on existing roads, working only in the required area, and minimizing direct disturbance to streams and open water sources.
- Sedimentation and erosion controls shall be implemented, when and where appropriate, during wetland restoration or creation activities to maintain the water quality of adjacent water sources.
- Bank stabilizing vegetation removed or altered because of restoration activities shall be replanted with native vegetation and protected from further disturbance until new growth is well established.

D.2.11 Fresh Water Mussels

- Time work to avoid sensitive life stages.
- Leave as much existing habitat as possible and favor projects and designs that allow protection of mussels onsite rather than having to salvage and relocate them.
- Consider relocating mussels that would be directly impacted by the project.
- Avoid dewatering a habitat before conducting a survey and planning for a potential relocation.
- Avoid complete elimination of host fish from isolated habitat as surviving mussels will be unable to reproduce.

- Avoid recurring activities in favor of methods that reduce overall disturbance at the site. When possible, phase construction activities to minimize the time period over which water disturbance occurs.
- If feasible, establish an exclusion area around areas with mussels to protect them from direct and indirect effects.

D.2.12 Vernal Pools

- Managing Vernal Pools includes managing adjacent upland habitat.
- Maintain watershed to provide seasonal water to the pools.
- Natural, undisturbed buffers approximately 300 yards wide around pools should help protect animal movements to and from the pools.
- Corridors connecting pools should be preserved.
- Avoid equipment operation and motorized recreation in pools.
- Avoid adding water to pools during dry phase of year.
- Debris or fill should not be dumped into vernal pools.
- Drainage containing road salt, roadside pesticides, and other chemicals can have adverse effects on vernal pool habitats.
- Habitat alterations that must take place should be carried out from June through November to minimize disturbance to breeding and resident animals.

D.2.13 Caves and Karst

- Caves with documented bat occupancy or high potential for bat occupancy should be gated with a bat gate to prevent human disturbance and spread/ establishment of white-nose syndrome.
- Emphasize inventory efforts of caves and abandoned mines to identify important bat resources.
- Buffer zones of at least 100 feet should be implemented prior to project implementation to restrict refueling, pesticide and herbicide application, and other disturbance-causing activities near cave entrances.

Appendix E

Areas of Critical Environmental Concern

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U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Northwest California

Integrated Resource Management Plan

Areas of Critical Environmental Concern

Report on the Application of the Relevance and Importance Criteria

Prepared by the
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Yuki Wilderness in the Arcata Field Office

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Acronyms and Abbreviations

Full Phrase

ACEC	Area of Critical Environmental Concern
Alt	Alternative
BLM	Bureau of Land Management
CalWild	California Wilderness Coalition
CESA	California Endangered Species Act
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
DPS	District Population Segment
EIS	Environmental Impact Statement
ESA	Endangered Species Act
ESU	Evolutionary Significant Unit
FLPMA	Federal Land Policy and Management Act
IDT	Interdisciplinary Team
IM	Instruction Memorandum
LCMA	Lacks Creek Management Area
LSR	Late Successional Reserve
NCIP	Northwest California Integrated Resource Management Plan
NRHP	National Register of Historic Places
OHV	Off-Highway Vehicle
ONA	Outstanding Natural Area
R&I	Relevance and Importance
RMP	Resource Management Plan
RNA	Research Natural Area
RNSP	Redwood National and State Park
SONSS	Southern Oregon/Northern California Coast
UNESCO	United Nations Educational, Scientific and Cultural Organization
WSR	Wild and Scenic River

1.0 INTRODUCTION

As part of the process for developing the Northwest California Integrated Resource Management Plan (NCIP) and Environmental Impact Statement (EIS), the Redding and Arcata Field Offices joint interdisciplinary team (IDT) reviewed all Bureau of Land Management (BLM)-managed lands in the planning area to determine whether any internally nominated areas should be considered for designation as areas of critical environmental concern (ACEC). In addition, the BLM sought public comments, nominations, and modifications to existing ACECs during the initial scoping period of the NCIP in 2017 (before the initial effort was terminated in 2018), and again during the scoping period for the NCIP Notice of Intent and ACECs from April 29 to June 28, 2022. The BLM IDT reviewed all ACEC nominations provided by the public to determine if any of the proposed areas should be considered for designation in addition to reviewing all existing ACECs to determine if the designations were still relevant.

The purpose of this report is to summarize the findings of the BLM's evaluations, identify areas that meet the relevance and importance (R&I) criteria and are considered in the NCIP alternatives as potential ACECs, and list areas that do not meet R&I criteria and thus will not be considered further.

1.1 Areas of Critical Environmental Concern

1.1.1 Authorities and Definition

An ACEC is defined in Section 103(a) of the Federal Land Policy and Management Act (FLPMA) as "areas within public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important cultural, historic, or scenic values; fish and wildlife resources or other natural systems or processes; or to protect life and safety from natural hazards." Special management attention refers to the management prescriptions developed in the preparation of the NCIP to protect the important and relevant values of an area from potential effects of actions permitted by the NCIP. These management prescriptions are provided in Chapter 2 of the Draft EIS. Alternatives are analyzed in Chapter 3: Affected Environment and Environmental Consequences of the Draft EIS/NCIP.

1.1.2 Area of Analysis

The analysis area for this ACEC report includes all BLM-administered public lands in the Redding and Arcata Field Offices, excluding the Headwaters Forest Reserve, King Range National Conservation Area, Cascade-Siskiyou National Monument, and the California Coastal National

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Monument (see **Section 1.3** in **Chapter 1** of the RMP/EIS for additional explanation). The BLM does not manage private surface land or private mineral estate as part of an ACEC.

1.1.3 ACEC Designation Process

There are several steps in the process of designating ACECs. Each of these steps is described in further detail in Section 2, Requirements for ACEC Designation:

- Nomination (by the public or BLM) of areas that may meet the relevance and importance criteria;
- Evaluation of the nominated areas to determine if they meet the criteria;
- Consideration of potential ACECs in alternative management scenarios in the Draft EIS/RMP and Proposed EIS/RMP, and through public comment;
- Designation of ACECs in the Record of Decision approving the NCIP.

2.0 REQUIREMENTS FOR ACEC DESIGNATION

2.1 Identifying ACECs

In order for an area to qualify for ACEC designation, it must undergo a thorough assessment based on the criteria of importance and relevance outlined in FLPMA and 43 CFR 1610.7-2. This involves a comprehensive evaluation and analysis process to determine its eligibility for ACEC status. Additionally, the BLM provides policies and procedures for inventorying, designating, and managing ACECs, described in BLM Manual 1613 and Instruction Memorandum (IM) 2023-013, "Clarification and Interim Guidance for Consideration of Areas of Critical Environmental Concern Designations in Resource Management Plans and Amendments."

As described in 43 CFR 1610.7-2(b) and BLM Manual 1613, an ACEC possesses significant cultural, historic, or scenic values; fish or wildlife resources (including habitat, communities, or species); natural processes or systems; or natural hazards. In addition, the significance of these values and resources must meet at least one of the following relevance criteria and one (or more) of the following importance criteria to be eligible for designation.

Relevance and importance (R&I) are defined as follows:

- **Relevance**—There shall be present a significant historic, cultural, or scenic value, a fish or wildlife resource or other natural system or process, or natural hazard.
- **Importance**—The above-described value, resource, system, process, or hazard shall have substantial significance and value, which generally requires qualities of more than local significance and special worth, consequence, meaning, distinctiveness, or

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cause for concern. A natural hazard can be important if it is a significant threat to life or property.

2.1.1 Instruction Memorandum 2023-0013

BLM IM 2023-0013 provides additional program guidance on prioritizing the designation and protection of ACECs through the land use planning process. The IM revises and clarifies existing policy and procedures for the designation of ACECs to ensure that the BLM considers public lands and resources for conservation, where appropriate. The inventory of values, resources, systems, processes, and natural hazards should be kept current to reflect changes in conditions and identify new and emerging resource and other values. When considering whether values meet the criteria for R&I, the BLM evaluated whether these values contribute to landscape intactness, climate resiliency, or habitat connectivity; provide opportunities for conservation and restoration; or support Tribal co-stewardship or traditional and customary uses.

All designated ACECs are considered open for potential co-stewardship with Tribes. All proposed actions within ACECs are analyzed on a project implementation level, and it is required that they are consistent with R&I values, including proposed actions under co-stewardship with Tribes. The BLM aims to work collaboratively with Tribes to ensure that the unique cultural, spiritual, and ecological values of these areas are recognized and protected.

2.1.2 Relevance Criteria

An area meets the ACEC relevance criterion if one or more of the following statements apply:

- 1) Area is of significant cultural, historic, or scenic value (including but not limited to rare or sensitive archaeological resources and religious or cultural resources important to Native Americans).
- 2) Area is a fish or wildlife resource (including but not limited to habitat for endangered, sensitive, or threatened species, or habitat essential for maintaining species diversity).
- 3) Area has a natural process or system (including but not limited to endangered, sensitive, or threatened plant species; rare, endemic, or relict plants or plant communities that are terrestrial, aquatic, or riparian; or rare geological features).
- 4) Area has a natural hazard (including but not limited to areas susceptible to avalanche, dangerous flooding, landslides, unstable soils, seismic activity, or areas containing dangerous cliffs). A hazard caused by human action may meet the relevance criteria if the RMP process determines that it has become part of a natural process.

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2.1.3 Importance Criteria

An area meets the importance criterion if it meets one or more of the following:

- 1) The area has more than locally significant qualities that give it special worth, consequence, meaning, distinctiveness, or cause for concern, especially compared to any similar resource.
- 2) The area has qualities or circumstances that make it fragile, sensitive, rare, irreplaceable, exemplary, unique, endangered, threatened, or vulnerable to adverse change.
- 3) The area has been recognized as warranting protection in order to satisfy national priority concerns or to carry out the mandates of FLPMA.
- 4) The area has qualities that warrant highlighting in order to satisfy public or management concerns about safety and public welfare.
- 5) The area poses a significant threat to human life and safety or property.

2.2 Evaluation of Nominations for Relevance and Importance

All ACEC nominations were evaluated by the BLM IDT to determine if they meet the relevance and importance criteria mentioned above. The results of this evaluation are included in Section 3 - Evaluations for Existing and Proposed ACECs. When identifying areas to be analyzed in this report, the BLM IDT followed guidance in BLM Manual 1613 and considered:

- 1) Existing ACECs;
- 2) Areas recommended for ACEC consideration (internal and external nominations);
- 3) Areas identified through inventory and monitoring; and
- 4) Adjacent designations of other federal and state agencies.

2.3 Consideration and Designation Process of Potential ACECs

All ACECs were considered during the development of alternatives for the NCIP and each potential ACEC was proposed for designation under at least one of the management alternatives of the Draft NCIP/EIS. The preferred alternative in the Draft NCIP/EIS identifies which ACECs are proposed for designation, and also displayed in Table 31 Summary of ACECs Under Preferred Alternative.

As part of the NCIP development process, the BLM will seek further public input on ACEC nominations. A notice of any areas proposed for ACEC designation will be published in the *Federal Register* along with the notice of availability requesting public comments on the Draft NCIP/EIS. This comment period provides the public the opportunity to comment during a 90-

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day review period on the Draft NCIP/EIS and the BLM IDT’s ACEC analysis in this report. All substantive comments will be considered when preparing the Proposed NCIP/Final EIS, which will be available for the public to provide input during a 30-day protest period before a Record of Decision for the NCIP and Final EIS is complete.

The following tables (Tables 1-4) include each ACEC, source of designation or nomination, acres designated or proposed, and rationale for designation or removal from designation.

Table 1 Existing ACECs

Name/Area	Source and Year of Designation	Existing Acres	Original Rationale for Designation
Baker Cypress RNA/ACEC	Redding Resource Management Plan (RMP) 1993	141	Rare Baker cypress (<i>Hesperocyparis bakeri</i>)
Butte Creek RNA/ACEC	Arcata RMP 1992	2,254	Late Successional Reserves (LSR) and Northern Spotted Owl
Deer Creek ACEC	Redding RMP 1993	567	Scenic qualities of the canyon, protection of raptors in the area, and conservation of archaeological resources, and protection of ecologically intact habitat for wildlife
Forks of Butte Creek ONA/ACEC	Redding RMP 1993	2,900	Scenic qualities, cultural resources, BLM special status species, and fisheries
Gillham Butte RNA/ACEC	Arcata RMP 1992	2,619	Late Successional Reserves
Hawes Corner RNA/ACEC	Redding RMP 1993	38	Federally Threatened Slender Orcutt grass (<i>Orcuttia tenuis</i>)
Iaqua Buttes RNA/ACEC	Arcata RMP 1992	1,111	Late Successional Reserves
Lacks Creek Watershed ACEC	Arcata RMP 1992	2,987	Late Successional Reserves, Park Protection Zone
Lacks Creek RNA/ACEC	Arcata RMP 1992 (expanded in Arcata RMP Forest Plan Amendment)	7,479	Late Successional Reserves, Park Protection Zone

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Name/Area	Source and Year of Designation	Existing Acres	Original Rationale for Designation
Ma-le'l (Manila) Dunes ONA/ACEC	Arcata RMP 1992	149	Natural values (active and stabilized sand dunes, wetlands, and sensitive plants)
Sacramento Island ONA/ACEC	Redding RMP 1993	91	Sensitive Natural Community (Great Valley Oak Riparian Forest)
Sacramento River Bend ONA/ACEC	Redding RMP 1993	18,596	Sensitive Natural Community (Great Valley Mixed Riparian Forest), BLM special status plants, cultural resources, wildlife (raptors), wetland systems, anadromous fish spawning habitat
Shasta and Klamath River Canyon ACEC	Redding RMP 1993	1,207	Sensitive riparian and fisheries habitat
Swasey Drive ACEC	Redding RMP 1993	468	Cultural resources
Elder Creek RNA/ACEC	Arcata RMP 1992	3,059	Elder Creek designated as a Registered Natural History Landmark under Historic Sites Act / United Nations Educational, Scientific and Cultural Organization (UNESCO) Biosphere Reserve; water quality and forest health
Red Mountain RNA/ACEC	Red Mountain Management Framework Plan (1981c)	6,811	Unique botanical values associated with red, serpentine soils, anadromous fishery (Cedar Creek), rare vegetation type/wildlife habitat (LSRs), northern spotted owl
South Fork Eel River RNA/ACEC	Arcata RMP 1992	7,109	Anadromous fishery, rare vegetation type/wildlife habitat (LSRs)

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Table 2 Removal of ACEC Designation

Name/Area	Rationale for Designation Removal
Elder Creek ACEC	Congressionally designated as Wilderness
Red Mountain ACEC	Congressionally designated as Wilderness
South Fork Eel River ACEC	Congressionally designated as Wilderness

Table 3 Existing ACECs Being Analyzed

Name/Area	Boundary Adjustment	Preferred Alternative Proposed Acres	Rationale for Nomination/Expansion
Upper Burney Dry Lake and Baker Cypress ACEC	Expansion	209	Rare Baker cypress (<i>Hesperocyparis bakeri</i>), Sensitive Natural Community (Northern Interior Cypress Forest), and mountain vernal lake habitat
Butte Creek RNA/ACEC	Same	2,254	Forests with late successional characteristics and Northern Spotted Owl
Deer Creek ACEC	Same	567	Scenic qualities of the canyon, protection of raptors in the area, and conservation of archaeological resources, and protection of ecologically intact habitat for wildlife
Forks of Butte Creek ACEC	Same	2,900	Scenic qualities, cultural resources, BLM special status plants, and fisheries
Gilham Butte ACEC	Expansion	9,328	Forests with late successional characteristics, "Corridor to the Sea" from Redwood National and State Park (RNSP), and part of essential corridors of connectivity
Hawes Corner RNA/ACEC	Same	38	Federally Threatened Slender Orcutt grass (<i>Orcuttia tenuis</i>)
Iaqua Buttes RNA/ACEC	Same	1,111	Forests with late successional characteristics
Lacks Creek ACEC	Reduction	2,141	Old-growth forests- ACEC reduced to more accurately match existing old growth and associated unique ecosystem characteristics
Ma-le'l (Manila) Dunes ONA/ACEC	Expansion	206	Unique and sensitive cultural resources, unique botanical values, rare and endangered plants, and coastal dune habitat suitable for nesting western snowy plovers

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Name/Area	Boundary Adjustment	Preferred Alternative Proposed Acres	Rationale for Nomination/Expansion
Sacramento Island ACEC	Same	91	Sensitive Natural Community (Great Valley Oak Riparian Forest)
Sacramento River Bend ACEC	Expansion	20,418	Unique and sensitive cultural resources, Sensitive Natural Community (Great Valley Riparian Forest), Federally Threatened slender Orcutt grass (<i>Orcuttia tenuis</i>), unique habitat for wetland plants and animals (vernal pools), and important connectivity corridor
Shasta and Klamath River Canyon ACEC	Expansion	1,270	Sensitive riparian and fisheries habitat
Swasey Drive ACEC	Same	468	Cultural resources

Table 4 Externally and Internally Nominated ACECs to be Considered

Name/Area	Nominated By	Preferred Alternative Proposed Acres	Rationale for Nomination/Expansion
Grass Valley Creek ACEC	Internal and External - California Wilderness Coalition (CalWild)	19,560	To protect fragile highly erosive soils, protect unique serpentine soils, reduce sediment delivery to the Trinity River, and maintain the important stronghold to climate change and ecosystem resiliency and diversity
Swasey Drive Clear Creek Greenway ACEC	External - CalWild	5,964	Cultural resources, unique geophysical and ecological features that support diverse plant communities, and high climate resilience that facilitates natural processes
Upper and Lower Clear Creek ACEC	Internal	4,558	Sensitive anadromous salmonid habitat, riparian communities, and unique scenic values of the Clear Creek canyon
Sheep Rock ACEC	Internal	1,410	Irreplaceable scenic, wildlife (e.g., nesting raptors), historic, and cultural values

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Name/Area	Nominated By	Preferred Alternative Proposed Acres	Rationale for Nomination/Expansion
Black Mountain ACEC	Internal	1,114	Irreplaceable timber stands with old growth characteristics, coniferous forests habitat, unique geologic features, cultural resources, and wildlife
Upper Klamath Bench ACEC	Internal	89	Unique and sensitive cultural and natural resources
Upper Mattole ACEC	Internal	459	Rare and sensitive riparian and fisheries habitat values
Eden Valley ACEC	Internal	10,807	Rare and unique geologic features, rare and endemic plants and plant communities, cold-water source for listed salmonids, and conservation of cultural and archeological values
Eden Creek ACEC	External-CalWild	4,588	Rare and unique geologic features, rare and endemic plants and plant communities, and cold-water source for listed salmonids, and to conserve cultural and archeological values
Beegum Creek Gorge ACEC	External - CalWild	4,377	Scenic, fisheries, and wildlife resources; ecological intactness; and rare and sensitive geological and lithological features that support unique plant communities
North Fork Eel ACEC	External - CalWild	500	To protect sensitive geological and lithological features, along with fisheries, and wildlife resources
Willis Ridge ACEC	Internal	3,184	To protect forests with late successional characteristics, along with fisheries and wildlife resources
South Spit ACEC	Internal	888	Sensitive plant and wetland habitat and cultural resources
Corning Vernal Pools ACEC	Internal	173	Rare critical habitat that supports threatened and endangered vernal pool species (e.g., Vernal Pool Fairy Shrimp); BLM special status plant populations associated with unique vernal pool habitat

Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

Name/Area	Nominated By	Preferred Alternative Proposed Acres	Rationale for Nomination/Expansion
North Table Mountain ACEC	Internal	53	Populations of the rare Butte County Golden Clover (<i>Trifolium jokerstii</i>) and Red Bluff dwarf rush (<i>Juncus leiospermus</i> var. <i>leiospermus</i>)

3.0 EVALUATIONS FOR EXISTING AND PROPOSED ACECs

3.1 Upper Burney Dry Lake and Baker Cypress ACEC

Table 5 Upper Burney Dry Lake and Baker Cypress Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor ¹	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Existing	Plant Communities	3	1 2	No	N/A	N/A	141	209
	Essential Habitat	2	2					

3.1.1 Rationale for ACEC – Plant Communities & Essential Habitat

The Upper Burney Dry Lake and Baker Cypress ACEC is located in eastern Shasta County. The Baker Cypress parcel is located 8 miles south-southwest of Burney, just east of Tamarack Road. Upper Burney Dry Lake is located just north of the Baker Cypress parcel, adjacent to Tamarack Road. The existing Baker Cypress ACEC would be expanded from 141 acres to 183 acres. The expanded Baker Cypress ACEC and the newly proposed Upper Burney Dry Lake ACEC would be designated as one ACEC named Upper Burney Dry Lake and Baker Cypress ACEC, totaling 209 acres. The ACEC has regionally significant and irreplaceable plant communities and provides rare vernal pool habitat for several animal and plant species.

The Upper Burney Dry Lake and Baker Cypress ACEC contains a large and vigorous stand of the Baker cypress (*Hesperocyparis bakeri*) population. Baker cypress is a species of rare cypress tree thought to only exist in 11 disparate locations throughout the northern Sierra Nevada, Cascade, and Siskiyou Mountains. There is a high diversity and genetic differentiation between the various populations of Baker cypress, which increases the need to protect each distinct stand. Baker cypress can grow in association with chaparral, mixed, or montane coniferous forest, in generally infertile soils, from elevations of 3,795 to 7,042 feet. Baker cypress is a California Native Plant Society (CNPS) list 4.2 species, meaning that it is a species of limited distribution and fairly threatened in California. Baker cypress is a fire-adapted species with serotinous cones

¹ Refers to Essential Connectivity Corridors of High Biological Value. California Department of Fish and Wildlife. (2010). *Essential Habitat Connectivity Project*. <https://wildlife.ca.gov/Conservation/Planning/Connectivity/CEHC>

Areas of Critical Environmental Concern Report on the Application of the Relevance and Importance Criteria

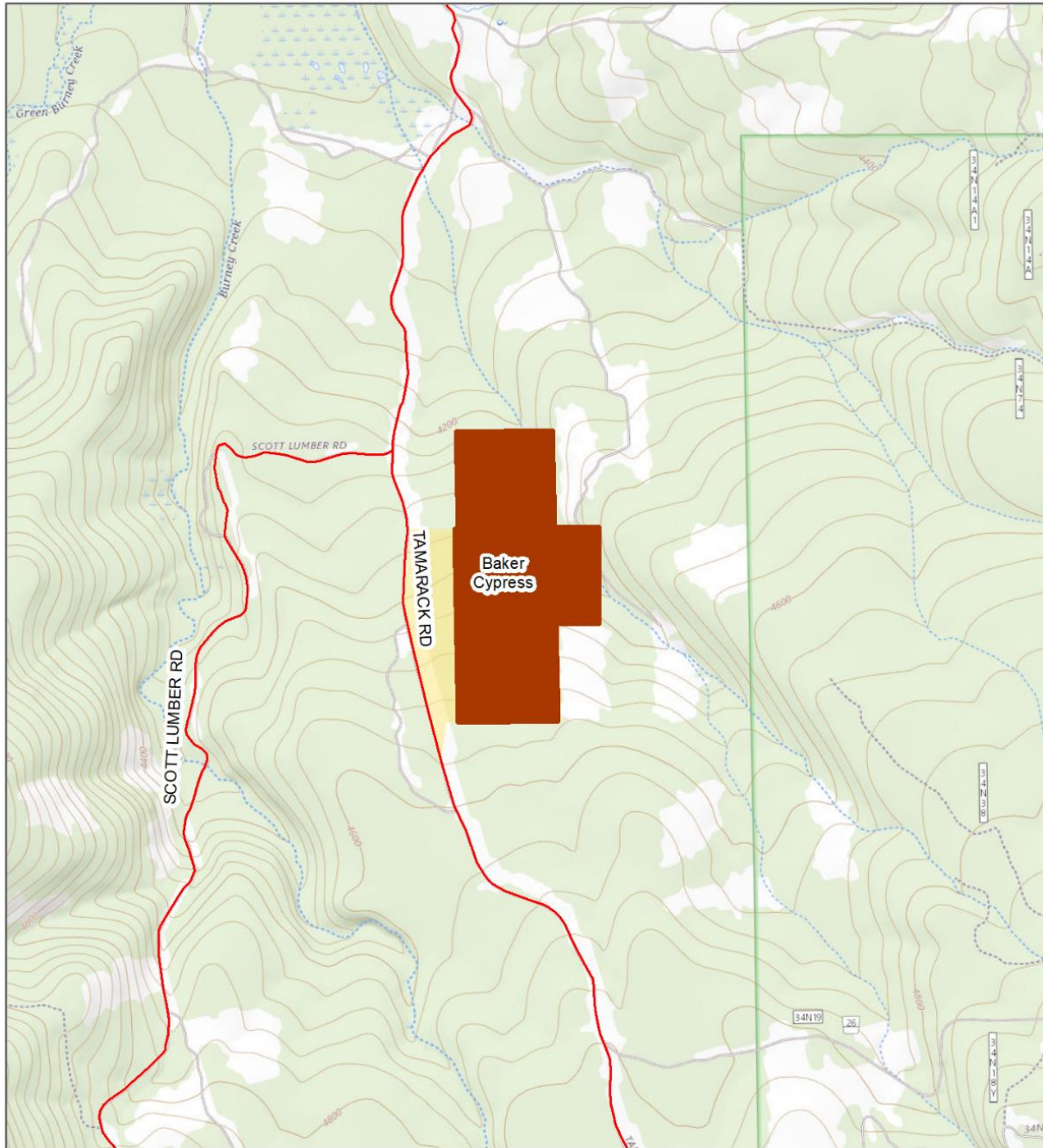
that only open after a high-intensity fire. Additionally, the seeds need high light and exposed mineral soils in order to germinate, characteristics often found after an area has burned. However, after years of fire suppression these conditions do not exist, and regeneration is often limited. In addition, despite the necessity of fire in reproduction, this stand of Baker cypress is also vulnerable to repeated high-severity fires on a short fire interval, as fires of this type can significantly limit regeneration if they occur before the population is mature enough to produce cones.

The ACEC also includes Upper Burney Dry Lake, a large vernal pool fed by a combination of rainfall, snowmelt, and a small spring at the southern end which feeds the lake after passing through a small pond. Aquatic surveys have found one species of tadpole shrimp (*Lepidurus cryptus*), two species of fairy shrimp (*Streptocephalus sealii* and *Branchinecta oriana*), and two species of frogs/toads in the area, none of which are currently federally listed. A potential eagle nesting site was observed on the east side of the lake on BLM land. At low water levels, the area becomes a large meadow that provides breeding habitat for amphibians and invertebrates. Numerous mudflats provide shorebirds with foraging opportunities, and plant cover around the edges provides nesting habitat and cover for various waterfowl species. Unique vernal pool plants are found in this area.

The Upper Burney Dry Lake and Baker Cypress ACEC (209 acres) would be managed to protect and promote the rare Baker cypress and mountain vernal pool habitat. These parcels require special management to reduce disturbance in the vernal pool by excluding trespass cows and off-highway vehicles (OHVs) and to revitalize the health of the Baker cypress stands by reducing competition and overcrowding through fire and removal of conifer overstory.




Areas of Critical Environmental Concern
Report on the Application of the Relevance and Importance Criteria

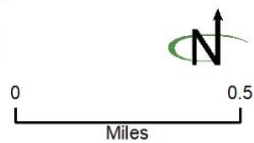
Figure 1 Existing Baker Cypress Existing ACEC Map



Existing ACEC - Baker Cypress

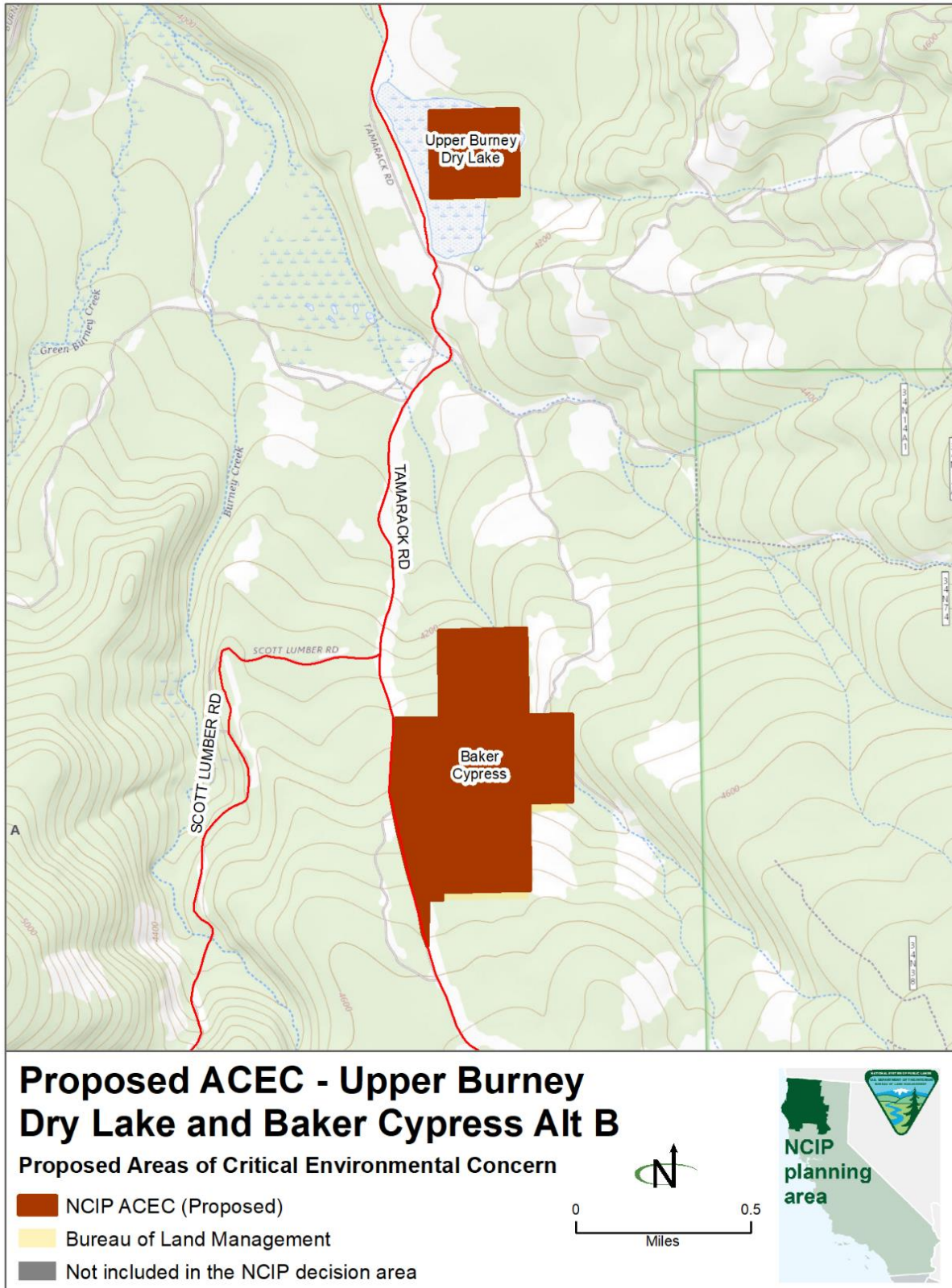
Proposed Areas of Critical Environmental Concern

-  NCIP ACEC (Proposed)
-  Bureau of Land Management
-  Not included in the NCIP decision area



Areas of Critical Environmental Concern
Report on the Application of the Relevance and Importance Criteria

Figure 2 Upper Burney Dry Lake and Baker Cypress ACEC Map (Existing and Alternative (Alt) B,
No Alt C Carried Forward)



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.2 Butte Creek ACEC

Table 6 Butte Creek Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Existing	Plant Communities	3	1	Partially	Yes ¹⁻²	Yes ²⁻³	2,254	2,254
	Wildlife	2	1					
	Fisheries	2	1					

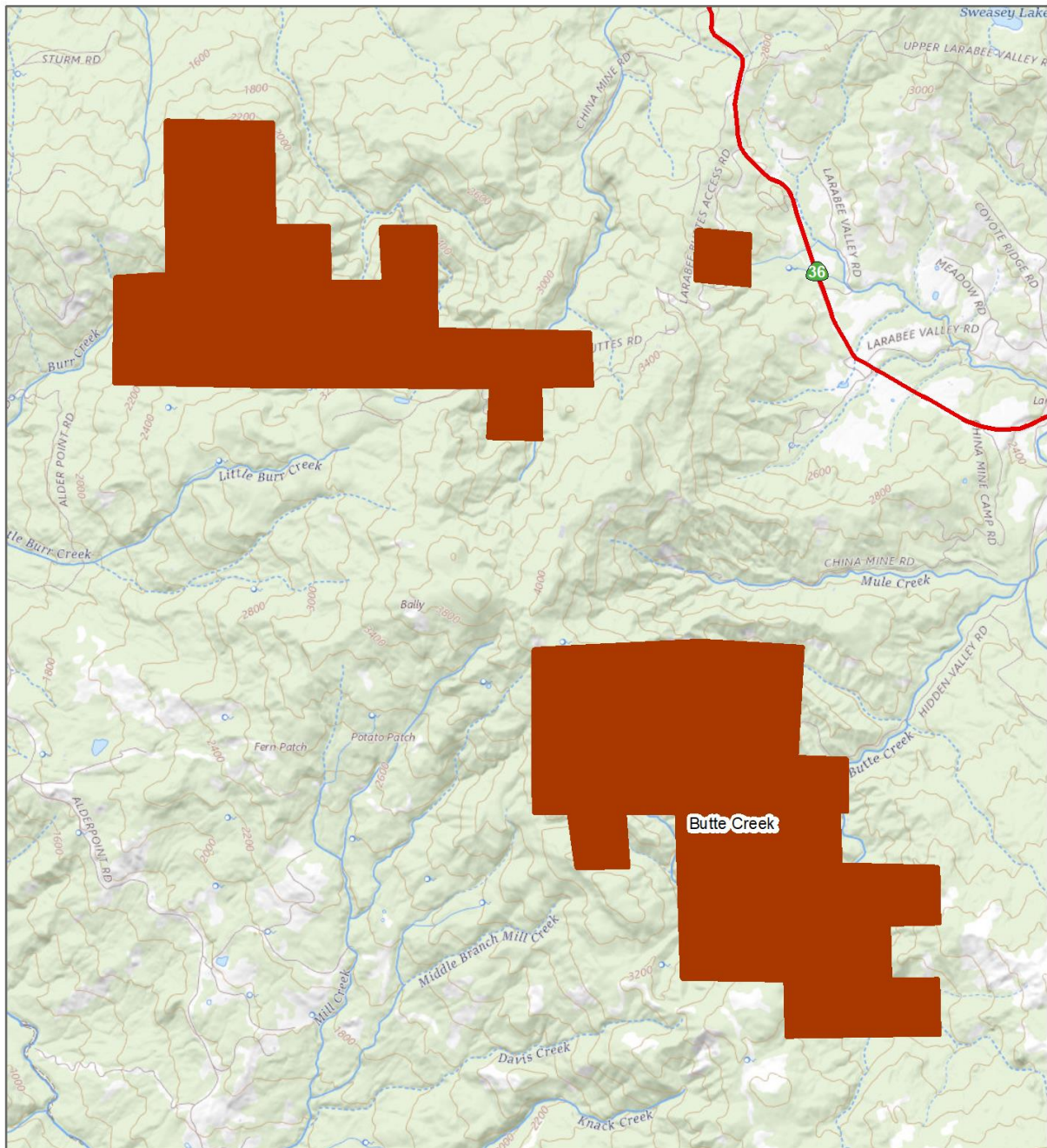
1. Northern Spotted Owl (*Strix occidentalis caurina*)
2. Summer-run and winter-run steelhead (*Oncorhynchus mykiss*)
3. Forests with late successional characteristics

3.2.1 Rationale for ACEC – Plant Communities, Wildlife, and Fisheries

The existing 2,254-acre Butte Creek ACEC, west of Larabee Valley in Humboldt County meets multiple R&I values, including wildlife, fish, and plant communities. It provides important roosting, foraging, and dispersal habitat and is designated critical habitat for the northern spotted owl within the Arcata Resource Area. Portions of the ACEC have stands of large diameter Douglas fir that exhibit late successional characteristics that are critical for many wildlife species, especially the Northern Spotted Owl, and provide for a diversity of habitat types. Butte Creek supports summer-run and winter-run steelhead. Both runs are listed as threatened under the federal Endangered Species Act (ESA) and the summer-run is listed as endangered under the state ESA. Additionally, the ACEC has 3.2 miles of stream identified as eligible in the 2023 Wild and Scenic Rivers (WSR) Eligibility Report. The late successional values for this ACEC have increased importance because they fall within statewide identified Essential Corridors of High Biological Value. The corridors are areas of natural habitat that are especially important to wildlife and plants for connectivity, ease of migration, and habitat resilience in the era of climate change.

Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

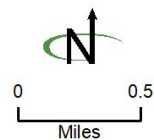
Figure 3 Butte Creek ACEC Map (Existing and Alt B, No Alt C Carried Forward)



Existing ACEC - Butte Creek Alt B

Proposed Areas of Critical Environmental Concern

- NCIP ACEC (Proposed)
- Bureau of Land Management
- Not included in the NCIP decision area



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.3 Deer Creek ACEC

Table 7 Deer Creek Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Existing	Scenic	1	1	Yes	Yes ¹	Yes ¹	567	567
	Wildlife	2	2					
	Fisheries	2	2					
	Cultural and Historic	1	1					

1. The Central Valley steelhead District Population Segment (DPS) and spring-run Chinook ESU are listed as threatened under the ESA.

3.3.1 Rationale for ACEC – Scenic, Wildlife, Fisheries, and Cultural and Historic

The Deer Creek ACEC is located on four discontinuous parcels along Deer Creek in Butte County, totaling 567 acres. The ACEC has regionally significant historic and cultural values, scenic qualities, rare wildlife habitat, and habitat that supports threatened fisheries.

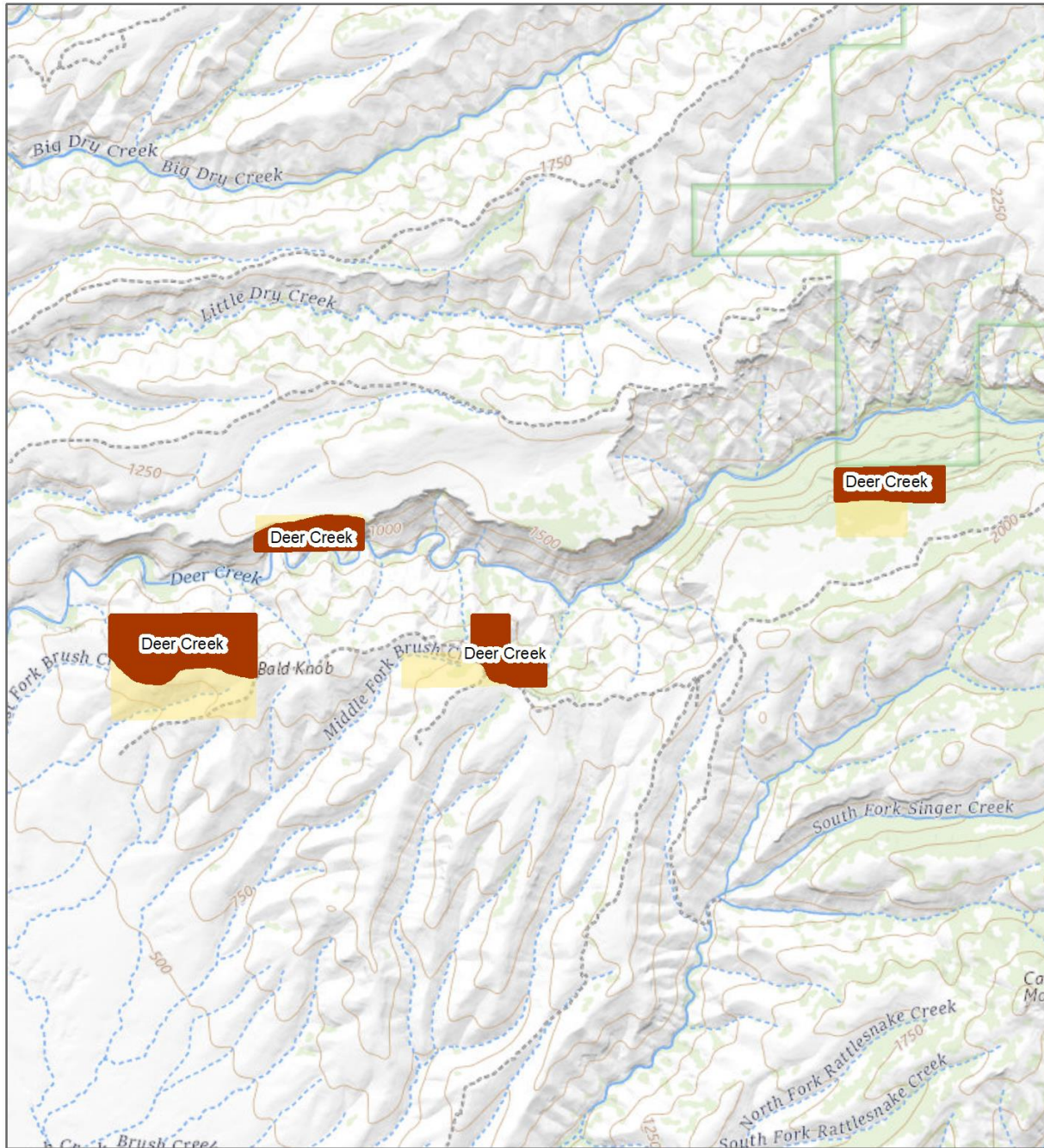
The existing 567-acre Deer Creek ACEC meets multiple R&I criteria. Deer Creek has tremendous biological importance due to the diversity and sensitivity of many species, including peregrine falcon, spring-run Chinook salmon (*Oncorhynchus tshawytscha*), and Steelhead – Central Valley DPS (*O. mykiss*), a federally threatened species. The canyon also contains nationally significant cultural resources in good to excellent condition. There is regional recreational value along the creek as well, including hiking trails in Lassen Volcanic National Park, creek-side campground in Lassen National Forest, and whitewater running within and below Lassen National Forest.

The Federal government has a long-term commitment to keep the majority of the Deer Creek unmodified. Public ownership of this remaining segment of the creek above the Deer Creek Irrigation Diversion Dam will help ensure the long-term protection and management continuity of the stream. This ACEC has additional importance because it occurs within statewide-identified Essential Connectivity Corridors of High Biological Value. The corridors are areas of natural habitat that are especially important to wildlife and plants for connectivity, ease of migration, and habitat resilience in the era of climate change.

Special management attention is necessary to protect the natural values, cultural resources, and nearby wilderness (Ishi Wilderness) values, while providing opportunities for undeveloped recreation. Therefore, designation as an ACEC is warranted.




Areas of Critical Environmental Concern
Report on the Application of the Relevance and Importance Criteria

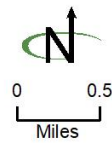
Figure 4 Deer Creek ACEC Map (Existing and Alt B, No Alt C carried Forward)



Existing ACEC - Deer Creek Alt B

Proposed Areas of Critical Environmental Concern

-  NCIP ACEC (Proposed)
-  Bureau of Land Management
-  Not included in the NCIP decision area



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.4 Forks of Butte Creek ACEC

Table 8 Forks of Butte Creek Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Existing	Plant Communities	3	1	Yes	Yes ¹⁻³	Yes ²⁻³	2,900	2,900
	Scenic	1	1					
	Cultural and Historic	1	1					
	Fisheries	2	1					

1. The foothill yellow-legged frog is listed as threatened under the California Endangered Species Act (CESA).
2. The chinook salmon – Central Valley spring-run ESU is listed as threatened under the CESA and threatened under the ESA.
3. The steelhead – Central Valley DPS is listed as threatened under the ESA.

3.4.1 Rationale for ACEC – Plant Communities, Scenic, Cultural and Historic, and Fisheries

The Forks of Butte ACEC is located in Butte County in Butte Creek Canyon between the communities of Paradise, Magalia, Centerville and Forest Ranch. The ACEC has regionally significant scenic, cultural and historical, and fisheries values. This creek is a stronghold for federally threatened spring-run Chinook salmon (*Oncorhynchus tshawytscha*). The ACEC has 1.5 miles of stream identified as eligible in the 2023 WSR Eligibility Report. The existing Forks of Butte Creek ACEC (2,900 acres) meets multiple R&I criteria, such as scenic, fisheries, wildlife, rare plant populations, cultural and historic, and old -growth forest. Forks of Butte Creek hosts a unique natural system which supports a mixed-conifer forest with old-growth characteristics and riparian vegetation. It further serves to facilitate natural processes essential to maintaining species diversity and climate resiliency due to its ecological intactness. It is also habitat for a known population of *Cardamine pachystigma* var. *dissectifolia* (1B.2), a rare species in the Brassicaceae family.

In addition, the area contains diverse aquatic and terrestrial habitat that supports endangered, threatened, and sensitive species such as spring-run Chinook salmon, Central Valley steelhead (*O. mykiss*), Pacific lamprey (*Lempetra tridentata*), and the North Feather River distinct population segment of foothill yellow-legged frog (*Rana boylei*). Butte Creek is one of only three streams in the Central Valley that supports a self-sustaining population of spring-run Chinook. Butte Creek is an important contributor to the recovery of threatened winter-run steelhead and

Areas of Critical Environmental Concern Report on the Application of the Relevance and Importance Criteria

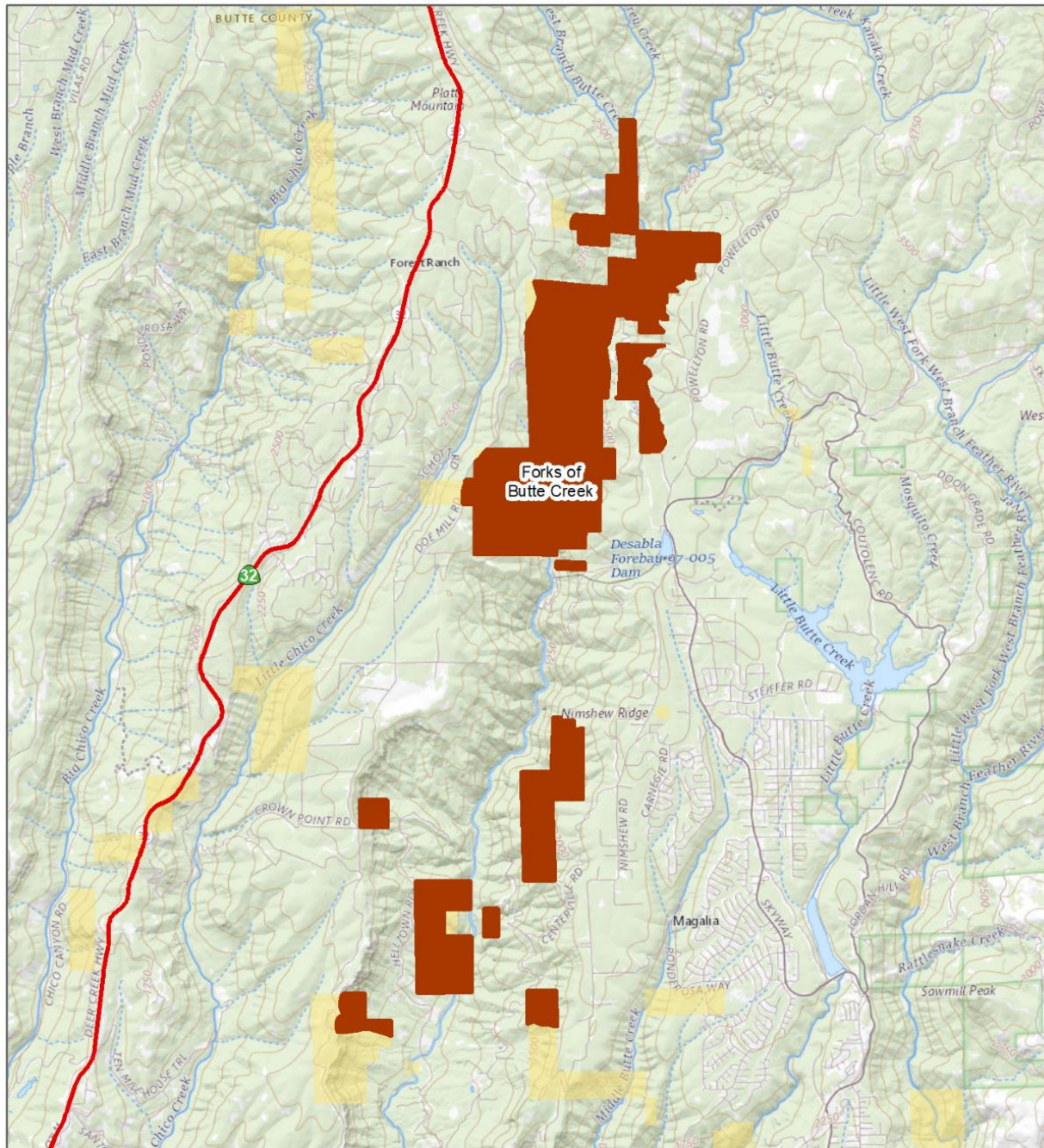
supports fall-run Chinook salmon. This ACEC has increased importance because it falls within statewide identified Essential Connectivity Corridors of High Biological Value. The corridors are areas of natural habitat that are especially important to wildlife and plants for connectivity, ease of migration, and habitat resilience in the era of climate change.

In addition to its natural resource R&I values, the ACEC contains regionally significant cultural resources, including historic hydroelectric facilities and archaeological remnants of the historic Helltown and other early gold mining communities. These were multicultural communities with significant populations of Native American and Chinese immigrant workers among others. The area retains significant cultural and scientific values in need of special management.

Due to a history of fire suppression, Forks of Butte Creek is particularly vulnerable to high-severity wildfire. Several significant wildfires that have occurred recently within the region, including the 2021 Dixie Fire in the Upper Butte Creek Watershed, illustrate the threats posed to the watershed by climate change and other anthropogenic factors. Special management and designation as an ACEC is thereby warranted to protect these R&I values.

Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

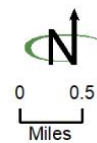
Figure 5 Forks of Butte ACEC Map (Existing, Alt B and Alt C)



**Existing ACEC - Forks of Butte Creek
 Alt B & Alt C**

Proposed Areas of Critical Environmental Concern

- NCIP ACEC (Proposed)
- Bureau of Land Management
- Not included in the NCIP decision area



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.5 Gilham Butte ACEC

Table 9 Gilham Butte Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Existing	Plant Communities	3	1	Yes	N/A	Yes ^{1,2}	2,619	Alt B – 9,328; Alt C – 2,619

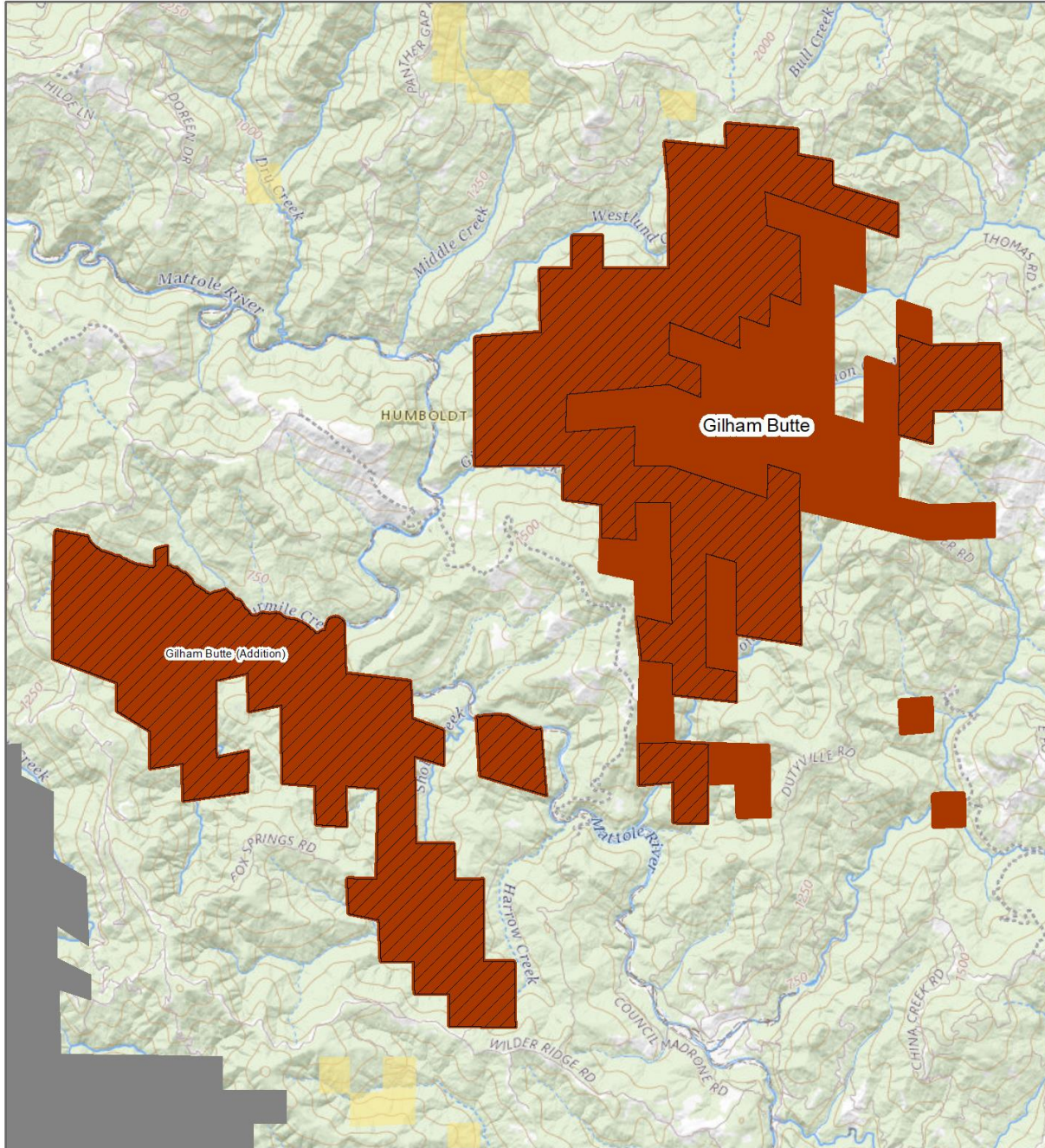
1. Marbled Murrelet (*Brachyramphus marmoratus*)
2. Northern Spotted Owl (*Strix occidentalis caurina*)
3. Forests with late successional characteristics

3.5.1 Rationale for ACEC – Plant Communities

The existing Gilham Butte ACEC (currently 2,619 acres but proposed to expand to 9,328 acres under the preferred Alt B) is located south of Humboldt Redwoods State Park in Humboldt County, CA and contains stands that exhibit late successional characteristics that are critical for many wildlife species, especially the Northern Spotted Owl, and provide for a diversity of habitat types. In addition, it the ACEC contains designated critical habitat for the marbled murrelet (*Brachyramphus marmoratus*) and northern spotted owl (*Strix occidentalis caurina*). Designating this area as an RNA/ACEC is essential for the preservation of old-growth values. The expansion includes additional stands that already exhibit significant late successional characteristics. The expansion also includes portions of Fourmile and Sholes Creeks, which have suitable habitat for threatened Chinook salmon, coho salmon, and steelhead. Further, the ACEC has 9.8 miles of stream identified as eligible in the 2023 WSR Eligibility Report. The late successional characteristics for this ACEC have increased in importance because they fall within statewide identified Essential Corridors of High Biological Value. The corridors are areas of natural habitat that are especially important to wildlife and plants for connectivity, ease of migration, and habitat resilience in the era of climate change.





Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

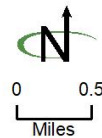
Figure 6 Gilham Butte w/Addition ACEC Map (Alt B, Carried Forward)



Existing & Proposed ACEC - Gilham Butte Alt B

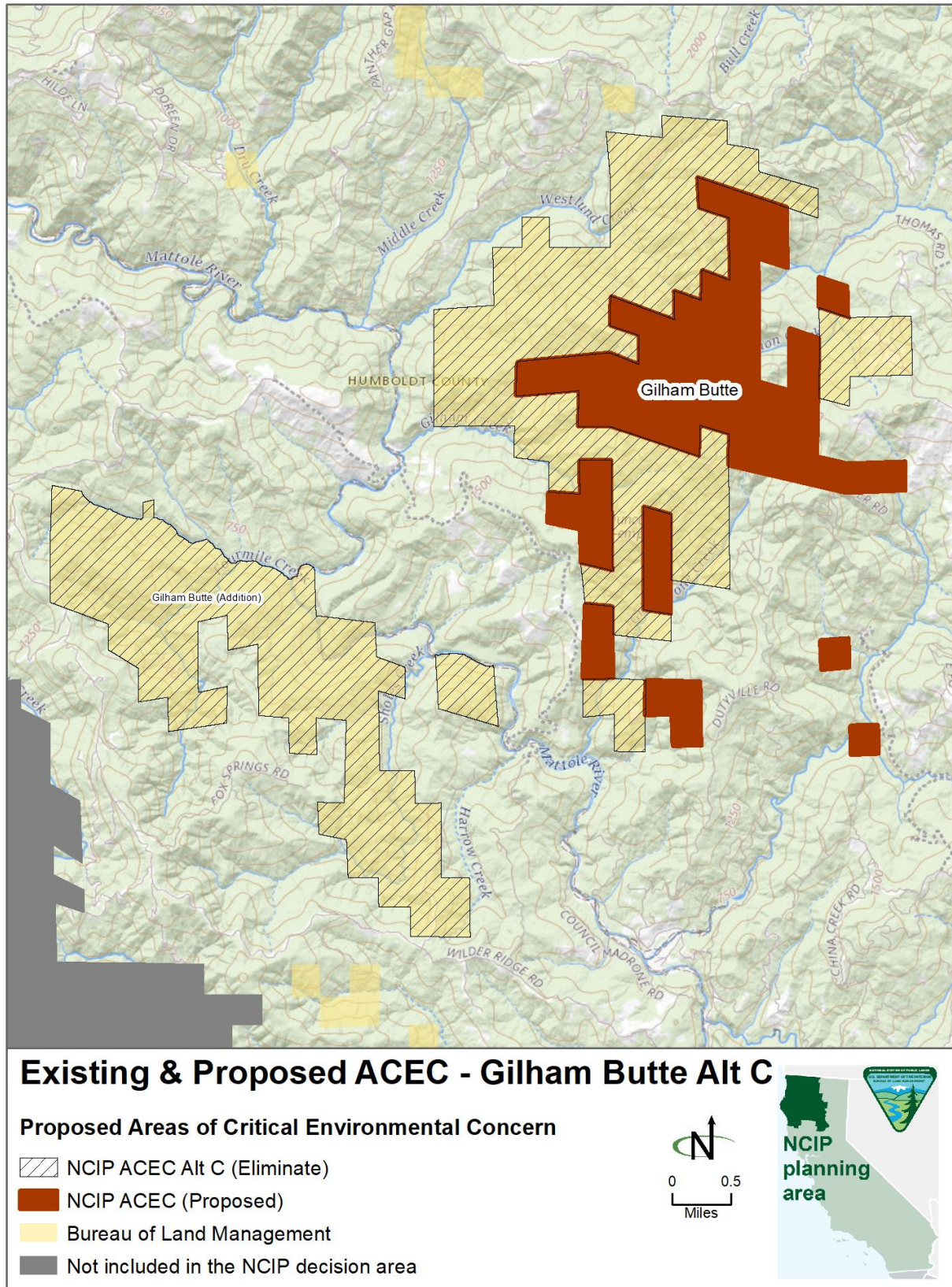
Proposed Areas of Critical Environmental Concern

-  NCIP ACEC (Addition)
-  NCIP ACEC (Proposed)
-  Bureau of Land Management
-  Not included in the NCIP decision area



Areas of Critical Environmental Concern
Report on the Application of the Relevance and Importance Criteria

Figure 7 Gilham Butte ACEC Map (Existing and Proposed Alt C, but Not Carried Forward)



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.6 Hawes Corner ACEC

Table 10: Hawes Corner Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Existing	Plant Communities	3	1	No	Yes ¹⁻³	Yes ¹⁻³	38	38
	Wildlife	2	1					

1. The slender Orcutt grass is listed as endangered under the CESA and threatened under the ESA.
2. The vernal pool tadpole shrimp is listed as endangered under the ESA.
3. The vernal pool fairy shrimp is listed as threatened under the ESA.

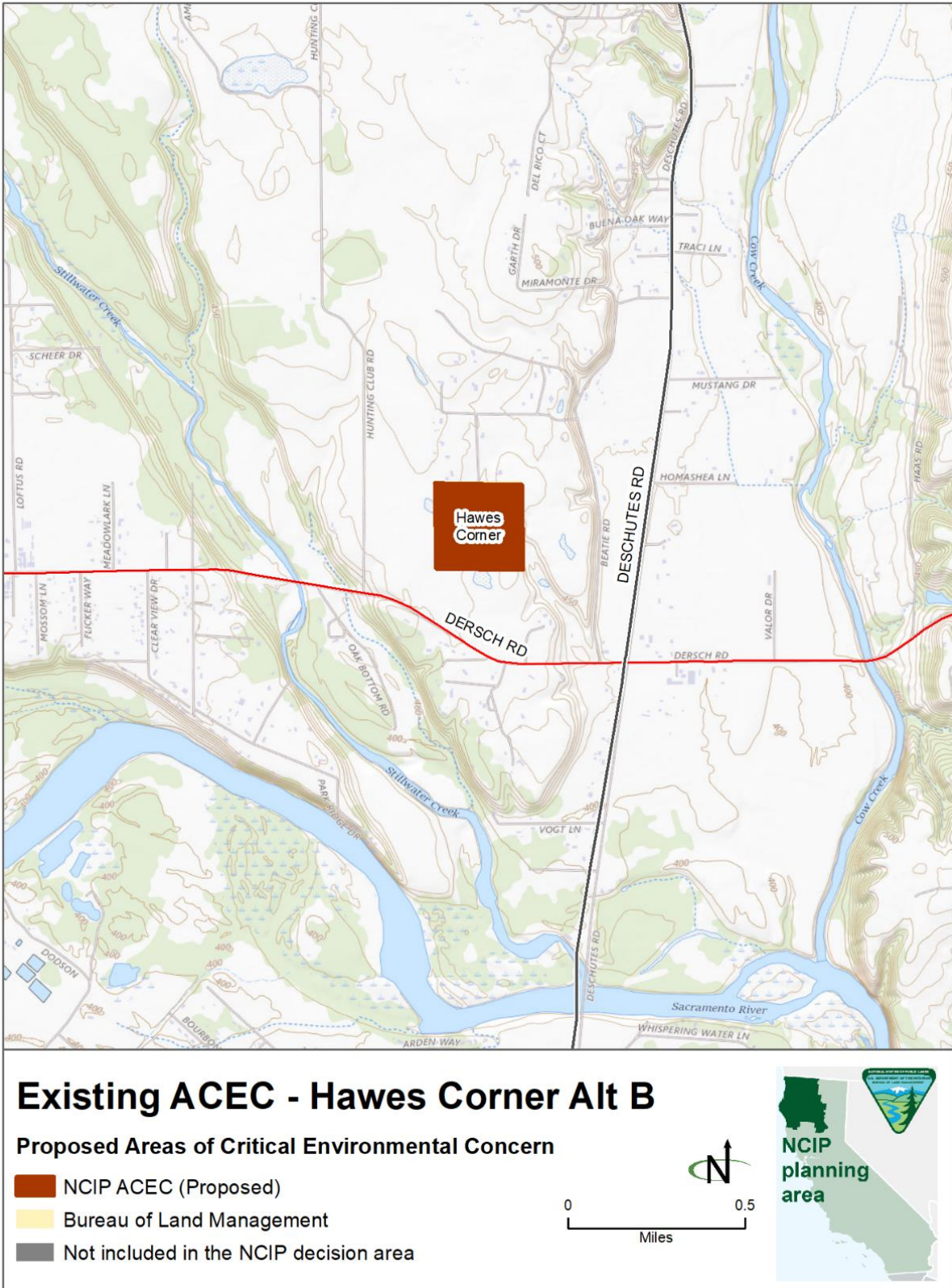
3.6.1 Rationale for ACEC – Plant Communities

The Hawes Corner ACEC is located on a small parcel in Anderson, Shasta County, California. It is about 0.2 mi north of Dersch Road, between Beatie Road to the east and Hunting Club Road to the west. Hawes Corner ACEC contains regionally significant plant communities as well as threatened and endangered species.

The existing Hawes Corner ACEC meets multiple R&I values. The plant community includes Slender orcutt grass (*Orcuttia tenuis*), which is Endangered under the CESA and Threatened under the ESA. In addition, the ACEC contains the vernal pool tadpole shrimp (*Lepidurus packardi*), which is listed as Endangered under the ESA, and the vernal pool fairy shrimp (*Branchinecta lynchi*), which is listed as Threatened under the ESA. Designating Hawes Corner an ACEC will conserve extremely important vernal pool habitat in the Central Valley that is vital habitat for slender Orcutt grass, improving long-term survival of this species.

Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

Figure 8 Hawes Corner ACEC Map (Existing and Alt B, No Alt C Carried Forward)



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.7 Iaqua Butte ACEC

Table 11: Iaqua Butte Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Existing	Plant communities	3	1	No	Yes ¹	Yes ²⁻³	1,111	1,111

1. Marbled Murrelet (*Brachyramphus marmoratus*)
2. Northern Spotted Owl (*Strix occidentalis caurina*)
3. Forests with late successional characteristics

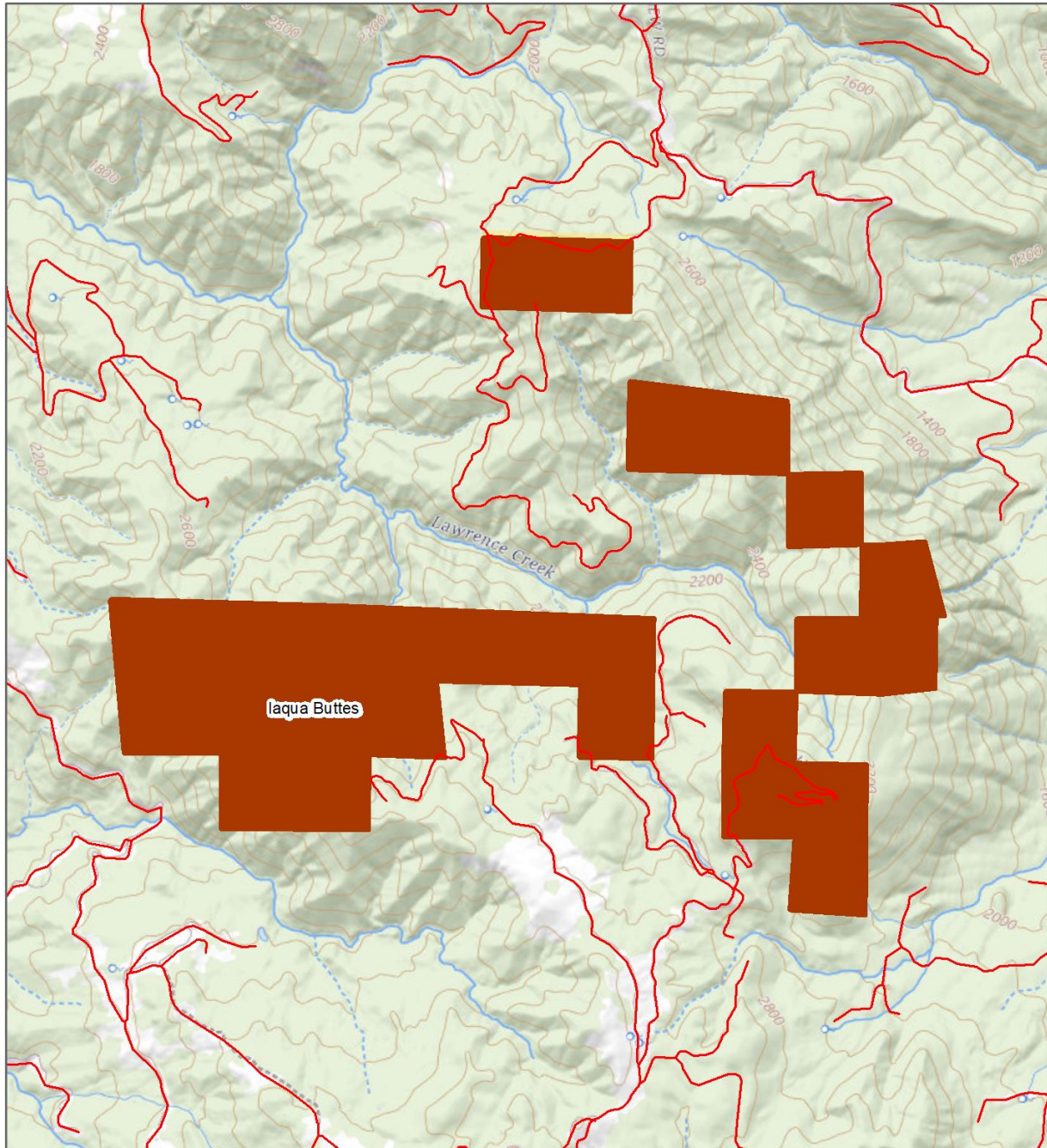
3.7.1 Rationale for ACEC – Plant Communities

The Iaqua Butte ACEC is located between Kneeland and Bridgeville in Humboldt County. Iaqua Butte ACEC has regionally significant plant communities as well as endangered animal species and critical wildlife habitat.

The existing 1,111-acre Iaqua Butte ACEC contains important late successional stands that provide a diversity of habitat types including designated critical habitat for the marbled murrelet (*Brachyramphus marmoratus*) and northern spotted owl (*Strix occidentalis caurina*). Designating this area as an ACEC will allow for preservation of stands that are already in the late successional stage.




Areas of Critical Environmental Concern
Report on the Application of the Relevance and Importance Criteria

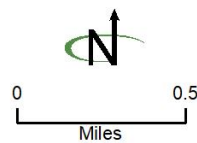
Figure 9 Iaquia Buttes ACEC Map (Existing and Alt B, No Alt C carried Forward)



Existing ACEC - Iaquia Buttes Alt B

Proposed Areas of Critical Environmental Concern

-  NCIP ACEC (Proposed)
-  Bureau of Land Management
-  Not included in the NCIP decision area



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.8 Lacks Creek ACEC

Table 12 Lacks Creek Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Existing	Plant Communities	3	1	Yes	Yes ¹⁻⁵	Yes ^{1-4, 6}	7,479	2,141

1. Marbled Murrelet (*Brachyramphus marmoratus*)
2. Northern Spotted Owl (*Strix occidentalis caurina*)
3. Northern California Steelhead DPS
4. California Coast Chinook salmon ESU
5. California Condor (*Gymnogyps californianus*)
6. Old growth forests

3.8.1 Rationale for ACEC – Plant Communities

The Lacks Creek Management Area (LCMA) is located 15 miles inland from the coast, roughly 25 air miles northeast of Eureka, California, and 3 miles west of the Hoopa Valley Reservation. While much of Lacks Creek was originally designated as LSR in the Northwest Forest Plan, the management area is a heterogeneous landscape consisting mostly of previously heavily logged Douglas fir stands in various stages of recovery from harvest prior to BLM ownership. Additionally, a series of acquisitions have changed the size and shape of the management area over the last 20 years. While the LSR designation for Lacks Creek will be carried forward under all alternatives of the NCIP, the ACEC is proposed to be reduced in size to more accurately reflect the spatial distribution of the existing old growth forest and associated unique ecosystem characteristics.

The existing ACEC in Lacks Creek was defined based on multiple polygons. The original 800-acre Lacks Creek ACEC designated in the 1989 RMP, based on old growth forest characteristics was expanded by 720 acres in the 1995 RMP amendment. The 1995 RMP Amendment also introduced an additional polygon encompassing the entire Lacks Creek watershed, along with stipulations that “Acquired lands within the watershed will be included in the watershed ACEC”.

Under the new NCIP, ‘old growth’ polygons describing the Lacks Creek ACEC will be expanded from 1,520 acres to 2,141 acres, which will constitute the entirety of the ACEC. The previously used ‘Lacks Creek Watershed Boundary’ for the ACEC is not proposed to be brought forward, as the majority of the acres in the 7,479-acre polygon do NOT meet R&I criteria and are, in fact,

Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

highly disturbed tan oak and Douglas fir-dominated forest stands that are extremely common across coastal forests formerly managed for timber production. All of Lacks Creek will still be managed as a LSR, with aggressive treatments being planned to reduce sediment impacts to Redwood Creek and accelerate the development of late seral forest characteristics and the associated plant and wildlife habitat values. Additionally, the Lacks Creek ACEC has 11.3 miles of stream identified as eligible in the 2023 WSR Eligibility Report.

The late successional forest characteristics for this ACEC have increased importance because they fall within statewide identified Essential Corridors of High Biological Value. The corridors are areas of natural habitat that are especially important to wildlife and plants for connectivity, ease of migration, and habitat resilience in the era of climate change.

No federally listed threatened or endangered plant species are present within the proposed ACEC, but there are numerous California Rare Ranked species observation records within the LCMA as a whole. Primarily in prairies or forest edges, these vascular and non-vascular species are primarily in prairies or forest edges and can be good indicators of high-quality habitat. Refer to Table 10 below for CA Rare ranked species know to occur within LCMA.

Table 2 Lists CNDDDB Inventory of BLM sensitive and CNPS species with occurrence records and/or suitable habitat within Lacks Creek Management Area.

Scientific Name	Common Name	CNPS Rank
Vascular Species		
<i>Arctostaphylos canescens ssp. Sonomensis</i>	Sonoma manzanita	1B.2
<i>Bensoniella oregona</i>	Bensoniella	1B.1
<i>Epilobium oreganum</i>	Oregon fireweed	1B.2
<i>Erythronium oregonum</i>	Giant fawn lily	2B.2
<i>Eucephalus vialis</i>	Wayside aster	1B.2
<i>Iliamna latibracteata</i>	California globemallow	1B.2
<i>Montia Howellii</i>	Howell’s montia	2B.2
<i>Piperia candida</i>	white-flowered rein orchid	1B.2
<i>Sidalcea malviflora ssp. Patula</i>	Siskiyou checkerbloom	1B.2
<i>Sidalcea oregana ssp. Eximia</i>	Coast checkerbloom	1B.2
<i>Thermopsis robusta</i>	Robust false lupin	1B.2
Non-vascular Species		
<i>Lobaria oregana</i>	Oregon lungwort	N/A

Areas of Critical Environmental Concern

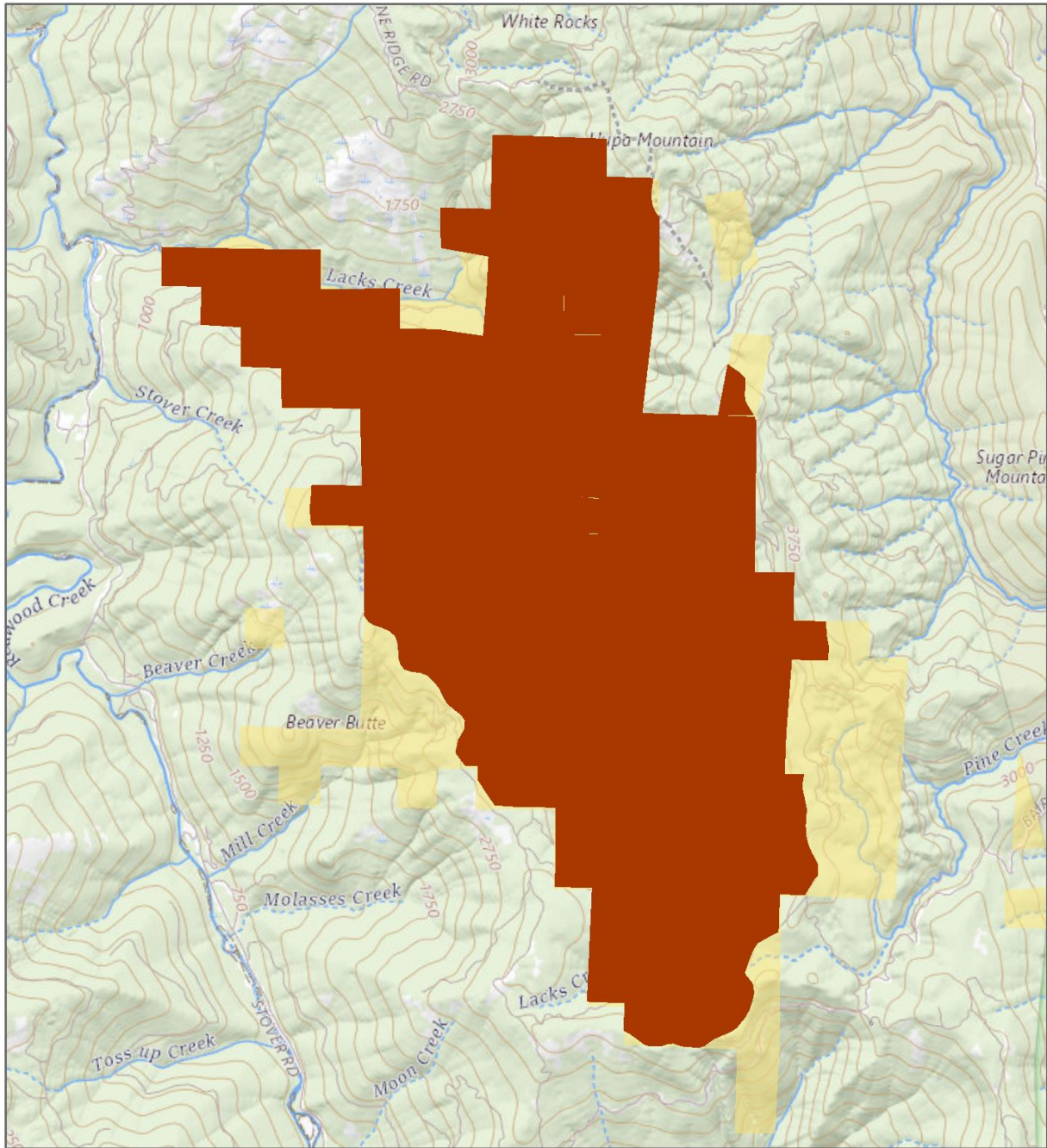
Report on the Application of the Relevance and Importance Criteria

Scientific Name	Common Name	CNPS Rank
<i>Ptilidium californicum</i>	Pacific fuzzwort	N/A

Recently California condors have been sighted at Lacks Creek ACEC. It is unknown whether or not suitable nesting habitat exists in the Lacks Creek ACEC. The proposed ACEC includes Lacks Creek, which provides excellent spawning and rearing habitat for threatened Chinook salmon and steelhead.




Areas of Critical Environmental Concern
Report on the Application of the Relevance and Importance Criteria

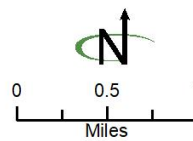
Figure 10 Lacks Creek ACEC Map (Existing)



Existing ACEC - Lacks Creek

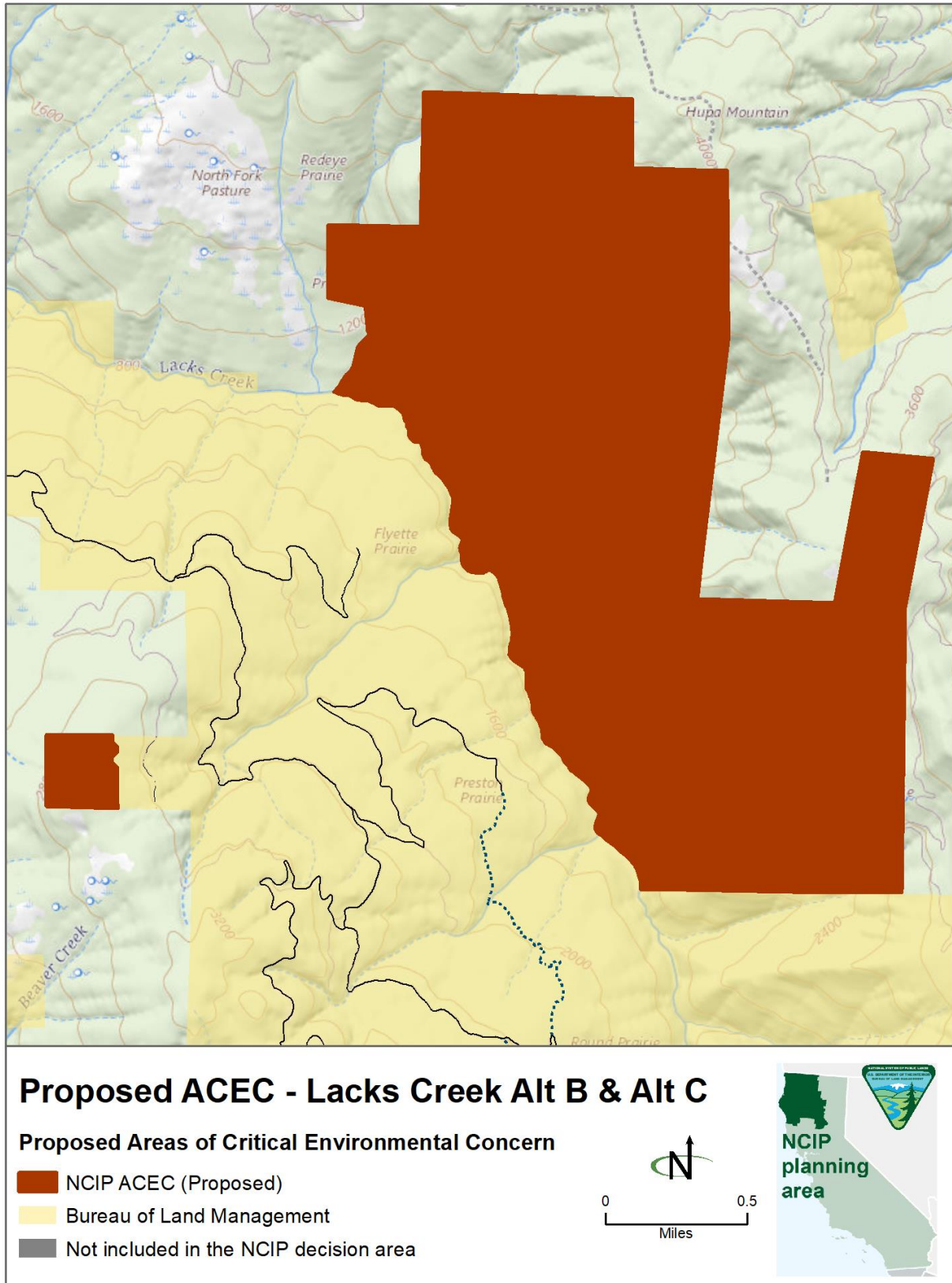
Proposed Areas of Critical Environmental Concern

-  NCIP ACEC (Proposed)
-  Bureau of Land Management
-  Not included in the NCIP decision area



Areas of Critical Environmental Concern
Report on the Application of the Relevance and Importance Criteria

Figure 11 Lacks Creek ACEC Map (Alt B and Alt C)



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.9 Ma-le’l Dunes ACEC

Table 14: Ma-le’l Dunes Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Existing	Plant Communities	3	1	No	Yes ¹⁻³	Yes	149	206 ⁴
	Cultural	1	2					

1. Western snowy plover (*Charadrius nivosus nivosus*) listed as Threatened under ESA
2. Beach layia (*Layia carnosa*) recently downlisted to Threatened under ESA
3. Menzie’s wallflower (*Erysimum menziesii*) listed as Endangered under ESA
4. The best available GIS data was used to calculate acres and create the Ma-le’l ACEC Map however, South Spit ACEC is on a shoreline, which tends to change. There may be small variations between this data and current conditions.

3.9.2 Rationale for ACEC – Plant Communities and Cultural and Historic

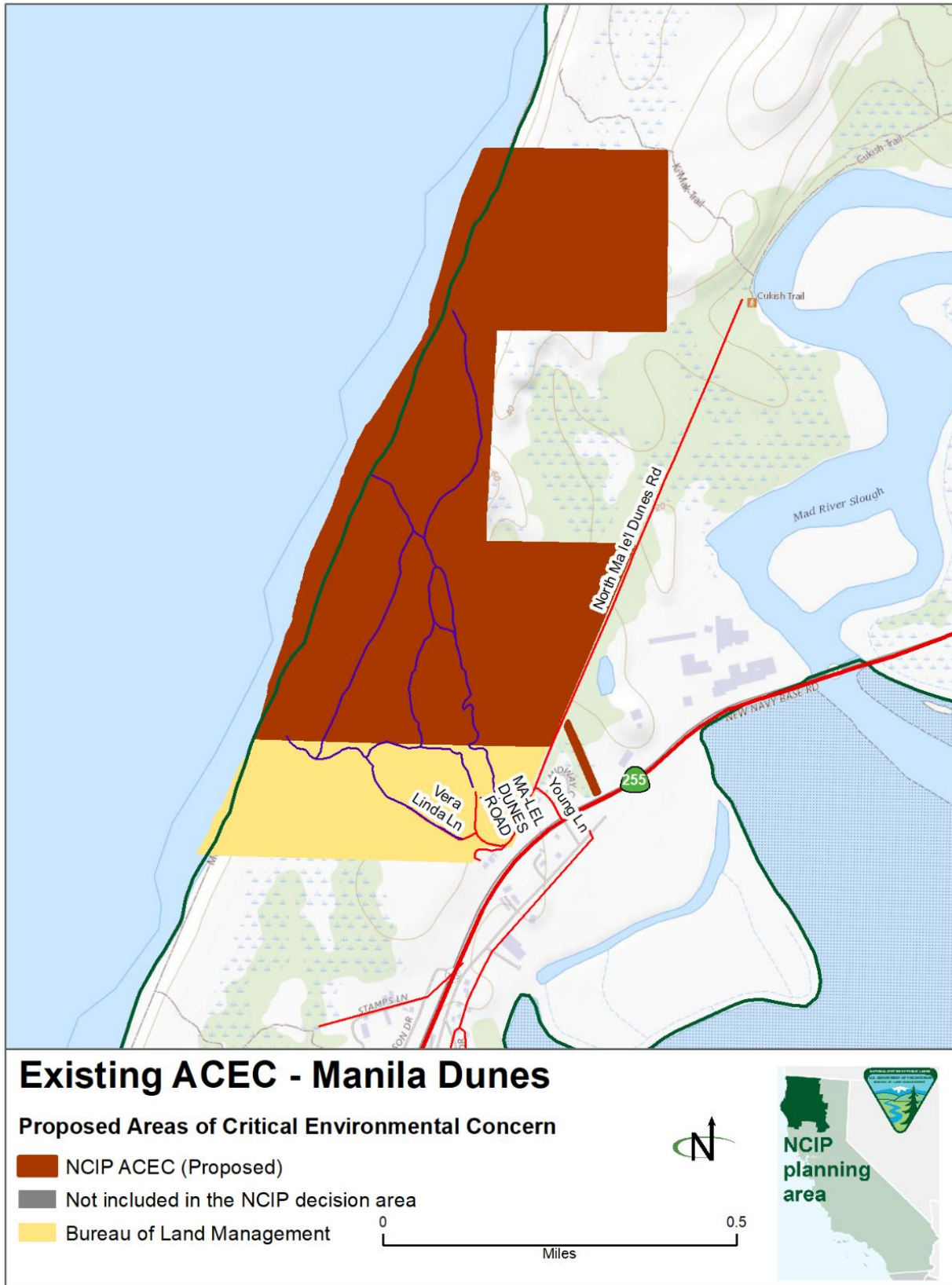
The Ma-le’l Dunes ACEC, previously known as the Manila Dunes ACEC, is located on the narrow stretch of land between the Mad River Slough and the Pacific Ocean along North Ma-le’l Dunes Road in Arcata, California. Ma-le’l Dunes ACEC contains regionally significant plant communities and cultural resources.

The existing Ma-le’l Dunes ACEC (currently 149 acres, proposed to expand to 180 acres) contains important botanical values and wetland habitat areas. The area contains active and stabilized sand dunes, wetlands, and a robust native plant community which supports the two federally listed threatened plant species: beach layia and menzie’s wallflower. Additionally, the beach provides nesting habitat for western snowy plovers. The area is also culturally significant to the Wiyot people and contains sensitive cultural resources. This area is only a few miles from Arcata and Eureka and will continue to provide an outstanding opportunity for environmental education that is utilized by Cal Poly Humboldt, primary schools and non-profit organizations that lead naturalist trainings annually.

Passive recreation opportunities will be protected and enhanced on Ma-le’l Dunes by providing access to designated coastal trails for equestrian and pedestrian use. OHV use is prohibited within the protected Ma-le’l Dunes portion of the Samoa Peninsula. Although fenced enclosures are utilized on the southern end of the Samoa Peninsula, no fencing is installed in Ma-le’l Dunes as a result of restricted access for OHVs. Additional attention is needed to protect this habitat and balance its protection.

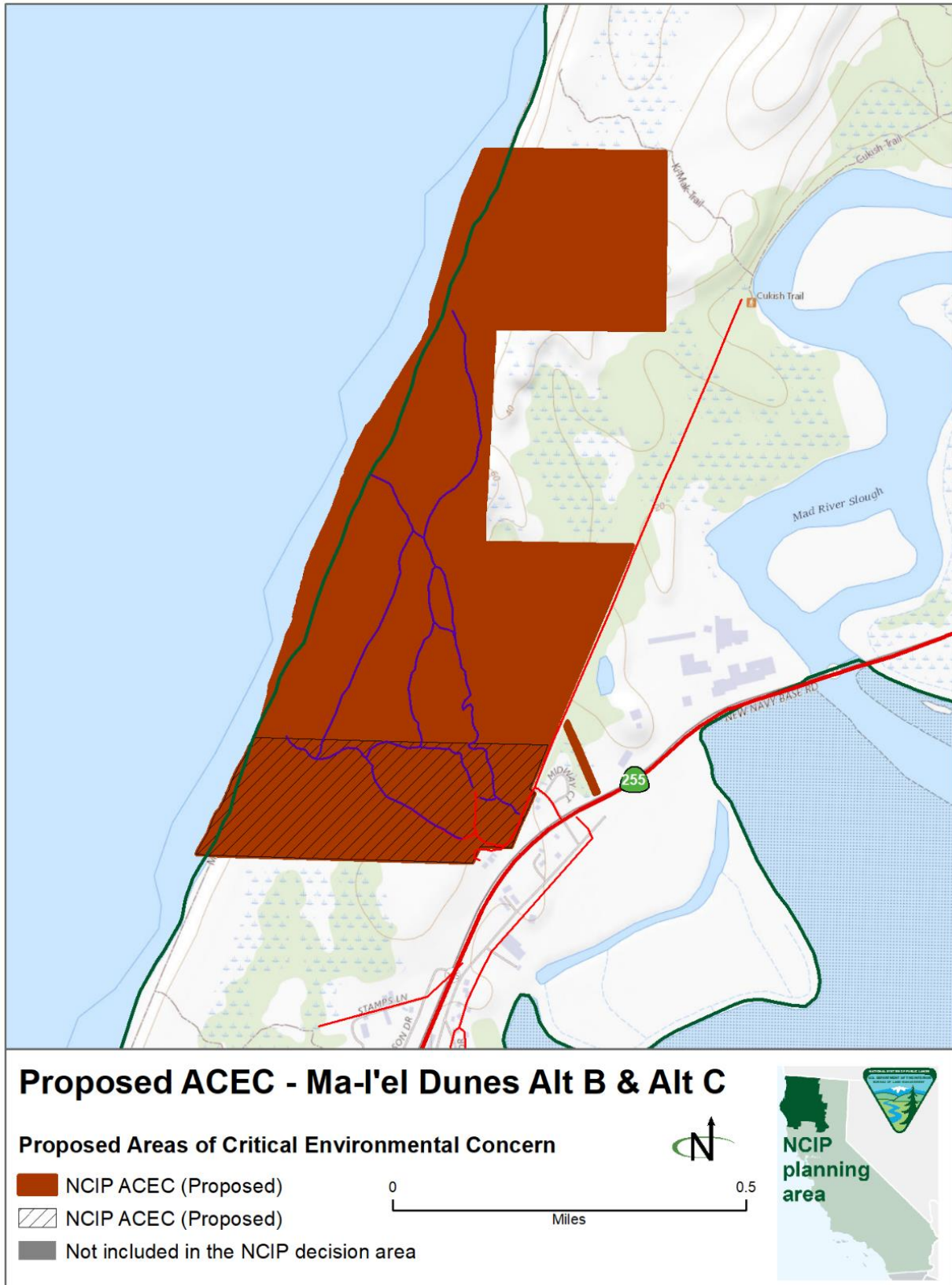
Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

Figure 12 Manila Dunes ACEC Map (Existing)



Areas of Critical Environmental Concern
Report on the Application of the Relevance and Importance Criteria

Figure 13 Ma-le'l Dunes Proposed ACEC Map (Alt B and Alt C)



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.10 Sacramento Island ACEC

Table 15: Sacramento Island Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Existing	Plant Communities	3	1	No	Yes ¹⁻⁶	Yes ^{2, 5}	91	91
	Wildlife	2	2					

1. The bald eagle is listed as endangered under the CESA.
2. The chinook salmon – Central Valley spring-run ESU is listed as threatened under the CESA and threatened under the ESA.
3. The tricolored blackbird is listed as threatened under the CESA.
4. The bank swallow is listed as threatened under the CESA.
5. The steelhead – Central Valley DPS is listed as threatened under the ESA.
6. The green sturgeon – southern DPS is listed as threatened under the ESA.

3.10.1 Rationale for ACEC – Plant Communities and Wildlife

Sacramento Island (not an “island” per se except during flood events) is located near Knighton Road in Shasta County along the Sacramento River. The location of this increasingly important habitat near a large population center necessitates special management attention and warrants management as an ACEC. Sacramento Island ACEC contains important plant communities as well as six threatened or endangered species.

The existing 91-acre Sacramento Island ACEC meets multiple R&I criteria, including plant communities and the presence of threatened/endangered animal species.

The Sacramento Island ACEC was designated in the 1993 Redding RMP to protect the largest unaltered fragment of native Great Valley–Valley Oak riparian forest within Shasta County. This habitat type is extremely rare today due to a century of landscape conversion and anthropogenic disturbance, and its conservation as an ACEC is critical for the unique ecological value and function it provides for the flora and fauna that utilize it.

The ACEC is also home to six threatened or endangered wildlife species: the bald eagle, chinook salmon, tricolored blackbird, bank swallow, steelhead, and green sturgeon. It is also potential habitat for the CESA Endangered yellow-billed Cuckoo and the ESA Threatened western yellow-billed Cuckoo. There are elderberry bushes on the site and therefore there is habitat for the Federally Threatened valley elderberry longhorn beetle. This habitat type has very high bird

Areas of Critical Environmental Concern
Report on the Application of the Relevance and Importance Criteria

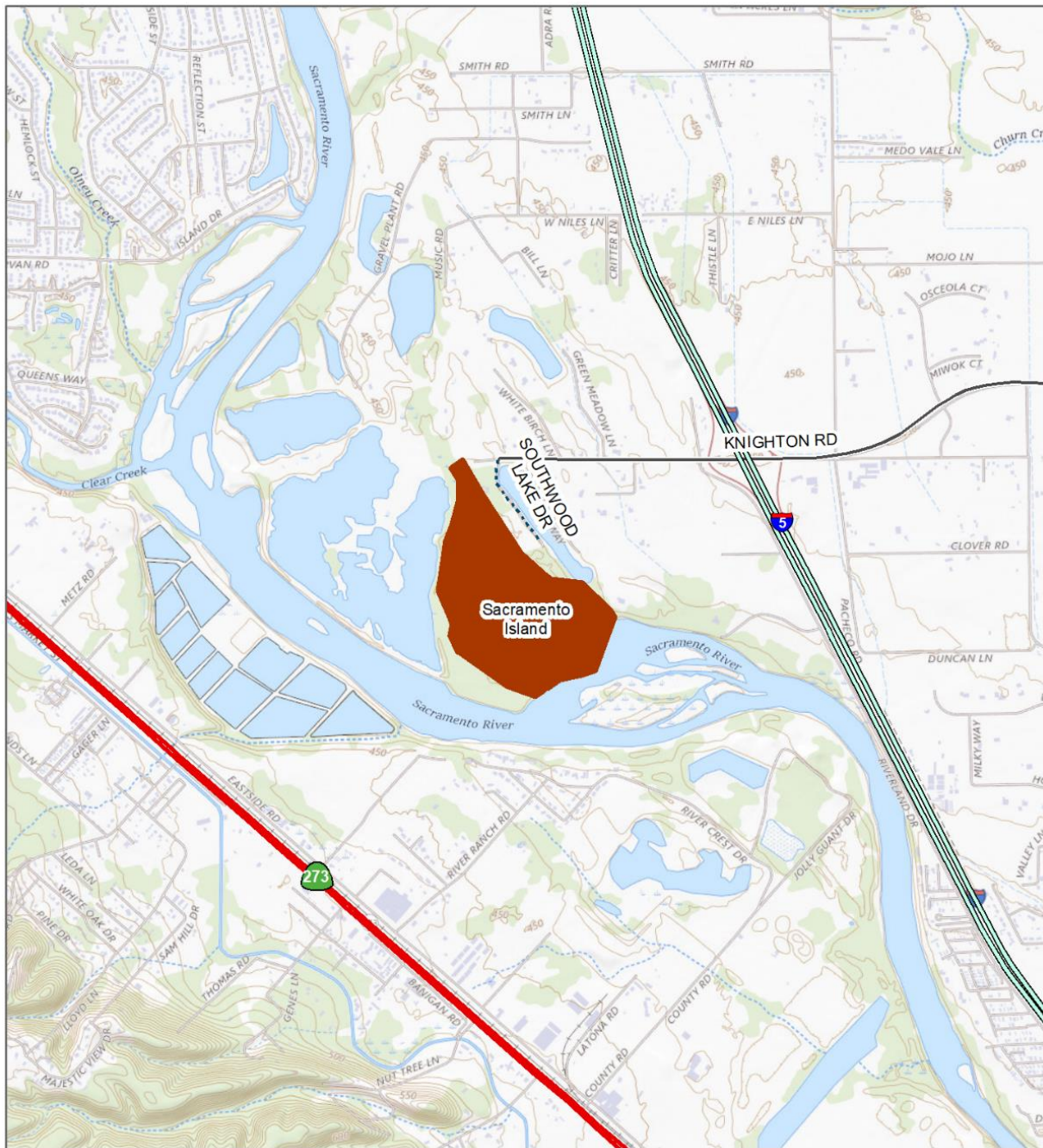
species diversity and richness. Many state and federal sensitive species and species of special concern also use this site.

While the Great Valley Oak Riparian forest type is extremely unique and provides a host of benefits to diverse native species, the habitat at this ACEC is currently being degraded by the encroachment of non-native, invasive species such as Tree of heaven and Himalayan blackberry. Additionally, a small portion of the ACEC is a remnant network of gravel roads with minimal native vegetation. Restoration on site would further improve existing habitat and may include activities such as invasive species removal and seeding of native species.

The ACEC is bordered by Interstate 5, residential/agricultural land, and a sand and gravel plant; degraded land adjacent to these impacts allows for testing of effectiveness of restoration techniques, which contributes to future adaptive management.

Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

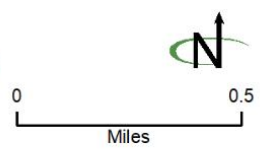
Figure 14 Sacramento Island ACEC Map (Existing and Alt B, No Alt C carried Forward)



**Existing & Proposed ACEC - Sacramento Island
 Alt B**

Proposed Areas of Critical Environmental Concern

- NCIP ACEC (Proposed)
- Not included in the NCIP decision area



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.11 Sacramento River Bend ACEC

Table 16: Sacramento River Bend Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Existing	Cultural and Historic	1	1	Yes	Yes ¹⁻¹¹	Yes ¹²	18,596	Alt B – 20,418; Alt C – 18,596
	Wildlife	2	1					
	Plant Communities	3	1					

1. The bald eagle is listed as endangered under the CESA.
2. The Boggs Lake hedge-hyssop is listed as endangered under the CESA.
3. Slender Orcutt grass is listed as endangered under the CESA and threatened under the ESA.
4. The Chinook salmon – Sacramento River winter-run ESU is listed as endangered under the CESA and ESA.
5. The Chinook salmon – Central Valley Spring-Run ESU is listed as threatened under the CESA and ESA.
6. Least Bell’s vireo is listed as endangered under the CESA and threatened under the ESA.
7. The steelhead – Central Valley DPS is listed as threatened under the ESA.
8. The valley elderberry longhorn beetle is listed as threatened under the ESA.
9. The vernal pool fairy shrimp is listed as threatened under the ESA.
10. The green sturgeon – southern DPS is listed as threatened under the ESA.
11. The vernal pool tadpole shrimp is listed as endangered under the ESA.
12. Slender Orcutt grass; Vernal pool tadpole shrimp; Winter-run and Spring-run Chinook salmon, steelhead

3.11.1 Rationale for ACEC – Cultural and Historic, Wildlife, and Plant Communities

The Sacramento River Bend ACEC is bordered by Highway 36 to the east and the Sacramento River to the west, just north of the town of Red Bluff, in Tehama County, California. The Sacramento River Bend ACEC contains regionally significant cultural and archaeological values, wildlife, and plant communities and has 42.1 miles of stream identified as eligible in the 2023 WSR Eligibility Report.

The existing Sacramento Bend ACEC (currently 18,596 acres, proposed to expand to 20,418 acres (under the Preferred Alt B) meets multiple R&I values. The Bend is the last publicly held, contiguous riparian system of any size on the Sacramento River between Sacramento and

Areas of Critical Environmental Concern Report on the Application of the Relevance and Importance Criteria

Shasta Dam. The area's unique resources include rare habitats, plants, wildlife, and cultural resources. Vernal pools support the Federally Threatened slender Orcutt grass, as well as many vernal pool endemic plants with a California Rare Plant Rank (CRPR). The area is also within the range of several federally-listed invertebrates including the vernal pool tadpole shrimp and the vernal pool fairy shrimp. The habitat protected by the Sacramento River Bend ACEC includes federally designated critical habitat for vernal pool obligate species and is vital for the continued existence of these and other riparian, wetland, and vernal pool associated species.

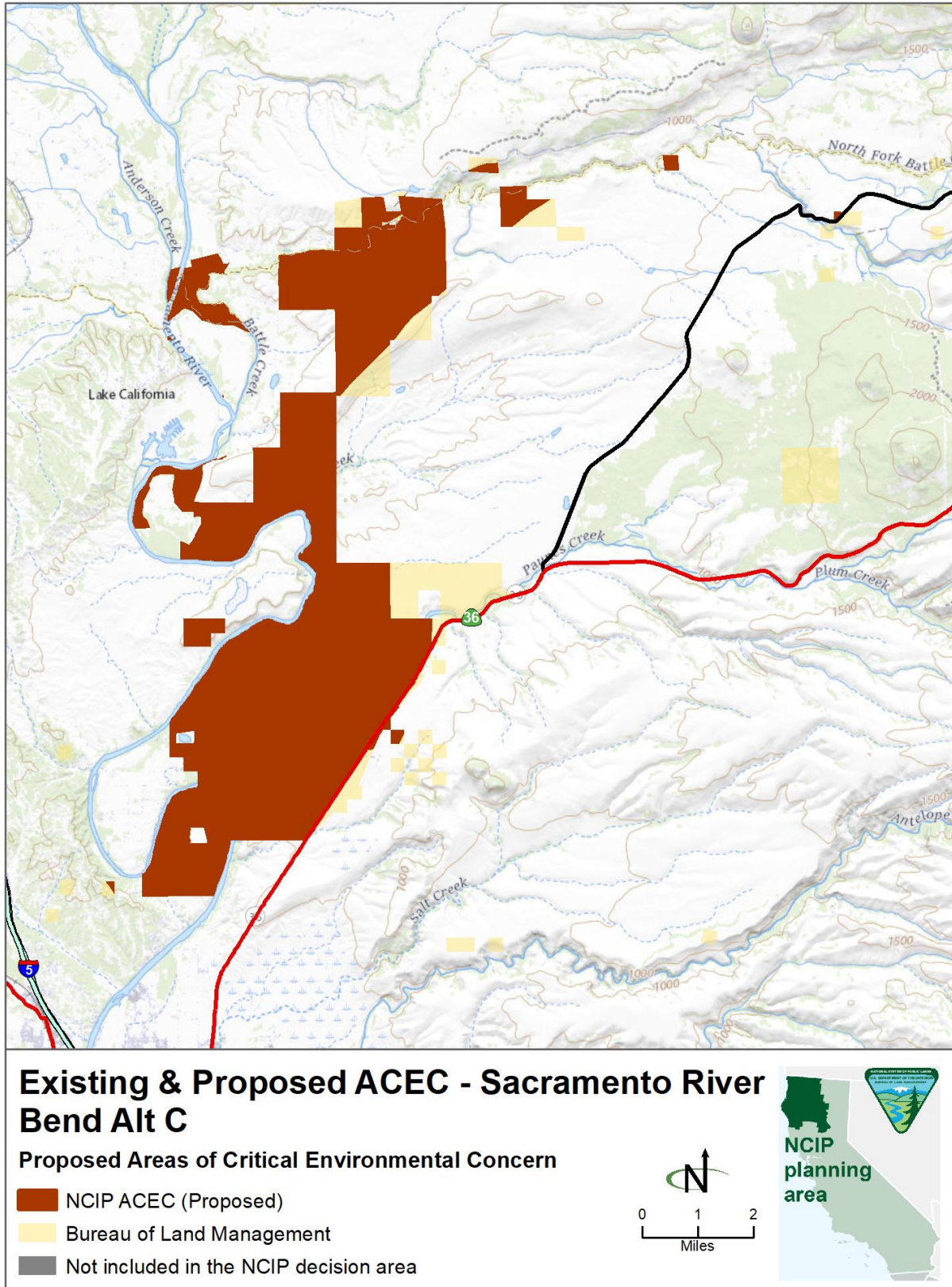
Nesting bald eagles and deer winter range habitat are found in this ACEC, and the 100 acres of managed wetlands are regionally significant, as they support a high diversity of waterfowl, shorebirds, and other wetland associated species. These include several CESA listed species, such as the foothill yellow-legged frog. Additionally, this area provides foraging and nesting habitat for migratory birds, including burrowing owls and tricolored blackbirds, both of which have experienced a population decline largely due to habitat loss. The sections of the Sacramento River and tributaries within this ACEC are important spawning habitat for multiple special-status anadromous fish and aquatic wildlife species, including Federally endangered Chinook salmon. By providing refuge and resources for diverse taxa, this ACEC also holds significant recreational value, as it offers unique wildlife viewing opportunities.

The values for this ACEC have increased importance because they fall within statewide identified Essential Corridors of High Biological Value. The corridors are areas of natural habitat that are especially important to wildlife and plants for connectivity, ease of migration, and habitat resilience in the era of climate change. Some of the best examples of extensive Blue Oak Woodland in California are found in this ACEC.

In addition to natural values, the ACEC includes numerous rare, fragile, and irreplaceable cultural resources of high scientific value and importance to local Tribes. Passing through the ACEC are remnants of the historic Blue Ridge Flume, an historic transport system for lumber from the mountains to the Valley. Portions of the ACEC also include parts of a Mexican land grant and remnants of settler occupation and use. The historic Red Bluff Wagon Road and early sheepherder facilities are common and sensitive to disturbances from cattle, visitors, and deterioration through time. Periodic looting and damage to cultural resources from recreation activities have been long-standing problems and require ongoing management.

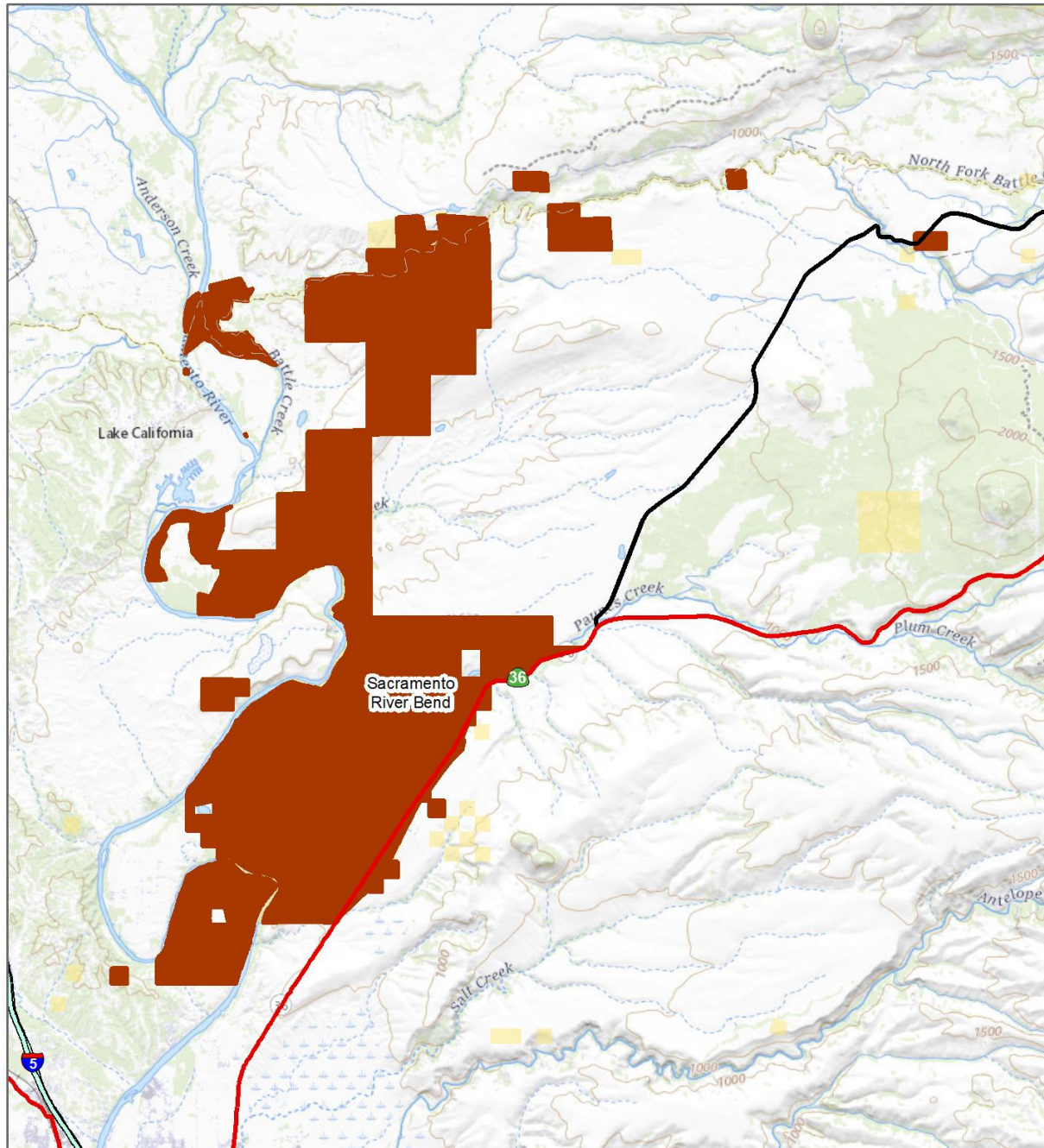
Areas of Critical Environmental Concern
Report on the Application of the Relevance and Importance Criteria

Figure 15 Sacramento River Bend ACEC Map (Existing and Alt C)



Areas of Critical Environmental Concern
Report on the Application of the Relevance and Importance Criteria

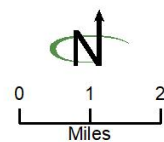
Figure 16 Sacramento River Bend ACEC Proposed Alt B



Proposed ACEC - Sacramento River Bend Alt B

Proposed Areas of Critical Environmental Concern

- NCIP ACEC (Proposed)
- Bureau of Land Management
- Not included in the NCIP decision area



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.12 Shasta and Klamath River Canyon ACEC

Table 17: Shasta and Klamath River Canyon Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Existing	Cultural and Historic	1	1	No	Yes ¹	Yes ²	1,215	1,270
	Fisheries	2	1					

1. Shasta River supports Southern Oregon/Northern California Coast (SONCC) coho salmon that are listed as threatened under the ESA.
2. Shasta River is critical habitat for SONCC coho salmon.

3.12.2 Rationale for ACEC – Cultural and Historic, and Fisheries

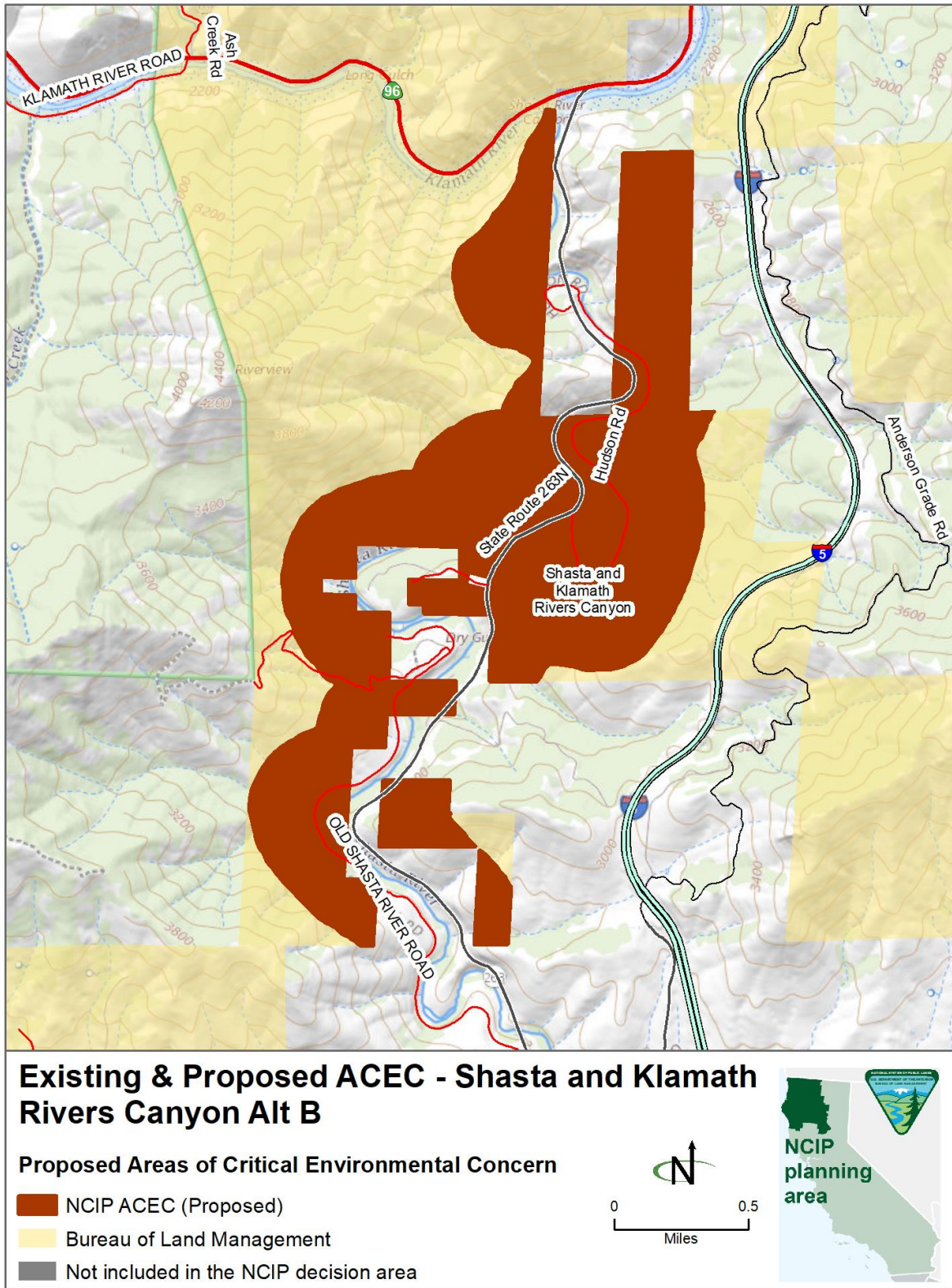
The Shasta and Klamath River Canyon ACEC is located along the Shasta River beginning at the confluence of the Shasta and Klamath in the north and stretching about 3 miles to the south; it is in the town of Yreka in Siskiyou County, California. Shasta and Klamath River Canyon ACEC has regionally significant cultural and fisheries values. Additionally, the ACEC has 3.4 miles of stream identified as eligible in the 2023 WSR Eligibility Report.

The existing Shasta and Klamath River Canyon ACEC (currently 1,215 acres, proposed increase to 1,270 acres) meets multiple R&I values, including riparian and salmonid values, and cultural and historic resources.

The ACEC was established to protect critical spawning and rearing habitat on the Shasta River for Chinook and Southern Oregon/Northern California Coast (SONCC) coho salmon within the Klamath Basin. In addition, the ACEC contains significant cultural resources important to local Tribes and the history of early settlement and gold mining in the region. Gold mining archaeological resources include both placer and lode operation remnants. The canyon was also an early historic transportation route with important road and bridge features. The 1931 Pioneer Bridge over the Shasta River was built in 1931 and is considered eligible for listing on the National Register of Historic Places (NRHP). OHV, grazing, looting, and erosion are ongoing detrimental actions damaging the historic values and necessitate special management.

Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

Figure 17 Shasta and Klamath Rivers Canyon ACEC Map (Existing and proposed Alt B, No Alt C carried Forward)



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.13 Grass Valley Creek ACEC

Table 18: Grass Valley Creek Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Proposed	Fisheries	2	1	No	Yes ¹	Yes ¹	N/A	Alt B – 19,560. Alt C – 13,068
	Soils	4	3 4					
	Wildlife	2	1					
	Plant Communities	3	1					

1. Northern Spotted Owl (*Strix occidentalis caurina*)

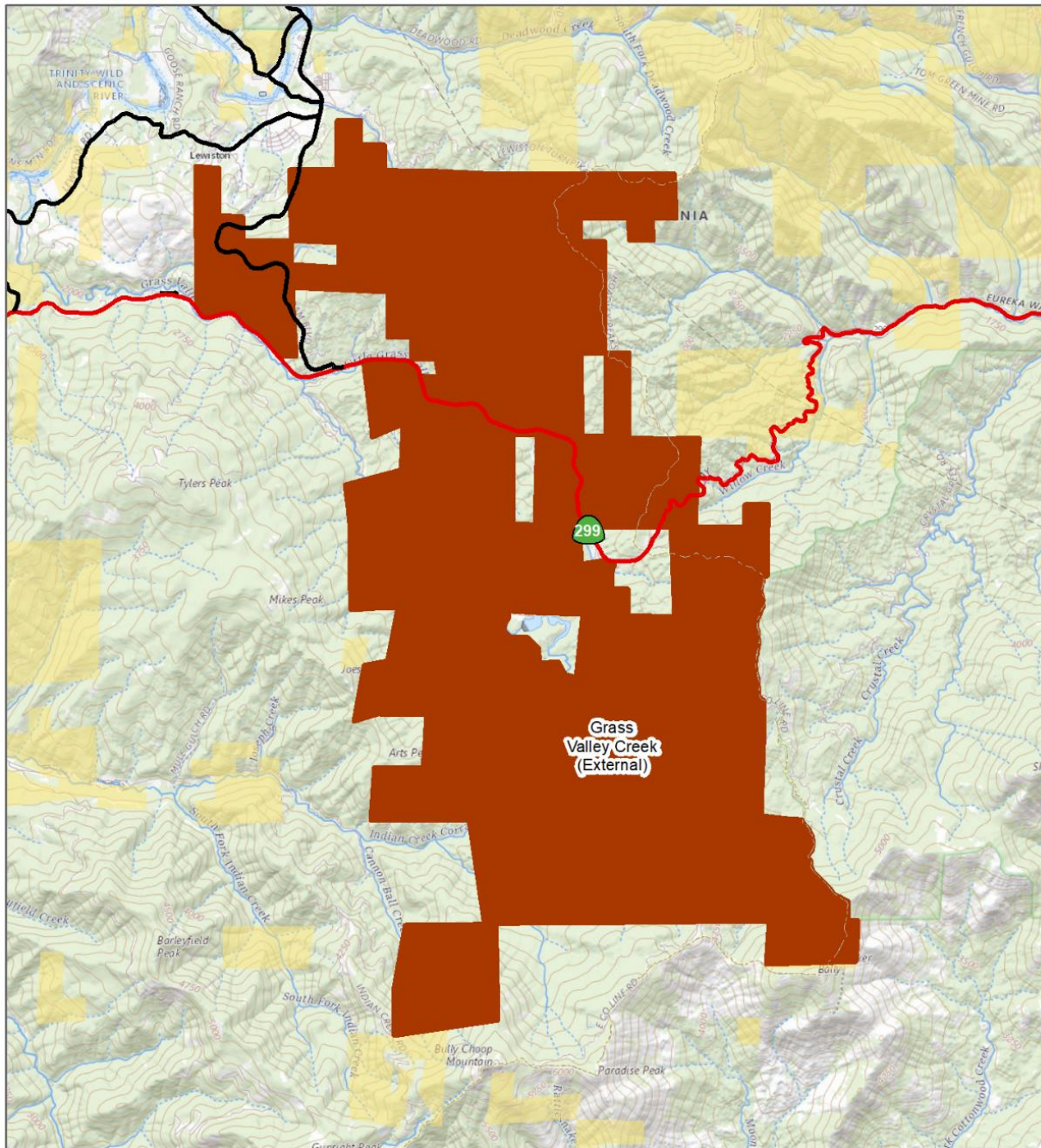
3.13.1 Rationale for ACEC – Fisheries, Soils, Wildlife, and Plant Communities

The Grass Valley Creek ACEC is located south and east of the town of Lewiston in Trinity County, California. The ACEC is proposed to include land both north and south of Highway 299 which includes portions of Grass Valley Creek and several tributaries. Grass Valley Creek ACEC has significant fisheries and soils values. Additionally, the ACEC has 1.7 miles of stream identified as eligible in the 2023 WSR Eligibility Report.

The proposed Alternative B Grass Valley Creek ACEC meets multiple R&I criteria. Grass Valley Creek hosts a unique natural system consisting of rare and sensitive geological and lithological features that can host rare and endemic plant species. The area is characterized by its highly erosive granitic soils. Intact or restored ecosystems such as Grass Valley Creek generally have high climate resilience and have a greater capacity to support species adaptation to climate change. This adaptation is a crucial natural process that can help maintain species diversity in the face of future conditions, as climate change continues to impact ecosystems. Between its high-water availability compared to other areas and the presence of rare geophysical types, Grass Valley is a significant fish and wildlife resource, providing habitat for Threatened and Endangered and BLM sensitive wildlife species. The area contains a significant acreage of federally designated critical habitat for the Northern Spotted Owl, and breeding pairs have been documented in the area. A local elk herd makes extensive use of the area, particularly during calving season. The regional (i.e., more than local) significance and exemplary nature of these values as compared to other places in the West and within BLM’s jurisdiction justify the creation of this ACEC. Finally, Grass Valley Creek is vulnerable to adverse change related to the threat of future water withdrawals and the presence of a potential natural hazard associated with its sensitive soils and high risk of soil erosion.




Areas of Critical Environmental Concern
Report on the Application of the Relevance and Importance Criteria

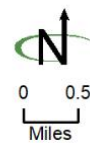
Figure 18 Grass Valley Creek ACEC Map (Alt B)



Proposed ACEC - Grass Valley Creek (External) Alt B

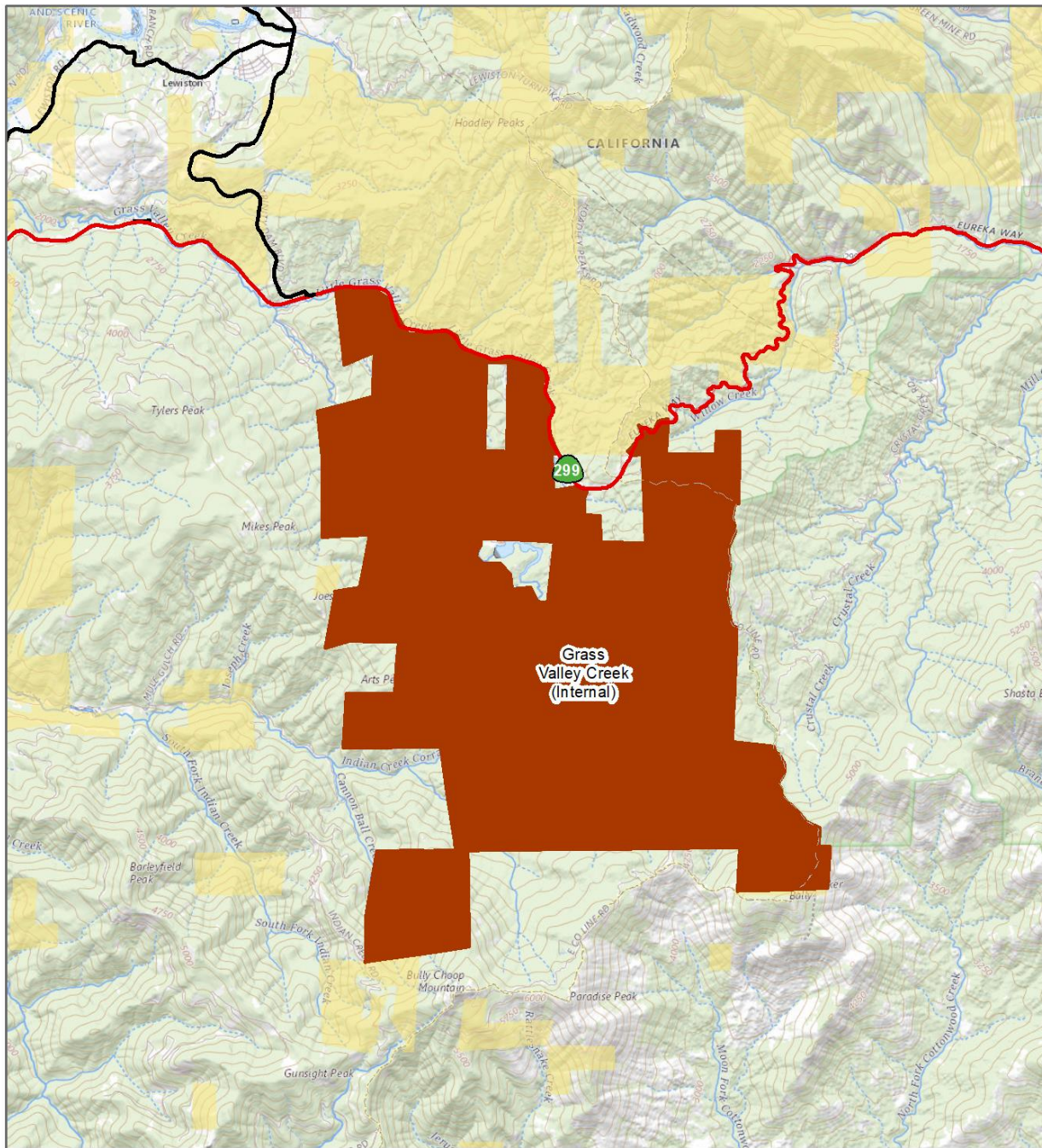
Proposed Areas of Critical Environmental Concern

-  NCIP ACEC (Proposed)
-  Bureau of Land Management
-  Not included in the NCIP decision area



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

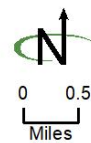
Figure 19 Grass Valley Creek ACEC Map (Alt C)



**Proposed ACEC - Grass Valley
 Creek (Internal) - Alternative C**

Proposed Areas of Critical Environmental Concern

- NCIP ACEC (Proposed)
- Bureau of Land Management



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.14 Swasey Drive ACEC

Table 19: Swasey Drive Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Existing	Cultural and Historic	1	1	Yes	N/A	N/A	468	468

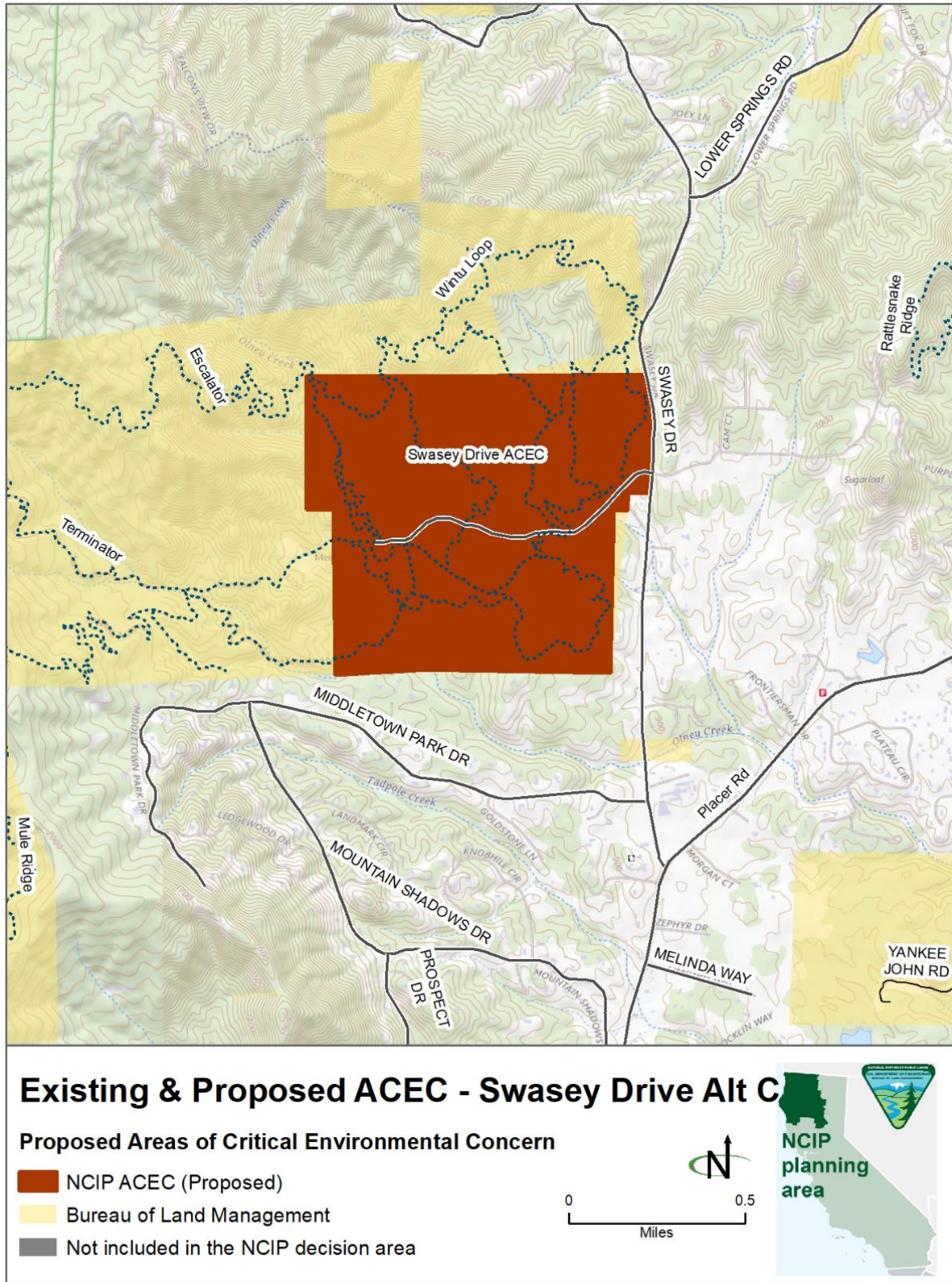
3.14.1 Rationale for ACEC – Cultural and Historic

The Swasey Drive ACEC is located in western Redding in Shasta County, California. The ACEC is west of Swasey Drive and is comprised of a contiguous block of land roughly centered on Delano Drive. The existing 468-acre Swasey Drive ACEC has regionally significant cultural and historic R&I values as it contains important Native American cultural and archaeological areas that comprise an NRHP district setting uncommon in public stewardship, as well as numerous historic archaeological sites. The latter includes important historic sites such as a segment of the regionally significant Clear Creek Ditch, which is over 40 miles long and was constructed in the 1850s.

The proximity of this ACEC to a large population center has resulted in ongoing damage to these irreplaceable values. The primary goal of an ACEC designation is to conserve and interpret the cultural and historic resources on public lands. Special management attention is required and continued designation as an ACEC is warranted.

Areas of Critical Environmental Concern
Report on the Application of the Relevance and Importance Criteria

Figure 20 Swasey Drive ACEC Map (Existing and Alt C, Not Carried Forward Under B)



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.15 Upper and Lower Clear Creek ACEC

Table 20: Upper and Lower Clear Creek Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Proposed	Fisheries	1	1	Partial	Yes ¹⁻³	Yes ²⁻³	N/A	4,558
	Scenic	2	1					

1. The tricolored blackbird is listed as threatened under the CESA.
2. The steelhead – Central Valley DPS is listed as threatened under the ESA.
3. The chinook salmon – Central Valley spring-run ESU is listed as threatened under the ESA.

3.15.1 Rationale for ACEC – Fisheries and Scenic

The Upper and Lower Clear Creek ACEC is in western Redding, Shasta County, California. Lower Clear Creek includes BLM lands primarily along Clear Creek Road slightly west of where the road intersects with Hwy 273 and along Cloverdale Road. Upper Clear Creek includes land along Mule Town Road up to the southern boundary of Whiskeytown National Recreation Area. Upper and Lower Clear Creek ACEC has regionally significant fisheries, scenic values.

Upper and Lower Clear Creek ACEC and Swasey Drive Clear Creek Greenway ACEC proposals cover most of the same areas except for the Swasey Drive Clear Creek Greenway ACEC includes the Swasey Drive ACEC and portions of Mule Mountain. Upper and Lower Clear Creek ACEC and Swasey Drive Clear Creek Greenway ACEC have fisheries as their primary relevance value.

The proposed 4,558-acre Upper and Lower Clear Creek ACEC meets multiple R&I values. BLM would continue to improve lower Clear Creek anadromous salmonid habitat and the scenic values of Clear Creek canyon (above Clear Creek Road). The ACEC has 9.4 miles of stream identified as eligible in the 2023 WSR Eligibility Report.

The Clear Creek watershed below Whiskeytown Dam includes 50 square miles with 18 miles of mainstem stream. Whiskeytown Dam is the limit of the anadromy of the Clear Creek fishery. As a result of more than 3 decades of interagency cooperation involving 20 partner agencies and organizations, the creek supports annual returns of ESA-listed spring run Chinook salmon that are several orders of magnitude larger than they were as recently as 1999, prior to implementation of several extensive, multi-year restoration efforts. The creek supports a robust steelhead fishery that has rebounded similarly. Clear Creek has the potential to produce up to 7.5% of the entire Sacramento River Chinook fishery. Due to its significant fisheries restoration

Areas of Critical Environmental Concern

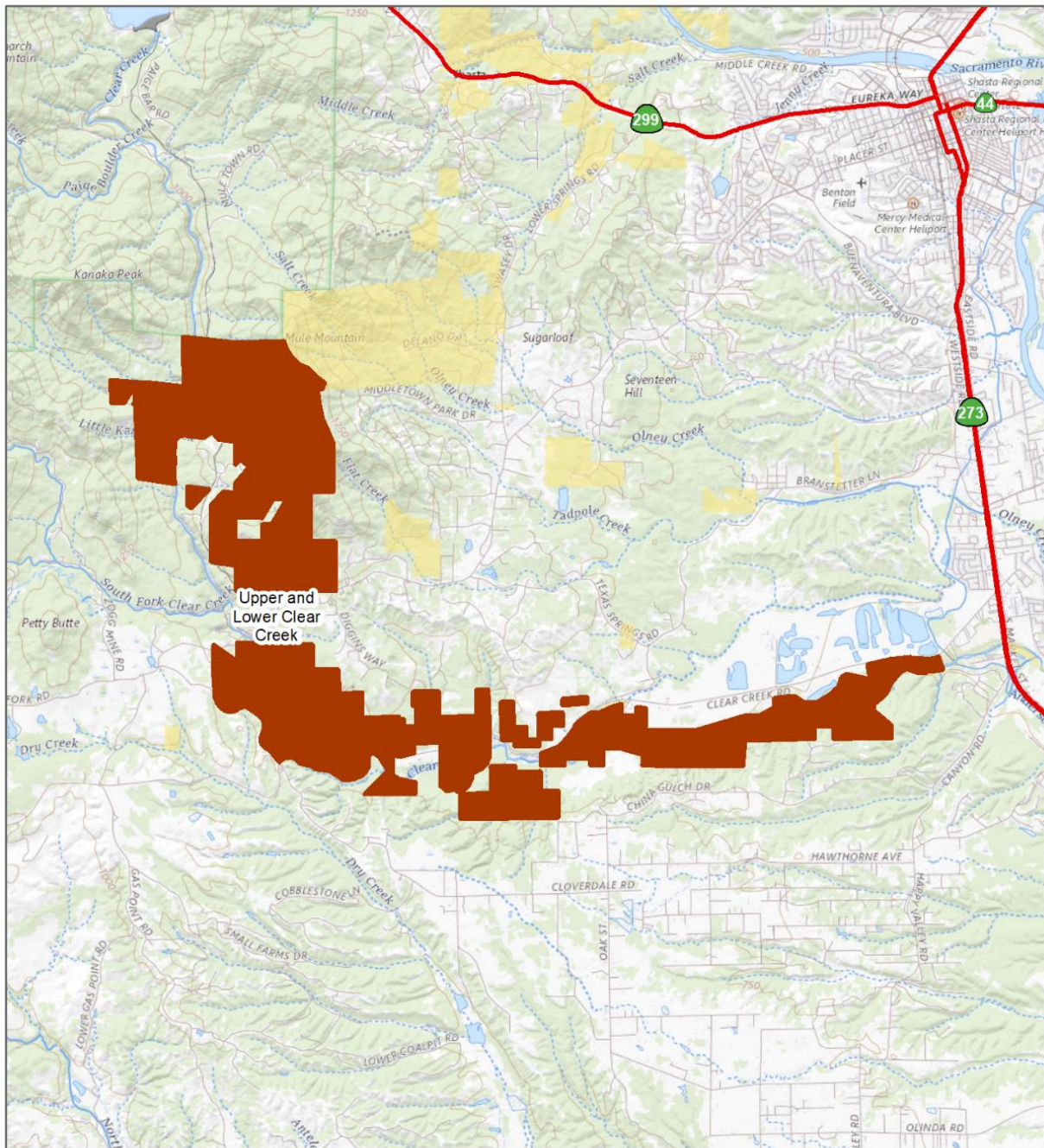
Report on the Application of the Relevance and Importance Criteria

related activities and its location relative to a densely populated urban center, the creek offers a unique combination of outstanding recreational, ecological, and educational resources available perhaps nowhere else in the region.

Most of the lower portion of Clear Creek is managed by Whiskeytown-Shasta-National Recreation Area and the BLM. This lower stretch has been the focus of BLM land acquisitions to conserve and restore this critical fishery and provide recreational opportunities. As a result of these efforts, public access exists from Whiskeytown Dam to the Sacramento River.

Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

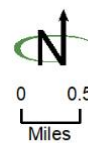
Figure 21 Upper and Lower Clear Creek ACEC Map (Only Carried forward Under Alt D)



Proposed ACEC - Upper and Lower Clear Creek Alt D

Proposed Areas of Critical Environmental Concern

- NCIP ACEC (Proposed)
- Bureau of Land Management
- Not included in the NCIP decision area



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.16 Swasey Drive Clear Creek Greenway ACEC

Table 21: Swasey Drive Clear Creek Greenway Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Proposed	Cultural and Historic	1	1	Partially	Yes ¹⁻⁴	Yes ³⁻⁴	468 (Swasey Drive ACEC)	5,964
	Fisheries	2	1					
	Scenic	2						

1. The foothill yellow-legged frog is listed as endangered under the CESA.
2. The tricolored blackbird is listed as threatened under the CESA.
3. The chinook salmon – Central Valley spring-run ESU is listed as threatened under the CESA and the ESA.
4. The steelhead – Central Valley DPS is listed as threatened under the ESA.

3.16.1 Rationale for ACEC – Cultural and Historic, Fisheries, and Scenic

The Swasey Drive Clear Creek Greenway ACEC is located in western Redding, Shasta County, California. Lower Clear Creek includes BLM lands primarily along Clear Creek Road slightly west of where the road intersects with Hwy 273 and along Cloverdale Road. Upper Clear Creek includes land along Mule Town Road up to the southern boundary of Whiskeytown National Recreation Area. Upper and Lower Clear Creek ACEC has regionally significant cultural and historic, fisheries, and scenic values. As described in the Upper and Lower Clear Creek ACEC, the Swasey Drive Clear Creek Greenway ACEC has 9.4 miles of stream identified as eligible in the 2023 WSR Eligibility Report.

The proposed 5,964-acre Swasey Drive Clear Creek Greenway ACEC meets multiple R&I criteria. The Swasey Drive Clear Creek Greenway hosts a unique natural system consisting of rare and sensitive geophysical and ecological features that support diverse plant communities, including rare and endemic plant species. Its high climate resilience further serves to facilitate natural processes, namely species adaptation to changing climate. The area supports a significant fish and wildlife resource, in that it provides habitat for rare, threatened, and sensitive species. The proposed ACEC is vulnerable to adverse change related to the threat of mineral resource development potential and future water withdrawals, as well as the presence of a potential natural hazard due to its sensitive soils that are highly subject to erosion. This ACEC falls within the ancestral homeland of the Wintu people, to whom it has long been, and remains, a culturally significant place. Sensitive and irreplaceable remnants of historic gold mining are prevalent in the area including locations related to the historic communities of Horsetown, Muletown, and Briggsville. Furthermore, an NRHP district composed of irreplaceable historic,

Areas of Critical Environmental Concern

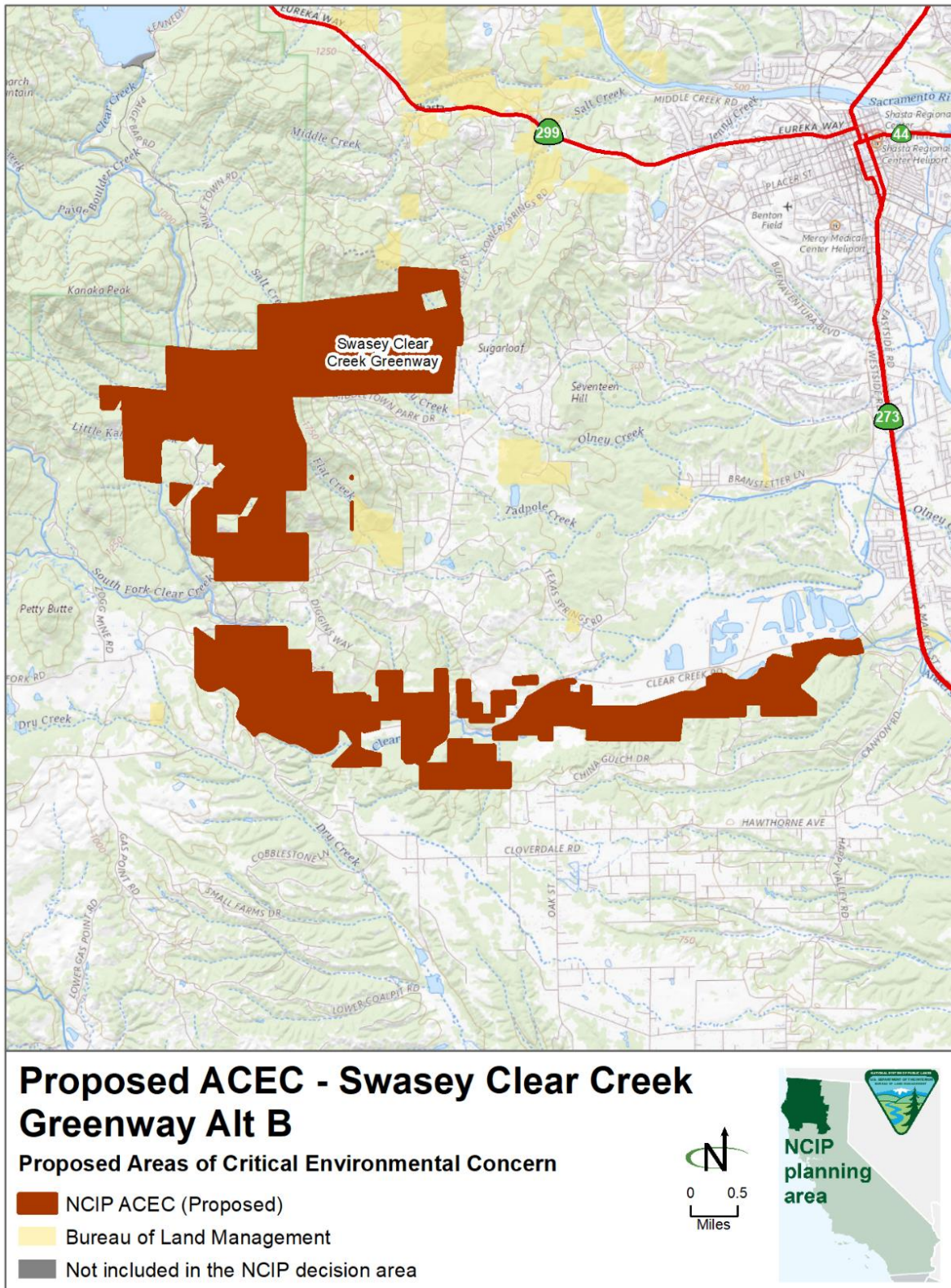
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cultural, and archaeological values that have been damaged by looting, mining, erosion, and fire, and requires continued special management.

The Clear Creek stream ends at the southern edge of the City of Redding and provides one of two (Sacramento River to Shasta Dam being the other) prime opportunities to develop a greenway connecting this population center to significant Federally administered public lands. This greenway will benefit local and regional residents alike. The lower portion of the creek can benefit tremendously from community involvement in anadromous salmonid habitat and riparian habitat restoration projects. Above Clear Creek Road bridge, the canyon and Mule Mountain ridge provide additional primitive recreation opportunities, nonmotorized access, and a scenic backdrop to users. Various interpretive opportunities are present to assist better management of the ACEC.

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Figure 22 Swasey Drive Clear Creek Greenway ACEC (Proposed Alt B, not Carried Forward in Alt C)



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3.17 Sheep Rock ACEC

Table 22: Sheep Rock Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Proposed	Cultural and Historic	1	1	Partially	N/A	N/A	N/A	1,410
	Plant Communities	3	1					
	Wildlife	2	1					

3.17.1 Rationale for ACEC – Cultural and Historic, Plant Communities, and Wildlife

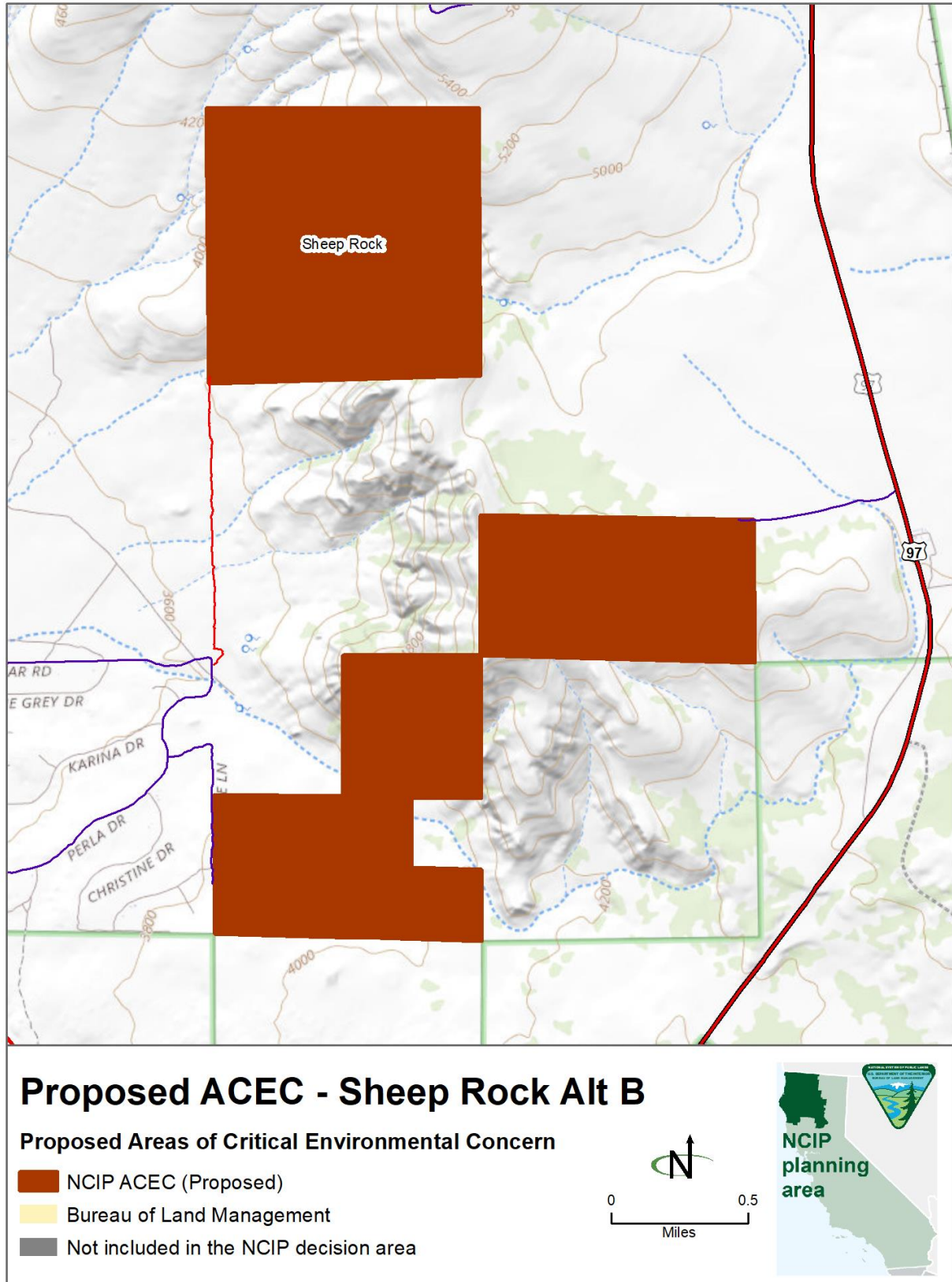
The Sheep Rock ACEC is located approximately 13 miles northeast of the town of Weed in Siskiyou County, California. It is just west of Highway 97 on a prominent mountain known as Sheep Rock. Sheep Rock ACEC has regionally significant values in terms of cultural resources, wildlife, and plant communities.

This ACEC has increased importance because it falls within an identified Essential Connectivity Corridor of High Biological Value. These corridors are areas of intact habitat that are especially important to wildlife and plants for connectivity, ease of migration, and habitat resilience in the era of climate change. Sheep Rock is within the recently elucidated migration corridor for the East Shasta Valley elk herd, which winters in the region. ACEC designation would lend additional protections to the herd. The steep cave and outcrop precipice is also home to sensitive listed raptors, bats, and other animals. The cliffs offer nesting sites for Golden Eagle, Prairie Falcon, Peregrine Falcon, and several other raptors. It is a potential reintroduction site for bighorn sheep after which the area was named.

The proposed 1,410-acre Sheep Rock ACEC meets multiple R&I values. In terms of cultural resources, Sheep Rock is one of the most well-known historic landmarks of northern California. Around its southern base runs the Yreka Trail that is under consideration for designation as a National Historic Trail. Earlier trappers and military groups camped and travelled around the mountainous outcrop. Pre-Contact sites occur in the area, some of which have been looted and are in danger of continued damage. Sheep Rock is also an important landmark to the Shasta Indians. Non-native vegetation is intruding into the location. Illegal vehicle use is also causing damage to some archaeological remains. Signing, fencing, and occasional monitoring have helped in site and resource protection, but more focused study and protection measures are warranted.

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Figure 23 Sheep Rock ACEC Map (Proposed Alt B, not Carried Forward in Alt C)



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3.18 Black Mountain ACEC

Table 3: Black Mountain Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Proposed	Cultural and Historic	1	1	No	N/A	N/A	N/A	1,114
	Plant Communities	3	1					

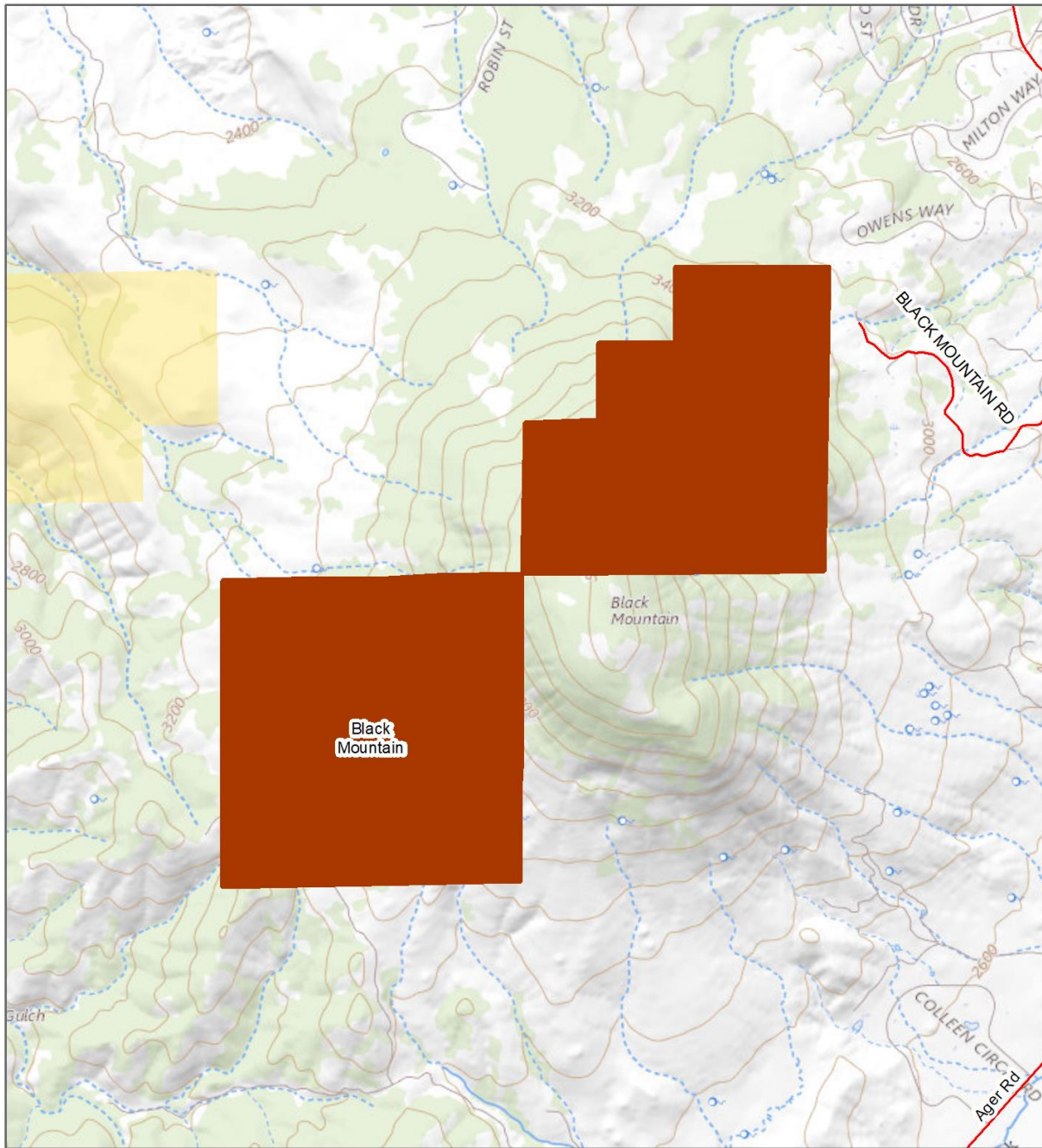
3.18.1 Rationale for ACEC – Cultural and Historic, and Plant Communities

The Black Mountain ACEC is located approximately 10 miles north-northwest of Yreka and about 4 miles southeast of Hornbrook in Siskiyou County, California. The proposed ACEC comprises the BLM lands on Black Mountain, a prominent local landmark. Black Mountain ACEC has regionally significant values in terms of cultural resources, fisheries, and plant communities.

The proposed 1,114-acre Black Mountain ACEC meets multiple R&I values. Black Mountain is a Traditional Cultural Property as identified by Shasta Tribal informants. Access for Tribal visitation is sharply curtailed by private surrounding lands. The location also contains pristine conifer forest stands that exhibit old growth characteristics which provide invaluable ecosystem services and unique geologic features including an isolated volcanic dome with massive talus slopes. The mountain is home to an unusual mix of plants and animals often disturbed by feral hog herds. At least one BLM sensitive plant, *Lomatium greeneii*, is present and others are suspected. Sensitive listed raptors and other animal species are concentrated on this mountain. Its relative seclusion has allowed some measure of current protection for various animal species, but nearby developments and population increases may lead to more visitation and resource damage. Non-native vegetation is encroaching on the natural systems present. Focused scientific studies should be conducted on this mountain to help better understand the resources present and their vulnerability. The watershed feeds the Klamath River with its important fisheries and needs continued protection.




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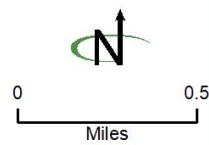
Figure 24 Black Mountain ACEC Map (Proposed Alt B, not Carried Forward in Alt C)



Proposed ACEC - Black Mountain Alt B

Proposed Areas of Critical Environmental Concern

-  NCIP ACEC (Proposed)
-  Bureau of Land Management
-  Not included in the NCIP decision area



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3.19 Upper Klamath Bench ACEC

Table 24: Upper Klamath Bench Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Proposed	Cultural and Historic	1	1	No	Yes ¹⁻²	N/A	N/A	89

1. The shortnose sucker is listed as endangered under the CESA and the ESA.
2. The Lost River sucker is listed as endangered under the CESA and the ESA.

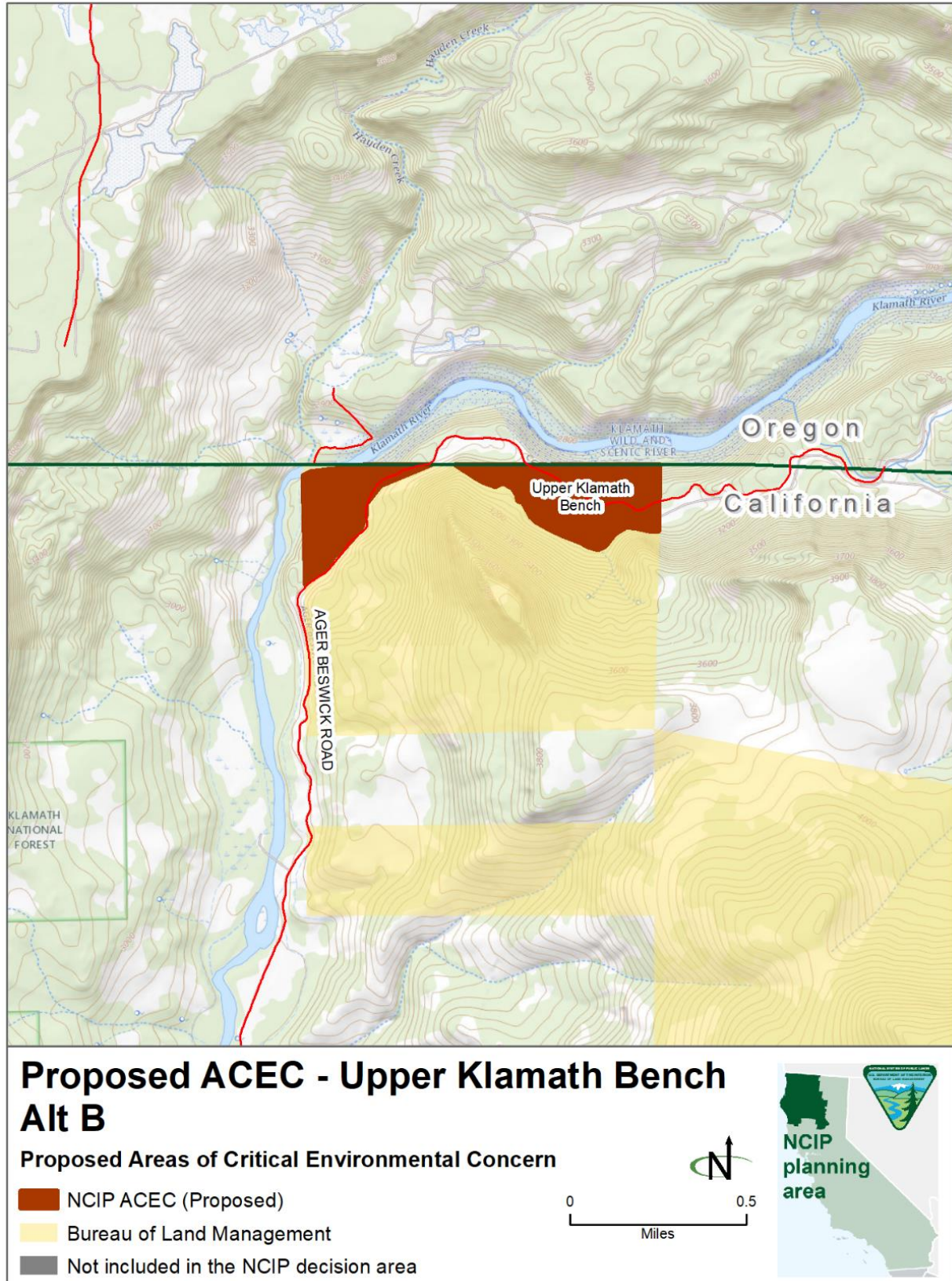
3.19.1 Rationale for ACEC – Cultural and Historic

The Upper Klamath Bench ACEC is located just south of the Oregon-California border approximately 13.5 miles west-northwest of the town of Dorris in Siskiyou County, California. The proposed ACEC is located along the Klamath River to the west and north, adjacent to Ager Beswick.

The proposed 89-acre Upper Klamath Bench ACEC meets multiple R&I criteria, particularly in terms of cultural and historic resources. These resources have been damaged by looting, feral horse trampling, woodcutting, fire-suppression activities, camping, and OHV use. Attempts to curtail damaging activities including fencing, signing, and infrequent monitoring have been partially successful. However, more focused attention and protection-based activities are warranted. Upper Klamath Bench ACEC Map (Proposed Alt B not Carried Forward in Alt C)

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Figure 25 Upper Klamath Bench ACEC Map (Proposed Alt B, not Carried Forward in Alt C)



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3.20 Upper Mattole Valley ACEC

Table 4: Upper Mattole Valley Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Proposed	Fisheries	2	1	Mostly	Yes ¹	Yes ²⁻⁵	N/A	459
	Plant Communities	3	1					
	Wildlife	2	1					

1. Marbled Murrelet (*Brachyramphus marmoratus*)
2. Northern Spotted Owl (*Strix occidentalis caurina*)
3. Chinook salmon – California Coastal ESU
4. Coho salmon – Southern Oregon-Northern California Coast ESU
5. Steelhead – Northern California DPS

3.20.1 Rationale for ACEC – Fisheries, Plant Communities, and Wildlife

The Upper Mattole Valley ACEC is located on several discontinuous blocks of land along the Mattole River and its tributaries, near the town of Whitethorn in Humboldt County, California and the ACEC has 0.7 miles of stream identified as eligible in the 2023 WSR Eligibility Report. The Upper Mattole Valley ACEC has regionally significant fisheries values and contains threatened species and critical fish and wildlife habitat. Significant hydrologic impairments exist in the ACEC that impact the potential for recovery of listed fish species. The principal impairment is a lack of adequate summer streamflow and seasonally drying stream reaches that would otherwise have the potential to support fish. The lack of streamflow is the result of a multitude of factors, including overly dense forest stands, loss of groundwater storage and human use. Great strides have been made within the private lands to address the human use component. However, much work remains to address the other factors driving the hydrologic impairments.

The proposed 460-acre Upper Mattole Valley ACEC meets multiple R&I values, including fisheries, plant communities, and wildlife. Chinook salmon, coho salmon, and steelhead are present, which are all listed as threatened under the ESA. In addition, the area provides critical habitat for the marbled murrelet (*Barchyramphus marmoratus*) and northern spotted owl (*Strix occidentalis caurina*).

This ACEC has increased importance because it falls within statewide identified Essential Corridors of High Biological Value. The corridors are areas of natural habitat that are especially

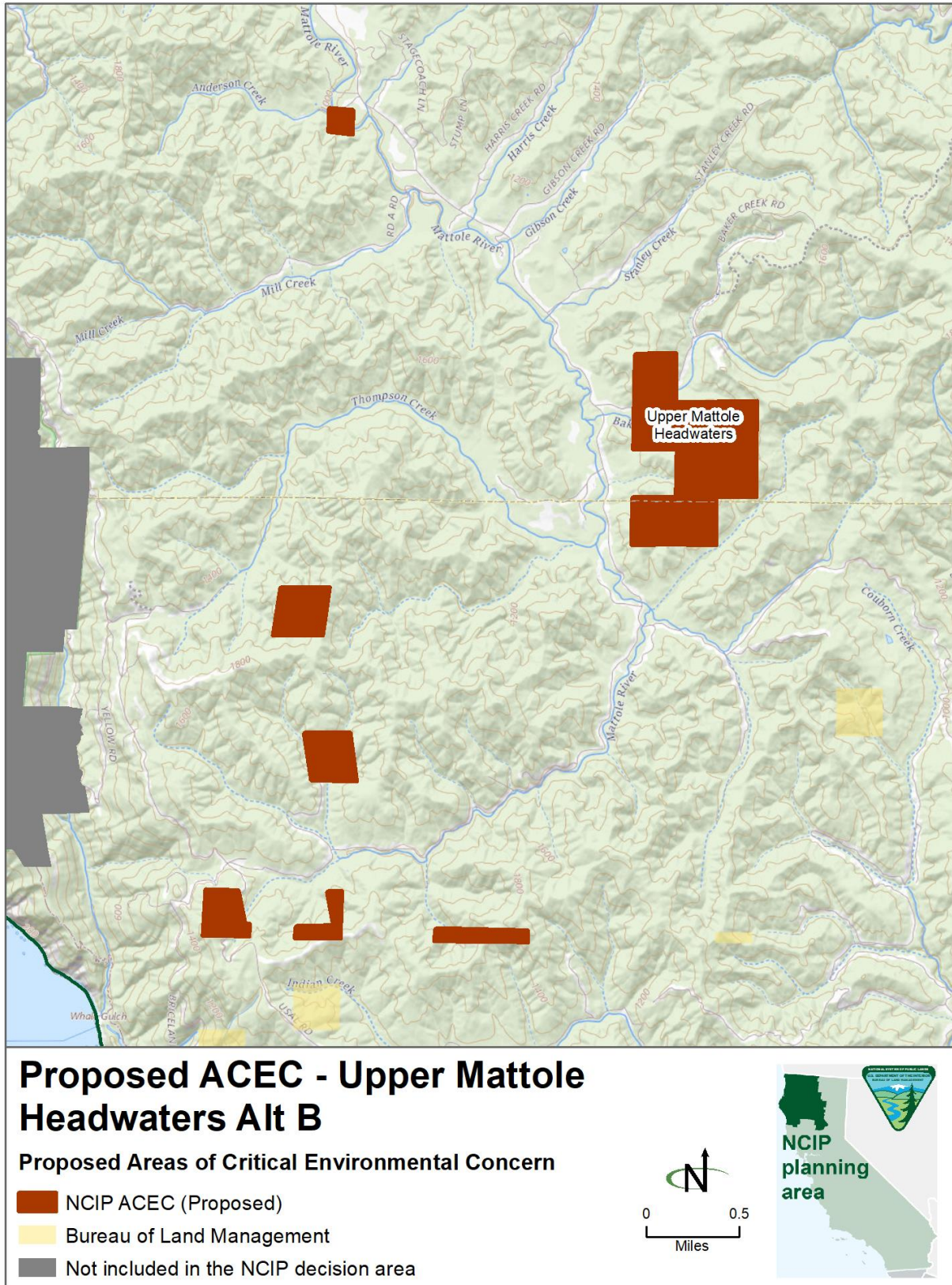
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important to wildlife and plants for connectivity, ease of migration, and habitat resilience in the era of climate change.

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Figure 26 Upper Mattole Valley ACEC Map (Proposed Alt B, not Carried Forward in Alt C)



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3.21 Eden Valley ACEC

Table 26: Eden Valley Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Proposed	Fisheries	2	1 2	No	Yes ¹	Yes ¹⁻²	N/A	Alt B – 10,807; Alt C – 4,588
	Wildlife	2	1 2					
	Natural Process/System	3	1 2					

1. Middle Fork Eel River, Elk, Eden, Ellis, Shake, and Deep Hole creeks support ESA threatened steelhead.
2. Middle Fork Eel River, Elk Creek, and Eden Creek support ESA threatened Chinook salmon.

3.21.1 Rationale for ACEC – Fisheries, Wildlife, and Natural Process/System

The Eden Valley ACEC is located in a large land area between Elk Creek to the east and Hearst-Willis Road the west, Eden Creek to the north, and the Mendocino National Forest boundary line to the south. This area is known as Eden Valley and is located in Mendocino County, California, approximately 11 miles southeast of Covelo. Eden Valley ACEC has regionally significant fisheries, wildlife, and natural process/system values. Additionally, the ACEC has 15.4 miles of stream identified as eligible in the 2023 WSR Eligibility Report.

The proposed Eden Valley ACEC meets multiple R&I criteria. The proposed Eden Valley ACEC hosts a unique natural system consisting of rare and sensitive geologic and ecological features, including irreplaceable rare and endemic plant species and cultural resources. Its ecological intactness further serves to facilitate natural processes, such as evolutionary adaptation to changing temperature and precipitation regimes. The area constitutes a significant fish and wildlife resource in its provision and yield of critical summer-time cold water and habitat for threatened anadromous fish species.

The proposed Eden Valley ACEC contains the largest, western-most, contiguous serpentine outcrop in the region, and as such, provides unique plant endemism, mineral composition, and critical cold-water resources of a type and scale necessary for maintaining key ecological processes. BLM currently manages about seventy-five percent of the existing serpentine

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outcrops in the Eden Valley vicinity. This is critically important given that many private lands in the region are often ecologically and functionally fragmented, or at risk of subdivision and development.

Unique geology is the foundation of serpentine barrens and the interdependent rare and endemic plants they support, several of which are likely yet undescribed to science, they support. Serpentine barrens are a unique ecoregion found in the coast ranges of the United States. In California, approximately 1.5 percent of California's land base is underlain by serpentine soil. Of species endemic to California, 12.5 percent are restricted to ultramafic substrates. The North Coast and Klamath Ranges support more serpentine endemics than the rest of California combined. Fifteen percent of all plant taxa listed as threatened or endangered in California show some degree of association with ultramafic substrates.

Serpentine soils are of immense value for plant endemism and the study of botanical evolution that can provide unique insight into the effects of a changing climate. The proposed Eden Valley ACEC includes the largest northern stand of Sargent's cypress (*Hesperocyparis sargentii*) in the world. Sargent's cypress is both native and endemic to California. Cypress typically occurs in small patches with low genetic diversity. However, the isolation and size of Sargent's cypress stands in Eden Valley suggest the community has high genetic diversity. Sargent's cypress is a closed-cone conifer that requires fire to open the cone scales to promote good germination. Stand recruitment and resilience benefits from an ongoing natural disturbance regime. Through geologic time, a species range is in a state of continual movement, expanding or contracting. The Eden Valley Sargent Cypress stand exists at the edge of its range (within 12 miles), and thus contains important information as to the ecological amplitude for which the species will tolerate. Preservation and study of this stand may be important for insight into the effects of a changing climate.

The proposed Eden Valley ACEC contains two rare plant communities, Ultramafic Cypress Woodland and Valley Oak Woodland and Forest; as well as more than 12 rare plants, and potentially eight or more taxa yet undescribed.

Five major streams are located within the proposed Eden Valley ACEC. Shake, Ellis, Deep Hole, Toney, and Eden Creeks flow from ultramafic rock bodies on public lands, and eventually join with Elk Creek. Elk Creek is a major tributary that joins the Middle Fork of the Eel River, one and a half miles downstream of the Eden Creek confluence. The Middle Fork of the Eel River and Elk Creek are important salmonid bearing tributaries that contain threatened populations of steelhead trout and Chinook salmon. These streams also support the Pacific Lamprey which is a BLM Sensitive species and federal Species of Special Concern. The 1990 BLM Wilderness Study Report also lists Deep Hole Creek as a productive small stream for steelhead and resident rainbow trout. Juvenile salmonids were also observed by BLM personnel on the lower portion of Eden Creek in October of 2002. The unique serpentine bedrock yields critical summer

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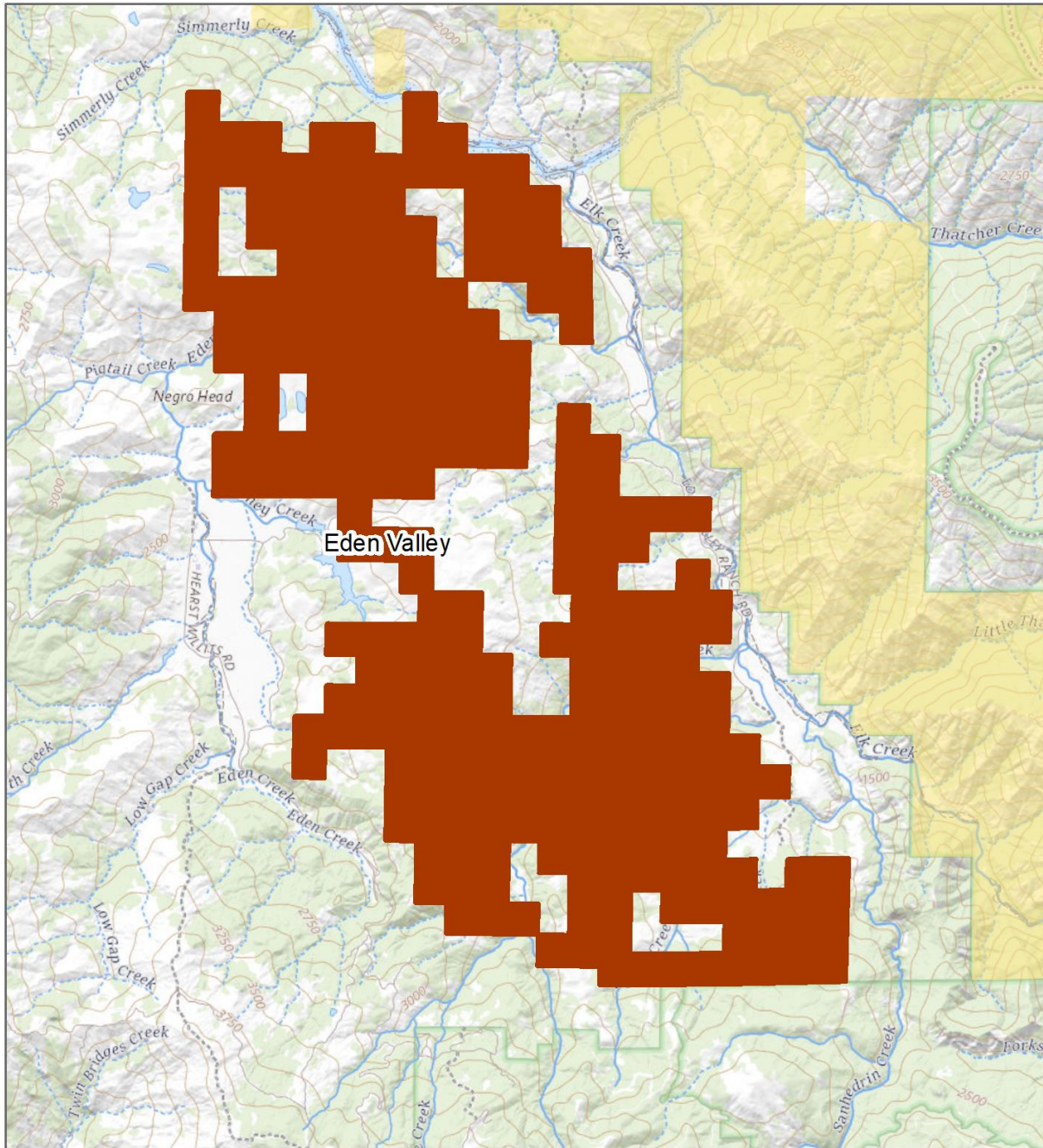
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sources of cold water to threatened salmonids. Such cold-water refuge habitats are becoming increasingly important as atmospheric temperatures continue to rise with corresponding impacts to water quality and quantity.

This proposed ACEC also hosts a wealth of cultural resources. The Eden Valley area is situated within the ancestral territory of the Yuki people. The rich natural resources of the Eden Valley ACEC are a major factor in the settlement of the area. Archaeological sites such as hunting camps, resource procurement and activity areas, and permanent habitation/village sites are often found in the region.




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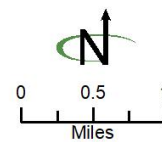
Figure 27 Eden Valley ACEC Map (Alternative B)



Proposed ACEC - Eden Valley Alt B

Proposed Areas of Critical Environmental Concern

-  NCIP ACEC (Proposed)
-  Bureau of Land Management
-  Not included in the NCIP decision area



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3.22 Eden Creek ACEC

Table 27: Eden Creek Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Proposed	Fisheries	2	1 2	No	Yes ¹⁻²	Yes ¹⁻²	N/A	4,588
	Wildlife	2	1 2					
	Natural Process/System	3	1 2					

1. Middle Fork Eel River, Elk and Eden creeks support ESA threatened steelhead
2. Middle Fork Eel River, Elk and Eden creeks support ESA threatened Chinook salmon.

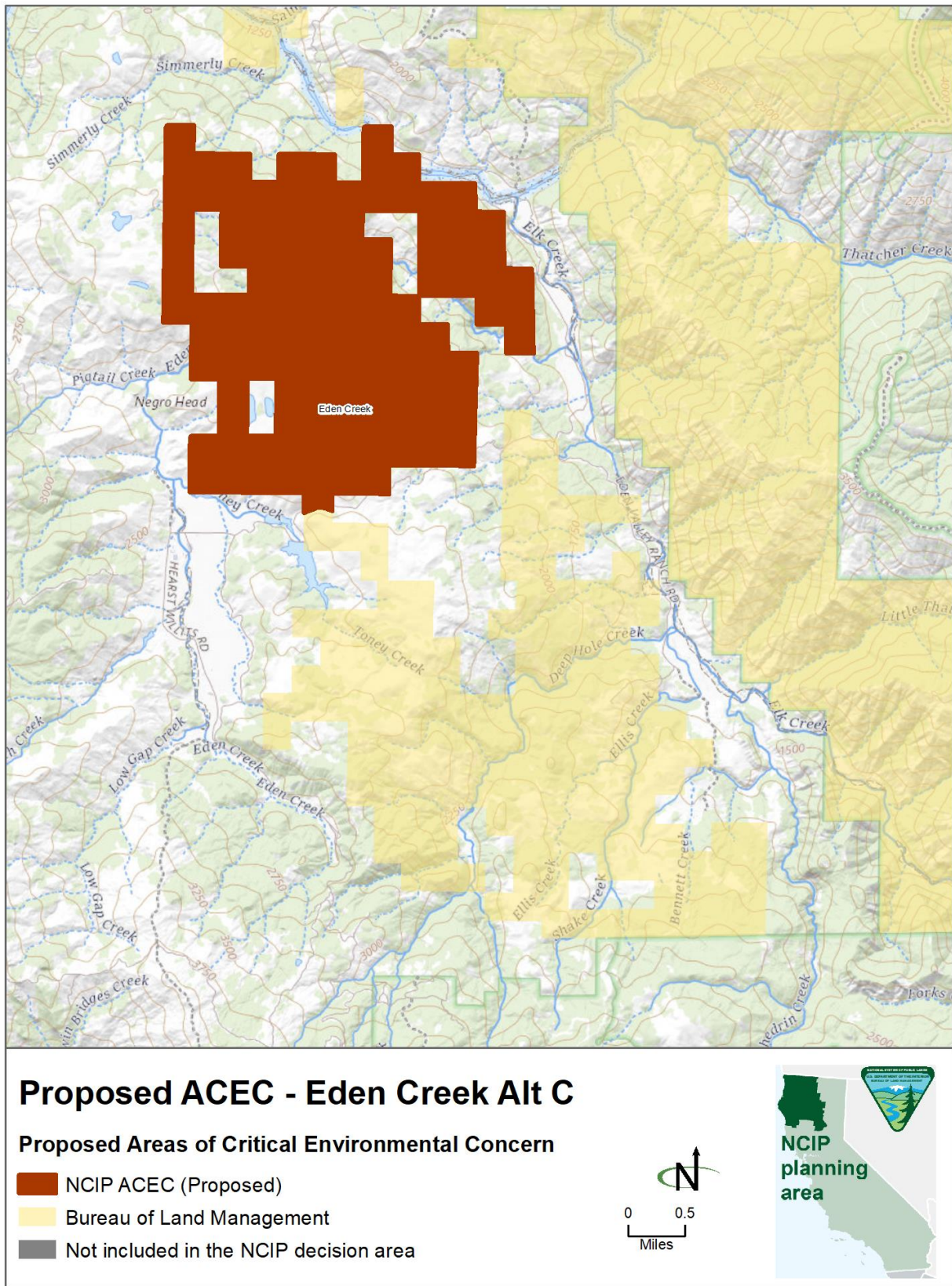
3.22.1 Rationale for ACEC – Fisheries, Wildlife, and Natural Process/System

The Eden Creek ACEC is southeast of Round Valley and northeast of Willits. The area contains roughly 200 acres of the Middle Fork Eel Wild in the area’s northeastern corner and the Yuki Wilderness is a located quarter mile to the east. Eden Creek ACEC contains regionally significant fisheries, wildlife, and natural process/system values.

The proposed Eden Creek ACEC meets multiple R&I criteria. The proposed ACEC provides important wildlife habitat, particularly for rare species due to the area’s geophysical diversity and ecological system diversity and rarity. Portions of the proposed Eden Creek ACEC are within federally-designated critical habitat for Chinook salmon (Middle Fork Eel River), steelhead (Middle Fork Eel River, Elk Creek, and Eden Creek), and the area provides potential habitat for numerous other at-risk species due to the harsh serpentine soils and diverse landforms.

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Figure 28 Eden Creek ACEC Map (Alt C)



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3.23 Beegum Creek Gorge ACEC

Table 28: Beegum Creek Gorge Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Proposed	Fisheries	2	1	Partial	Yes ¹⁻²	Yes ¹⁻²	N/A	4,377
	Wildlife	2	1					
	Natural Process/System	3	1					

1. The steelhead – Central Valley DPS is listed as threatened under the ESA.
2. The Chinook salmon – Central Valley spring-run ESU is listed as threatened under the CESA and threatened under the ESA.

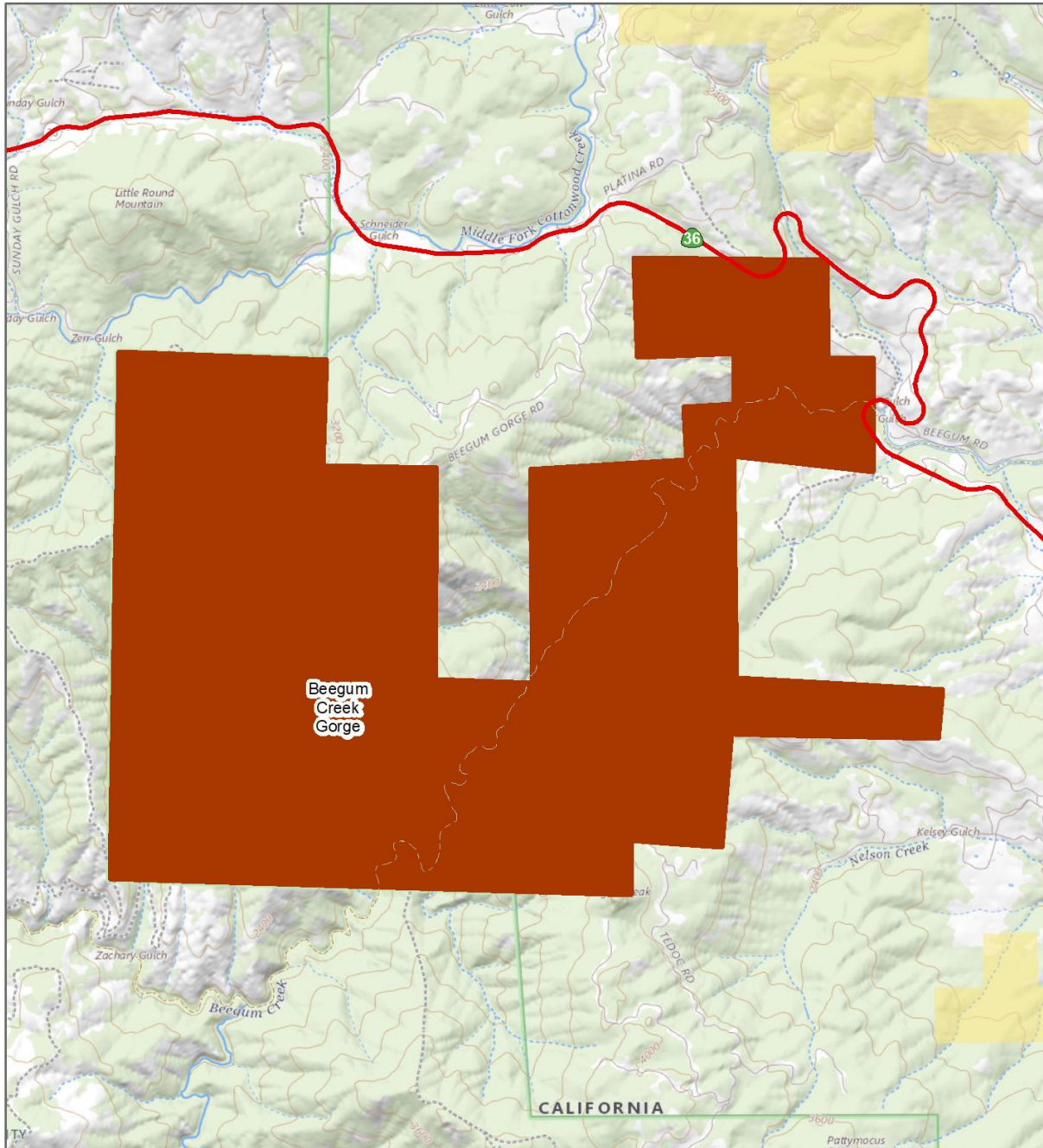
3.23.1 Rationale for ACEC – Fisheries, Wildlife, and Natural Process/System

The Beegum Creek Gorge ACEC is located in Tehama County and surrounds Beegum Creek, which flows through a deep gorge accessible from Highway 36 west of Red Bluff. The proposed Beegum Creek Gorge ACEC meets multiple R&I criteria and has 4.7 miles of stream identified as eligible in the 2023 WSR Eligibility Report. Beegum Creek Gorge hosts a unique natural system consisting of rare and sensitive geological and lithological features that could support rare and endemic serpentine plant species such as the Beegum Onion, Tracy’s eriastrum, sickle-fruit jewelflower, and Stebbin’s harmonia. It further serves to facilitate natural processes essential to maintaining species diversity due to its climate resiliency and ecological intactness. The area supports a significant fish and wildlife resource, providing habitat for multiple threatened and sensitive species (e.g., Chinook salmon, steelhead). Conservation Science Partners’ analyses further demonstrate the regional (i.e., more than local) significance and exemplary nature of these values as compared to other places in the West and within BLM’s jurisdiction. Finally, their analysis highlights the Beegum Creek’s vulnerability to adverse change related to the threat of mineral resource development, future water withdrawals, and the presence of sensitive soils, which may present a natural hazard due to their high erosion potential.

This ACEC has increased importance because it occurs within statewide-identified Essential Corridors of High Biological Value. The corridors are areas of natural habitat that are especially important to wildlife and plants for connectivity, ease of migration, and habitat resilience in the era of climate change. Further, the ACEC lies within critical winter range for one of California’s declining black-tailed deer (*Odocoileus hemionus*) herds. Additionally, the area has had recent intense fire activity increasing soil erosion.

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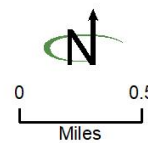
Figure 29 Beegum Creek Gorge ACEC Map (Alt B, not Carried Forward in Alt C)



**Proposed ACEC - Beegum Creek Gorge
 Alt B**

Proposed Areas of Critical Environmental Concern

- NCIP ACEC (Proposed)
- Bureau of Land Management
- Not included in the NCIP decision area



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3.24 North Fork Eel ACEC

Table 29: North Fork Eel Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Proposed	Fisheries	2	1	No	Yes ¹	No	N/A	500
	Wildlife	2	1					
	Natural Process/System	3	1					
	Natural Hazards	4	3 4					

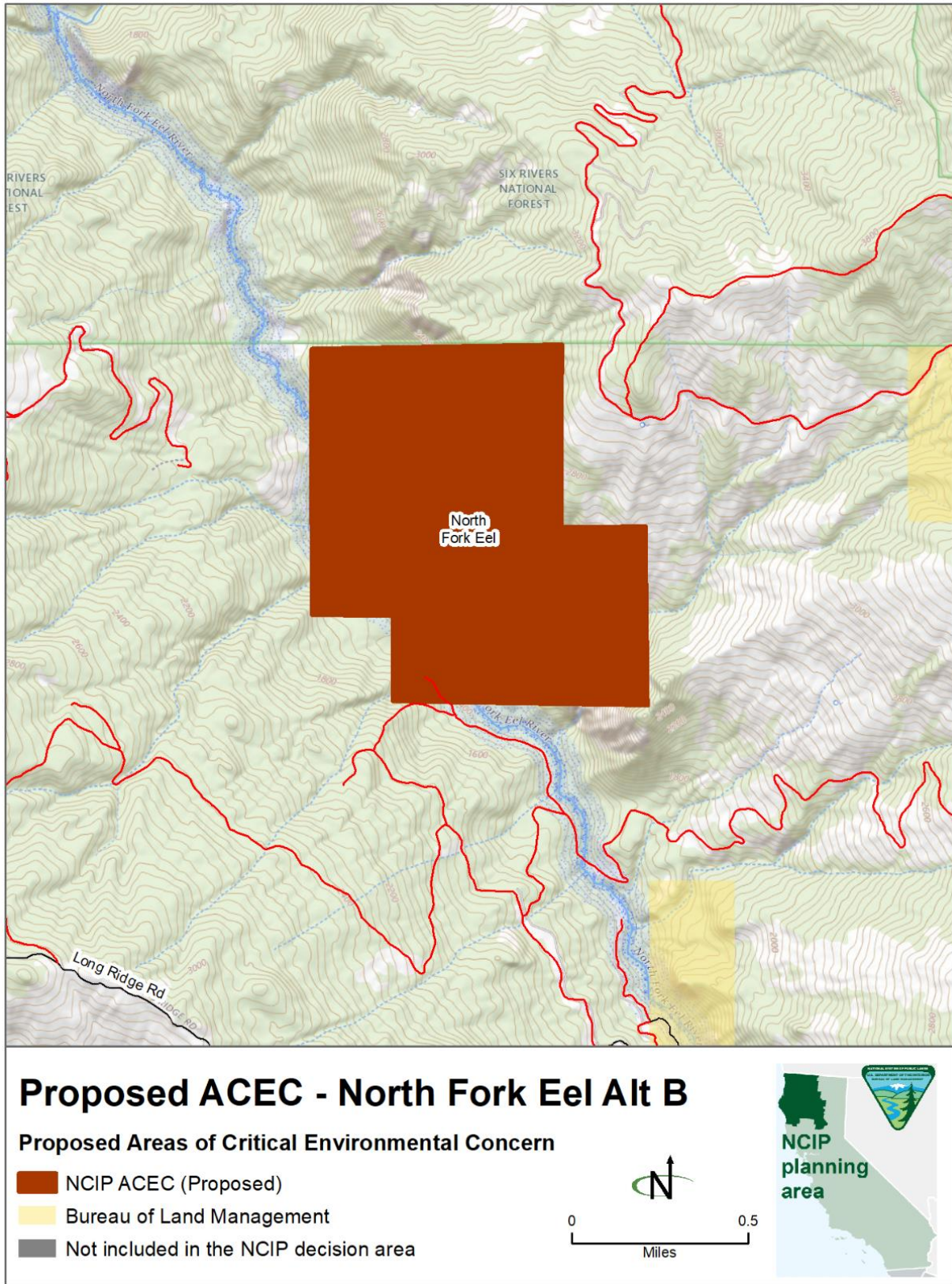
1. Steelhead are listed as threatened under the ESA.

3.24.1 Rationale for ACEC – Fisheries, Wildlife, Natural Process/System, and Natural Hazards

The proposed North Fork Eel ACEC is straddles the designated Wild and Scenic North Fork Eel River in the south-central portion of Trinity County and meets multiple R&I criteria. The proposed ACEC hosts a unique natural system consisting of rare and sensitive geological and lithological features, which support rare and endemic plant species. Its climate resilience and ecological intactness further serve to facilitate natural processes, including ecological flows and species adaptation to climate change. The area offers a significant fish and wildlife resource by providing habitat for multiple threatened or sensitive species. The area contains values with regional (i.e., more than local) significance and exemplary nature as compared to other places in the West and within BLM’s jurisdiction. Finally, the North Fork Eel is vulnerable to adverse change related to the threat of future water withdrawals, and the potential presence of a natural hazard due to its sensitive and erosion-prone soils.

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Figure 30 North Fork Eel ACEC Map (Alt B, not Carried Forward in Alt C)



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3.25 Willis Ridge ACEC

Table 30: Willis Ridge Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria see Section 2.1 for Relevance Criterion	Importance Criteria see Section 2.2 for Importance Criterion	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Proposed	Cultural and Historic	1	1	No	N/A	Yes ¹	N/A	3,184
	Fisheries	2	1					
	Wildlife	2	1					
	Natural Process/System	3	1					
	Natural hazards	4	4					

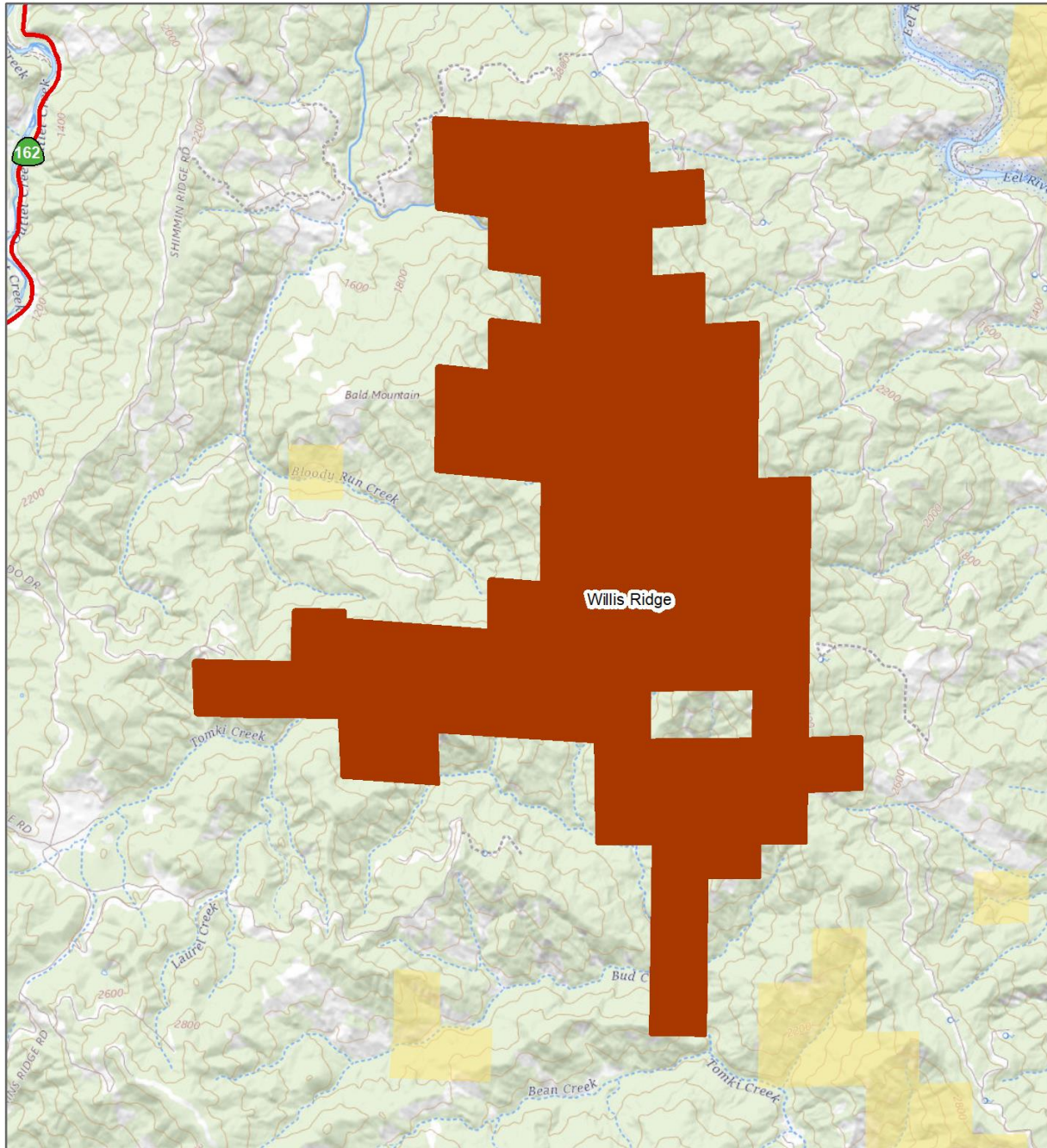
1. Northern Spotted Owl (*Strix occidentalis caurina*)

3.25.1 Rationale for ACEC – Cultural and Historic, Fisheries, Wildlife, Natural Process/Systems, and Natural Hazards

Located south of State Highway 162 in Mendocino County, Willis Ridge is the divide between Outlet Creek and Tomki Creek, which are two tributaries of the Wild and Scenic Eel River and serves as the headwaters for Tomki Creek and Bloody Run Creek. The proposed Willis Ridge ACEC meets multiple R&I criteria and has 2.6 miles of stream identified as eligible in the 2023 WSR Eligibility Report. The ACEC hosts a unique natural system consisting of rare and sensitive geophysical and ecological features, including rare and endemic plant species, as well as forests with late successional characteristics. Its climate resilience and ecological intactness further serve to facilitate natural processes, such as adaptation to climate change. The area constitutes a significant fish and wildlife resource in its provision of habitat for rare, threatened and sensitive species. Conservation Science Partners (CSPs) analyses further demonstrate the regional (i.e., more than local) significance and exemplary nature of these values as compared to other places in the West and within BLM’s jurisdiction. Finally, their analysis highlights the Willis Ridge’s vulnerability to adverse change and the presence of a potential natural hazard associated with sensitive soils that are highly subject to erosion.




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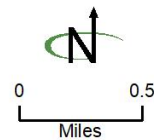
Figure 31 Willis Ridge ACEC Map (Alt B not Carried Forward in Alt C)



Proposed ACEC - Willis Ridge Alt B

Proposed Areas of Critical Environmental Concern

-  NCIP ACEC (Proposed)
-  Bureau of Land Management
-  Not included in the NCIP decision area



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3.26 South Spit ACEC

Table 31: South Spit Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Proposed	Fisheries	2	1	No	Yes ¹⁻³	Yes ³	N/A	888 ⁴
	Wildlife	2	1					
	Natural Process/System	3	1					
	Cultural Significance	1	2					

1. Beach layia is listed as endangered under the CESA and the ESA.
2. Menzies’ wallflower is listed as endangered under the CESA and the ESA.
3. The western snowy plover is listed as threatened under the ESA.
4. The best available GIS data was used to calculate acres and create the South Spit ACEC Map however, South Spit ACEC is on a shoreline, which tends to change. There may be small variations between this data and current conditions.

3.26.1 Rationale for ACEC – Fisheries, Wildlife, Natural Process/System, and Cultural and Historic

The proposed South Spit ACEC is a narrow strip of land (approximately 4.5 miles long) between Humboldt Bay’s entrance and Table Bluff and meets multiple R&I criteria. The proposed ACEC provides essential coastal dune habitat for continued existence and recovery of beach layia, Menzie’s wallflower, western snowy plover, and a multitude of other BLM Sensitive Species. The proposed South Spit ACEC is comprised of four California Sensitive Plant Communities that are vulnerable to critically imperiled, such as northern foredune grassland, active coastal dunes, northern coastal salt marsh, and brackish coastal marsh. With active management, these native and rare communities can be recovered where invasive, non-native species have affected community composition and processes that sustain them. These habitats provide essential habitat to a variety of wildlife and native pollinators.

The proposed South Spit ACEC is appropriate for observation and study of natural, physical dune processes in furthering understanding of landform adaptation and resilience in a coastal barrier system, which offers broader management implications for the state of California.

Areas of Critical Environmental Concern

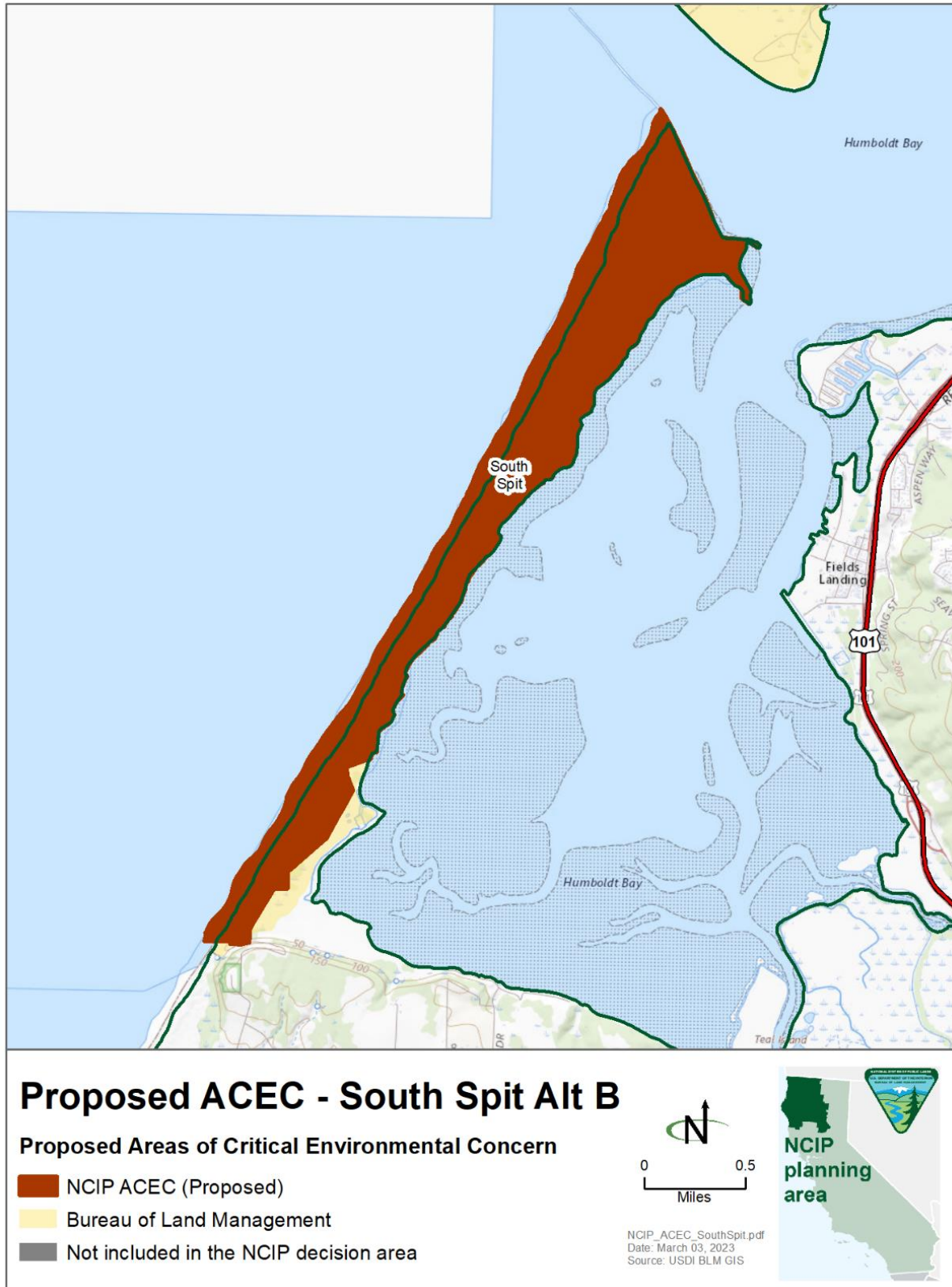
Report on the Application of the Relevance and Importance Criteria

Cultural resources also meet the R&I criteria to promote a South Spit ACEC. This unit of land has been used by people for hundreds of years and falls within the ancestral homeland of the Wiyot people. The area is culturally significant and is still important to the Wiyot people as a place to engage in traditional practices.

The proposed South Spit ACEC provides wildlife-related access for waterfowl hunting and fishing, and other recreational uses such as pedestrian use, vehicular wave slope access, equestrian use, jogging, bicycling, hang-gliding and picnicking. In order to best manage for the unique, rare, threatened, endangered, dynamic natural and vulnerable qualities of the South Spit, the BLM recommends the South Spit as warranting of special management considerations.

Areas of Critical Environmental Concern
Report on the Application of the Relevance and Importance Criteria

Figure 32 South Spit ACEC Map (Alt B, not Carried Forward in Alt C)



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.27 Corning Vernal Pools ACEC

Table 32: Corning Vernal Pools Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria see Section 2.1 for Relevance Criterion	Importance Criteria see Section 2.2 for Importance Criterion	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Proposed	Wildlife	2	1	No	Yes ¹	N/A	N/A	173
	Natural Process/System	3	1					

1. The vernal pool fairy shrimp is listed as threatened under the ESA

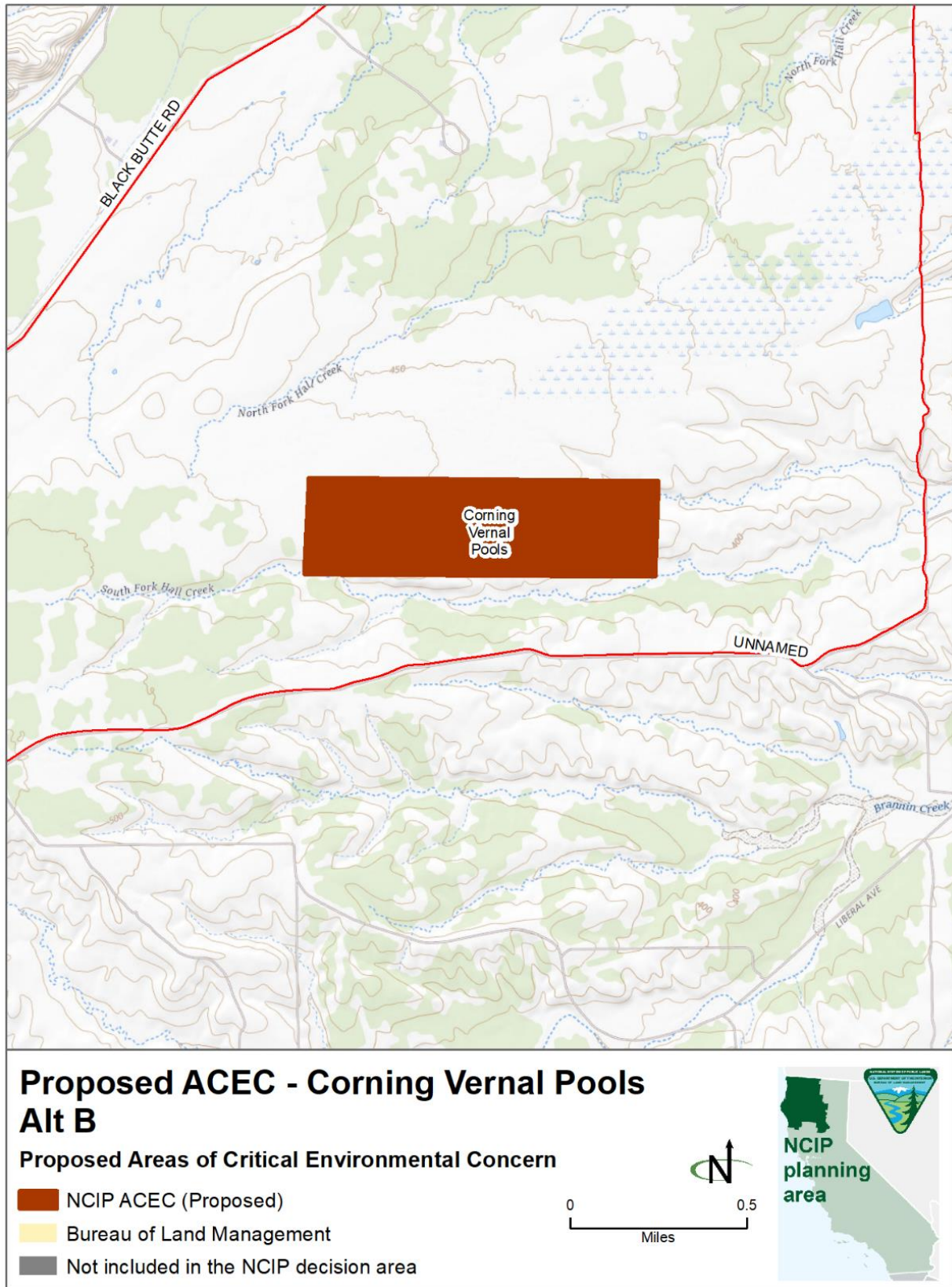
3.27.1 Rationale for ACEC – Wildlife and Natural Process/System

Corning Vernal pools is located near the community of Corning, California. The proposed ACEC meets multiple R&I criteria. The ACEC Vernal pools are a rare and diminishing resource on the landscape. Similar lands in the area have been converted to Walnut and Olive orchards, an activity which generally results in the permanent loss of vernal pool habitat. This pool complex has a concentration of the Threatened and Endangered Vernal pool fairy shrimp – nearly a third of the pools at this location have documented populations of this species, which is threatened primarily by habitat loss resulting from agriculture and development. There are also several rare and sensitive vernal pool associated plant species that have been found in the pool complex. The flora of the immediate area is characterized by numerous rare and sensitive plants, including the California Endangered Boggs Lake hedge hyssop (*Gratiola heterosepala*). Five additional plants have CNPS 1B or 2B rare plant status.

The vernal pool complex on this ACEC is dependent on the watershed to the north. Water for the vernal pools comes from the north through a system of additional vernal pools and swales, as well as sheet flow during heavy rain events. At present this watershed is in private ownership and is managed sporadically for grazing cattle and sheep. It is imperative that this watershed be maintained either through fee title acquisition or permanent conservation easement. Other management needs include fencing to discourage trespass grazing and the possibility of timed grazing for weed control.

Areas of Critical Environmental Concern
Report on the Application of the Relevance and Importance Criteria

Figure 33 Corning Vernal Pools ACEC Map (Alt B, not Carried Forward in Alt C)



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.28 North Table Mountain ACEC

Table 33: North Table Mountain Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Proposed	Natural Process/System	3	1	Yes	Yes ¹	N/A	N/A	53

1. The foothill yellow-legged frog Feather River clade is listed as threatened under the CESA.

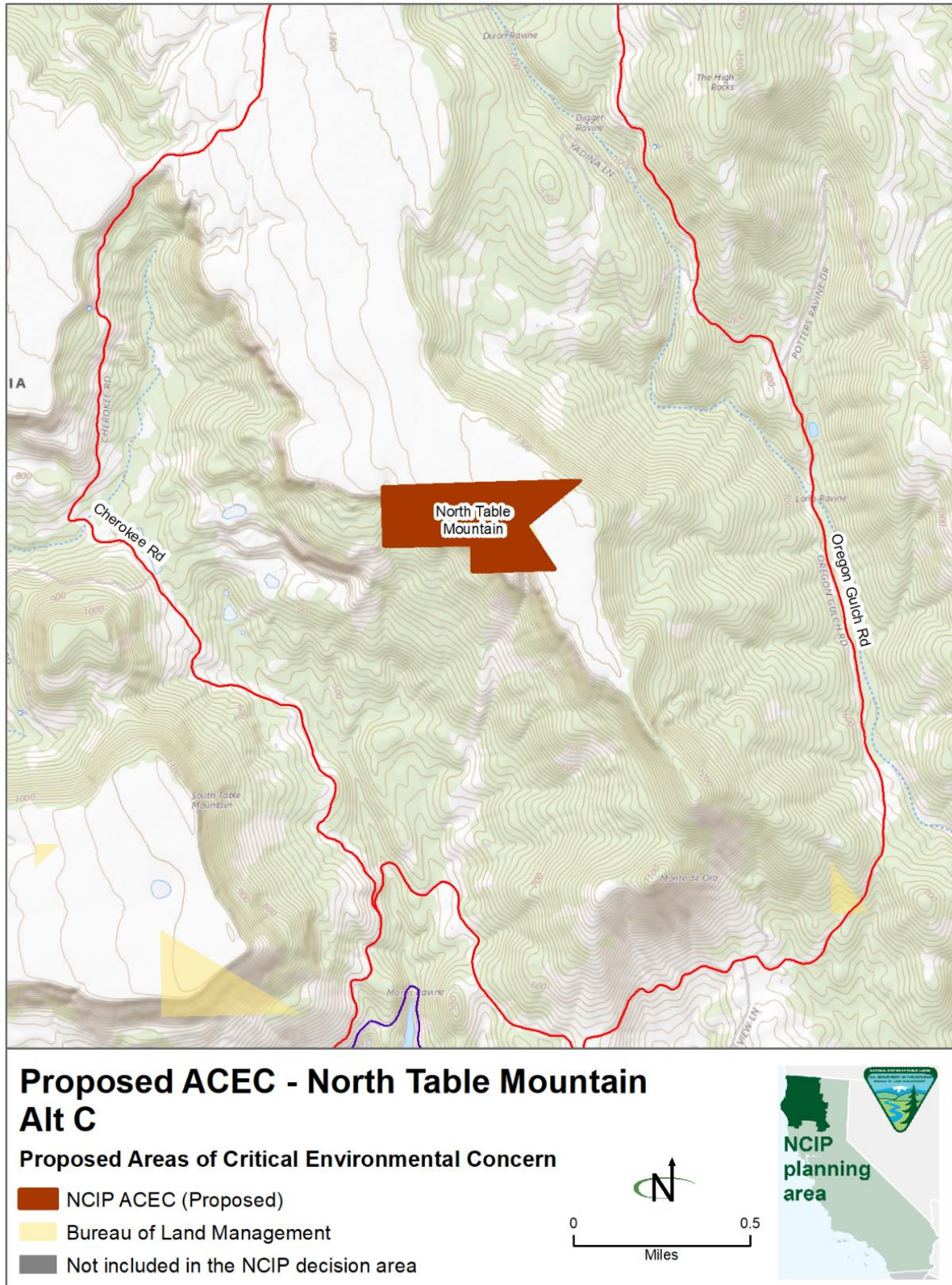
3.28.1 Rationale for ACEC – Natural Process/System

The North Table Mountain ACEC is located near Oroville, CA. This ACEC provides habitat that supports the rare Butte County golden clover (*Trifolium jokerstii*). Indicative of its ecological and social importance, several government agencies and private conservation groups have holdings in this area as part of independent efforts to conserve these imperiled resources. North Table Mountain ACEC adds to this conservation matrix. This small ACEC has the largest known population of a rare clover (Butte County golden clover – *Trifolium jokerstii*) which benefits from BLM management of no grazing. The adjacent private land to the north has no occurrences of this rare species, much lower native plant diversity, and many more weeds and other non-native plants. This appears to be because of an intensive year-round grazing treatment of these private lands. It is imperative that this ACEC be protected from the management of the adjacent private lands.

This ACEC has increased importance because it falls within a statewide identified Essential Connectivity Corridor of High Biological Value. The corridors are areas of natural habitat that are especially important to wildlife and plants for connectivity, ease of migration, and habitat resilience in the era of climate change.

Areas of Critical Environmental Concern
Report on the Application of the Relevance and Importance Criteria

Figure 34 North Table Mountain ACEC Map (Alt B, not Carried Forward in Alt C)



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.29 Red Mountain ACEC

Table 34: Red Mountain Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Existing	Fisheries	2	1 2	Yes	Yes2-6	Yes3-6	6,815	0
	Wildlife	2	1 2					
	Plant Communities	3	1					

1. Rare plants
2. The northern spotted owl is listed as threatened under the ESA.
3. The marbled murrelet is listed as threatened under the ESA.
4. Chinook salmon are listed as threatened under the ESA.
5. Coho salmon are listed as threatened under the ESA.
6. Steelhead are listed as threatened under the ESA.

3.29.1 Rationale for ACEC – Fisheries, Plant Communities, and Wildlife

The Red Mountain, located less than a mile northeast of Legget, CA and the Standish-Hickey State Recreation Area, contains a number of unique resource values. Red Mountain was incorporated as a unit of the South Fork Eel River Wilderness in 2006. Clearly visible from aerial imagery, the unique red soils of the Red Mountain area are a product of the unusual serpentine soils there that have high levels of iron which, combined with a lack of organic material, creates the obvious red appearance. Serpentine soils have an ultramafic origin, and the low calcium to magnesium ratio effects the cation exchange capacity (CEC) of the soils. Low levels of nutrients in these soils, including nitrogen (N), phosphorous (P), and potassium (K) create a harsh and unique environment that plays host to a number of unique botanical values, which also influences the fauna associated with the area. Streams draining the Red Mountain ultramafic unit are known for abundant cold-water supplies, augmenting the often lethal low, warm streamflows in the South Fork Eel River below. Water flowing from Red Mountain is a significant benefit to salmon and steelhead dependent on cold, clear water, especially in the late summer drought conditions often experienced in Northern California.

The Red Mountain ACEC is host to numerous federally listed and special status plant species. Known Federally endangered plant species include McDonald’s Rockcress (*Arabis*

Areas of Critical Environmental Concern
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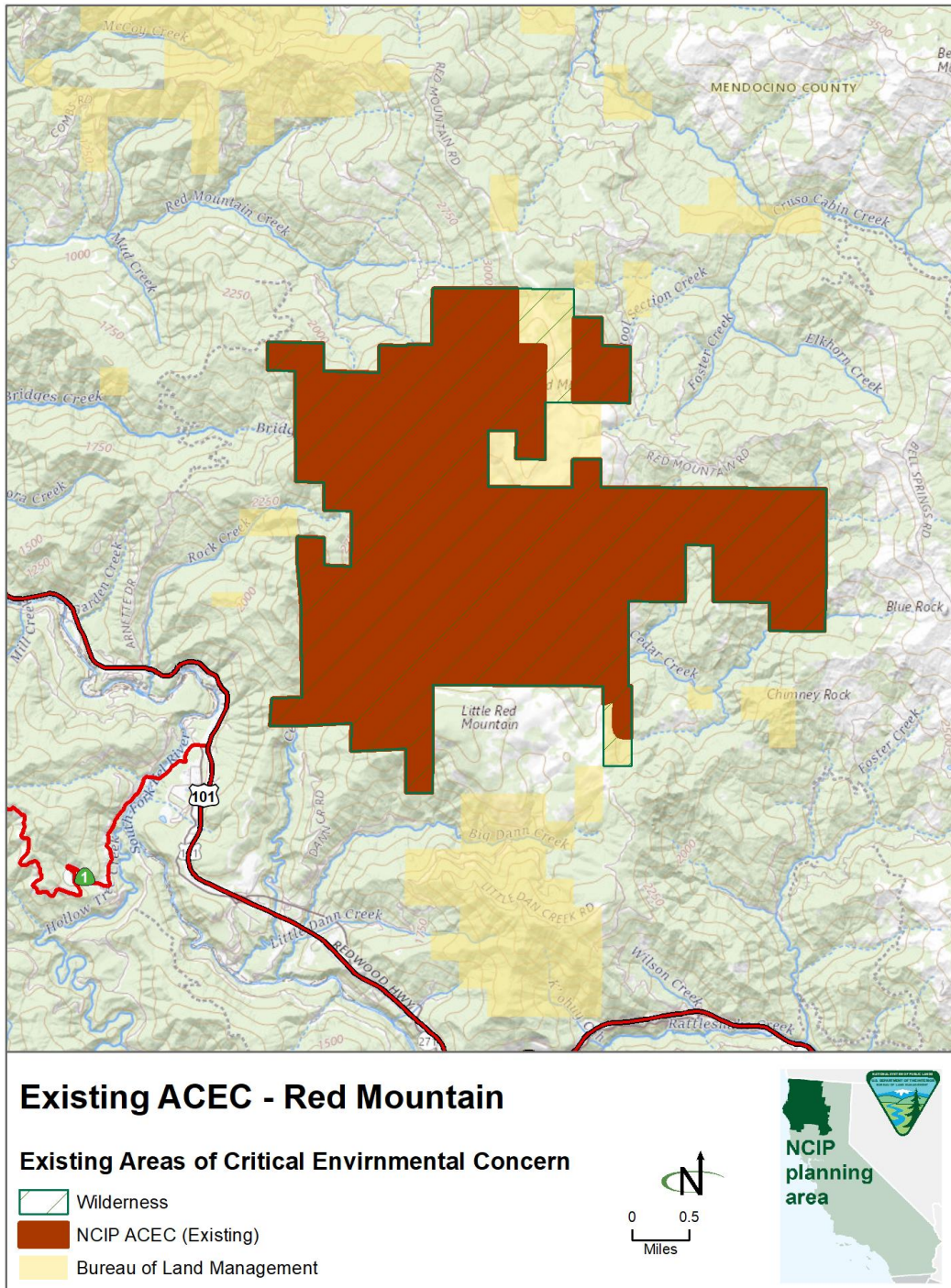
mcdonaldiana) and recently discovered Western lily (*Lilium occidentale*). Known BLM sensitive species include Red Mountain catchfly (*Silene campanulata* subsp. *campanulata*), Red Mountain stonecrop (*Sedum laxum* subsp. *Eastwoodiae*), Red Mountain Buckwheat (*Eriogonum kelloggii*), and Mendocino gentian (*Gentiana setigera*). These species thrive due to the particular nature of the serpentine soils. With relatively poor nutrient levels and high levels of heavy metals including Nickel and Chromium, these soils naturally vet competition from other species not adapted to live in the harsh environment in situ. This allows for other species well adapted to these soils to thrive, which ultimately results in a higher number of rare and sensitive species within Red Mountain.

BLM lands in the Red Mountain area are suitable habitat for the northern spotted owl and Federally designated critical habitat for the marbled murrelet.

This ACEC is not being carried forward as the resources it contains are now protected by the designation of wilderness; it no longer requires special management attention afforded by ACEC designation because the R&I values are protected by the Wilderness designation.

Areas of Critical Environmental Concern
Report on the Application of the Relevance and Importance Criteria

Figure 35 Red Mountain ACEC (Existing) (Not Carried Forward under Alt B and Alt C)



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.30 Elder Creek ACEC

Table 35: Elder Creek Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Proposed	Fisheries	2	1 2	Yes	Yes ^{1,3-5}	Yes ¹⁻⁵	7,019	0
	Wildlife	2	1 2					

1. The northern spotted owl is listed as threatened under the ESA.
2. The marbled murrelet is listed as threatened under the ESA.
3. Chinook salmon are listed as threatened under the ESA.
4. Coho salmon are listed as threatened under the ESA and CESA.
5. Steelhead are listed as threatened under the ESA.

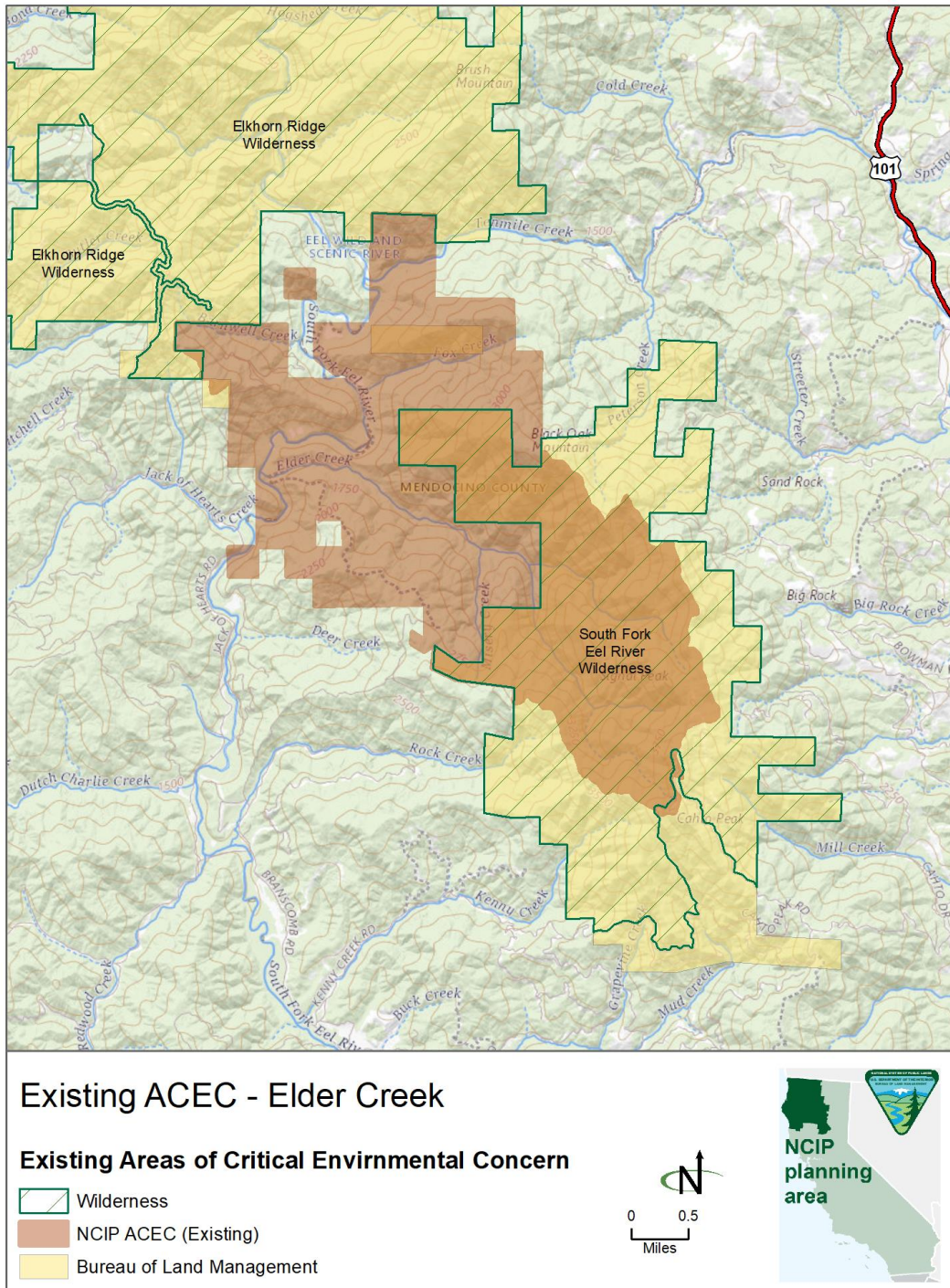
3.30.1 Rationale for ACEC – Fisheries and Wildlife

Elder Creek is located in the northeast corner of what is now the Cahto Peak unit of the South Fork Eel River Wilderness, approximately 5 miles northwest of Laytonville, CA. Elder Creek is designated as a Registered Natural History Landmark under the Historic Site Act / United Nations Education, Scientific and Cultural Organization (UNESCO) Biosphere Reserve. This nearly pristine stream is considered a Hydrologic Benchmark for water quality. The upper portion of Elder Creek is located on BLM lands, while the lower portion flows into the Angelo Coast Range Reserve (reserve), which is managed for wild lands research but the University of California, Berkeley. The reserve represents one of the few pristine, unharvested coastal forests in the area, and provides an excellent laboratory for studying watershed and ecological processes in an undisturbed coastal range ecosystem.

Elder Creek is an important tributary to the South Fork Eel Wild and Scenic River and provides important habitat for anadromous Pacific lamprey and threatened coho salmon, Chinook salmon, and steelhead, and is designated critical habitat for all three species. Because the resources in Elder Creek are protected by wilderness designation; it no longer requires special management attention afforded by ACEC designation because the R&I values are protected by the Wilderness designation.

Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

Figure 36 Elder Creek ACEC (Existing) (Not Carried Forward under Alt B and Alt C)



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

3.31 South Fork Eel River ACEC

Table 36: South Fork Eel River Summary of ACEC Findings

Existing or Proposed	Values Assessed	Relevance Criteria <i>see Section 2.1 for Relevance Criterion</i>	Importance Criteria <i>see Section 2.2 for Importance Criterion</i>	Connectivity Corridor	Threatened and Endangered Species	Critical Habitat	Existing Acres	Proposed Acres Carried Forward
Proposed	Fisheries	2	1 2	Yes	Yes ^{1,3-5}	Yes ¹⁻⁵	7,157	0
	Wildlife	2	1 2					

1. The northern spotted owl is listed as threatened under the ESA.
2. The marbled murrelet is listed as threatened under the ESA.
3. Chinook salmon are listed as threatened under the ESA.
4. Coho salmon are listed as threatened under the ESA and CESA.
5. Steelhead are listed as threatened under the ESA.

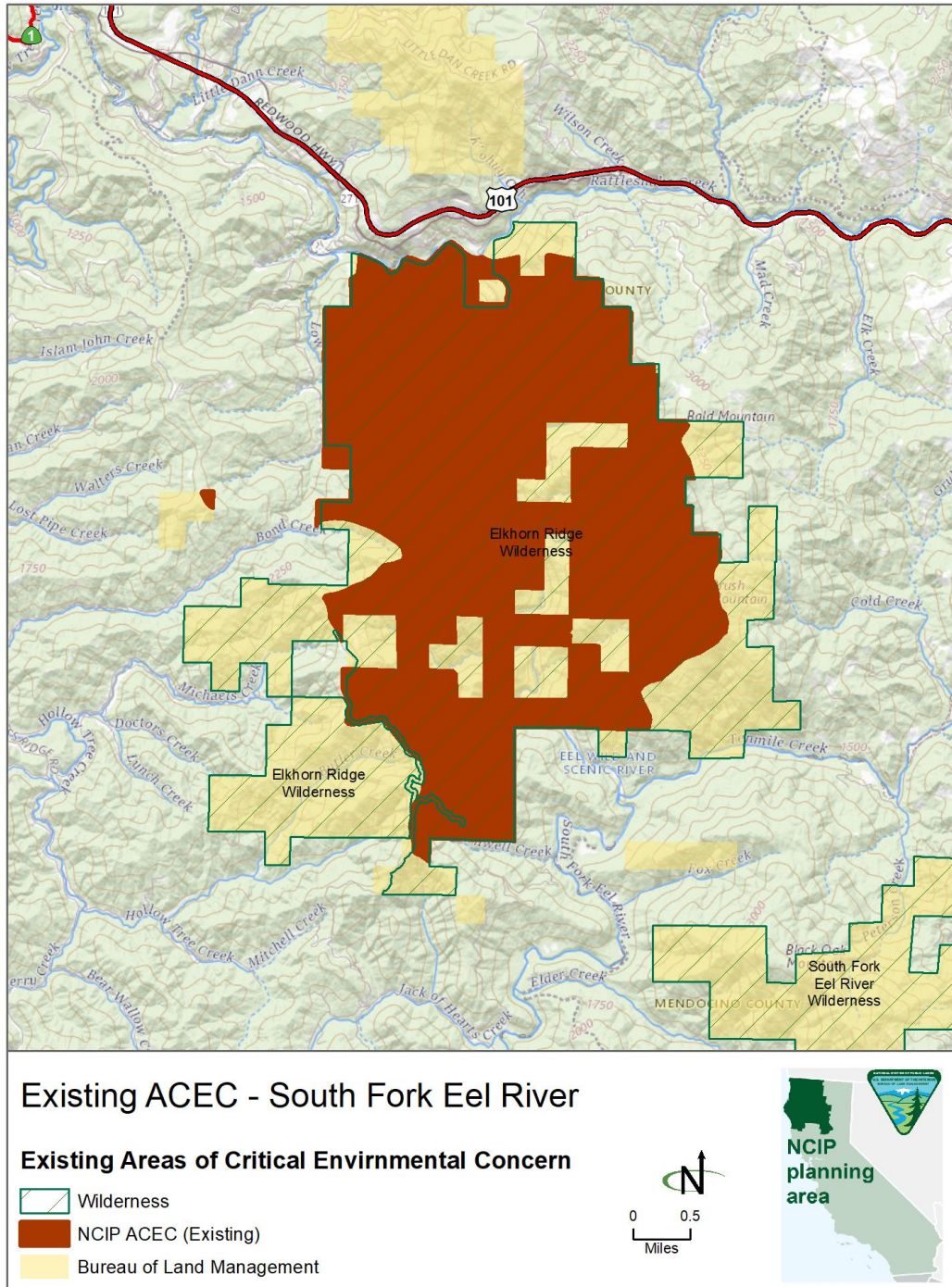
3.31.1 Rationale for ACEC – Fisheries and Wildlife

The South Fork Eel River ACEC, incorporated into the Elkhorn Ridge Wilderness in 2011, lies between the Red Mountain and Cahto Peak units of the South Fork Eel River Wilderness. While the other wilderness areas were designated in 2006, the Elkhorn Ridge Wilderness was designated 5 years later. As part of the wilderness designation, the process determined that the area had naturally rehabilitated itself and therefore met the conditions to become wilderness.

The original South Fork Eel River ACEC was listed as approximately 7,157 acres and was primarily identified to protect habitat for ESA-threatened Chinook salmon, coho salmon, and steelhead, as well as a Late Successional Reserve forest that provides important habitat for listed species. The resources in the area that was the South Fork Eel River ACEC are now well protected by wilderness designation; it no longer requires special management attention afforded by ACEC designation because the R&I values are protected by the Wilderness designation.

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Report on the Application of the Relevance and Importance Criteria

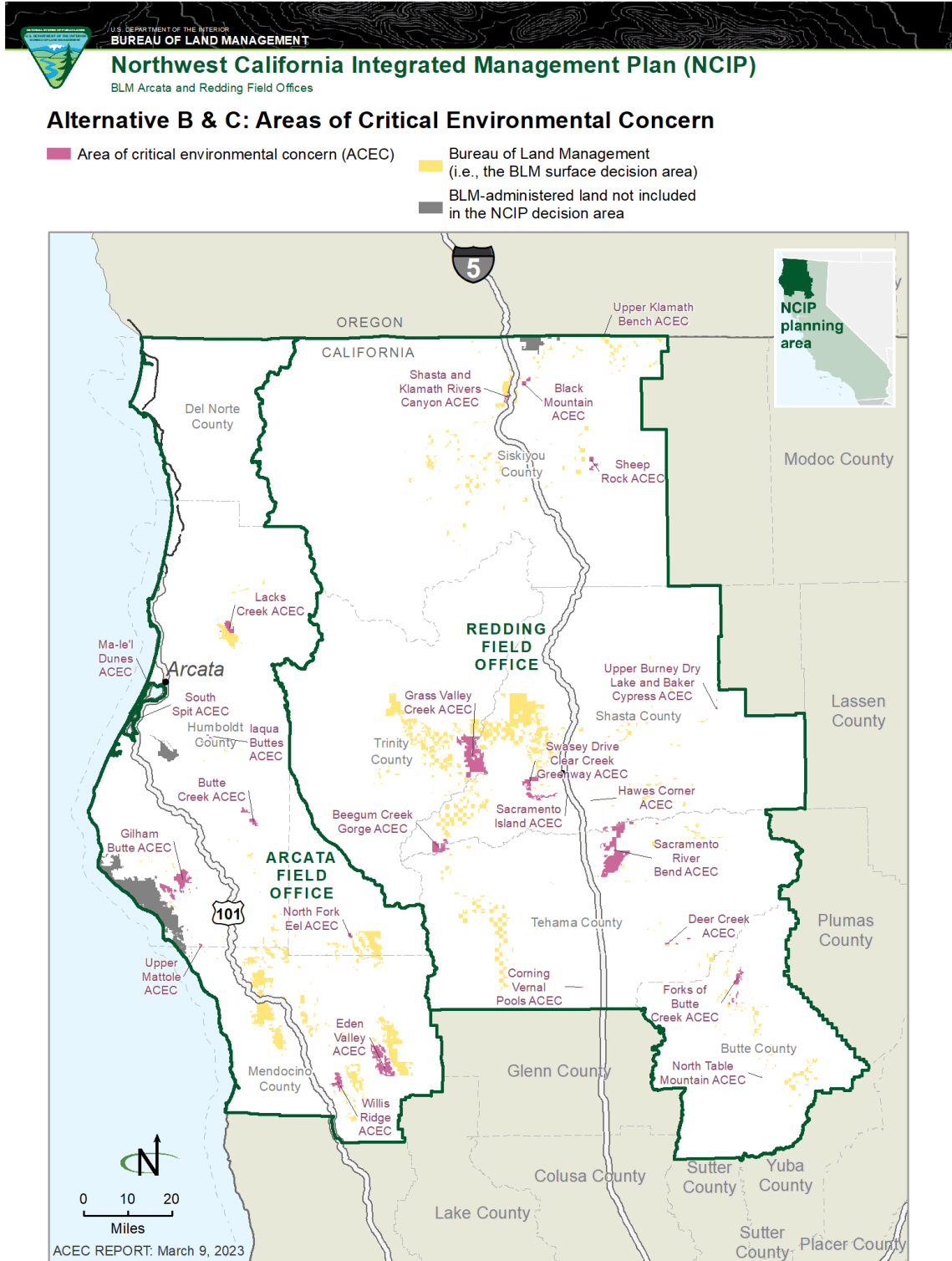
Figure 37 South Fork Eel River (Existing) (Not Carried Forward under Alt B and Alt C)



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

4.0 SUMMARY of FINDINGS

Figure 38 NCIP ACEC Overview Map



Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

4.1 Summary of Findings

This chapter summarizes the findings of the ACEC evaluations. Table 34, Summary of ACEC Evaluations, summarizes the existing and nominated ACECs that were evaluated and whether the relevance and importance criteria were met. 26 ACECs were found to meet both the R&I criteria and are displayed in Figure 3539 NCIP ACEC Overview Map above.

These 26 ACECs will be carried forward into the alternatives for the Draft RMP. Their evaluations demonstrated that they met the R&I criteria for at least one resource. The third requirement for ACEC designation, special management attention, is addressed in the range of alternatives in Chapter 2 of the Draft EIS and analyzed for impacts in Chapter 3. Additionally, as shown in the range of alternatives, the acreages of the ACECs may change, as determined by the special management attention required for the ACEC resource. The size and management prescriptions for each ACEC may vary by alternative to reflect a balance between the goals and objectives of the alternative and values being protected (BLM Manual 1613.22.B.1- 2).

There were no areas or nominations that did not meet the R&I criteria. However, Swasey Clear Creek Greenway ACEC is not being carried forward for evaluation in the RMP as it was nominated, but all or portions of the nomination may be included in other areas being carried forward for analysis in the RMP.

The table below summarizes the findings for each existing and nominated area.

Table 345 Summary of ACECs Under Preferred Alternative

Name/Area	Existing or Nominated	Meets Relevance and Importance Criteria?	Existing Size (acres)	Acres Carried Forward in the Draft EIS Preferred Alternative
Upper Burney Dry Lake and Baker Cypress ACEC	Existing	Yes	141	209
Butte Creek ACEC	Existing	Yes	2,254	2,254
Deer Creek ACEC	Existing	Yes	567	567
Forks of Butte Creek ACEC	Existing	Yes	2,900	2,900
Gilham Butte ACEC	Existing	Yes	2,621	9,328
Hawes Corner ACEC	Existing	Yes	38	38

Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

Name/Area	Existing or Nominated	Meets Relevance and Importance Criteria?	Existing Size (acres)	Acres Carried Forward in the Draft EIS Preferred Alternative
Iaqua Butte ACEC	Existing	Yes	1,112	1,111
Lacks Creek ACEC	Existing	Yes	7,479	2,141
Male'l Dunes ACEC (Previously Manila Dunes ACEC)	Existing	Yes	149	206
Sacramento Island	Existing	Yes	91	91
Sacramento River Bend ACEC	Existing	Yes	18,596	20,418
Shasta and Klamath River Canyon ACEC	Existing	Yes	1,207	1,270
Swasey Drive ACEC	Existing	Yes	468	468
Grass Valley Creek ACEC	Nominated	Yes	0	19,560
Upper and Lower Clear Creek ACEC	Nominated	Yes	0	4,558
Swasey Clear Creek Greenway	Nominated	Yes	0	0
Sheep Rock ACEC	Nominated	Yes	0	1,410
Black Mountain ACEC	Nominated	Yes	0	1,114
Upper Klamath Bench ACEC	Nominated	Yes	0	89
Upper Mattole ACEC	Nominated	Yes	0	459
Eden Valley ACEC	Nominated	Yes	0	10,807
Beegum Creek Gorge ACEC	Nominated	Yes	0	4,337
North Fork Eel ACEC	Nominated	Yes	0	500
Willis Ridge ACEC	Nominated	Yes	0	3,184
South Spit ACEC	Nominated	Yes	0	888
Corning Vernal Pools ACEC	Nominated	Yes	0	173

Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

Name/Area	Existing or Nominated	Meets Relevance and Importance Criteria?	Existing Size (acres)	Acres Carried Forward in the Draft EIS Preferred Alternative
North Table Mountain ACEC	Nominated	Yes	0	53

5.0 LIST OF PREPARERS

Name	Title	Role
Natasha Braziel	Planning and Environmental Specialist (Redding)	Planning and NEPA
Chad Endicott	Planning and Environmental Specialist (Redding)	Planning and NEPA
Tory Callahan (Victoria Slaughter)	Planning and Environmental Specialist (Arcata)	Planning and NEPA
Alden Neel	Assistant Field Manager (Redding)	Cultural and Natural Resources
Jennifer Wheeler	Assistant Field Manager (Arcata)	Lands & Realty, Recreation, Operations, and GIS
Laura Brodhead	Assistant Field Manager (Redding)	Lands & Realty, Recreation, Operations, and GIS
Dan Wooden	Assistant Field Manager (Arcata)	Resources
Paul Fritze	GIS Specialist (Arcata)	GIS
Andrew Suppiger	GIS Specialist (Redding)	GIS
Brooke Thompson	Ecologist (Redding)	Vegetation (including wetlands and riparian areas; nonnative, invasive species; special status species; and vegetation products)
Crystal Welch	Ecologist (Arcata)	Livestock Grazing; Vegetation (including wetlands and riparian areas; nonnative, invasive species; special status species; and

Areas of Critical Environmental Concern
 Report on the Application of the Relevance and Importance Criteria

Name	Title	Role
		vegetation products)
David Anthon	Wildlife Biologist (Arcata)	Wildlife/Special Status Species
Devonie Plummer	Range Management Specialist (Redding)	Livestock Grazing
Eric Ritter	Archaeologist (Redding)	Cultural Resources; Socioeconomics; National Historic Trails; Cave and Karst Resources; Tribal Interests
Lowell Thomas	Archaeologist (Redding)	Cultural Resources; Socioeconomics; Tribal Interests
Sara Balmuth	Archaeologist (Redding)	Cultural Resources
Heidi Rogers	Forester (Redding)	Forestry
Jess Paoli	Forester (Redding)	Forestry
Kody Shellhouse	Geologist (Redding)	Air Quality/Climate and Greenhouse Gases; Water Resources; Minerals; Paleontology
Sam Flanagan	Geologist (Arcata)	Air Quality/Climate and Greenhouse Gases; Coastal Resource Management; Water Resources; Minerals; Paleontology
Marissa Vossmer	Forester (Arcata)	Forestry
Samantha Gillette	Wildlife Biologist (Redding)	Wildlife/Special Status Species
Tobias Felbeck	Wildlife Biologist (Redding)	Wildlife/Special Status Species
Steve Laymon	Wildlife Biologist (Redding)	Wildlife/Special Status Species
Joseph (Zane) Ruddy	Fish Biologist (Arcata)	Fish and Aquatic Species/Special Status Species
Lauren Alvares	Fish Biologist (Redding)	Fish and Aquatic Species/Special Status Species

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Appendix F

Recreation and Visitor Services
Management Framework for Special and Extensive
Recreation Management Areas

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ACRONYMS AND ABBREVIATIONS

Full Phrase

ACEC	area of critical environmental concern
BMP	best management practice
ERMA	extensive recreation management area
OHV	off-highway vehicle
RMZ	recreation management zone
ROW	right-of-way
RSC	recreation setting characteristics
RUP	recreation use permit
SRMA	special recreation management area
SRP	special recreation permit
USFS	United States Forest Service
VRM	visual resource management
WCF	Weaverville Community Forest
WSR	wild and scenic river

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Appendix F. Recreation and Visitor Services Management Framework for Special and Extensive Recreation Management Areas

F.1 INTRODUCTION

This appendix provides supporting information to recreation and visitor services decisions in the Northwest California Integrated Resource Management Plan and Environmental Impact Statement. Each special recreation management area (SRMA) and extensive recreation management area (ERMA) are detailed below to include management objectives and associated land-use planning and implementation-level actions.

F.2 KEY RECREATION PLANNING TERMS AND DEFINITIONS

F.2.1 Special Recreation Management Area

Definition. Special recreation management areas are areas identified in land use plans to direct recreation funding and personnel to fulfill commitments made to provide specific recreation opportunities. Also sometimes referred to as Recreation Management Zones (RMZ).

Management Focus. Special recreation management areas are managed to protect and enhance a targeted set of activities, experiences, benefits, and desired recreation setting characteristics (RSC). The SRMAs may be subdivided into RMZs to further delineate specific recreation opportunities. Within SRMAs, recreation and visitor services management are recognized as the predominant land management focus, where specific recreation opportunities and RSCs are managed and protected on a long-term basis.

Requirements. The SRMA/RMZs must have measurable, outcome-focused objectives. Supporting management actions and allowable use decisions are required to 1) sustain or enhance recreation objectives, 2) protect the desired RSCs, and 3) constrain uses, including noncompatible recreational activities that are detrimental to meeting recreation or other critical resource objectives (such as objectives for cultural resources or threatened and endangered species).

Outcome Objective. The outcome objective is a clear, measurable, and agreed upon guide for decision making and evaluation of management effectiveness. Objectives must define the specific recreation opportunities (i.e., the activities, experiences, and benefits derived from those experiences) which become the focus of recreation and visitor services management.

Recreation Setting Characteristics are a description of the physical, social, and operational characteristics that define an SRMAs function and condition in the future. The desired RSCs may currently exist and be maintained, or they may be a target or goal outlined in the SRMA and RMZs that may take years to reach. Three recreation setting components and their RSCs are considered:

- The physical qualities of nature and the landscape are defined by remoteness, naturalness, and facilities.
- The social qualities associated with use are defined by group size, contacts, and evidence of use.

- The operational conditions to manage recreation use defined by type of access, visitor services, and management controls.

The BLM describes the RSCs in the land use plan to guide management action and allowable use decisions, and to guide site-specific implementation. Monitoring and evaluation may indicate a need to adjust the RSCs over the life of the plan to meet recreation objectives.

F.2.2 Extensive Recreation Management Area

Definition. An ERMA is an administrative unit that require specific management consideration to address recreation use and demand.

Management Focus. An ERMA is managed to support and sustain the principal recreation activities and the associated qualities and conditions. Management of ERMA areas is similar to the management of other resources and resource uses.

Requirements. An ERMA must have measurable objectives. Supporting management actions and allowable use decisions must facilitate the visitors' ability to participate in outdoor recreation activities and protect the associated qualities and conditions. Non-compatible uses, including some recreation activities, may be restricted, or constrained to achieve interdisciplinary objectives.

Outcome Objectives. The outcome objective must define the recreation activities and the associated qualities and conditions which become the focus for recreation and visitor services.

F.2.3 Other Key Terms and Definitions

Recreation Activity. Common recreation areas activities in the planning area include hunting, fishing, swimming, canoeing, kayaking, whitewater boating, surfing, floating, off-highway vehicle (OHV) use, relaxing, camping, hiking, mountain biking, equestrian use, wildlife viewing, heritage resource viewing, casual mineral collection, and gold panning.

Recreation Use. Common recreation uses are identified by the type of use and visitation numbers. These will vary over time based on societal trends.

Visitation. Estimated by the number of participants and the visitor days.

Visitor Day. A unit of measurement used by federal agencies and represents an aggregate of 12 visitor hours at a site or area.

Special Recreation Permits (SRP). Type of permit needed for commercial, competitive, vending, and organized group activities and events.

Recreation Use Permits (RUP). Type of permit needed for short-term recreation use of specialized sites, facilities, equipment, or services furnished at federal expense. *For example: Douglas City Campground.*

F.3 SUPPORTING MANAGEMENT ACTION AND ALLOWABLE USE DECISIONS

Management actions and allowable use decisions are generally described as land use planning level decisions needed to achieve program objectives or constrain non-compatible land uses. Supporting management action and allowable use decisions are selected in terms of their ability to help achieve the

recreation objectives (i.e., recreation opportunities), maintain or enhance the recreation settings, or guide recreation implementation.

A complete list of supporting management actions and allowable use decisions that affect recreation and visitor's services can be found in **Table 2-2** in **Chapter 2**.

F.4 BEST MANAGEMENT PRACTICES

See the Recreation and Visitor Services section of **Appendix D** for Best Management Practices (BMPs) specific to recreation and SRMA/ERMA management.

F.5 SUMMARY OF EXISTING AND PROPOSED RECREATION MANAGEMENT AREAS BY ALTERNATIVE

F.5.1 Special Recreation Management Areas

The following details the SRMAs designated or proposed by alternative.

Alternative A

The following three areas are currently designated as SRMAs (40,190 acres, Map 2-29 in Appendix A).

- Interlake's SRMA (37,800 acres)
- Samoa Dunes SRMA (190 acres)
- Forks of Butte Creek SRMA (2,200 acres)

Alternative B

The following area would be designated as a SRMA (23,800 acres, Map 2-30 in Appendix A) under Alternative B:

- Chappie-Shasta OHV Area SRMA (23,800 acres)

Alternatives C and D

The following four areas would be designated as SRMAs (42,290 acres, Map 2-31 [Alternative C], 2-32 [Alternative D] in Appendix A) under Alternatives C and D:

- Chappie-Shasta OHV Area SRMA (31,100 acres)
- Redding Trails SRMA (9,900 acres)
 - Clear Creek RMZ (2,600 acres)
 - Mule Mountain RMZ (2,900 acres)
 - Sacramento River Rail Trail and Keswick Reservoir RMZ (30 acres)
 - Community Trails RMZ (4,400 acres)
- Iron Mountain Target Shooting Area SRMA (600 acres)
- Samoa Dunes SRMA (190 acres)

F.5.2 Extensive Recreation Management Areas

The following details the ERMAs designated or proposed for designated by alternative.

Alternative A

There are currently no designated ERMAs.

Alternative B

The following areas would be designated as ERMAs under Alternative B (21,790 acres, Map 2-30 in Appendix A):

- Redding Trails ERMA (9,900 acres)
 - Clear Creek RMZ (2,580 acres)
 - Mule Mountain RMZ (2,900 acres)
 - Sacramento River Rail Trail and Keswick Reservoir RMZ (30 acres)
 - Community Trails RMZ (4,400 acres)
- Swasey ERMA (500 acres)
- Lacks Creek ERMA (9,000 acres)
- Samoa Dunes ERMA (190 acres)
- Forks of Butte Creek ERMA (2,200 acres)

Alternative C

The following nine areas would be designated as ERMAs under Alternative C (45,980 acres, Map 2-31 in Appendix A):

- Lacks Creek ERMA (9,000 acres)
- Swasey ERMA (500 acres)
- Sacramento River Bend ERMA (20,400 acres)
- Trinity River ERMA (9,500 acres)
- Ewing Area ERMA (1,000 acres)
- Weaverville Community Forest ERMA (3,100 acres).
- Ma-le'l Dunes ERMA (180 acres)
- Forks of Butte Creek ERMA (2,200 acres)
- Mike Thompson Wildlife Area, South Spit, Humboldt Bay ERMA (if the area becomes federally managed) (600 acres)

Alternative D

The following eight areas would be designated as ERMAs under Alternative D (45,380 acres, Map 2-32 in Appendix A):

- Lacks Creek ERMA (9,000 acres)
- Swasey ERMA (500 acres)
- Sacramento River Bend ERMA (20,400 acres)
- Trinity River ERMA (9,500 acres)
- Ewing Area ERMA (1,000 acres)

- Weaverville Community Forest ERMA (3,100 acres).
- Ma-le'l Dunes ERMA (180 acres)
- Forks of Butte Creek ERMA (2,200 acres)

F.6 SPECIAL RECREATION MANAGEMENT AREAS

For each SRMA, the BLM has identified supporting information, established objectives decisions, described RSCs, identified management actions and allowable uses, and as necessary, identified implementation decisions. Land use plan level recreation and visitor services objective decisions define intended activities and specific recreation opportunities to be offered. Objectives describe the intended recreation activities, experiences, and benefits derived from those experiences.

Direct recreation funding and personnel to fulfill commitments made to provide specific “structured” recreation opportunities based on outcome-focused management. Designation of SRMAs helps direct recreation program priorities toward areas with high resource values, elevated public concern, or significant amounts of recreational activity. Within a SRMA, recreation and visitor services management is recognized as the predominant land use planning focus. Investments in recreation facilities and visitor services are aimed at reducing resource damage and mitigating user conflicts. The BLM may develop implementation-level plans for SRMAs to further guide management actions and objectives. Supporting management actions and allowable use decisions common to all SRMAs include:

- Throughout the life of the plan and as funding allows, evaluate visitor satisfaction of SRMAs on a five-year basis using such methods as field visits, staff monitoring, and surveys. The objective would be to manage recreation to provide the identified experiences and benefits 75 percent of the time. When this level of satisfaction is not met, management would be implemented as practicable to address issues that are impeding identified experiences and benefits.
- Forestry: Timber harvest, firewood cutting, and special forest product harvest would be allowed if they can be implemented without affecting the desired recreation setting.
- Lands and Realty: All SRMAs would be right-of-way (ROW) avoidance areas and would be retained for long-term management (subject to valid existing rights).
- Minerals: All SRMAs would be closed to salable minerals development and closed to mineral leasing.
- Visual Resource Management (VRM): All SRMAs would be managed under VRM Class III objectives except specific locations where VRM Class II objectives are proposed for special designation areas located within the SRMAs.
- Comprehensive Travel Management: All SRMAs would be classified as OHV Limited, except for Samoa Dunes SRMA, which would be classified as OHV Open.

For further information on other management actions that apply to all SRMAs and ERMAs regardless of Alternative see **Table 2-2** in **Chapter 2**.

F.6.1 Chappie-Shasta OHV Area SRMA

The Chappie-Shasta OHV Area SRMA would be designated under all action alternatives, although acreages vary slightly by alternatives (see **Section F.5** above). The Chappie-Shasta OHV Area SRMA is located immediately northwest of the City of Redding (**Figure I**). The SRMA plays an important role in the community’s local economy and residents’ quality of life. Chappie-Shasta serves as both a popular

recreation destination in the Redding area and a conveniently close daily riding area for local OHV users. This area provides outstanding opportunities for rock crawling, 4x4 driving, OHV riding, and motorcycle riding on more than 200 miles of roads and trails. Located within the rugged southern portions of the Klamath Mountain Range, offering beautiful vistas of the surrounding natural features, such as Mount Shasta, Mount Lassen, the Trinity Alps, and Shasta Lake.

The Chappie-Shasta OHV Area SRMA borders Clear Creek to the west and Shasta Lake and Keswick Reservoir to the east. Elevations range from 1000 to 5000 feet and vegetation ranges from chaparral to mixed conifer. This area serves as a regional asset for managed OHV recreation opportunities. Targeted outcomes include family/group togetherness, skill development, and risk taking and adventure. Community benefits include economic development from outdoor recreation tourism and serving as an attraction for living/re-locating to the area.

Outcome Objective

Participants in visitor assessments report on average 4.0 realization of the targeted experience and benefit outcomes listed below (where 1 = Not at all realized and 5 = totally realized).

Activities	Experiences	Benefits
<ul style="list-style-type: none"> • 4x4 Driving • OHV riding, motorcycle riding • Camping • Permitted competitive or commercial OHV events. 	<ul style="list-style-type: none"> • Developing skills and abilities • Enjoying risk taking and adventure • Enjoying friends and family togetherness • Enjoying learning/teaching outdoor skills • Enjoying access to natural landscapes. 	<ul style="list-style-type: none"> • Greater sense of adventure • Stronger ties with family and friends • Improved skills for enjoying the outdoors. • Lifestyle improvement or maintenance • Greater community involvement • Maintain local tourism. • Increased desirability as a place to live.

Management Actions and Allowable Use Decisions

- Provide a regional opportunity for motorized recreation.
- Acquire available unimproved lands that expand legal public access to adjoining public lands, complete segments of recreational trails, enhance protection of sensitive resources, provide opportunities for public interpretation, enhance reforestation efforts (including habitat improvement for sensitive species), or enhance long-term administration of the area.
- Develop a trail management plan to provide for the maintenance of existing trails and the expansion of the trail network to provide for additional OHV recreational opportunities, decrease user density, and separate different motorized user groups (including loop trails and trails to scenic or unique areas). This would be completed at the implementation level and would be analyzed and disclosed through site-specific NEPA analysis.
- Prioritize development of parking lots at trailheads.
- Prioritize development of trails to provide for various levels of difficulty for skill development. In the Chappie-Shasta OHV Area SRMA, camping would be limited to 14 days per 4-month period.
- In the Chappie/Shasta OHV Area SRMA, camping would be limited to 14 days per 4-month period.

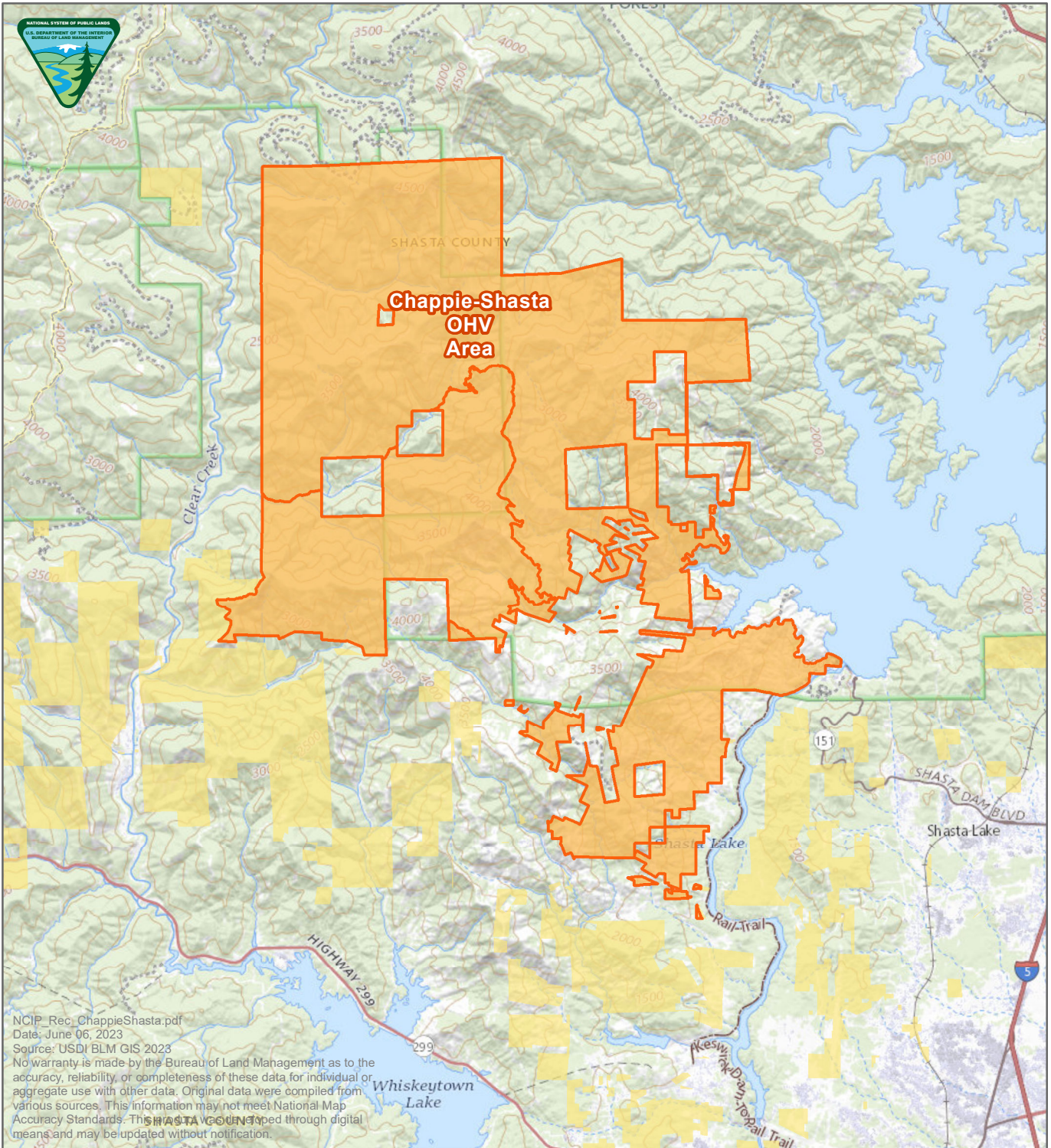


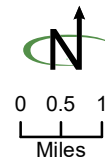


Figure 1: Chappie-Shasta OHV Area SRMA

-  Proposed special recreation management area (SRMA)
-  Bureau of Land Management



Physical, Social, and Operational Recreation Setting Characteristics

Table F-1. Chappie-Shasta OHV SRMA, Physical Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Remoteness (F-8 approx. distance from routes) – Over time, class acreages may change but all classes still exist					
More than 0.5 miles from either mechanized or motorized routes	Within 0.5 miles of mechanized routes	Within 0.5 miles of four-wheel-drive vehicle, all-terrain vehicle, and motorcycle routes.	Within 0.5 miles of low-clearance or passenger vehicle routes (includes unpaved County roads and private land routes)	Within 0.5 miles of paved/primary roads and highways	Within 0.5 miles of streets and roads within municipalities and along highways
Naturalness (landscape texture form, line, color) – No new ROWs or fluid or locatable mineral development. Manage as No Surface Occupancy.					
Undisturbed natural landscape	Natural landscape with any modifications in harmony with surroundings and not visually obvious or evident (for example, stock ponds and trails)	Character of the natural landscape retained; a few modifications contrast with character of the landscape (for example, fences and primitive roads)	Character of the natural landscape partially modified, but none overpower natural landscape (for example, roads, structures, and utilities)	Character of the natural landscape considerably modified (agriculture, residential, or industrial)	Urbanized developments dominate landscape
Visitor Facilities – Maintain rustic facilities. Camping designated to dispersed sites along 2.7 miles of Thirteen Mile Loop.					
No structures; foot/horse trails only	Developed trails made mostly of native materials such as log bridges; structures are rare and isolated	Maintained and marked trails, simple trailhead developments, and basic toilets	Rustic facilities such as campsites, restrooms, trailheads, and interpretive displays	Modern facilities such as campgrounds, group shelters, boat launches, and occasional exhibits.	Elaborate full-service facilities such as laundries, restaurants, and groceries

Existing RSCs	
Desired RSCs	
Anticipated Potential Conditions	

Table F-2. Chappie-Shasta OHV SRMA Social Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Contacts (with other groups) – Participants encounter a primary use season (October through May) average of up to 14 encounters/day in areas classified as middle country and encounter an average of up to 29 encounters/day in areas classified as front country.					
Fewer than 3 encounters per day at camp sites and fewer than 6 encounters per day on travel routes	3–6 encounters per day off travel routes (for example, campsites) and 7–15 encounters per day on travel routes	7–14 encounters per day off travel routes (for example, staging areas) and 15–29 encounters per day on travel routes	15–29 encounters per day off travel routes (for example, campgrounds) and 30 or more encounters per day on travel routes.	People seem to be generally everywhere	Busy place with other people constantly in view
Group Size – Away from trailheads, participants encounter a primary use season (Mid-April through October) average of up to 9 people per group in areas classified as back country and up to 12 people per group in areas classified as middle country					
Fewer than or equal to 3 people per group	4–6 people per group	7–12 people per group	13–25 people per group	26–50 people per group	Greater than 50 people per group.
Evidence of Use – Localized areas of vegetation alteration and compacted/bare soils are found along trails and at trailheads. Inappropriate recreation use is rehabilitated					
No alteration of the natural terrain; footprints only observed; sounds of people rare	Areas of alteration uncommon; little surface vegetation wear observed; sounds of people infrequent	Small areas of alteration; surface vegetation showing wear with some bare soils sounds of people occasionally heard	Small areas of alteration prevalent; surface vegetation gone with compacted soils observed; sounds of people regularly heard	A few large areas of alteration; surface vegetation absent with hardened soils; sounds of people frequently heard	Large areas of alteration prevalent; some erosion; constantly hear people

Existing RSCs	
Desired RSCs	
Anticipated Potential Conditions	

Table F-3. Chappie-Shasta OHV SRMA Operational Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Public Access (types of public travel allowed) – Off-road vehicle use is predominant in the RMZ and motorized use is limited to designated motorized routes, with a 25-mph speed limit throughout.					
Nonmotorized travel (for example, foot and horse travel)	Nonmotorized travel (for example, mountain bikes)	Four-wheel-drive vehicles, all-terrain vehicles, and dirt bikes, in addition to nonmotorized, mechanized use	Two-wheel-drive vehicles are predominant, but also four-wheel-drive vehicles and nonmotorized, mechanized use	Ordinary highway auto and truck traffic is characteristic	Wide variety of street vehicles and highway traffic is ever-present
Visitor Services and information – Informational materials describe the SRMA and recreation opportunities. BLM staff/volunteers are periodically present at recreation sites but occasionally present away from recreation sites.					
No maps or brochures available on-site; staff rarely present to provide on-site assistance	Basic maps; staff infrequently present (for example, seasonally or during high-use periods) to provide on-site assistance	Area brochures and maps; staff occasionally present (for example, most weekends) to provide on-site assistance	Information materials describe recreation areas and activities; staff periodically present (for example, on weekdays and weekends)	Information materials describe recreation areas and activities, plus experience and benefit descriptions; staff regularly present (for example, almost daily)	Information materials describe recreation areas and activities, plus regularly scheduled on-site outdoor demonstrations and clinics
Management Controls and Regulations- Some regulatory and ethics signing; moderate use restrictions					
No on-site posting or signing of visitor regulations, interpretive information, or ethics; few use restrictions	Basic user regulations at key access points; minimum use restrictions	Some regulatory and ethics signing; moderate use restrictions (for example, camping and human waste)	Rules, regulations, and ethics clearly posted; use restrictions, limitations, and/or closures	Regulations strict and ethics prominent; use may be limited by permit, reservation, or other methods	Enforcement in addition to rules to reduce conflicts, hazards, and resource damage

Existing RSCs	
Desired RSCs	
Anticipated Potential Conditions	

F.6.2 Redding Trails SRMA

The Redding Trails SRMA (9,900 acres) would be designated under Alternatives C and D. The Redding Trails area is comprised of four RMZs to include the Sacramento Rail Trail and Keswick Reservoir, Clear Creek, Mule Mountain Recreation Area, and Community Trails (**Figure 2**). Approximately 100 acres of the Redding trail SRMA falls under management by the United States Bureau of Reclamation. The Redding Trails SRMA is a composite network of approximately 100 miles of non-motorized, multi-use trail. Hiking, trail running, mountain biking, and horseback riding are all popular activities, as well as swimming and nature viewing. The trail system is continuously evolving with an emphasis on connectivity and diversity in

recreational opportunities for residents and visitors to the city of Redding. The trail system works in conjunction with trails maintained by Whiskeytown National Recreation Area, Horsetown Clear Creek Preserve, and City of Redding, further expanding the recreational opportunities. The SRMA’s emphasis for connectivity inherently promotes partnerships and stewardship of public lands with neighboring land agencies and owners.

Trails frequently follow alongside creeks and utilize land features that provide for a sense of immersion in the natural environment, allowing one to feel away from roads and urban features within a mile of most trailheads. Trails may be utilized for commutes and have the potential of developing more to this purpose. The area considered for inclusion in the Redding Trails SRMA is expansive, aiming to provide opportunity for trail system enhancement.

Management actions associated with the entire SRMA include:

- Acquire available unimproved lands that provide legal public access to adjoining public lands, complete segments of recreational trails, enhance protection of sensitive resources, provide opportunities for public interpretation, enhance reforestation efforts (including habitat improvement for sensitive species), or enhance long-term administration of the area.
- Limitations for SRP within all RMZs would be based on level of use and potential for resource impact. BLM would monitor recreational conflict and resource impacts and would limit permits as necessary to maintain long-term resource sustainability and desired recreational experience and outcomes.

Sacramento River Rail Trail and Keswick Reservoir RMZ (30 acres)

The Sacramento River Rail Trail and Keswick Reservoir RMZ is located to the west of the Keswick reservoir and the Sacramento River. The primary recreation opportunities are the on the paved Sacramento River Rail Trail and water-based recreation opportunities from the Keswick boat ramp and trailhead. The area connects with and complements the Community Trails RMZ.

Outcome Objective

Objective: Continue to provide paved trail experiences and water-based recreation opportunities along the Sacramento River to encourage quality of life for visitors and socioeconomic opportunities for the community.

Recreation development may be constrained to meet greater stewardship goals for natural and cultural resources.

Participants in visitor assessments report on average 4.0 realization of the targeted experience and benefit outcomes listed below (where 1 = Not at all realized and 5 = totally realized).

Activities	Experiences	Benefits
<ul style="list-style-type: none"> • Cycling and biking, hiking and trail running • Motorized and non-motorized water-based activity 	<ul style="list-style-type: none"> • Developing skills and abilities • Perseverance, exercise, and stress reduction • Enjoying easy access to natural landscapes. 	<ul style="list-style-type: none"> • Increase self-reliance • Improved mental and physical health • Greater sense of connection to nature and expanded cultural awareness

Management Actions and Allowable Use Decisions

- Commercial fishing SRPs would be evaluated for resource capacity and sustainability.
- Recreational use would be encouraged to promote socioeconomic development and reach social outcomes of greater sense of connection and cultural awareness within the area.
- Work with adjoining landowners to acquire full administrative rights to lands as applicable to optimize management for desired recreational outcomes.

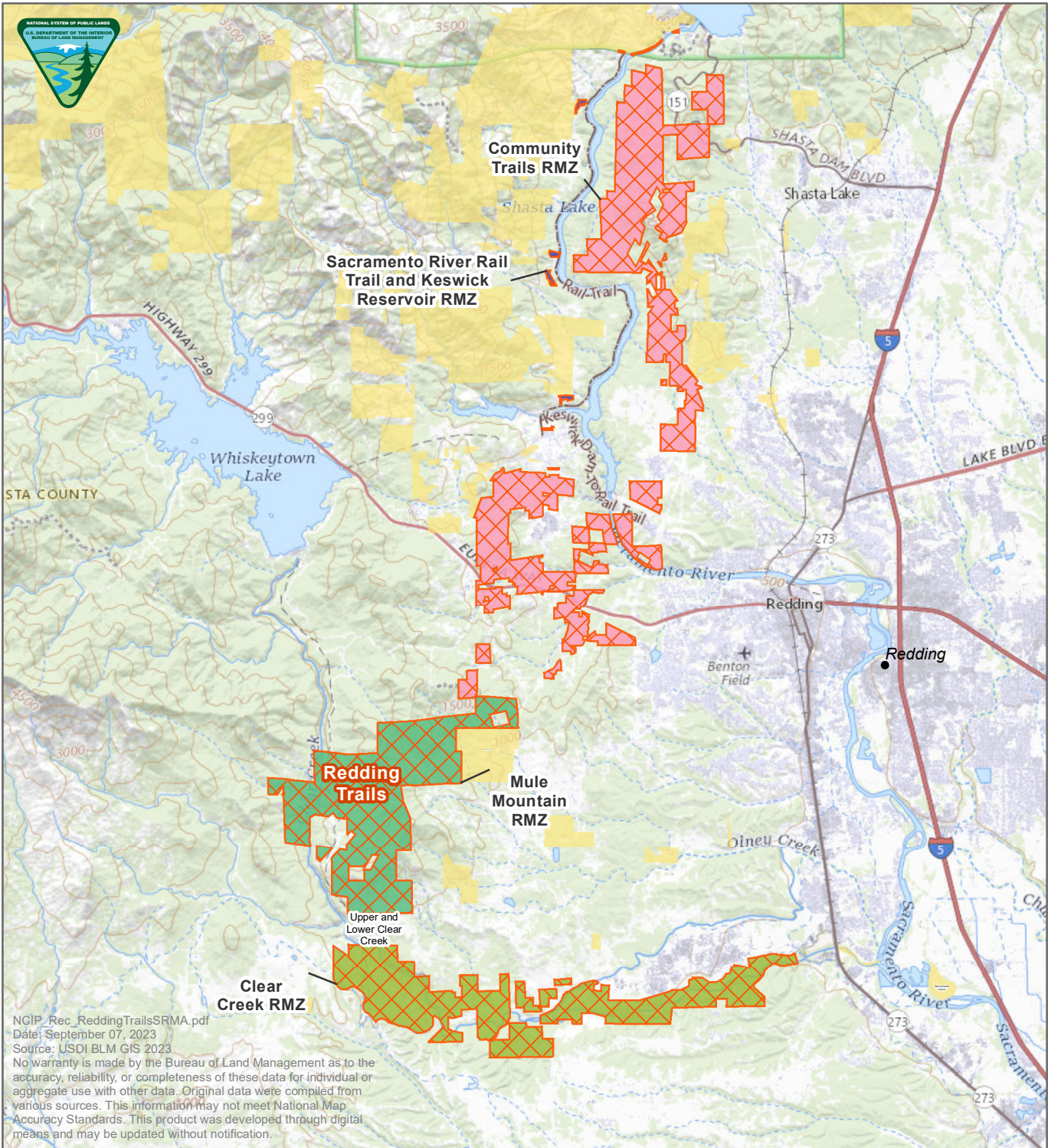
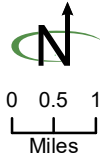


Figure 2: Redding Trails SRMA and Associated RMZs

- Recreation Management Zone (RMZ)
- Clear Creek
- Community Trails
- Mule Mountain
- Sacramento River Rail Trail and Keswick Reservoir
- Bureau of Land Management
- Proposed special recreation management area (SRMA)



Physical, Social, and Operational Recreation Setting Characteristics

Table F-4. Sacramento River Rail Trail and Keswick Reservoir RMZ, Physical Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Remoteness (approx.. distance from routes) – Over time, class acreages may change but all classes still exist					
More than 0.5 miles from either mechanized or motorized routes	Within 0.5 miles of mechanized routes	Within 0.5 miles of four-wheel-drive vehicle, all-terrain vehicle, and motorcycle routes.	Within 0.5 miles of low-clearance or passenger vehicle routes (includes unpaved County roads and private land routes)	Within 0.5 miles of paved/primary roads and highways	Within 0.5 miles of streets and roads within municipalities and along highways
Naturalness (landscape texture form, line, color) – No new ROWs or fluid or locatable mineral development. Manage as No Surface Occupancy.					
Undisturbed natural landscape	Natural landscape with any modifications in harmony with surroundings and not visually obvious or evident (for example, stock ponds and trails)	Character of the natural landscape retained; a few modifications contrast with character of the landscape (for example, fences and primitive roads)	Character of the natural landscape partially modified, but none overpower natural landscape (for example, roads, structures, and utilities)	Character of the natural landscape considerably modified (agriculture, residential, or industrial)	Urbanized developments dominate landscape
Visitor Facilities – Maintain rustic facilities. Camping designated to dispersed sites along 2.7 miles of Thirteen Mile Loop.					
No structures; foot/horse trails only	Developed trails made mostly of native materials such as log bridges; structures are rare and isolated	Maintained and marked trails, simple trailhead developments, and basic toilets	Rustic facilities such as campsites, restrooms, trailheads, and interpretive displays	Modern facilities such as campgrounds, group shelters, boat launches, and occasional exhibits.	Elaborate full-service facilities such as laundries, restaurants, and groceries

Existing RSCs	
Desired RSCs	
Anticipated Potential Conditions	

Table F-5. Sacramento River Rail Trail and Keswick Reservoir RMZ Social Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Contacts (with other groups) – Participants encounter a primary use season (October through May) average of up to 14 encounters/day in areas classified as middle country and encounter an average of up to 29 encounters/day in areas classified as front country.					
Fewer than 3 encounters per day at camp sites and fewer than 6 encounters per day on travel routes	3–6 encounters per day off travel routes (for example, campsites) and 7–15 encounters per day on travel routes	7–14 encounters per day off travel routes (for example, staging areas) and 15–29 encounters per day on travel routes	15–29 encounters per day off travel routes (for example, campgrounds) and 30 or more encounters per day on travel routes	People seem to be generally everywhere	Busy place with other people constantly in view
Group Size – Away from trailheads, participants encounter a primary use season (Mid-April through October) average of up to 9 people per group in areas classified as back country and up to 12 people per group in areas classified as middle country					
Fewer than or equal to 3 people per group	4–6 people per group	7–12 people per group	13–25 people per group	26–50 people per group	Greater than 50 people per group.
Evidence of Use – Localized areas of vegetation alteration and compacted/bare soils are found along trails and at trailheads. Inappropriate recreation use is rehabilitated					
No alteration of the natural terrain; footprints only observed; sounds of people rare	Areas of alteration uncommon; little surface vegetation wear observed; sounds of people infrequent	Small areas of alteration; surface vegetation showing wear with some bare soils sounds of people occasionally heard	Small areas of alteration prevalent; surface vegetation gone with compacted soils observed; sounds of people regularly heard	A few large areas of alteration; surface vegetation absent with hardened soils; sounds of people frequently heard	Large areas of alteration prevalent; some erosion; constantly hear people

Existing RSCs	
Desired RSCs	
Anticipated Potential Conditions	

Table F-6. Sacramento River Rail Trail and Keswick Reservoir RMZ Operational Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Public Access (types of public travel allowed) – Off-road vehicle use is predominant in the RMZ and motorized use is limited to designated motorized routes, with a 25-mph speed limit throughout.					
Nonmotorized travel (for example, foot and horse travel)	Nonmotorized travel (for example, mountain bikes)	Four-wheel-drive vehicles, all-terrain vehicles, and dirt bikes, in addition to nonmotorized, mechanized use	Two-wheel-drive vehicles are predominant, but also four-wheel-drive vehicles and nonmotorized, mechanized use	Ordinary highway auto and truck traffic is characteristic	Wide variety of street vehicles and highway traffic is ever-present
Visitor Services and information – Informational materials describe the SRMA and recreation opportunities. BLM staff/volunteers are periodically present at recreation sites but occasionally present away from recreation sites.					
No maps or brochures available on-site; staff rarely present to provide on-site assistance	Basic maps: staff infrequently present (for example, seasonally or during high-use periods) to provide on-site assistance	Area brochures and maps; staff occasionally present (for example, most weekends) to provide on-site assistance	Information materials describe recreation areas and activities; staff periodically present (for example, on weekdays and weekends)	Information materials describe recreation areas and activities, plus experience and benefit descriptions; staff regularly present (for example, almost daily)	Information materials describe recreation areas and activities, plus regularly scheduled on-site outdoor demonstrations and clinics
Management Controls and Regulations- Some regulatory and ethics signing; moderate use restrictions					
No on-site posting or signing of visitor regulations, interpretive information, or ethics; few use restrictions	Basic user regulations at key access points; minimum use restrictions	Some regulatory and ethics signing; moderate use restrictions (for example, camping and human waste)	Rules, regulations, and ethics clearly posted; use restrictions, limitations, and/or closures	Regulations strict and ethics prominent; use may be limited by permit, reservation, or other methods	Enforcement in addition to rules to reduce conflicts, hazards, and resource damage

Existing RSCs	
Desired RSCs	
Anticipated Potential Conditions	

Clear Creek RMZ (2,600 acres)

The Clear Creek RMZ primarily centers around Clear Creek, a suitable creek in the Wild and Scenic River (WSR) system and tributary of the Sacramento River. Clear Creek RMZ offers the Cloverdale trail area in the west of the RMZ with scenic, expansive deep canyon views and multi-use trails. In the eastern portion of the RMZ, the trail accesses the creek and meanders through restored riparian ecosystems, providing outstanding swimming, nature viewing, and trail-based recreation opportunities. The RMZ provides a buffer between the creek corridor and industrial development along Clear Creek Road.

Outcome Objective

Objective: Provide safe, diverse, and sustainable non-motorized trail and water-based recreation opportunities within the riparian corridor of Clear Creek while conserving cultural and natural resources.

Participants in visitor assessments report on average 4.0 realization of the targeted experience and benefit outcomes listed below (where 1 = Not at all realized and 5 = totally realized).

Activities	Experiences	Benefits
<ul style="list-style-type: none"> • Day-use access to beaches • Non-motorized trail use emphasizing hiking and trail running • Wildlife viewing 	<ul style="list-style-type: none"> • Stress reduction, relaxation, and enjoyment • Enjoying easy access to natural landscapes • Exercise options close to home. 	<ul style="list-style-type: none"> • Improved mental and physical health • Greater sense of connection to others and the natural world

Management Actions and Allowable Use Decisions

- Minimize impacts to wildlife and riparian vegetation when providing and improving access to the creek.
- Improve health and safety in the area through an abundance of education, interpretation, and signage, as well as increased recreation staff, volunteer, and community partner presence.
- Due to the sensitive resource area, optimized mountain bike trail (trails with mountain bike-specific trail features such as berms and jumps) and equestrian only trails would not be allowed.
- Commercial fishing SRPs would be re-evaluated for limitations and possibly discontinued. Public fishing access would continue.
- Provide opportunity for large Day-Use group functions through a reservable day-use area at China Gardens. Reservable day-use may be used for SRPs, or for large groups not requiring a permit.
- Special Recreation Permits (except commercial fishing) and organized groups not requiring a permit would be allowed and encouraged to promote socioeconomic development and reach social outcomes of greater sense of connection and cultural awareness within the area.

Physical, Social, and Operational Recreation Setting Characteristics

Table F-7. Clear Creek RMZ, Physical Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Remoteness (approx.. distance from routes) – Over time, class acreages may change but all classes still exist					
More than 0.5 miles from either mechanized or motorized routes	Within 0.5 miles of mechanized routes	Within 0.5 miles of four-wheel-drive vehicle, all-terrain vehicle, and motorcycle routes.	Within 0.5 miles of low-clearance or passenger vehicle routes (includes unpaved County roads and private land routes)	Within 0.5 miles of paved/primary roads and highways	Within 0.5 miles of streets and roads within municipalities and along highways
Naturalness (landscape texture form, line, color) – No new ROWs or fluid or locatable mineral development. Manage as No Surface Occupancy.					
Undisturbed natural landscape	Natural landscape with any modifications in harmony with surroundings and not visually obvious or evident (for example, stock ponds and trails)	Character of the natural landscape retained; a few modifications contrast with character of the landscape (for example, fences and primitive roads)	Character of the natural landscape partially modified, but none overpower natural landscape (for example, roads, structures, and utilities)	Character of the natural landscape considerably modified (agriculture, residential, or industrial)	Urbanized developments dominate landscape
Visitor Facilities – Maintain rustic facilities. Camping designated to dispersed sites along 2.7 miles of Thirteen Mile Loop.					
No structures; foot/horse trails only	Developed trails made mostly of native materials such as log bridges; structures are rare and isolated	Maintained and marked trails, simple trailhead developments, and basic toilets	Rustic facilities such as campsites, restrooms, trailheads, and interpretive displays	Modern facilities such as campgrounds, group shelters, boat launches, and occasional exhibits.	Elaborate full-service facilities such as laundries, restaurants, and groceries

Existing RSCs	
Existing and Desired RSCs	
Anticipated Potential Conditions	

Table F-8. Clear Creek RMZ Social Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Contacts (with other groups) – Participants encounter a primary use season (October through May) average of up to 14 encounters/day in areas classified as middle country and encounter an average of up to 29 encounters/day in areas classified as front country.					
Fewer than 3 encounters per day at camp sites and fewer than 6 encounters per day on travel routes	3–6 encounters per day off travel routes (for example, campsites) and 7–15 encounters per day on travel routes	7–14 encounters per day off travel routes (for example, staging areas) and 15–29 encounters per day on travel routes	15–29 encounters per day off travel routes (for example, campgrounds) and 30 or more encounters per day on travel routes	People seem to be generally everywhere	Busy place with other people constantly in view
Group Size – Away from trailheads, participants encounter a primary use season (Mid-April through October) average of up to 9 people per group in areas classified as back country and up to 12 people per group in areas classified as middle country					
Fewer than or equal to 3 people per group	4–6 people per group	7–12 people per group	13–25 people per group	26–50 people per group	Greater than 50 people per group.
Evidence of Use – Localized areas of vegetation alteration and compacted/bare soils are found along trails and at trailheads. Inappropriate recreation use is rehabilitated					
No alteration of the natural terrain; footprints only observed; sounds of people rare	Areas of alteration uncommon; little surface vegetation wear observed; sounds of people infrequent	Small areas of alteration; surface vegetation showing wear with some bare soils sounds of people occasionally heard	Small areas of alteration prevalent; surface vegetation gone with compacted soils observed; sounds of people regularly heard	A few large areas of alteration; surface vegetation absent with hardened soils; sounds of people frequently heard	Large areas of alteration prevalent; some erosion; constantly hear people

Existing RSCs	
Existing and Desired RSCs	
Anticipated Potential Conditions	

Table F-9. Clear Creek RMZ Operational Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Public Access (types of public travel allowed) – Off-road vehicle use is predominant in the RMZ and motorized use is limited to designated motorized routes, with a 25-mph speed limit throughout.					
Nonmotorized travel (for example, foot and horse travel)	Nonmotorized travel (for example, mountain bikes)	Four-wheel-drive vehicles, all-terrain vehicles, and dirt bikes, in addition to nonmotorized, mechanized use	Two-wheel-drive vehicles are predominant, but also four-wheel-drive vehicles and nonmotorized, mechanized use	Ordinary highway auto and truck traffic is characteristic	Wide variety of street vehicles and highway traffic is ever-present
Visitor Services and information – Informational materials describe the SRMA and recreation opportunities. BLM staff/volunteers are periodically present at recreation sites but occasionally present away from recreation sites.					
No maps or brochures available on-site; staff rarely present to provide on-site assistance	Basic maps; staff infrequently present (for example, seasonally or during high-use periods) to provide on-site assistance	Area brochures and maps; staff occasionally present (for example, most weekends) to provide on-site assistance	Information materials describe recreation areas and activities; staff periodically present (for example, on weekdays and weekends)	Information materials describe recreation areas and activities, plus experience and benefit descriptions; staff regularly present (for example, almost daily)	Information materials describe recreation areas and activities, plus regularly scheduled on-site outdoor demonstrations and clinics
Management Controls and Regulations- Some regulatory and ethics signing; moderate use restrictions					
No on-site posting or signing of visitor regulations, interpretive information, or ethics; few use restrictions	Basic user regulations at key access points; minimum use restrictions	Some regulatory and ethics signing; moderate use restrictions (for example, camping and human waste)	Rules, regulations, and ethics clearly posted; use restrictions, limitations, and/or closures	Regulations strict and ethics prominent; use may be limited by permit, reservation, or other methods	Enforcement in addition to rules to reduce conflicts, hazards, and resource damage

Existing RSCs	
Existing and Desired RSCs	
Anticipated Potential Conditions	

Mule Mountain RMZ (2,900 Acres)

The Mule Mountain RMZ is characterized by steeper, typically longer trails with multiple loop options that connect to trails in the Swasey ERMA. Mountain biking is popular in the RMZ, though hiking, trail running, horseback riding, and casual use metal detection are also common. Outcome Objective

Objective: Develop a diverse sustainable trail system serving multiple use needs with a focus on mountain biking.

Participants in visitor assessments report on average 4.0 realization of the targeted experience and benefit outcomes listed below (where 1 = Not at all realized and 5 = totally realized).

Activities	Experiences	Benefits
<ul style="list-style-type: none"> Mountain biking as well as hiking/trail running, equestrian use 	<ul style="list-style-type: none"> Mountain bike skill development, endurance and physical fitness Stress reduction Sense of community Expansion of cultural awareness 	<ul style="list-style-type: none"> Improved sense of self-reliance Improved skills for outdoor enjoyment Improved physical and mental health, social cultural enrichment and connection Socioeconomic benefit to the surrounding area through tourism and local engagement

Management Actions and Allowable Use Decisions

- Optimized mountain bike trails (trails with mountain bike-specific trail features such as berms and jumps) would be allowed.
- To provide safe trail options for equestrian uses, hiker and equestrian use only trails would be allowable where not in conflict with optimized mountain bike trails. Forethought would be given to diverse user groups in the planning of the overall trail system, and mountain biking will be the dominant recreational use.
- Mitigate cumulative impacts of a high demand SRMA near the Swasey ERMA through limitations within the Swasey ERMA, as described above.
- Develop a trail monitoring program to gauge impact to sedimentation and cultural resources.
- Promote a volunteer trail stewardship program.
- Pursue expanding overflow and event parking.
- In the SRMA, pursue trailhead, road, and parking area improvements and expansions as necessary to meet user needs and with consideration of the management of the adjoining area of critical environmental concern (ACEC).
- Provide recreational opportunities to encourage socioeconomic development and reach social outcomes of greater sense of connection and cultural awareness within the area.
- Limitations to SRPs and organized groups would be implemented if monitoring indicates adverse impacts to cultural or natural resources in the area. These potential future limitations could include:
 - Limitations on group size.
 - Limitations of number of groups annually.
 - Closure of impacted areas to organized events
- Capacity levels would be considered in subsequent implementation level planning if needed.

- During competitive SRP events, spectating would be allowed along trails, roads, and parking lots.
- To maintain an accessible environment, the number of large events would be balanced with public demand during peak season.
- Provide visitor services to orient users to the mountain bike specific area, promote responsible recreation, educate about cultural resource values, address specific user group needs, and reduce user conflicts.
- Provide information on mountain bike difficulty level, ratings, skill requirements and safety through all platforms.
- Maintain trails and close user-made trails. Provide trail map that is clear to facilitate ease of use and awareness of trail location and type.
- Visitor Services would include extensive development of etiquette, guidance, and policy signage. Such information would focus on cultural heritage and recreational uses within the and Mule Mountain RMA.
- Promote the area in coordination with the City of Redding and other partners.
- Plan for providing cultural and natural resource information throughout the SRMA, ensuring adequate coverage of all resource topics and points of cultural interests to be covered.
- Provide developed camping opportunities in the area. The recreation area would be day use only.
- Recreation area would be day use only.
- Explore expanded amenity fee camping in the area, for example along Mule Mountain Road. Consider developing a small campground along Mule Mountain Road with fee amenities.

Physical, Social, and Operational Recreation Setting Characteristics

Table F-10. Mule Mountain RMZ, Physical Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Remoteness (approx. distance from routes) – Over time, class acreages may change but all classes still exist					
More than 0.5 miles from either mechanized or motorized routes	Within 0.5 miles of mechanized routes	Within 0.5 miles of four-wheel-drive vehicle, all-terrain vehicle, and motorcycle routes.	Within 0.5 miles of low-clearance or passenger vehicle routes (includes unpaved County roads and private land routes)	Within 0.5 miles of paved/primary roads and highways	Within 0.5 miles of streets and roads within municipalities and along highways
Naturalness (landscape texture form, line, color) – No new ROWs or fluid or locatable mineral development. Manage as No Surface Occupancy.					
Undisturbed natural landscape	Natural landscape with any modifications in harmony with surroundings and not visually obvious or evident (for example, stock ponds and trails)	Character of the natural landscape retained; a few modifications contrast with character of the landscape (for example, fences and primitive roads)	Character of the natural landscape partially modified, but none overpower natural landscape (for example, roads, structures, and utilities)	Character of the natural landscape considerably modified (agriculture, residential, or industrial)	Urbanized developments dominate landscape
Visitor Facilities – Maintain rustic facilities. Camping designated to dispersed sites along 2.7 miles of Thirteen Mile Loop.					
No structures; foot/horse trails only	Developed trails made mostly of native materials such as log bridges; structures are rare and isolated	Maintained and marked trails, simple trailhead developments, and basic toilets	Rustic facilities such as campsites, restrooms, trailheads, and interpretive displays	Modern facilities such as campgrounds, group shelters, boat launches, and occasional exhibits.	Elaborate full-service facilities such as laundries, restaurants, and groceries

Existing RSCs	
Desired RSCs	
Anticipated Potential Conditions	

Table F-11. Mule Mountain RMZ Social Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Contacts (with other groups) - Participants encounter a primary use season (October through May) average of up to 14 encounters/day in areas classified as middle country and encounter an average of up to 29 encounters/day in areas classified as front country.					
Fewer than 3 encounters per day at camp sites and fewer than 6 encounters per day on travel routes	3–6 encounters per day off travel routes (for example, campsites) and 7–15 encounters per day on travel routes	7–14 encounters per day off travel routes (for example, staging areas) and 15–29 encounters per day on travel routes	15–29 encounters per day off travel routes (for example, campgrounds) and 30 or more encounters per day on travel routes	People seem to be generally everywhere	Busy place with other people constantly in view
Group Size - Away from trailheads, participants encounter a primary use season (Mid-April through October) average of up to 9 people per group in areas classified as back country and up to 12 people per group in areas classified as middle country					
Fewer than or equal to 3 people per group	4–6 people per group	7–12 people per group	13–25 people per group	26–50 people per group	Greater than 50 people per group.
Evidence of Use - Localized areas of vegetation alteration and compacted/bare soils are found along trails and at trailheads. Inappropriate recreation use is rehabilitated					
No alteration of the natural terrain; footprints only observed; sounds of people rare	Areas of alteration uncommon; little surface vegetation wear observed; sounds of people infrequent	Small areas of alteration; surface vegetation showing wear with some bare soils sounds of people occasionally heard	Small areas of alteration prevalent; surface vegetation gone with compacted soils observed; sounds of people regularly heard	A few large areas of alteration; surface vegetation absent with hardened soils; sounds of people frequently heard	Large areas of alteration prevalent; some erosion; constantly hear people

Existing RSCs	
Desired RSCs	
Anticipated Potential Conditions	

Table F-12. Mule Mountain RMZ Operational Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Public Access (types of public travel allowed) – Off-road vehicle use is predominant in the RMZ and motorized use is limited to designated motorized routes, with a 25-mph speed limit throughout.					
Nonmotorized travel (for example, foot and horse travel)	Nonmotorized travel (for example, mountain bikes)	Four-wheel-drive vehicles, all-terrain vehicles, and dirt bikes, in addition to nonmotorized, mechanized use	Two-wheel-drive vehicles are predominant, but also four-wheel-drive vehicles and nonmotorized, mechanized use	Ordinary highway auto and truck traffic is characteristic	Wide variety of street vehicles and highway traffic is ever-present
Visitor Services and information - Informational materials describe the SRMA and recreation opportunities. BLM staff/volunteers are periodically present at recreation sites but occasionally present away from recreation sites.					
No maps or brochures available on-site; staff rarely present to provide on-site assistance	Basic maps; staff infrequently present (for example, seasonally or during high-use periods) to provide on-site assistance	Area brochures and maps; staff occasionally present (for example, most weekends) to provide on-site assistance	Information materials describe recreation areas and activities; staff periodically present (for example, on weekdays and weekends)	Information materials describe recreation areas and activities, plus experience and benefit descriptions; staff regularly present (for example, almost daily)	Information materials describe recreation areas and activities, plus regularly scheduled on-site outdoor demonstrations and clinics
Management Controls and Regulations- Some regulatory and ethics signing; moderate use restrictions					
No on-site posting or signing of visitor regulations, interpretive information, or ethics; few use restrictions	Basic user regulations at key access points; minimum use restrictions	Some regulatory and ethics signing; moderate use restrictions (for example, camping and human waste)	Rules, regulations, and ethics clearly posted; use restrictions, limitations, and/or closures	Regulations strict and ethics prominent; use may be limited by permit, reservation, or other methods	Enforcement in addition to rules to reduce conflicts, hazards, and resource damage

Existing RSCs	
Desired RSCs	
Anticipated Potential Conditions	

Community Trails RMZ (4,400 acres)

The Community Trails RMZ is nested within the greater Redding area. Non-motorized, multi-use trails frequently interface with rural and urban areas, providing critical connectivity between recreation focus areas and the community. Community Trails offer nature experiences by leaving roaded areas, following along creeks, utilizing natural features such as hillsides to provide a sense of remoteness from the rural and urban environment.

Outcome Objective

Objective: Develop a complete, diverse, and sustainable multi-use trail system to increase individual well-being, sense of community, and to promote connectivity and socioeconomic opportunities.

Participants in visitor assessments report on average 4.0 realization of the targeted experience and benefit outcomes listed below (where 1 = Not at all realized and 5 = totally realized).

Activities	Experiences	Benefits
<ul style="list-style-type: none"> • Mountain biking, hiking/trail running, equestrian use 	<ul style="list-style-type: none"> • Developing skills and abilities, • Perseverance, exercise, and stress reduction • Enjoying easy access to natural landscapes • Expansion of cultural awareness 	<ul style="list-style-type: none"> • Increase self-reliance, improved mental and physical health. • Greater sense of connection to nature and community • Community connectivity

Management Actions and Allowable Use Decisions

- Provide connectivity to other trails and features in the Redding area.
- Provide a diversity of trail and nature experiences, including wildlife viewing, swimming hole access. Trail planning would emphasize multi-use trail and equity among user groups.
- Optimized mountain bike trail and equestrian and hiker only trails would be permissible where uses would not be in conflict and would not prohibit free flowing use of connected multi-use trail.
- Promote community participation in stewardship of trails and in cultural and natural resources conservation through volunteer and partner engagement.
- Sign planning for cultural resource information throughout the RMZ would ensure adequate coverage of all resource topics and points of cultural interests to be covered.
- Special recreation permits and organized groups not requiring a permit would be allowed and encouraged to promote socioeconomic development and reach social outcomes of greater sense of connection and cultural awareness within the area.

Physical, Social, and Operational Recreation Setting Characteristics Tables

Table F-13. Community Trails RMZ, Physical Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Remoteness (approx. distance from routes) – Over time, class acreages may change but all classes still exist					
More than 0.5 miles from either mechanized or motorized routes	Within 0.5 miles of mechanized routes	Within 0.5 miles of four-wheel-drive vehicle, all-terrain vehicle, and motorcycle routes.	Within 0.5 miles of low-clearance or passenger vehicle routes (includes unpaved County roads and private land routes)	Within 0.5 miles of paved/primary roads and highways	Within 0.5 miles of streets and roads within municipalities and along highways
Naturalness (landscape texture form, line, color) - No new ROWs or fluid or locatable mineral development. Manage as No Surface Occupancy.					
Undisturbed natural landscape	Natural landscape with any modifications in harmony with surroundings and not visually obvious or evident (for example, stock ponds and trails)	Character of the natural landscape retained; a few modifications contrast with character of the landscape (for example, fences and primitive roads)	Character of the natural landscape partially modified, but none overpower natural landscape (for example, roads, structures, and utilities)	Character of the natural landscape considerably modified (agriculture, residential, or industrial)	Urbanized developments dominate landscape
Visitor Facilities – Maintain rustic facilities. Camping designated to dispersed sites along 2.7 miles of Thirteen Mile Loop.					
No structures; foot/horse trails only	Developed trails made mostly of native materials such as log bridges; structures are rare and isolated	Maintained and marked trails, simple trailhead developments, and basic toilets	Rustic facilities such as campsites, restrooms, trailheads, and interpretive displays	Modern facilities such as campgrounds, group shelters, boat launches, and occasional exhibits.	Elaborate full-service facilities such as laundries, restaurants, and groceries

Existing RSCs	
Existing and Desired RSCs	
Anticipated Potential Conditions	

Table F-14. Community Trails RMZ Social Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Contacts (with other groups) - Participants encounter a primary use season (October through May) average of up to 14 encounters/day in areas classified as middle country and encounter an average of up to 29 encounters/day in areas classified as front country.					
Fewer than 3 encounters per day at camp sites and fewer than 6 encounters per day on travel routes	3–6 encounters per day off travel routes (for example, campsites) and 7–15 encounters per day on travel routes	7–14 encounters per day off travel routes (for example, staging areas) and 15–29 encounters per day on travel routes	15–29 encounters per day off travel routes (for example, campgrounds) and 30 or more encounters per day on travel routes	People seem to be generally everywhere	Busy place with other people constantly in view
Group Size - Away from trailheads, participants encounter a primary use season (Mid-April through October) average of up to 9 people per group in areas classified as back country and up to 12 people per group in areas classified as middle country					
Fewer than or equal to 3 people per group	4–6 people per group	7–12 people per group	13–25 people per group	26–50 people per group	Greater than 50 people per group.
Evidence of Use - Localized areas of vegetation alteration and compacted/bare soils are found along trails and at trailheads. Inappropriate recreation use is rehabilitated					
No alteration of the natural terrain; footprints only observed; sounds of people rare	Areas of alteration uncommon; little surface vegetation wear observed; sounds of people infrequent	Small areas of alteration; surface vegetation showing wear with some bare soils sounds of people occasionally heard	Small areas of alteration prevalent; surface vegetation gone with compacted soils observed; sounds of people regularly heard	A few large areas of alteration; surface vegetation absent with hardened soils; sounds of people frequently heard	Large areas of alteration prevalent; some erosion; constantly hear people

Existing RSCs	
Existing and Desired RSCs	
Anticipated Potential Conditions	

Table F-15. Community Trails RMZ Operational Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Public Access (types of public travel allowed) – Off-road vehicle use is predominant in the RMZ and motorized use is limited to designated motorized routes, with a 25-mph speed limit throughout.					
Nonmotorized travel (for example, foot and horse travel)	Nonmotorized travel (for example, mountain bikes)	Four-wheel-drive vehicles, all-terrain vehicles, and dirt bikes, in addition to nonmotorized, mechanized use	Two-wheel-drive vehicles are predominant, but also four-wheel-drive vehicles and nonmotorized, mechanized use	Ordinary highway auto and truck traffic is characteristic	Wide variety of street vehicles and highway traffic is ever-present
Visitor Services and information - Informational materials describe the SRMA and recreation opportunities. BLM staff/volunteers are periodically present at recreation sites but occasionally present away from recreation sites.					
No maps or brochures available on-site; staff rarely present to provide on-site assistance	Basic maps: staff infrequently present (for example, seasonally or during high-use periods) to provide on-site assistance	Area brochures and maps; staff occasionally present (for example, most weekends) to provide on-site assistance	Information materials describe recreation areas and activities; staff periodically present (for example, on weekdays and weekends)	Information materials describe recreation areas and activities, plus experience and benefit descriptions; staff regularly present (for example, almost daily)	Information materials describe recreation areas and activities, plus regularly scheduled on-site outdoor demonstrations and clinics
Management Controls and Regulations- Some regulatory and ethics signing; moderate use restrictions					
No on-site posting or signing of visitor regulations, interpretive information, or ethics; few use restrictions	Basic user regulations at key access points; minimum use restrictions	Some regulatory and ethics signing; moderate use restrictions (for example, camping and human waste)	Rules, regulations, and ethics clearly posted; use restrictions, limitations, and/or closures	Regulations strict and ethics prominent; use may be limited by permit, reservation, or other methods	Enforcement in addition to rules to reduce conflicts, hazards, and resource damage

Existing RSCs	
Existing and Desired RSCs	
Anticipated Potential Conditions	

F.6.3 Iron Mountain Target Shooting Area SRMA

The Iron Mountain SRMA (600 acres) would be designated under Alternatives C and D. The Iron Mountain SRMA is located on Iron Mountain Road, 5 miles north of Highway 299, west of the City of Redding (**Figure 3**). This area has historically been used for target shooting and sighting in hunting rifles. It provides 4 separate roadside turnout shooting areas and is popular for its proximity to population centers and year-round paved county road access. The Iron Mountain Target Shooting SRMA has been used as a target shooting area for over 30 years. The use has grown significantly over the last 15 years due to public and private lands elsewhere being closed to target shooting. Although BLM rarely designates target shooting areas, BLM has historically managed for this use along with assistance from Shasta County by improving parking and lead capture. The SRMA would be managed to improve user safety and reduce impacts to surrounding areas, potentially with more developed shooting ranges, backstops, or other infrastructure.

Outcome Objective

Participants in visitor assessments report on average 4.0 realization of the targeted experience and benefit outcomes listed below (where 1 = Not at all realized and 5 = totally realized).

Activities	Experiences	Benefits
<ul style="list-style-type: none"> • Target shooting 	<ul style="list-style-type: none"> • Improving skills and abilities • Increasing awareness for firearm safety • Sharing outdoor activity with friends and family • Easy access to outdoors. 	<ul style="list-style-type: none"> • Increase self-reliance, improved skills for outdoor enjoyment • Stronger ties with family and friends • Enlarged understanding of personal responsibility to help care for community and keep it clean • Economic benefits to local retailers and small businesses.

Management Actions and Allowable Use Decisions

- Improve target shooting opportunities and allow for greater development of gun safety capacity and awareness, gun skills and abilities, and awareness of wildfire safety while shooting.
- Develop shooting range facilities (for example, backstops) to provide for a safe shooting environment and in accordance with resource protection and stewardship goals.
- As applicable, pursue partnerships and/or stewardship opportunities with governmental or non-governmental organizations to assist in developing and managing the shooting range.
- Continue to provide Shooting Range SRPs, balancing easy public access with commercial, organized group and event interests.
- Prioritize hazardous fuel reductions at the Shooting Range, maintaining hazardous fuel reductions on a 1 to 3-year cycle at the shooting range.
- Require the use of non-toxic ammunition for all shooting and/or develop backstop containment and require non-toxic skeet and trap shooting.
- Develop an implementation level plan for managing the shooting range.
- This plan would include facilities and shooting range operating practices to provide for a safe recreational experience while protecting natural and cultural resources.

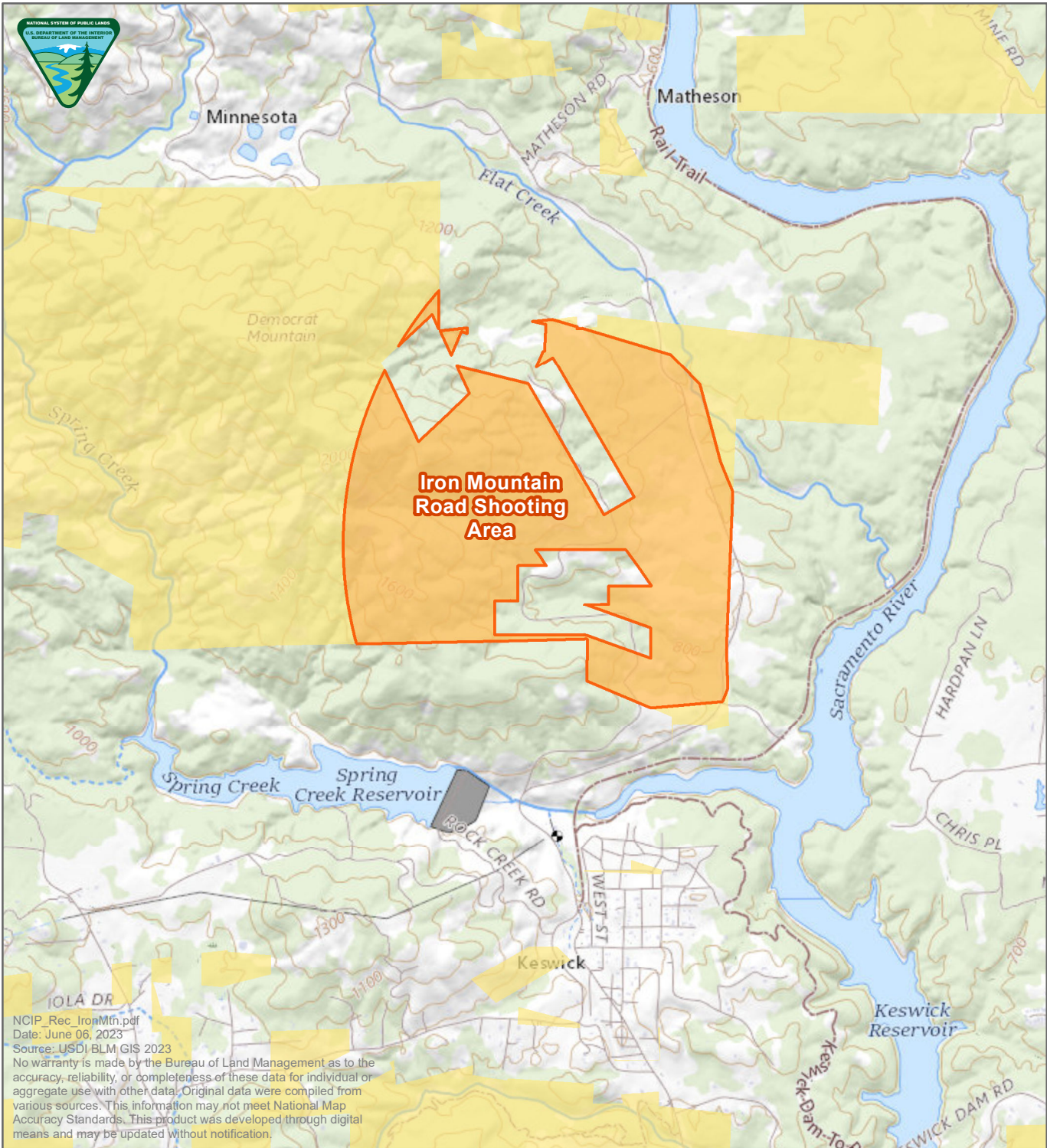


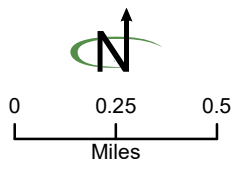


Figure 3: Iron Mountain SRMA

-  Proposed special recreation management area (SRMA)
-  Bureau of Land Management



Physical, Social, and Operational Recreation Setting Characteristics

Table F-16. Iron Mountain SRMA, Physical Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Remoteness (approx. distance from routes) – Over time, class acreages may change but all classes still exist					
More than 0.5 miles from either mechanized or motorized routes	Within 0.5 miles of mechanized routes	Within 0.5 miles of four-wheel-drive vehicle, all-terrain vehicle, and motorcycle routes.	Within 0.5 miles of low-clearance or passenger vehicle routes (includes unpaved County roads and private land routes)	Within 0.5 miles of paved/primary roads and highways	Within 0.5 miles of streets and roads within municipalities and along highways
Naturalness (landscape texture form, line, color) - No new ROWs or fluid or locatable mineral development. Manage as No Surface Occupancy.					
Undisturbed natural landscape	Natural landscape with any modifications in harmony with surroundings and not visually obvious or evident (for example, stock ponds and trails)	Character of the natural landscape retained; a few modifications contrast with character of the landscape (for example, fences and primitive roads)	Character of the natural landscape partially modified, but none overpower natural landscape (for example, roads, structures, and utilities)	Character of the natural landscape considerably modified (agriculture, residential, or industrial)	Urbanized developments dominate landscape
Visitor Facilities – Maintain rustic facilities. Camping designated to dispersed sites along 2.7 miles of Thirteen Mile Loop.					
No structures; foot/horse trails only	Developed trails made mostly of native materials such as log bridges; structures are rare and isolated	Maintained and marked trails, simple trailhead developments, and basic toilets	Rustic facilities such as campsites, restrooms, trailheads, and interpretive displays	Modern facilities such as campgrounds, group shelters, boat launches, and occasional exhibits.	Elaborate full-service facilities such as laundries, restaurants, and groceries

Existing RSCs	
Desired RSCs	
Anticipated Potential Conditions (APC)	

Table F-17. Iron Mountain SRMA Social Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Contacts (with other groups) - Participants encounter a primary use season (October through May) average of up to 14 encounters/day in areas classified as middle country and encounter an average of up to 29 encounters/day in areas classified as front country.					
Fewer than 3 encounters per day at camp sites and fewer than 6 encounters per day on travel routes	3–6 encounters per day off travel routes (for example, campsites) and 7–15 encounters per day on travel routes	7–14 encounters per day off travel routes (for example, staging areas) and 15–29 encounters per day on travel routes	15–29 encounters per day off travel routes (for example, campgrounds) and 30 or more encounters per day on travel routes	People seem to be generally everywhere	Busy place with other people constantly in view
Group Size - Away from trailheads, participants encounter a primary use season (Mid-April through October) average of up to 9 people per group in areas classified as back country and up to 12 people per group in areas classified as middle country					
Fewer than or equal to 3 people per group	4–6 people per group	7–12 people per group	13–25 people per group	26–50 people per group	Greater than 50 people per group.
Evidence of Use - Localized areas of vegetation alteration and compacted/bare soils are found along trails and at trailheads. Inappropriate recreation use is rehabilitated					
No alteration of the natural terrain; footprints only observed; sounds of people rare	Areas of alteration uncommon; little surface vegetation wear observed; sounds of people infrequent	Small areas of alteration; surface vegetation showing wear with some bare soils sounds of people occasionally heard	Small areas of alteration prevalent; surface vegetation gone with compacted soils observed; sounds of people regularly heard	A few large areas of alteration; surface vegetation absent with hardened soils; sounds of people frequently heard	Large areas of alteration prevalent; some erosion; constantly hear people

Existing RSCs	
Desired RSCs	
Anticipated Potential Conditions	

Table F-18. Iron Mountain SRMA Operational Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Public Access (types of public travel allowed) – Off-road vehicle use is predominant in the RMZ and motorized use is limited to designated motorized routes, with a 25-mph speed limit throughout.					
Nonmotorized travel (for example, foot and horse travel)	Nonmotorized travel (for example, mountain bikes)	Four-wheel-drive vehicles, all-terrain vehicles, and dirt bikes, in addition to nonmotorized, mechanized use	Two-wheel-drive vehicles are predominant, but also four-wheel-drive vehicles and nonmotorized, mechanized use	Ordinary highway auto and truck traffic is characteristic	Wide variety of street vehicles and highway traffic is ever-present
Visitor Services and information - Informational materials describe the SRMA and recreation opportunities. BLM staff/volunteers are periodically present at recreation sites but occasionally present away from recreation sites.					
No maps or brochures available on-site; staff rarely present to provide on-site assistance	Basic maps; staff infrequently present (for example, seasonally or during high-use periods) to provide on-site assistance	Area brochures and maps; staff occasionally present (for example, most weekends) to provide on-site assistance	Information materials describe recreation areas and activities; staff periodically present (for example, on weekdays and weekends)	Information materials describe recreation areas and activities, plus experience and benefit descriptions; staff regularly present (for example, almost daily)	Information materials describe recreation areas and activities, plus regularly scheduled on-site outdoor demonstrations and clinics
Management Controls and Regulations- Some regulatory and ethics signing; moderate use restrictions					
No on-site posting or signing of visitor regulations, interpretive information, or ethics; few use restrictions	Basic user regulations at key access points; minimum use restrictions	Some regulatory and ethics signing; moderate use restrictions (for example, camping and human waste)	Rules, regulations, and ethics clearly posted; use restrictions, limitations, and/or closures	Regulations strict and ethics prominent; use may be limited by permit, reservation, or other methods	Enforcement in addition to rules to reduce conflicts, hazards, and resource damage

Existing RSCs	
Desired RSCs	
Anticipated Potential Conditions	

F.6.4 Samoa Dunes SRMA (190 acres)

The Samoa Dunes SRMA would be designated a SRMA under Alternatives C and D. The Samoa Dunes SRMA is a multi-use area located near the City of Eureka and Arcata with wide variety of recreational activities, including hiking, surfing, fishing, sightseeing, beachcombing, OHV use, picnicking, and birdwatching.

Outcome Objective

- The SRMA would be managed the same as Alternative A.

Participants in visitor assessments report on average 4.0 realization of the targeted experience and benefit outcomes listed below (where 1 = Not at all realized and 5 = totally realized).

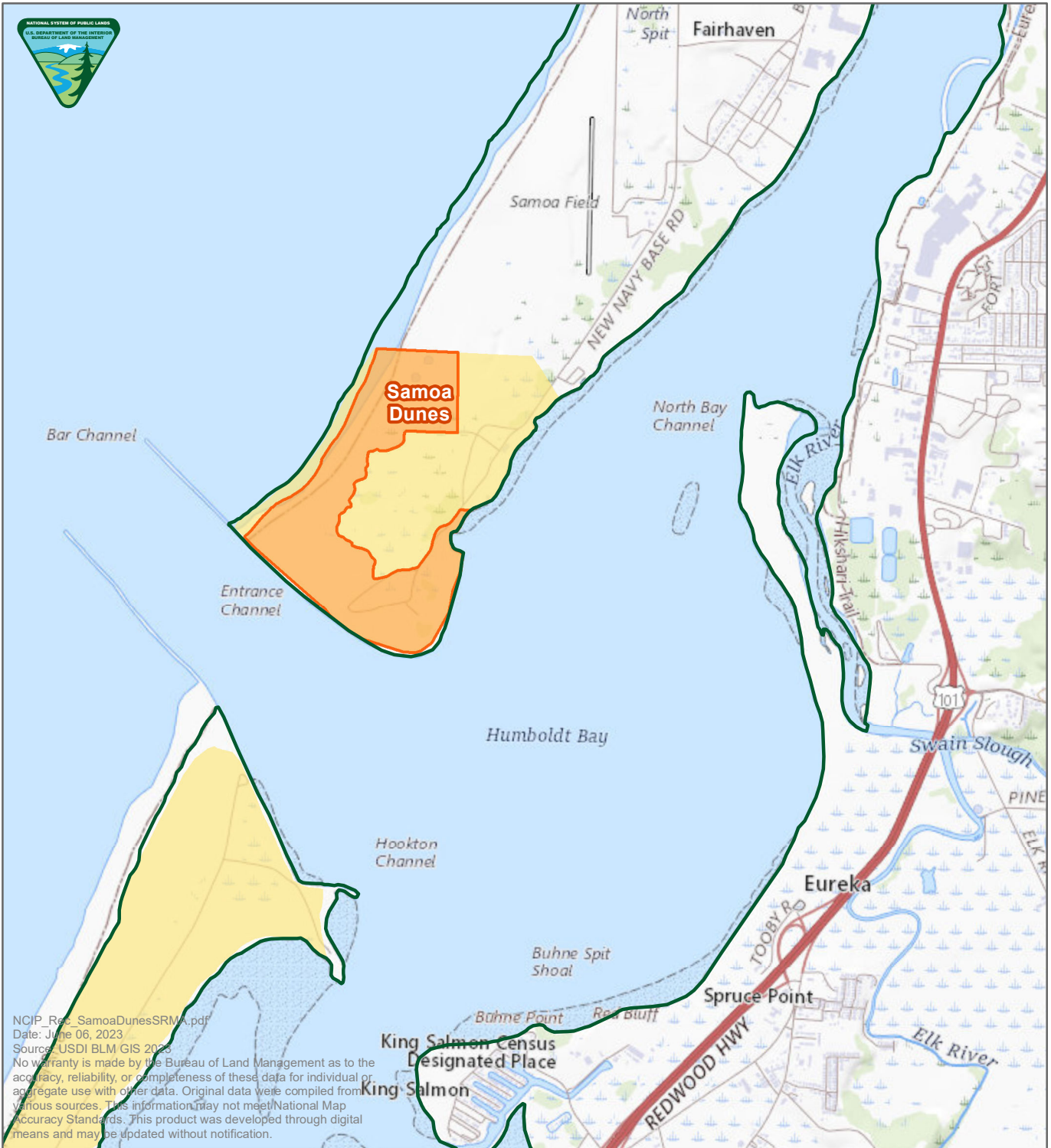
Activities	Experiences	Benefits
<ul style="list-style-type: none"> • 4x4 driving, ATV/UTV riding, motorcycle riding. • Surfing • Fishing • Hiking • Picnicking • Wildlife viewing 	<ul style="list-style-type: none"> • Escape everyday responsibilities. • Developing skills and abilities • Enjoying risk taking and adventure • Enjoy frequent access to physical activity. • Enjoying friends and family togetherness • Enjoying learning/teaching outdoor skills, • Enjoying access to natural landscapes 	<ul style="list-style-type: none"> • Greater sense of adventure • Stronger ties with family and friends • Improved skills for enjoying the outdoors. • Lifestyle improvement or maintenance • Greater community involvement • Maintain local tourism. • Increased desirability as a place to live

Management Actions and Allowable Use Decisions

- Entire management area is closed to firearm and crossbow/bow shooting.
- Vehicles limited to daytime access, with nighttime gate closure one hour after sunset, and reopened daily one hour before sunrise.
- Continue to work with local governments in the management of the entire peninsula.
- Provide opportunities for off-road vehicle recreation.
- Provide opportunities for hiking, sightseeing, bird watching, picnicking, surfing, fishing that do not directly conflict with OHV use.
- Provide opportunities for OHV recreation by maintaining and improving OHV facilities and trails.
- Continue to apply for “Green Sticker” funding.
- Maintain and improve OHV park (for example, staging area, riding trails) at Samoa Dunes
- Interpretation and education of natural and cultural resources unique to Samoa Dunes would be prioritized.
- Prepare a Samoa Dunes Recreation Area Management Plan (completed)




Best Management Practices

See **Appendix D** of this plan for a list of recreation and visitor services BMPs.



NCIP_Rec_SamoaDunesSRMA.pdf
 Date: June 06, 2023
 Source: USDI BLM GIS 2023
 No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Figure 4: Samoa Dunes SRMA

-  Proposed special recreation management area (SRMA)
-  Bureau of Land Management
-  NCIP planning area



Physical, Social, and Operational Recreation Setting Characteristics

Table F-19. Samoa Dunes SRMA, Physical Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Remoteness (approx. distance from routes) – Over time, class acreages may change but all classes still exist					
More than 0.5 miles from either mechanized or motorized routes	Within 0.5 miles of mechanized routes	Within 0.5 miles of four-wheel-drive vehicle, all-terrain vehicle, and motorcycle routes.	Within 0.5 miles of low-clearance or passenger vehicle routes (includes unpaved County roads and private land routes)	Within 0.5 miles of paved/primary roads and highways	Within 0.5 miles of streets and roads within municipalities and along highways
Naturalness (landscape texture form, line, color) - No new ROWs or fluid or locatable mineral development. Manage as No Surface Occupancy.					
Undisturbed natural landscape	Natural landscape with any modifications in harmony with surroundings and not visually obvious or evident (for example, stock ponds and trails)	Character of the natural landscape retained; a few modifications contrast with character of the landscape (for example, fences and primitive roads)	Character of the natural landscape partially modified, but none overpower natural landscape (for example, roads, structures, and utilities)	Character of the natural landscape considerably modified (agriculture, residential, or industrial)	Urbanized developments dominate landscape
Visitor Facilities – Maintain rustic facilities. Camping designated to dispersed sites along 2.7 miles of Thirteen Mile Loop.					
No structures; foot/horse trails only	Developed trails made mostly of native materials such as log bridges; structures are rare and isolated	Maintained and marked trails, simple trailhead developments, and basic toilets	Rustic facilities such as campsites, restrooms, trailheads, and interpretive displays	Modern facilities such as campgrounds, group shelters, boat launches, and occasional exhibits.	Elaborate full-service facilities such as laundries, restaurants, and groceries

Existing RSCs		*All three denotes existing, desired, and anticipated.
Desired RSCs		
Anticipated Potential Conditions		

Table F-20. Samoa Dunes SRMA Social Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Contacts (with other groups) - Participants encounter a primary use season (October through May) average of up to 14 encounters/day in areas classified as middle country and encounter an average of up to 29 encounters/day in areas classified as front country.					
Fewer than 3 encounters per day at camp sites and fewer than 6 encounters per day on travel routes	3–6 encounters per day off travel routes (for example, campsites) and 7–15 encounters per day on travel routes	7–14 encounters per day off travel routes (for example, staging areas) and 15–29 encounters per day on travel routes	15–29 encounters per day off travel routes (for example, campgrounds) and 30 or more encounters per day on travel routes	People seem to be generally everywhere	Busy place with other people constantly in view
Group Size - Away from trailheads, participants encounter a primary use season (Mid-April through October) average of up to 9 people per group in areas classified as back country and up to 12 people per group in areas classified as middle country					
Fewer than or equal to 3 people per group	4–6 people per group	7–12 people per group	13–25 people per group	26–50 people per group	Greater than 50 people per group.
Evidence of Use - Localized areas of vegetation alteration and compacted/bare soils are found along trails and at trailheads. Inappropriate recreation use is rehabilitated					
No alteration of the natural terrain; footprints only observed; sounds of people rare	Areas of alteration uncommon; little surface vegetation wear observed; sounds of people infrequent	Small areas of alteration; surface vegetation showing wear with some bare soils sounds of people occasionally heard	Small areas of alteration prevalent; surface vegetation gone with compacted soils observed; sounds of people regularly heard	A few large areas of alteration; surface vegetation absent with hardened soils; sounds of people frequently heard	Large areas of alteration prevalent; some erosion; constantly hear people
Existing RSCs		*All three denotes existing, desired, and anticipated.			
Desired RSCs					
Anticipated Potential Conditions					

Table F-21. Samoa Dunes SRMA Operational Recreation Setting Characteristics

Primitive Classification	Backcountry Classification	Middle Country Classification	Front Country Classification	Rural Classification	Urban Classification
Public Access (types of public travel allowed) – Off-road vehicle use is predominant in the RMZ and motorized use is limited to designated motorized routes, with a 25-mph speed limit throughout.					
Nonmotorized travel (for example, foot and horse travel)	Nonmotorized travel (for example, mountain bikes)	Four-wheel-drive vehicles, all-terrain vehicles, and dirt bikes, in addition to nonmotorized, mechanized use	Two-wheel-drive vehicles are predominant, but also four-wheel-drive vehicles and nonmotorized, mechanized use	Ordinary highway auto and truck traffic is characteristic	Wide variety of street vehicles and highway traffic is ever-present
Visitor Services and information - Informational materials describe the SRMA and recreation opportunities. BLM staff/volunteers are periodically present at recreation sites but occasionally present away from recreation sites.					
No maps or brochures available on-site; staff rarely present to provide on-site assistance	Basic maps; staff infrequently present (for example, seasonally or during high-use periods) to provide on-site assistance	Area brochures and maps; staff occasionally present (for example, most weekends) to provide on-site assistance	Information materials describe recreation areas and activities; staff periodically present (for example, on weekdays and weekends)	Information materials describe recreation areas and activities, plus experience and benefit descriptions; staff regularly present (for example, almost daily)	Information materials describe recreation areas and activities, plus regularly scheduled on-site outdoor demonstrations and clinics
Management Controls and Regulations- Some regulatory and ethics signing; moderate use restrictions					
No on-site posting or signing of visitor regulations, interpretive information, or ethics; few use restrictions	Basic user regulations at key access points; minimum use restrictions	Some regulatory and ethics signing; moderate use restrictions (for example, camping and human waste)	Rules, regulations, and ethics clearly posted; use restrictions, limitations, and/or closures	Regulations strict and ethics prominent; use may be limited by permit, reservation, or other methods	Enforcement in addition to rules to reduce conflicts, hazards, and resource damage

Existing RSCs	
Desired RSCs	
Anticipated Potential Conditions	

F.7 EXTENSIVE RECREATION MANAGEMENT AREAS

For each ERMA, the BLM has identified supporting information to include established objectives, identified management actions and allowable uses.

Supporting management actions and allowable use decisions common to all ERMAs include:

- **Forestry:** All ERMAs except *Mule Mountain RMZ*. Timber harvest, firewood cutting, and special forest product harvest would be allowed if they can be implemented without negatively affecting the desired recreation setting.
- **Lands and Realty:** All ERMAs would be retained for long-term management (subject to valid existing rights).
- **Minerals:** All ERMAs would be closed to salable mineral development (with exception of development of salable minerals for restoration), and closed to mineral leasing
- **Visual Resource Management:** All ERMAs would be managed under VRM Class III objectives except specific locations where VRM Class II objectives are proposed for special designation areas located within the ERMAs.
- **Comprehensive Travel Management:** All ERMAs would be classified as OHV Limited.
- **Collaborate with community partners, agencies, and tribes to promote awareness of area sensitivity and cumulative impacts to be avoided.**

F.7.1 Redding Trails ERMA

The Redding Trails ERMA (with four associated RMZs) would be designated under Alternative B. The Redding Trails ERMA (9,900 acres) is a composite network of approximately 100 miles of non-motorized, multi-use trail (**Figure 5**). Hiking, trail running, mountain biking, and horseback riding are all popular activities, as well as swimming and nature viewing. The area will be maintained and enhanced to provide continued recreational opportunities for residents and visitors to the city of Redding. One of the key features of the ERMA is its proximity to and accessibility from the great Redding population center. In the Redding Trails ERMA area, the Bureau of Reclamation manages 100 acres that are associated with the construction and operation of Shasta and Keswick dams. Ultimately, much of this land may return to the BLM for long term management, though the exact timing and areas for this is unknown. In the meantime, BLM has agreed to manage the recreational opportunities on this land to provide a cohesive, high-quality experience for the public. The BLM will manage the recreational opportunities on BOR land in accordance with the descriptions in the ERMA.

Sacramento River Rail Trail and Keswick Reservoir RMZ (30 acres)

The Sacramento River Rail Trail and Keswick Reservoir RMZ is located to the west of the Keswick reservoir and the Sacramento River. The primary recreation opportunities are the on the paved Sacramento River Rail Trail and water-based recreation opportunities from the Keswick boat ramp and trailhead. The area connects with and complements the Community Trails RMZ.

Outcome Objective

Continue to provide paved trail experiences and water-based recreation opportunities along the Sacramento River to encourage quality of life for visitors and socioeconomic opportunities for the community.

Management Actions and Allowable Use Decisions

- Commercial fishing SRPs would be evaluated for resource capacity and sustainability.
- Work with adjoining landowners to acquire full administrative rights to lands as applicable to optimize management for desired recreational outcomes.
- Recreation development may be constrained to meet greater stewardship goals for natural and cultural resources.

Clear Creek RMZ (2,600 acres)

The Clear Creek RMZ primarily centers around Clear Creek, a suitable creek in the WSR system and tributary of the Sacramento River. Clear Creek RMZ offers the Cloverdale trail area in the west of the RMZ with scenic, expansive deep canyon views and multi-use trails. In the eastern portion of the RMZ, the trail accesses the creek and meanders through restored riparian ecosystems, providing outstanding swimming, nature viewing, and trail-based recreation opportunities. The RMZ provides a buffer between the creek corridor and industrial development along Clear Creek Road.

Outcome Objective

Provide safe, diverse, and sustainable non-motorized trail and water-based recreation opportunities within the riparian corridor of Clear Creek while conserving cultural and natural resources.

Management Actions and Allowable Use Decisions

- Minimize impacts to wildlife and riparian vegetation when providing and improving access to the creek.
- Develop interpretive educational materials and signage to provide safe recreational access and use of the area. This would include information regarding the difficulty of rapids on the creek.
- Encourage a developed trail system and promote specific locations for creek access. Promote trail connectivity within the RMZ and to the surrounding area.
- Promote collaboration with surrounding landowners to develop trail connectivity.
- Improve health and safety in the area through an abundance of education, interpretation, and signage, as well as increased recreation staff, volunteer, and community partner presence.
- Due to the sensitive resource area, mountain bike-only trail and equestrian-only trails would not be allowed.
- Commercial fishing SRPs would not be issued in this RMZ. Public fishing access would continue.
- Provide opportunity for large group functions through a reservable day-use area at China Gardens. Reservable day use may be used for SRPs, or for large groups not requiring a permit.
- Recreation development may be constrained to meet greater stewardship goals for natural and cultural resources.

Mule Mountain RMZ (2,900 acres)

The Mule Mountain RMZ is characterized by steeper, typically longer trails with multiple loop options that connect to trails in the Swasey ERMA. Mountain biking is popular in the RMZ, though hiking, trail running, horseback riding, and casual use metal detection are also common.

Outcome Objective

Develop a complete, diverse, sustainable trail system serving multiple use needs with a focus on mountain biking.

Management Actions and Allowable Use Decisions

- Optimized mountain bike trails (trails with mountain bike-specific trail features such as berms and jumps) would be allowed.
- To provide safe trail options for equestrian uses. Hiker, and equestrian use only trails would be allowable where not in conflict with optimized mountain bike trails (i.e., trails with mountain bike-specific trail features such as berms and jumps).
- Forethought would be given to diverse user groups in the planning of the overall trail system, and mountain biking would be the priority/dominant recreational use.
- Recreation development and management may be constrained by other resources within the Mule Mountain area at any time. Recreation services would be put forward to meet high recreational demand and may continue in a high-profile manner.
- Consider trail re-routes and closures throughout the Swasey ACEC where needed to protect relevance and importance values. Trail re-routes and closures would be proposed and analyzed at the site-specific implementation level.
- Maintenance of parking areas, trailheads, and roads would continue in the existing footprints.
- Develop a trail and road monitoring program to gauge impact to sedimentation and cultural resources.
- Promote a volunteer trail stewardship program.
- Special recreation permits and organized group uses not requiring a permit would be allowed.
- Limitations to SRPs and organized groups would be implemented if monitoring indicates adverse impacts to cultural or natural resources in the area. These limitations could include:
 - Limitations on group size
 - Limitations of number of groups annually
 - Closure of impacted areas to organized events.
- Capacity levels for SRPs would be considered in subsequent implementation level planning if needed.
- During competitive SRP events, spectating would not be allowed within the ACEC outside of parking lots, and roadside areas. Spectating would be allowed outside the ACEC.
- To maintain an accessible environment, the number of large SRP events would be balanced with public demand during peak season.
- Provide visitor services to orient users to the mountain bike specific area, promote responsible recreation, educate about cultural resource values, address specific user group needs, and reduce user conflicts.
- Provide information on mountain bike difficulty level, ratings, skill requirements, and safety through all platforms.
- Maintain trails and close user-made trails as soon as practicable. Provide trail map that is clear to facilitate ease of use and awareness of what is allowed.

- Visitor Services would include extensive development of etiquette, guidance, and policy signage. Such information would focus on cultural heritage and recreational uses within the Swasey ACEC and Mule Mountain RMZ.
- Plan for providing cultural and natural resource information throughout the ERMA, ensuring adequate coverage of all resource topics and points of cultural interests to be covered.
- Establish an interpretive or educational center to assist the public in understanding the relevance and importance of the ACEC. BLM would collaborate with the Tribes on development and presentation of materials at this center.
- The recreation area would be day use only. Mule Mountain Road area would be closed to camping.

Community Trails RMZ (4,400 acres)

The Community Trails RMZ is nested within the greater Redding area. Non-motorized, multi-use trails frequently interface with rural and urban areas, providing critical connectivity between recreation focus areas and the community. Community Trails offer nature experiences by leaving roadbed areas, following along creeks, utilizing natural features such as hillsides to provide a sense of remoteness from the rural and urban environment.

Outcome Objective

Develop high quality trails with connectivity between points of interest and recreation areas for complete, diverse, and sustainable multi-use trail system to increase individual well-being, sense of community, and to promote socioeconomic opportunities.

Management Actions and Allowable Use Decisions

- Provide connectivity to other trails and features in the Redding area.
- Provide a diversity of trail and nature experiences, including wildlife viewing and swimming hole access.
- Trail planning would emphasize multi-use trail and equity among user groups.
- Optimized mountain bike trails (i.e., trails with mountain bike-specific trail features such as berms and jumps) and equestrian and hiker-only trails would be permissible where uses are not in conflict and do not prohibit free flowing use of connected multi-use trail.
- Promotion of community engagement in stewardship of trails and cultural and natural resources conservation through volunteer and partner engagement.
- Recreation development may be constrained to meet greater stewardship goals for natural and cultural resources.

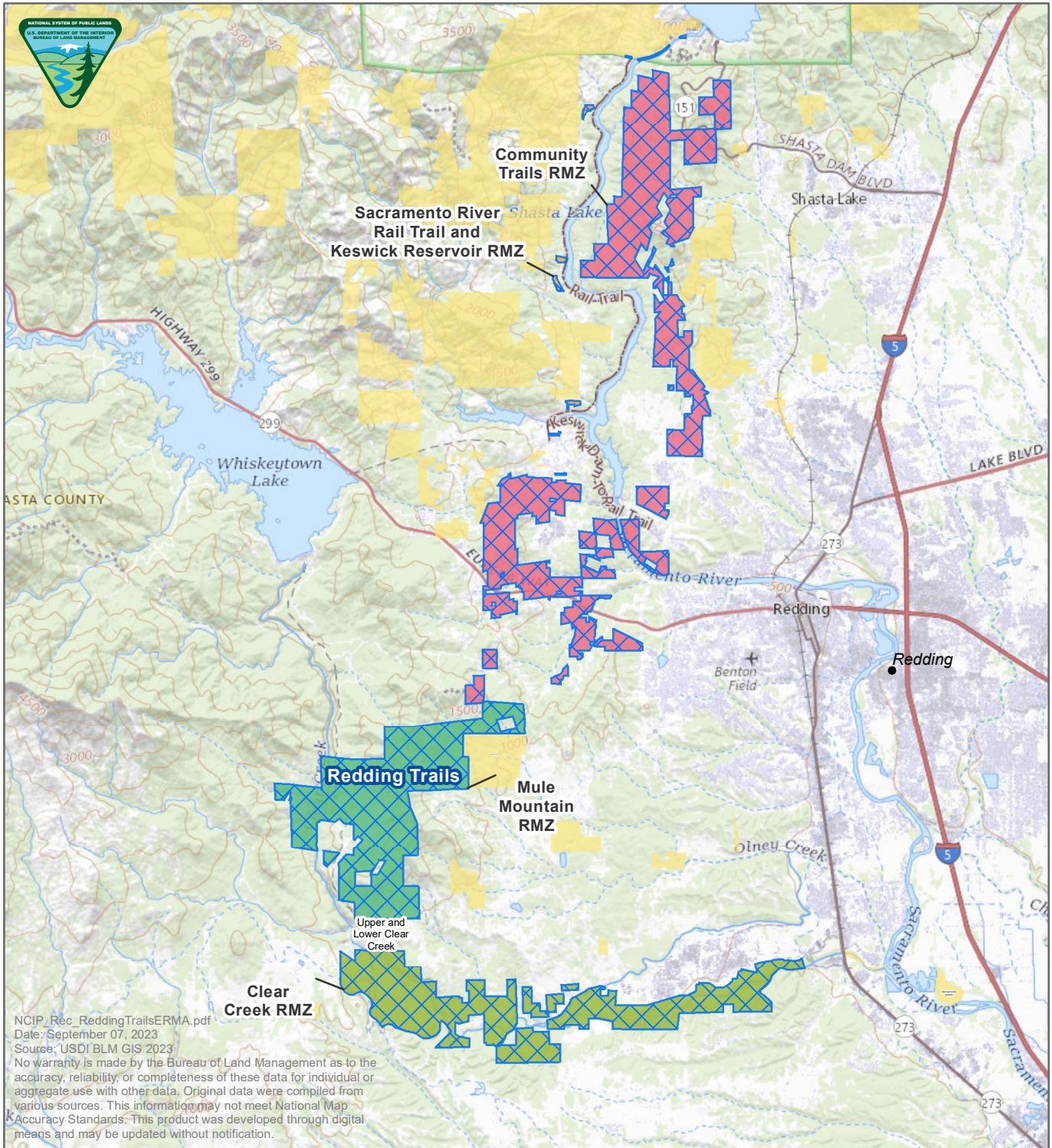
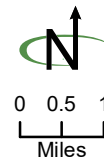


Figure 5: Redding Trails ERMA and Associated RMZs

- | | |
|--|--|
| <ul style="list-style-type: none"> Clear Creek Community Trails Mule Mountain Sacramento River Rail Trail and Keswick Reservoir | <ul style="list-style-type: none"> Proposed extensive recreation management area (ERMA) Bureau of Land Management |
|--|--|



F.7.2 Swasey ERMA

The Swasey ERMA (500 acres) is characterized by lowlands and foothills with shorter trail segments, many of which connect to longer, steeper trails in the adjacent Mule Mountain RMZ. The Swasey ERMA is a cultural ACEC. The area is popular for mountain biking, though hiking, trail running, horseback riding, and casual use metal detection are also common.

Outcome Objective

Maintain a diverse, sustainable trail system serving multiple non-motorized uses with a focus on mountain biking, while protecting and interpreting heritage resources.

Management Actions and Allowable Use Decisions – Alternative B

- Signage would use a new name for the area: “Swasey Recreation and Heritage Area”
- Recreation development and management may be constrained by other resources within the Swasey ERMA, particularly cultural and heritage resources.
- Recreation services would not be emphasized in the same way in the Swasey ERMA as they would be within the Mule Mountain ERMA/SRMA; however, high demand recreation would be allowed to continue within the Swasey ERMA.
- No new trail development would occur in the ERMA.
- Existing trails in the ERMA would be maintained to promote sustainable, high-quality recreation.
- Close user-made trails as soon as practicable.
- Consider re-routes or closures of existing trails as needed to protect cultural and heritage resources.
- Optimized mountain bike trails (trails with mountain bike- specific trail features such as berms and jumps) would be allowed.
- To provide safe trail options for equestrian uses, hiker and equestrian use only trails would be allowable where not in conflict with optimized mountain bike trails (i.e., trails with mountain bike-specific trail features such as berms and jumps).
- Forethought would be given to diverse user groups in the planning of the overall trail system, and mountain biking would be the priority/dominant recreational use.
- Develop a trail and road monitoring program to gauge impact to sedimentation and cultural resources.
- Promote a volunteer trail stewardship program.
- SRPs and organized group uses not requiring a permit would be allowed.
- Limitations to SRPs and organized groups would be implemented if monitoring indicates adverse impacts to cultural or natural resources in the area. These limitations could include:
 - Limitations on group size
 - Limitations of number of groups annually
 - Closure of impacted areas to organized events
- SRP capacity levels would be considered in subsequent implementation level planning if needed.
- During competitive SRP events, spectating would not be allowed within the ERMA outside of parking lots and roadside areas.

- To maintain an accessible environment, the number of large SRP events would be balanced with public demand during peak season
- Maintain trailhead, road, and parking areas in existing footprints.
- Provide visitor services to orient users to the mountain bike specific area, promote responsible recreation, educate about cultural resource values, address specific user group needs, and reduce user conflicts.
- Provide information on mountain bike difficulty level, ratings, skill requirements, and safety through all platforms.
- Provide trail map that is clear to facilitate ease of use and awareness of what is allowed.
- Visitor services would include extensive development of etiquette, guidance, and policy signage. Such information would focus on cultural heritage and recreational uses within the ERMA.
- Plan for providing cultural and natural resource information throughout the ERMA, ensuring adequate coverage of all resource topics and points of cultural interests to be covered.
- Establish an interpretive or educational center to assist the public in understanding the relevance and importance of the area. BLM would collaborate with the Tribes on development and presentation of materials at this center.
- Recreation area would be day use only.

Management Actions and Allowable Use Decisions – Alternatives C and D

Management would be the same as in Alternative B, except for the following:

- Minimal trail development may occur in areas of low potential for conflict or impacts to natural or cultural resources. No trail development would be allowed in areas of high potential for conflict or impacts to natural or cultural resources.
- There would be no limitations on spectating during competitive SRP events, unless future site-specific implementation level planning determines a need for it.
- Pursue trailhead, road, and parking area improvements and expansions that would be consistent with relevance and importance values of the Swasey ACEC, including expanding the overflow parking and event area.

F.7.3 Lacks Creek ERMA

The Lacks Creek ERMA (9,000 acres) would be designated under all action alternatives. Lacks Creek ERMA is in California's northern Coast Range, approximately 15 miles inland from the Pacific Ocean (**Figure 6**). The area is in Humboldt County, approximately 20 miles northeast of Eureka. Hiking, trail running, mountain biking, horseback riding, and seasonal hunting are all popular activities, as well as camping and nature viewing.

Outcome Objective

Through recreation program management and stakeholder involvement, provide outstanding opportunities for nonmotorized trail-based recreation, dispersed camping and continue to contribute to the local community's quality of life commensurate with wildlife habitat, prairie restoration, hunting, forest health, and aesthetic values.

Management Actions and Allowable Use Decisions

- Dispersed camping would be allowed.
- Acquire lands to provide public vehicle access on the west side of Lacks Creek.
- Coordinate with landowners to extend the trail network to Redwood National Park and to Forest Service-administered lands.
- Cooperative management with local non-motorized trail groups supports non-motorized recreation trail activities (e.g., mountain biking, hiking, equestrian) commensurate with prairie restoration and hunting.
- Allow Class I E-bikes on designated routes.
- Continuously improve/develop trails.
- Designate or restrict specific areas from target shooting as necessary to reduce conflict, preserve public health and safety and natural resource values.
- Prioritize connecting the east side trail system with west side trail system.
- If monitoring shows potential for high conflict and/or safety issues between mountain biking and hunting, BLM may close trails to mountain bikes in high use hunting areas during hunting season.
- Sign entrance to public lands regarding OHV designations.
- Post boundaries

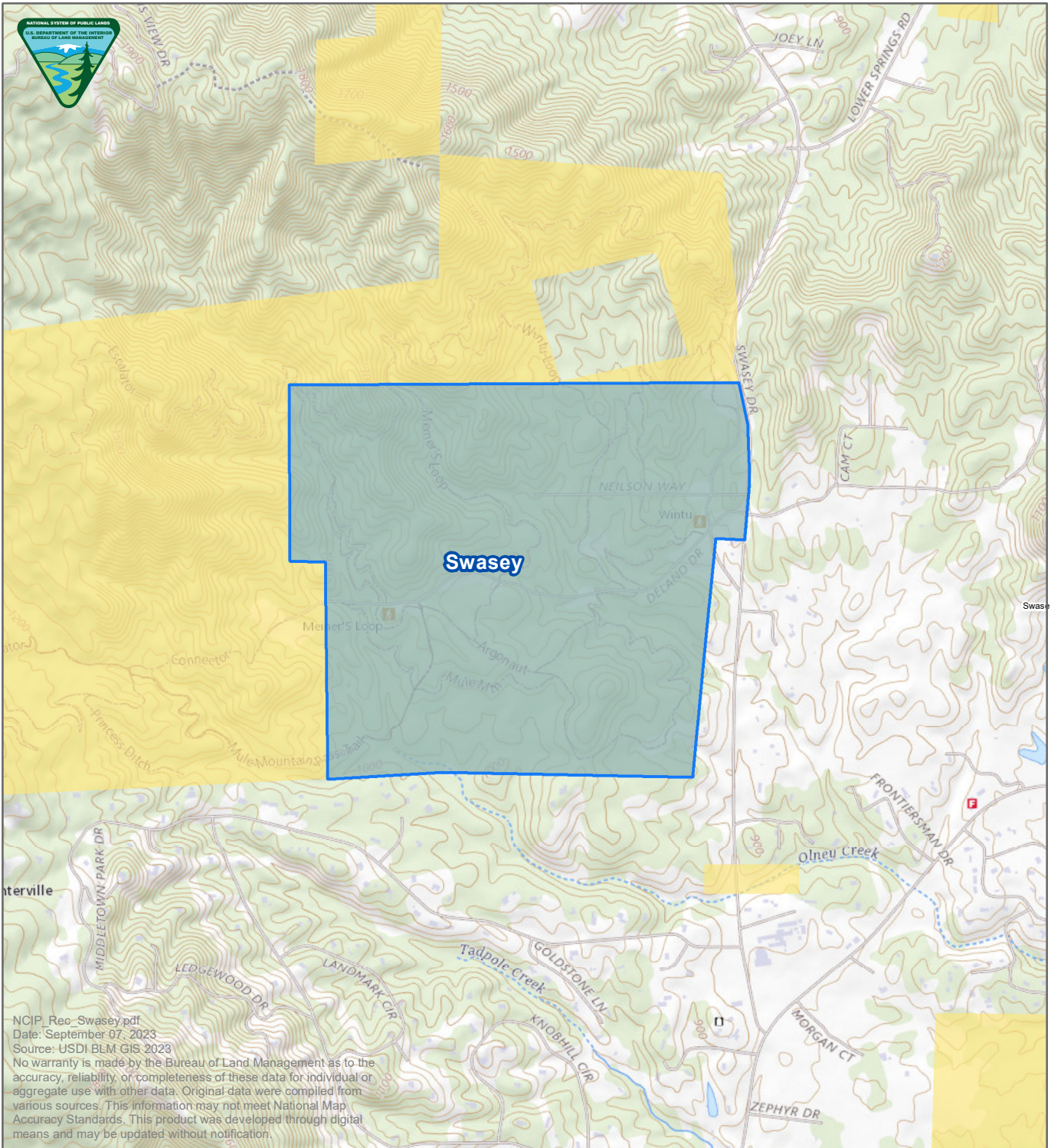


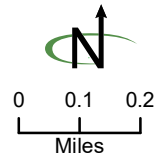


Figure 6: Swasey ERMA

-  Proposed extensive recreation management area (ERMA)
-  Bureau of Land Management



F.7.4 Forks of Butte Creek ERMA

The Forks of Butte Creek ERMA (2,200 acres) would be designated under all alternatives, although the objectives and associated management actions vary by alternative (see below). The Forks of Butte Creek ERMA is located between the communities of Paradise and Forest Ranch; Butte Creek Canyon offers exceptional nature experiences in Butte County (**Figure 7**). The Forks of Butte Creek site was home to the 1849 gold mining operations and this area is still known for its placer gold deposits.

Since being designated by the BLM in 1993 as a recreational mineral collection area, this area has become a popular destination for recreational level gold prospecting. Recreation focuses on hiking, swimming, creek side relaxation, and gold panning, occurring in a dispersed way through the canyon.

Forks of Butte Creek ERMA – Alternatives B and D

Outcome Objective

Recreation opportunities will be provided for sustainable casual use (recreational) mining, creek access, and multiple-use trails, maintaining a predominantly undisturbed natural landscape.

Management Actions and Allowable Use Decisions

- The ERMA would be day use only, except by permittees, and mining claimants.
- Dispersed camping is prohibited throughout the ERMA.
- Facilities for the day-use area would be developed.
- Motor vehicle access to the day use area would be seasonally closed.
- A gate and/or barriers would be installed and maintained. All trail development and barriers would be analyzed and disclosed through site-specific implementation- level NEPA.
- Develop sustainable opportunities for casual use (recreational) level gold prospecting through non-motorized trail access.
- Motorized trail development is not allowed. Equestrian and mountain bike trail options may be limited to avoid resource impacts.
- Develop signage to indicate specific areas where casual use (recreational) mining is not allowed due to conflicts with other resources. These could include (but may not be limited to) areas with significant and/or sensitive cultural and natural resources or recreational facilities.
- Promote recreational opportunity in balance with cultural resources, winter wildlife habitat, riparian areas, and the fishery along Butte Creek.
- Prioritize trail maintenance and development to allow for non-motorized access and recreational use within the ACEC. Unauthorized trail construction, motorized or non-motorized including any user made mountain bike feature, is not allowed, and would be remediated.
- Equitable access to casual use mining will be provided. This includes development of 45” wide low-gradient pathways into popular casual use mining areas where feasible.
- Issuance of SRPs or authorization of group use that does not require a permit within Forks of Butte ERMA is allowed but may be constrained by other resources to promote sustainability and prevent resource damage. This would be determined on a case-by-case basis at the implementation level.
- Prioritize obtaining easements from landowners to obtain administrative and public access.

Forks of Butte Creek ERMA – Alternative C

Outcome Objective

Same as Alternatives B and D

Management Actions and Allowable Use Decisions

- Closed to dispersed camping.
- Explore developing a designated, expanded amenity fee campground and restricting motorized access beyond the designated campground. Details of this campground would be considered and analyzed with site-specific implementation level NEPA.
- Explore developing cooperative management of the campground with other agencies or organizations where possible.
- Motor vehicle access to the campground would be seasonally closed.
- A gate and/or barriers would be installed and maintained.
- The campground, trail development and barriers would be analyzed and disclosed through site-specific implementation- level NEPA.
- Develop sustainable opportunities for casual use (recreational) level gold prospecting through non-motorized trail access. Motorized trail development is not allowed.
- Equestrian and mountain bike trail options may be limited to avoid resource impacts.
- Develop signage to indicate specific areas where casual use (recreational) mining is not allowed due to conflicts with other resources. These could include (but may not be limited to) areas with significant and/or sensitive cultural and natural resources or recreational facilities.
- Promote recreational opportunity in balance with cultural resources, winter wildlife habitat, riparian areas, and the fishery along Butte Creek.
- Prioritize trail maintenance and development to allow for non-motorized access and recreational use within the ACEC. Unauthorized trail construction motorized or non-motorized including any user made mountain bike feature, is not allowed, and would be remediated.
- Equitable access to casual use mining will be provided. This includes development of 45” wide low-gradient pathways into popular casual use mining areas where feasible.
- Issuance of SRPs or authorization of group use that does not require a permit within Forks of Butte ERMA is allowed but may be constrained by other resources to promote sustainability and prevent resource damage. This would be determined on a case-by-case basis at the implementation level.
- Prioritize obtaining easements from landowners to obtain administrative and public access.

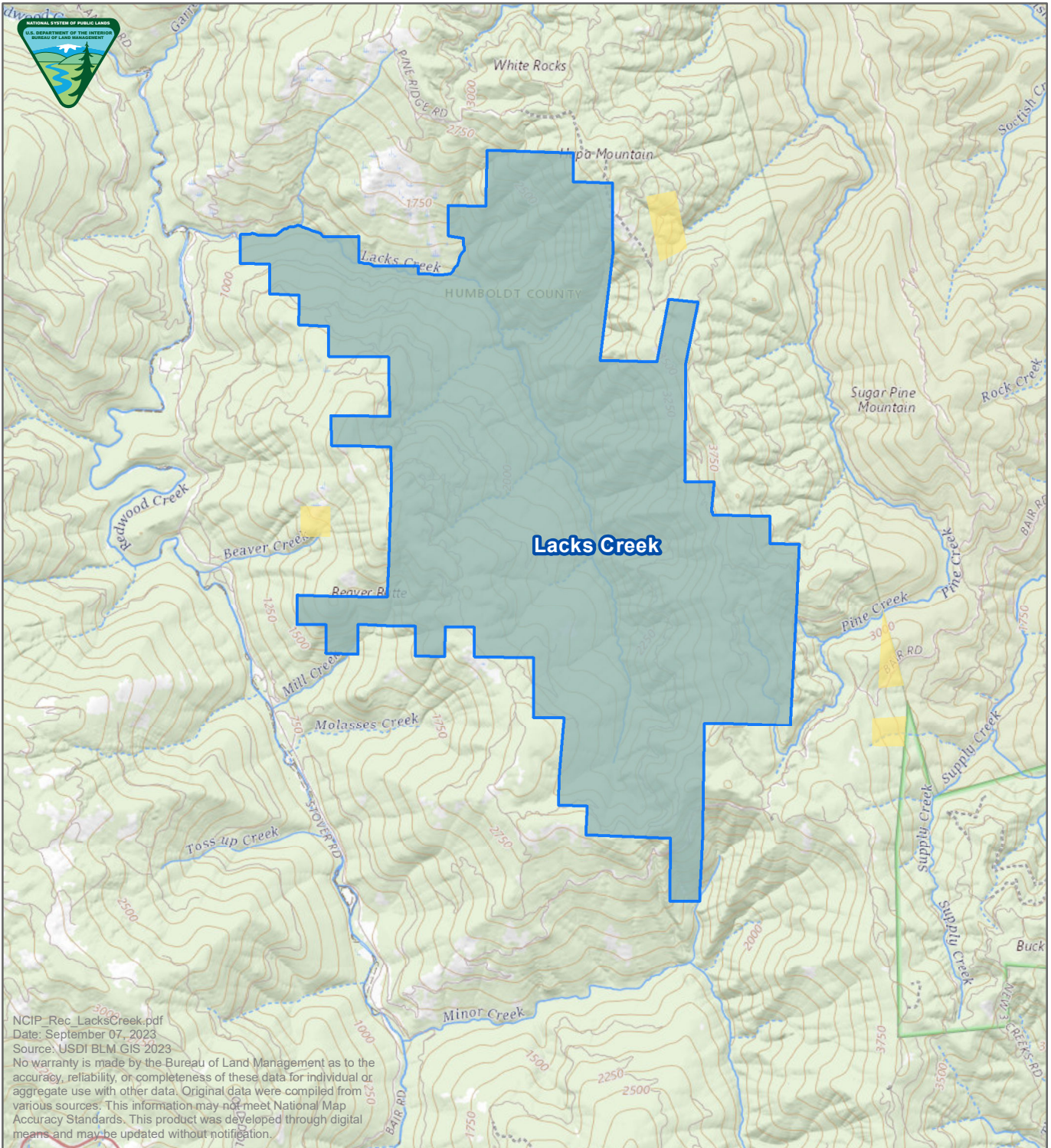


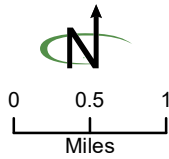


Figure 7: Lacks Creek ERMA

-  Proposed extensive recreation management area (ERMA)
-  Bureau of Land Management



F.7.5 Samoa Dunes ERMA

The Samoa Dunes ERMA (190 acres) is a park located near the City of Eureka and Arcata with wide variety of recreational activities, including hiking, surfing, fishing, sightseeing, beachcombing, OHV use, picnicking, and birdwatching (**Figure 8**).

Outcome Objective

Alternative B

Provide coastal recreation for both motorized and non-motorized recreational use.

Management Actions and Allowable Use Decisions

- Entire management area is closed to firearm and crossbow/bow shooting.
- Vehicles limited to daytime access, with nighttime gate closure one hour after sunset, and reopened daily one hour before sunrise.
- Continue to work with local governments in the management of the entire peninsula.
- Provide opportunities for off-road vehicle recreation.
- Provide opportunities for hiking, sightseeing, bird watching, picnicking, surfing, fishing that do not directly conflict with OHV use.
- Provide opportunities for OHV recreation by maintaining and improving OHV facilities and trails.
- Continue to apply for “Green Sticker” funding.
- Maintain and improve OHV park (staging area, riding trails, etc.) at Samoa Dunes
- Areas would be designated for both OHV use and non-motorized uses such as hiking, sightseeing, bird watching, picnicking, surfing, fishing.
- Identify areas closed to OHVs to prioritize non-motorized access for bird watching, surfing, picnicking, and other coastal recreational activities.
- Interpretation and education of natural and cultural resources unique to Samoa Dunes would be prioritized.
- Prepare a Samoa Dunes Recreation Area Management Plan (completed)

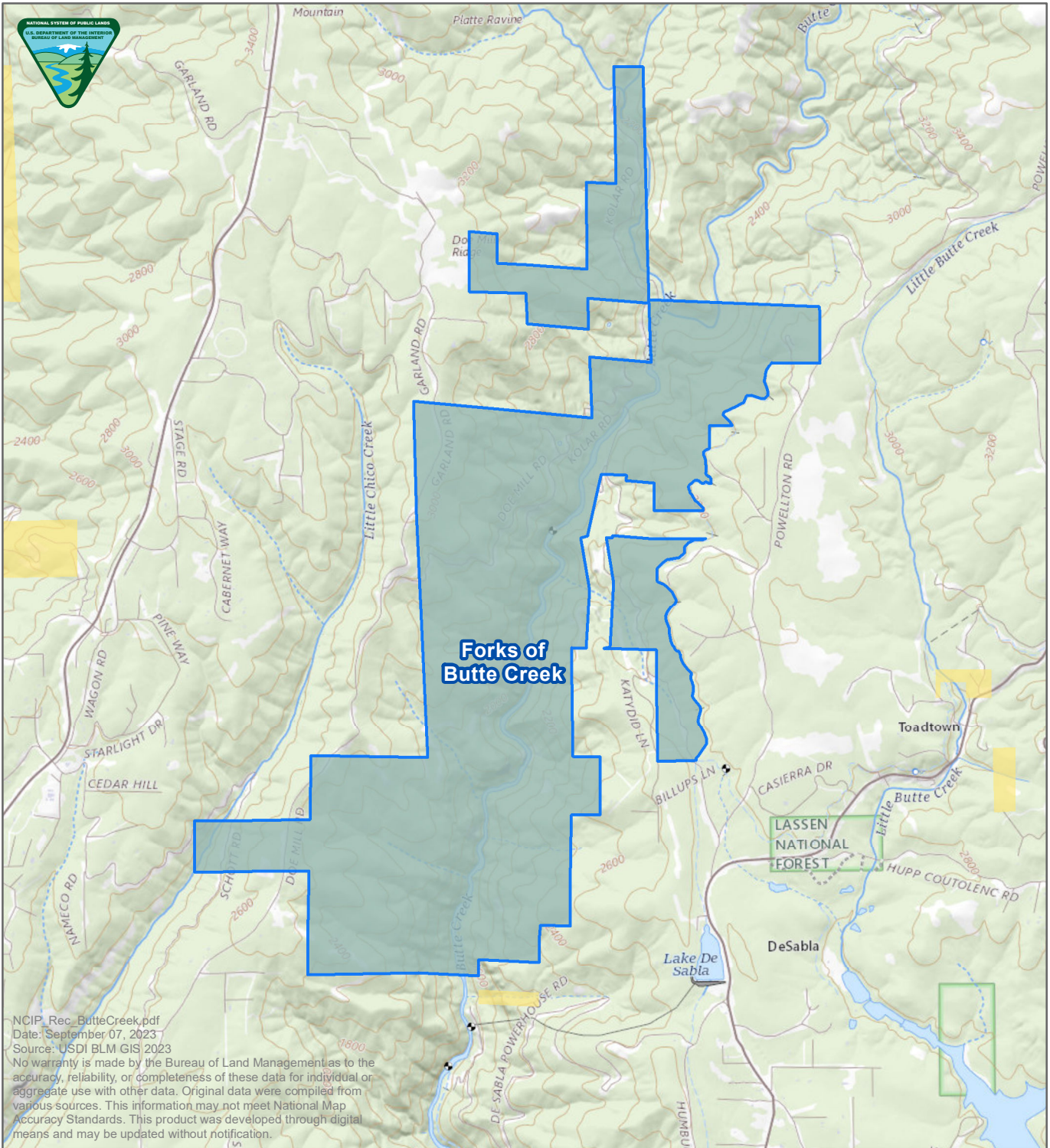


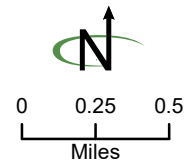


Figure 8: Forks of Butte Creek ERMA

-  Proposed extensive recreation management area (ERMA)
-  Bureau of Land Management



F.7.6 Trinity River ERMA

The Trinity River ERMA (9,500 acres) would be designated under Alternatives C and D. The Trinity River ERMA provides recreational opportunity from just below Lewiston, through Douglas City and Junction City before meeting the United States Forest Service (USFS) boundary just past the confluence of the North Fork of the Trinity with the mainstem of the Trinity River (**Figure 9**). The Trinity River is a “recreational” WSR and supports robust recreational and permitted commercial fishing. The river offers opportunities for non-motorized water-based recreation on calm class 1-2 waters in low flows, and more challenging class 2+ rapids at higher flows. Trailheads, campgrounds, and river access sites provide opportunities for camping and swimming. Non-motorized trail segments exist along the river providing recreational access and diversity or recreational activities.

Outcome Objective

Alternative B

Trinity River would not be designated as an ERMA.

Alternative C and D

Under these alternatives Trinity River would be designated as an ERMA. The Trinity River ERMA will provide a diverse and sustainable water-based recreation, non-motorized trail opportunities and camping where impacts to cultural and natural resources, river health, and fish populations can be sufficiently mitigated.

Management Actions and Allowable Use Decisions

- Optimized mountain bike trail (trails with mountain bike-specific trail features such as berms and jumps) and equestrian only trails are not allowed in riparian areas. Impacts from bikes and horses will be monitored in the riparian area.
- Maintain a predominantly natural landscape while promoting fishing access, non-motorized trails, expanded amenity fee campgrounds, dispersed camping, and additional water-based recreation opportunities.
- Expanded amenity fee campgrounds will be utilized to meet camping demand to minimize impacts to river health.
- Monitor day use areas and river segments for impacts to river health from commercial and non-commercial use. If adverse impacts are seen, carrying capacity could be established through site specific implementation level planning.
- SRPs and organized groups not requiring a permit will be allowed. Authorized uses, such as commercial fishing, will be monitored and managed to reduce impacts specific to the WSR outstandingly remarkable value of fish and fish habitat.
- Recreational development and restoration projects in the ERMA will be evaluated for recreational impacts, including impacts to SRP holders.
- Sign planning for natural and cultural resource information throughout the ERMA will ensure adequate coverage of all resource topics and points of cultural interests to be covered.

Overlapping Designations

Trinity River ERMA has also been designated as a WSR for recreation. See **Chapter 3** of this plan for further details on WSRs.

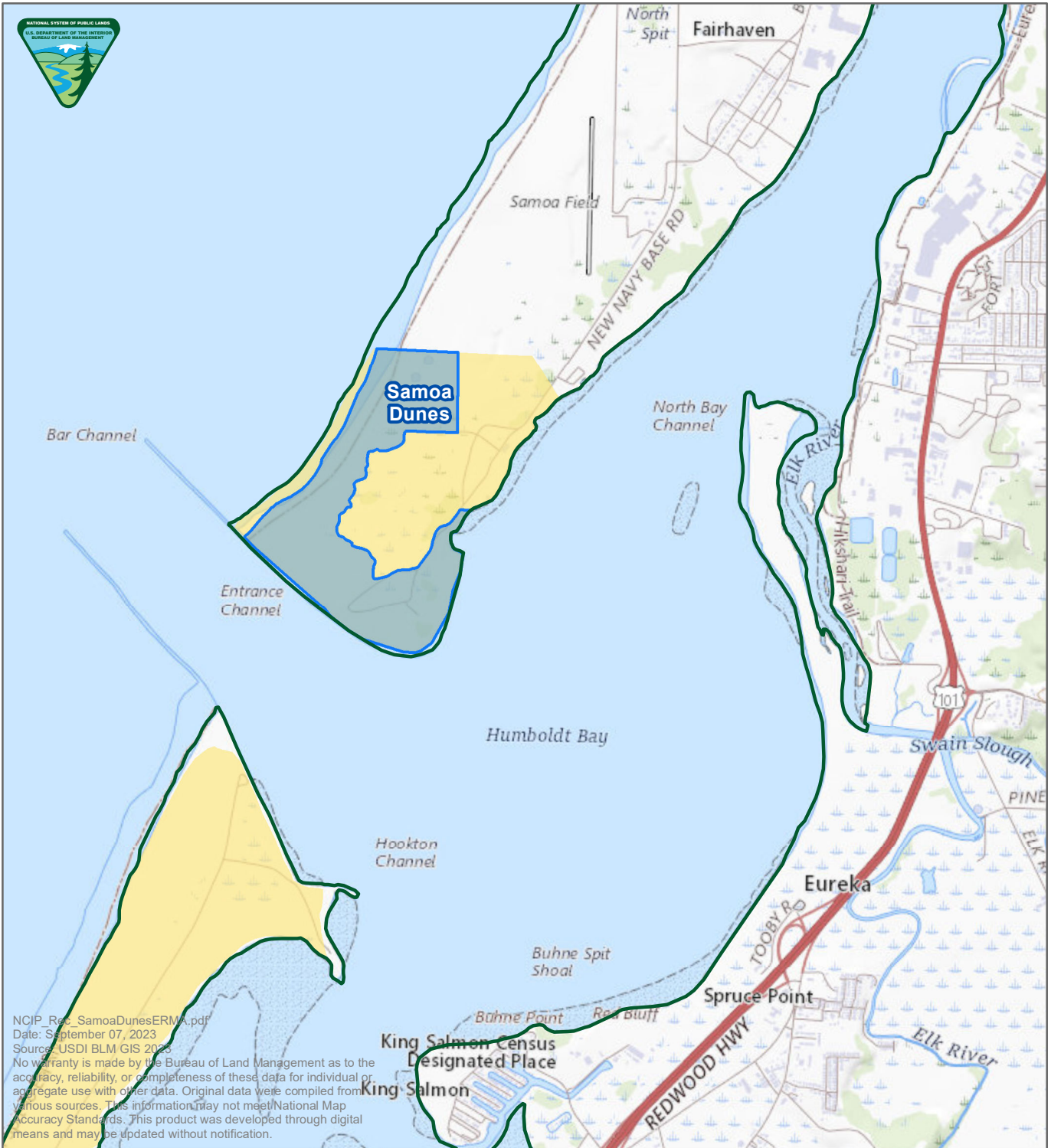


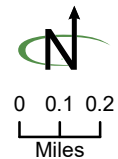


Figure 9: Samoa Dunes ERMA

-  Proposed extensive recreation management area (ERMA)
-  Bureau of Land Management



F.7.7 Ewing Area ERMA

The Ewing Area ERMA would be designated under Alternatives C (1,000 acres) and D (1,000 acres). The Ewing Trail System is in Hayfork, California, off Highway 3 in Trinity County (**Figure 10**). The immediate area around Ewing Reservoir has seen some recent non-motorized multi-use trail development on Waterworks District land and there is a desire from members of the local community to improve and expand the trail system on BLM and USFS land in the area. Currently about 2 miles of trail exist, but an additional 10 miles of trails are planned to be built. Continued development of the trail system is conceptualized by community partners, and primarily envisioned to continue north.

Outcome Objective

The Ewing Trails ERMA provides a sustainable and diverse multi-use trail system, where multi-use trails are emphasized, and specialized trails may be allowed. Recreation and visitor services promote natural and cultural resource understanding, resource conservation and stewardship goals, while allowing for socioeconomic development and a high quality of life for the Hayfork community.

Management Actions and Allowable Use Decisions

- Implement a complete, sustainable multi-use trail system for hiking, bicycling, and equestrian use beginning from the Ewing Reservoir area.
- Consider connectivity beyond the scope of BLM parcels in trail development.
- Optimized mountain bike trails (trails with mountain bike-specific trail features such as berms and jumps), equestrian and hiker only trails are allowed where uses do not conflict.
- Forethought would be given to a complete trail system, where equity among user groups is prioritized.
- Maintain long term commitments and relationships with trails partners, Tribes, and adjacent landowners for cooperative planning of trails and recreation area developments and building and maintenance of the trail system.
- Promote volunteer engagement in coordination with partners.

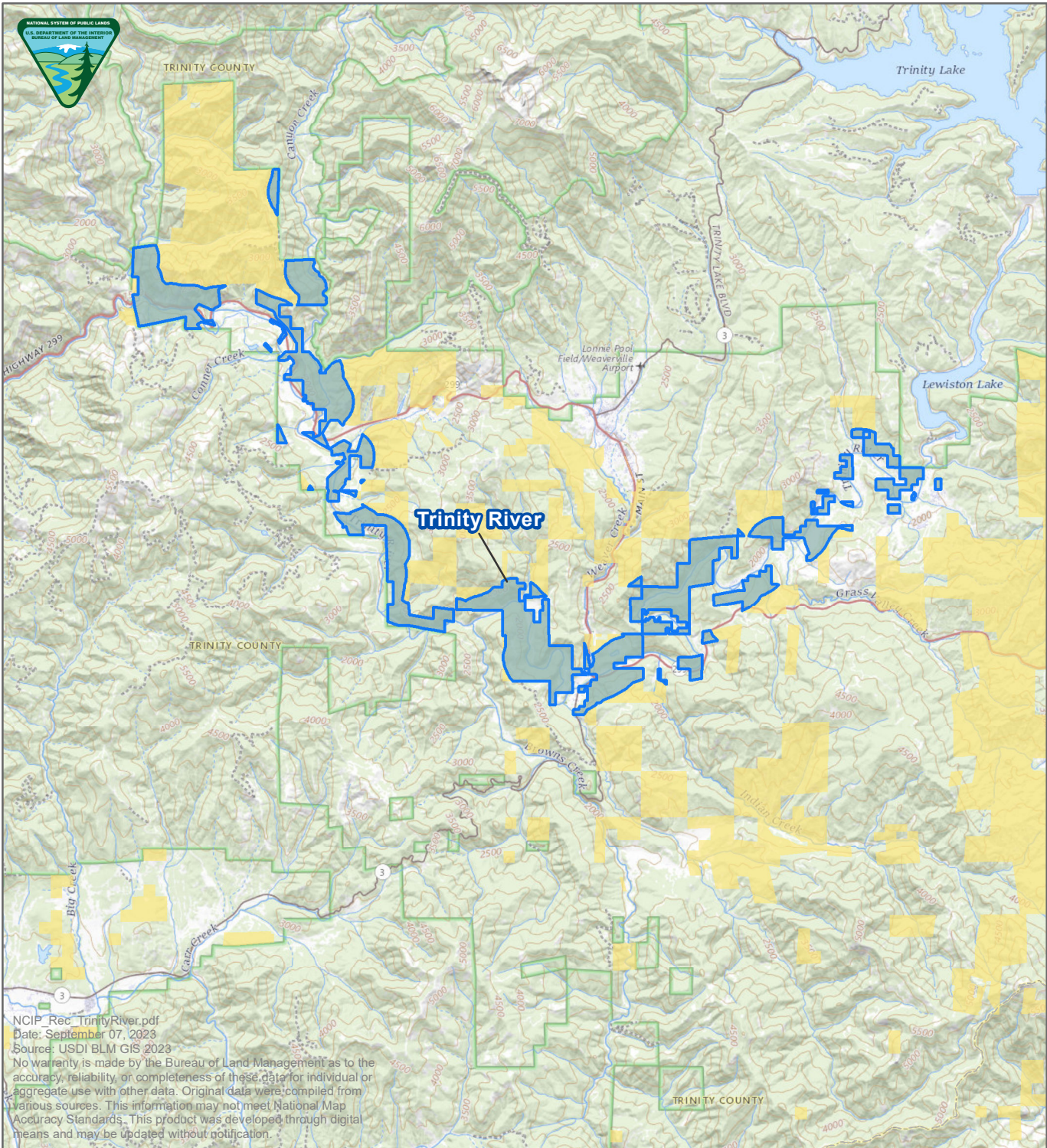




Figure 10: Trinity River ERMA

-  Proposed extensive recreation management area (ERMA)
-  Bureau of Land Management



F.7.8 Ma-le'I Dunes ERMA

The Ma-le'I Dunes ERMA (180 acres) would be designated under Alternatives C and D. The Ma-le'I Dunes ERMA is located south of US Fish and Wildlife Service managed Lanphere Dunes at the upper end of the North Spit of Humboldt Bay, west of the Mad River Slough (**Figure 11**). Considered refuge for those looking for a different kind of hiking experience, Ma-le'I Dunes offers a diverse and dynamic coastal landscape of forests, salt marshes, sand dunes, and beaches. BLM managed Ma-le'I South is part of the greater Ma-le'I Dunes Cooperative Management Area. Ma-le'I North is managed by US Fish and Wildlife Service and is part of the Humboldt Bay National Wildlife Refuge. Trails are limited to pedestrian and equestrian access only.

Outcome Objective

Provide recreation opportunities and coastal access in a unique dune environment that is close to the population centers of Arcata and Eureka, while also prioritizing dune habitat restoration and protection of endangered plant species and aesthetic values.

Management Actions and Allowable Use Decisions

- Closed to mechanized vehicles.
- Closed to dispersed camping.
- Pedestrian and equestrian use is limited to designated trails to protect sensitive plant and animal habitat.
- Dogs under voice control are allowed at Ma-le'I South.
- Enhance natural values and dune ecosystem.
- Facilitate research and educational uses of unique dune ecosystems.
- Provide opportunities for other non-consumptive recreational uses (hiking, sightseeing, bird watching, picnicking).
- Patrol for OHV trespass in Manila Dunes area.
- Provide opportunities for hiking, sightseeing, bird watching, picnicking.
- Samoa Dunes Land Use Plan Amendment 1995 and Supplementary Rules
- Closed to all off-road vehicle use.
- Vehicles limited to daytime access, with nighttime gate closure on hour after sunset, and reopened daily on hour before sunrise.
- Vegetative gathering is prohibited between November 1 and May 1
- Use of firearms and archery equipment prohibited.
- Monitor botanical and cultural resources; protect sensitive species according to the BLM Sensitive Species Policies (BLM Manual Section 6840). Threatened and endangered species management will follow Section 7 consultation procedures in accordance with the Endangered Species Act.
- Conduct dune restoration and exotic plant removal.
- Parking areas may need to be modified in the future to accommodate increased use and shifting sand dunes.

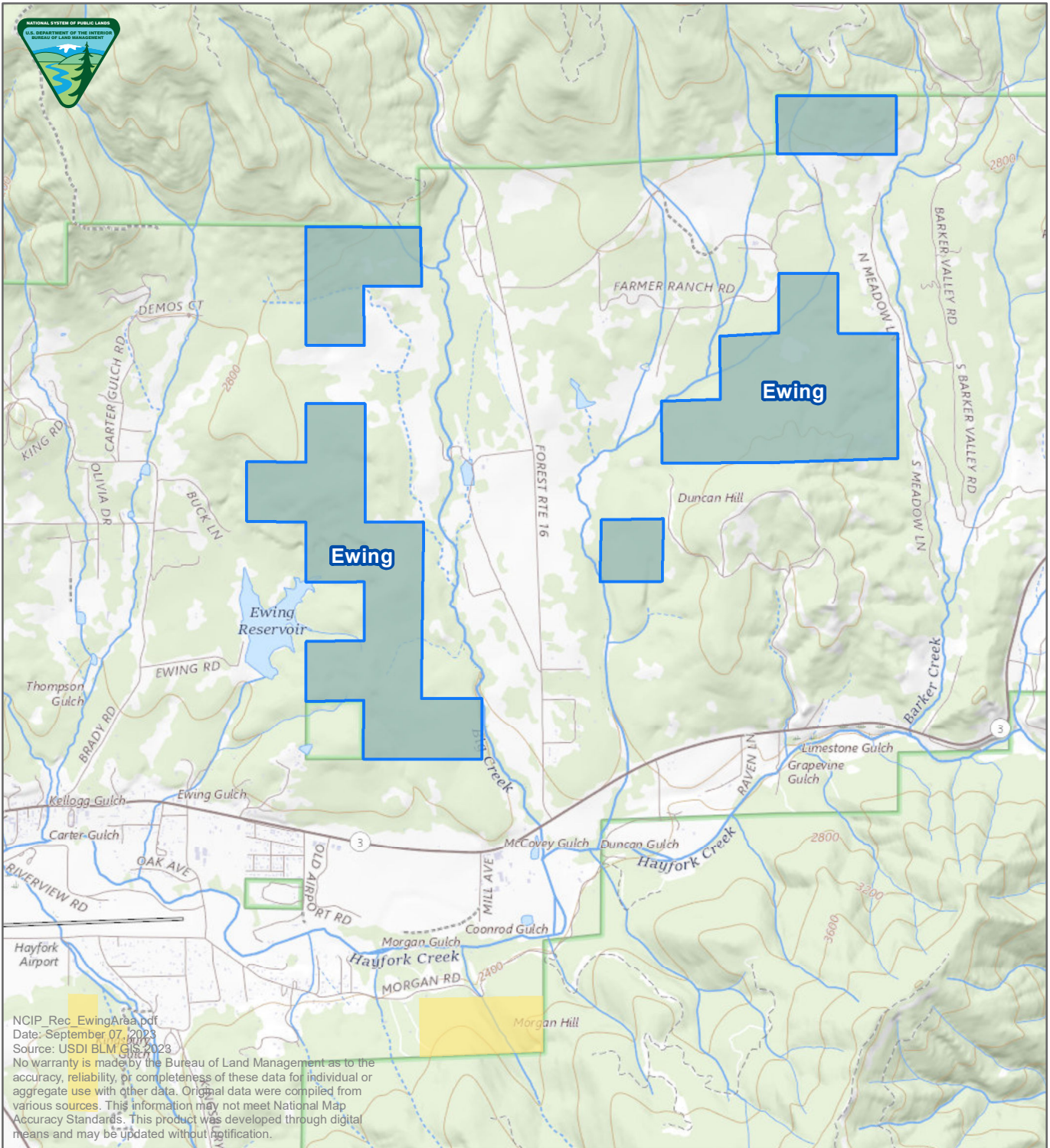


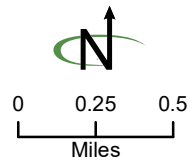


Figure 11: Ewing Area ERMA

-  Proposed extensive recreation management area (ERMA)
-  Bureau of Land Management



F.7.9 Mike Thompson Wildlife Area ERMA

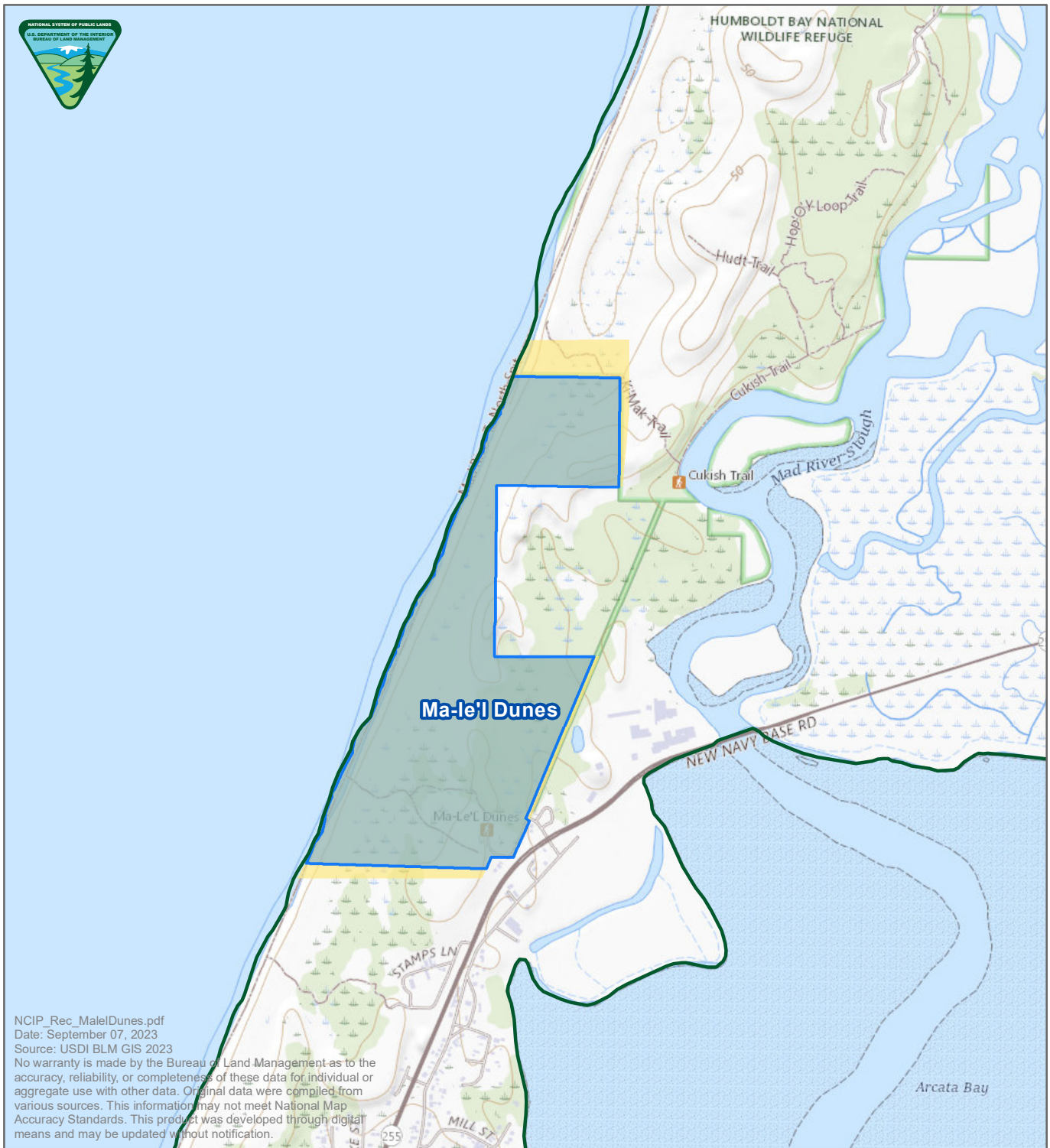
The Mike Thompson Wildlife Area ERMA (600 acres) would be designated under Alternative C. The Mike Thompson Wildlife Area ERMA is a long beach on a sandy spit south of the entrance to Humboldt Bay near Eureka, California (**Figure 12**). Common recreational uses are coastal access (fishing, beach combing, family play, and surfing), wildlife viewing, hiking, hunting, and limited OHV use.

ERMA Objective

Through collaboration with stakeholders and partners, provide outstanding recreation opportunities and continue to contribute to the local community's quality of life and is commensurate with protecting wildlife habitat, hunting, dune restoration, endangered species protection and aesthetic values.

Management Actions and Allowable Use Decisions

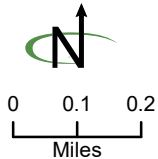
- No unmanned aerial vehicles would be allowed within 300 feet of temporary or permanent plover protection areas.
- OHV wave slope access may be restricted on a case-by-case basis as necessary to protect nesting plovers and/or plover habitat.
- Public lands are available for dispersed recreation.
- The area is open for day use only 1 hour before sunrise to 1 hour after sunset. During brant season, gate opens at 4:00 am.
- Day use only
- No OHVs allowed except on vehicle access corridors and wave slope. No vehicles on wave slope within plover restoration area during plover season.
- Dogs must be leashed on the west side of Jetty Road during plover season.
- No public use in plover restoration area during plover season.
- Kites, model airplanes, and campfires are not allowed within 300 feet of temporary or permanent plover protection areas.
- Lands on west side of Jetty Road open to equestrian use; all other lands closed to equestrian use.
- Firewood cutting or collecting is allowed by permit from September 16 – February 28. Casual collecting is allowed year-round.
- Firearm use is allowed only for hunting of waterfowl during State season. Target shooting is not allowed.
- Fireworks are not allowed.
- Vehicles limited to daytime access, 1 hour before sunrise to 1 hour after sunset.



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Date: September 07, 2023
Source: USDI BLM GIS 2023
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources. This information may not meet National Map Accuracy Standards. This product was developed through digital means and may be updated without notification.

Figure 12: Ma-le'i Dunes ERMA

- Proposed extensive recreation management area (ERMA)
- Bureau of Land Management
- NCIP planning area



F.7.10 Sacramento River Bend ERMA

The Sacramento River Bend ERMA (20,400 acres) would be designated under Alternatives C and D.

The Sacramento River Bend ERMA is characterized by rolling oak Savannah with Tuscan Butte formation rock throughout. The Sacramento River forms a primary boundary to the west, and a network of tributaries cross the recreation area. A multi-use, non-motorized trail system with an equestrian emphasis extends through the landscape, offering diverse and expansive views. Payne's Creek provides water for the prominent Payne's Creek Wetlands area. Trail development is limited in wetland areas to preserve the wetland ecosystem, a vital habitat for migratory birds and native species.

Outcome Objective

The Sacramento River Bend ERMA will offer a diversity of sustainable, multi-use non-motorized trails (for example, hiking and equestrian use trails). Additionally, hunting, camping, and wildlife viewing opportunities will be provided in tandem with natural and cultural resource conservation.

Management Actions and Allowable Use Decisions

- Trail development will only occur where resource impacts may be sufficiently mitigated or avoided and where development is consistent with natural and cultural resource management and provides enhanced recreational experience.
- Eliminate redundant trails and provide a planned trail system with well-designed linkages.
- Use equestrian design standards as well as standard multi-use guidance to promote trail sustainability.
- Identify and authorize as part of trail system high-use water access points for watering horses. Ensure these access points can be maintained long-term, are safe for users, and consistent with natural and cultural resource management.
- Mountain bike only and optimized mountain bike trails (trails with mountain bike-specific trail features such as berms and jumps) are not allowed.
- Trail closures would occur when needed to protect public health and safety and natural and cultural resources.
- As needed, identify areas within the ERMA where no trails would be developed to retain the relevance and importance values of the ACEC.
- Additional trail development opportunities would be considered only when consistent with the lands with wilderness characteristics designation, VRM class II designation, and relevance and importance values of the ACEC where each standard is applicable.
- Prioritize a safe and sustainable environment for day-users.
- Camping is prohibited within 0.25 miles of roads in the Sacramento Bend ERMA.
- Backpackers must camp only within the area open to camping and at least 50 feet from the trail.
- Continue to allow designated dispersed camping in the Massacre Flat area.
- Provide safe and sustainable opportunities for hunting and fishing.
- Maintain recreational fishing and hunting access, while promoting wetlands conservation.
- Limit target shooting to designated areas. Engage with community to determine designated shooting areas. Identification of those areas would be analyzed and disclosed through subsequent implementation-level NEPA.

- Provide extensive visitor services to promote stewardship goals and minimize impacts.
- Sign planning for cultural resource information throughout the ERMA will ensure adequate coverage of all resource topics and points of cultural interests.
- Provide signage and education regarding resource stewardship rules and ethics to provide visitors with a clear understanding of rules and how they relate to resource management.
- Special recreation permits and organized groups not requiring a permit are allowed when compatible with natural and cultural resource management.
- Limit SRP and organized group uses to minimize resource impacts to the relevant and important values of the ACEC in spring and fall. These potential future limitations could include:
 - Limitations on group size
 - Limitations of number of groups annually
 - Closure of impacted areas to organized events.
 - Explore fee-based camping opportunities based on public demand and to meet diverse user group needs, including general recreation and equestrian uses, while also protecting relevance and importance values of the ACEC.

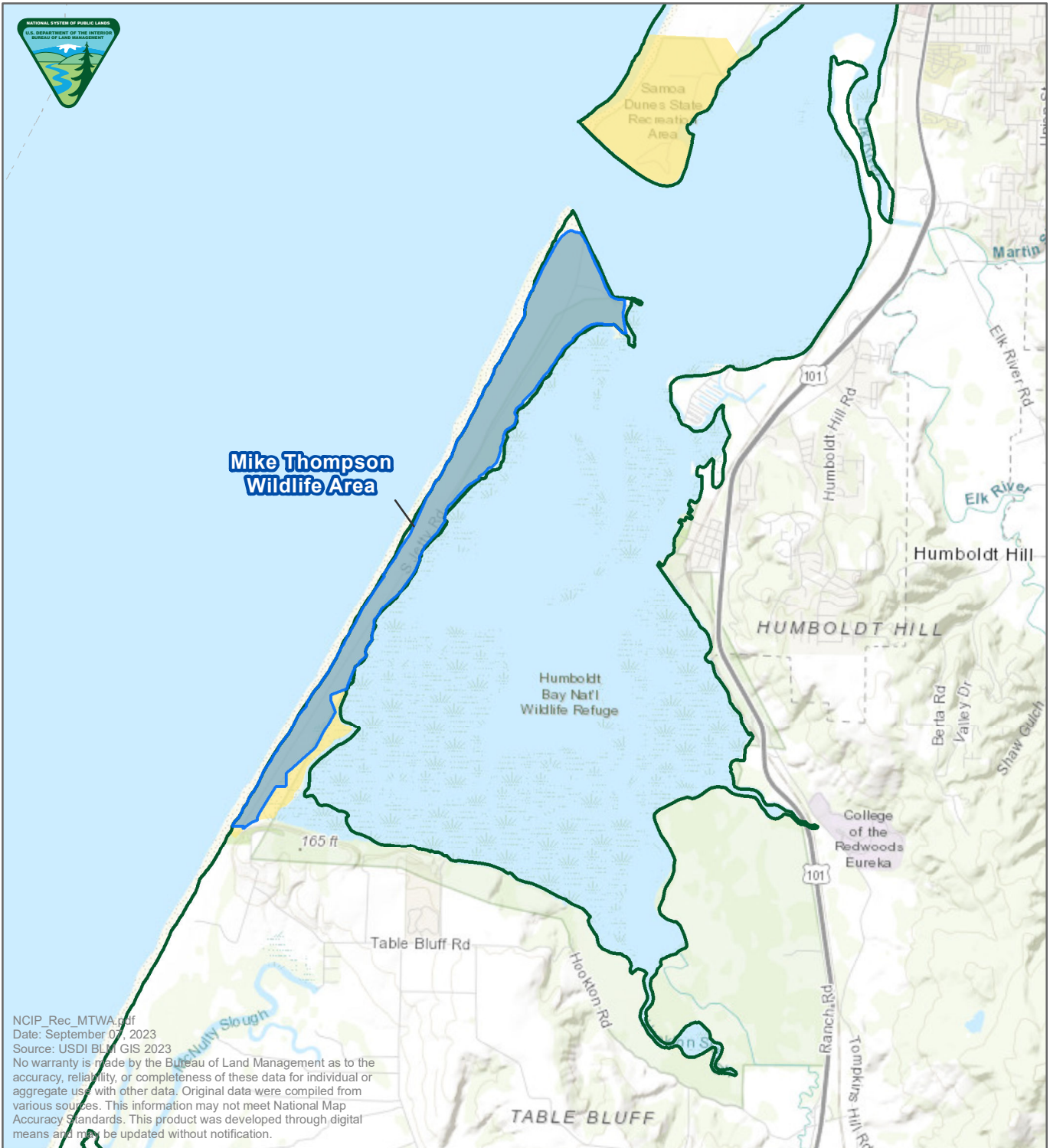



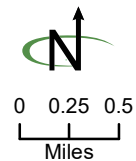


Figure 13: Mike Thompson Wildlife Area ERMA

-  Proposed extensive recreation management area (ERMA)
-  Bureau of Land Management
-  NCIP planning area



F.7.11 Weaverville Community Forest ERMA

The Weaverville Community Forest (WCF) ERMA (3,100 acres) would be designated under Alternatives C and D. The WCF is a cooperatively managed area of BLM and USFS lands that surround the community of Weaverville in Trinity County (**Figure 14**). There is a trail system within WCF that is popular with local communities, and there is interest in enhancing the trail system to further encourage economic growth in the area through tourism. Enhancement of the trail area is also aimed at improving quality of life for locals through connection to nature, and improved health and wellness. Over the last two decades, the community has shown great interest in cooperatively managing the area to ensure community needs are met and voices are heard.

Outcome Objective

Support recreational opportunity enhancement within the WCF as appropriate with respect to natural and cultural resources to increase quality of life and promote socioeconomic development within the area.

Management Actions and Allowable Use Decisions

- Close the WCF to dispersed camping in accordance with the existing County ordinance.
- Work collaboratively with the WCF Steering Committee, partners, and Tribes to facilitate recreational development.

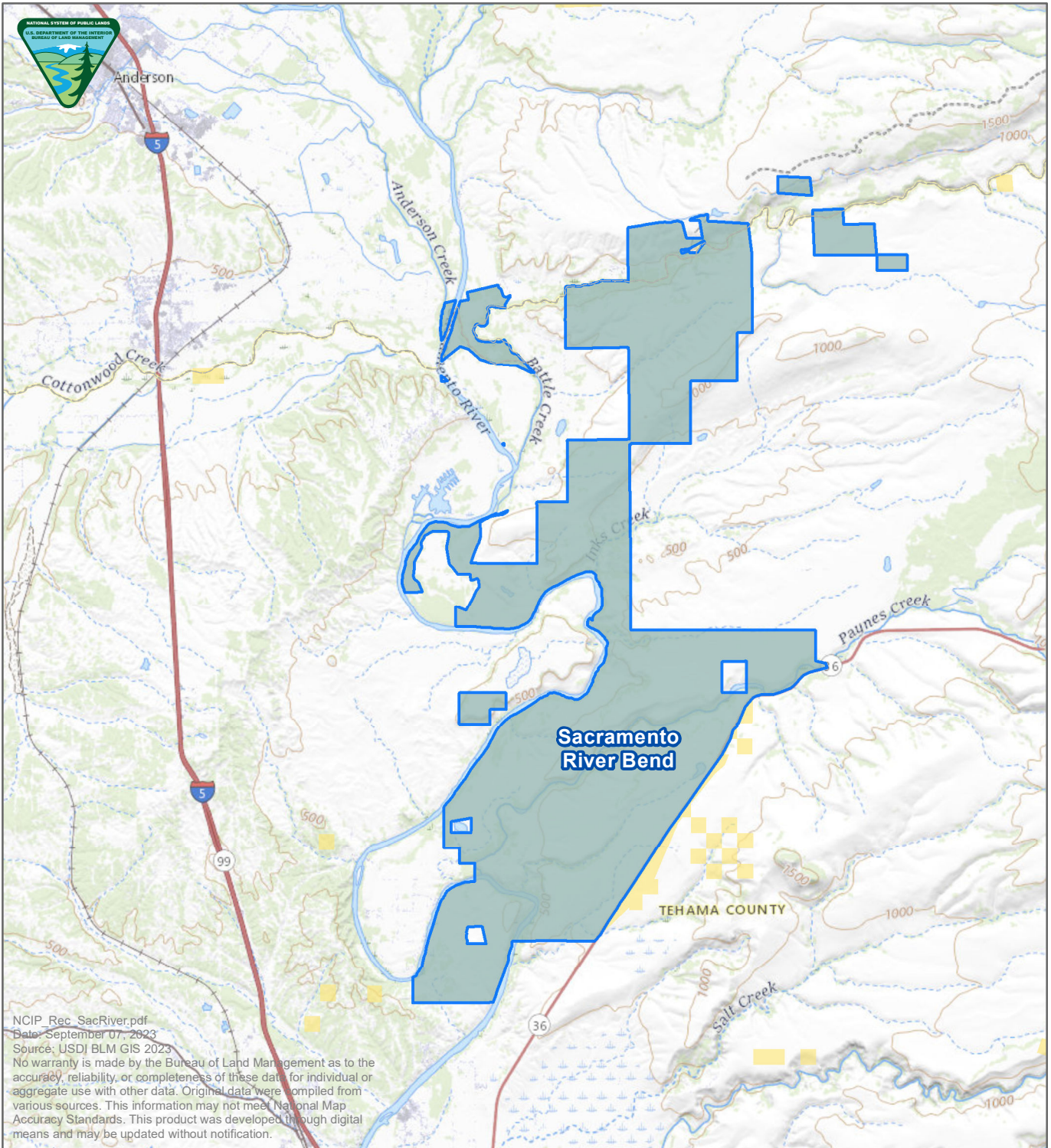


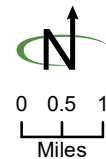


Figure 14: Sacramento River Bend ERMA

-  Proposed extensive recreation management area (ERMA)
-  Bureau of Land Management



Appendix G

Wild and Scenic River Suitability Report

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**US Department of the Interior
Bureau of Land Management
Redding and Arcata Field Offices**

Northwest California Integrated Resource Management Plan



WILD AND SCENIC RIVER SUITABILITY REPORT

September 2023

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APPENDICES

A Maps of Suitable Rivers or Streams

ACRONYMS AND ABBREVIATIONS

Full Phrase

Act	Porter-Cologne Water Quality Control Act
AFRP	Anadromous Fish Restoration Program
BLM	US Department of the Interior, Bureau of Land Management
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CWA	Clean Water Act
ERP	Ecosystem Restoration Program
ESA	Endangered Species Act of 1973
FERC	Federal Energy Regulatory Commission
Forest Service	US Department of Agriculture, Forest Service
National System	National Wild and Scenic Rivers System
NCIP	Northwest California Integrated Resource Management Plan
NMFS	National Marine Fisheries Service
NOAA Fisheries	National Oceanic and Atmospheric Administration
ORV	outstandingly remarkable value
regional Basin Plan	Regional Water Quality Control Plan
Regional Water Board	Regional Water Quality Control Board
STNF	Shasta-Trinity National Forest
TRRP	Trinity River Restoration Program
US	United States
USFWS	US Fish and Wildlife Service
WSR	wild and scenic river
WSRA	Wild and Scenic Rivers Act of 1968
WSRCD	Western Shasta Resource Conservation District

Chapter I. Introduction

The United States (US) Department of the Interior, Bureau of Land Management (BLM), Arcata and Redding Field Offices are jointly preparing the Northwest California Integrated Resource Management Plan (NCIP) to replace and update the current management direction for these field offices. Section 5(d)(1) of the Wild and Scenic Rivers Act of 1968 (WSRA; Public Law 90-542; 16 United States Code 1271–1287) directs federal agencies to consider potential wild and scenic rivers (WSRs) in their land and water planning processes (“In all planning for the use and development of water and related land resources, consideration shall be given by all federal agencies involved to potential national wild, scenic, and recreational river areas”).

To fulfill this requirement, whenever the BLM undertakes land use planning, such as the NCIP, it analyzes river and stream segments that might be eligible and suitable for inclusion in the National Wild and Scenic Rivers System (National System). The BLM’s policy, direction, and guidance for identifying, evaluating, planning, and managing eligible and suitable WSRs and managing designated components of the National System is contained in Manual 6400, Wild and Scenic Rivers—Policy and Program Direction for Identification, Evaluation, Planning, and Management (BLM 2012).

This report describes the determinations made during the suitability phase of the WSR evaluation for the NCIP (see **Section 1.2**, Steps in the Wild and Scenic River Process). A separate report, the NCIP Wild and Scenic River Eligibility Report, presents the findings of the eligibility study conducted for the NCIP (BLM 2022), which is available at <https://eplanning.blm.gov/eplanning-ui/project/2012803/510>. As a result of the eligibility study, 117 river or stream segments on BLM-administered land within the NCIP were determined to be eligible for inclusion in the National System (see **Table I-1**, Eligible Rivers in 2023, and **Figure I-1**, Designated and Eligible Rivers). Background information pertaining to the WSR inventory process and eligibility study methodology is presented in the eligibility report. This report documents the suitability of those 117 eligible river or stream segments for inclusion in the National System. **Figure I-2**, Suitable Rivers, displays the rivers determined to be suitable.

**Table I-1
Eligible Rivers in 2023**

Ancestor Creek	Eden Creek Tributary 2	Rattlesnake Creek
Baker Creek	Elder Creek	Sacramento River Bend tributary 1 Segment A
Battle Creek	Elder Creek tributaries	Sacramento River Bend tributary 1 Segment B
Bear Creek Segment A	Elk Creek	Sacramento River Bend tributary 2
Bear Creek Segment B	Elkhorn Creek	Sacramento River Segment A
Beegum Creek	Eubank Creek	Sacramento River Segment B
Bell Springs Creek	Fish Creek	Sacramento River Segment C
Bell Springs Creek tributary	Fourmile Creek	Sacramento River Segment D
Big Chico Creek Segment A	Grindstone Creek	Sacramento River Segment E
Big Chico Creek Segment B	Grub Gulch	Sacramento River Segment F
Board Tree Canyon	Hayshed Creek	Sacramento River Segment G
Brin Canyon Creek	Horse Canyon Creek	School Section Creek
Butler Creek	Hulls Creek Segment A	School Section Creek tributary 1
Butte Creek I Segment A	Hulls Creek Segment B	School Section Creek tributary 2






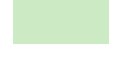







Ancestor Creek	Eden Creek Tributary 2	Rattlesnake Creek
Butte Creek 1 Segment B	Indian Creek 1 (Trinity River Tributary) Segment A	Scorpion Gulch
Butte Creek 2 (Van Duzen River Tributary)	Indian Creek 1 (Trinity River Tributary) Segment B	Sevenmile Creek
Butte Creek 2 tributary 1	Indian Creek 1 (Trinity River Tributary) Segment C	Sevenmile Creek tributaries
Butte Creek 2 tributary 2	Indian Creek 2 (Eel River Tributary)	Shasta River Segment A
Canyon Creek	Inks Creek	Shasta River Segment B
Casoose Creek	Inks Creek tributary	Shell Rock Creek
Cedar Creek Segment A	Lacks Creek	Sholes Creek
Cedar Creek Segment B	Lacks Creek tributaries	South Fork Battle Creek
Cedar Creek tributary 1	Mad River	South Fork Cottonwood Creek Segment A
Cedar Creek tributary 2	Massacre Creek	South Fork Cottonwood Creek Segment B
Cedar Gulch	Mattole River Segment A	Tenmile Creek
Chamise Creek	Mattole River Segment B	Thatcher Creek
Chamise Creek tributaries	Mattole River Segment C	Tom Long Creek
Charlton Creek	McAdam Creek	Tom Long Creek tributaries
Charlton Creek tributaries	McAdam Creek tributary	Tomki Creek
Clear Creek Segment A	Middle Fork Cottonwood Creek Segment A	Turtle Creek
Clear Creek Segment B	Middle Fork Cottonwood Creek Segment B	West Branch Butte Creek 1
Clear Creek Segment C	Mill Creek	West Weaver Creek
Coleman Creek	Misery Creek	West Weaver Creek tributary
Cruso Cabin Creek	North Fork Battle Creek	White Rock Creek
Deep Hole Creek	North Fork Cedar Creek	White Rock Creek tributary 1
Deer Creek	North Fork Cottonwood Creek	White Rock Creek tributary 2
East Branch South Fork Eel River	Paralyze Canyon and tributaries	White Rock Creek tributary 3
Eden Creek	Paynes Creek	White Rock Creek tributary 4
Eden Creek tributary 1	Pipe Creek	Woodman Creek

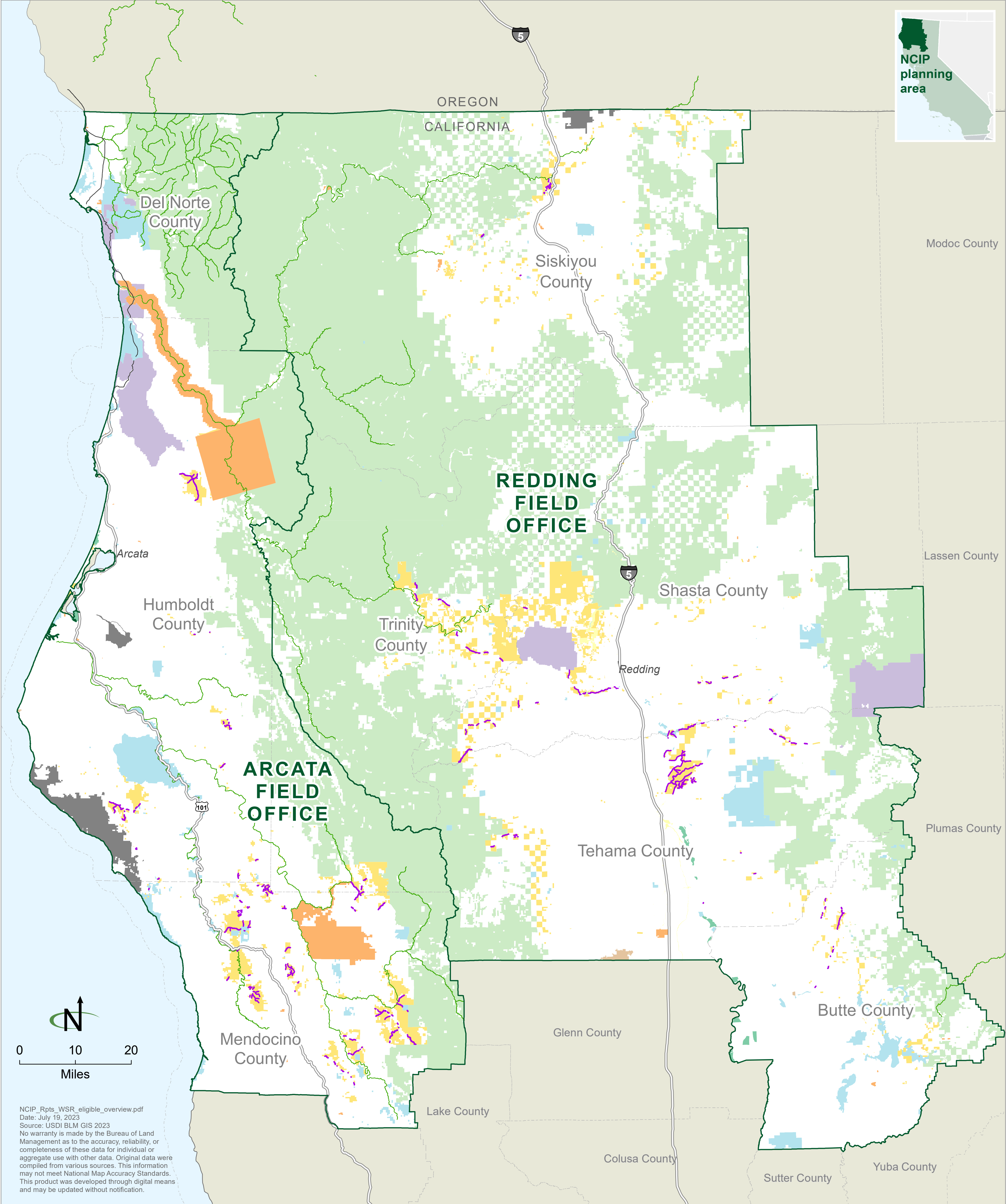
Source: BLM GIS 2023

I.1 STUDY AREA

The NCIP planning area encompasses approximately 14.4 million acres of federal, state, and private lands in eight counties in northwestern California (Butte, Del Norte, Humboldt, Mendocino, Shasta, Siskiyou, Tehama, and Trinity Counties), including lands administered by the BLM's Arcata and Redding Field Offices. Management direction outlined in the NCIP will apply to 382,200 surface acres and 295,100 mineral estate (split estate) acres of BLM-administered lands.






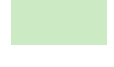





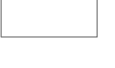

Map 1-1 Designated and Eligible Rivers

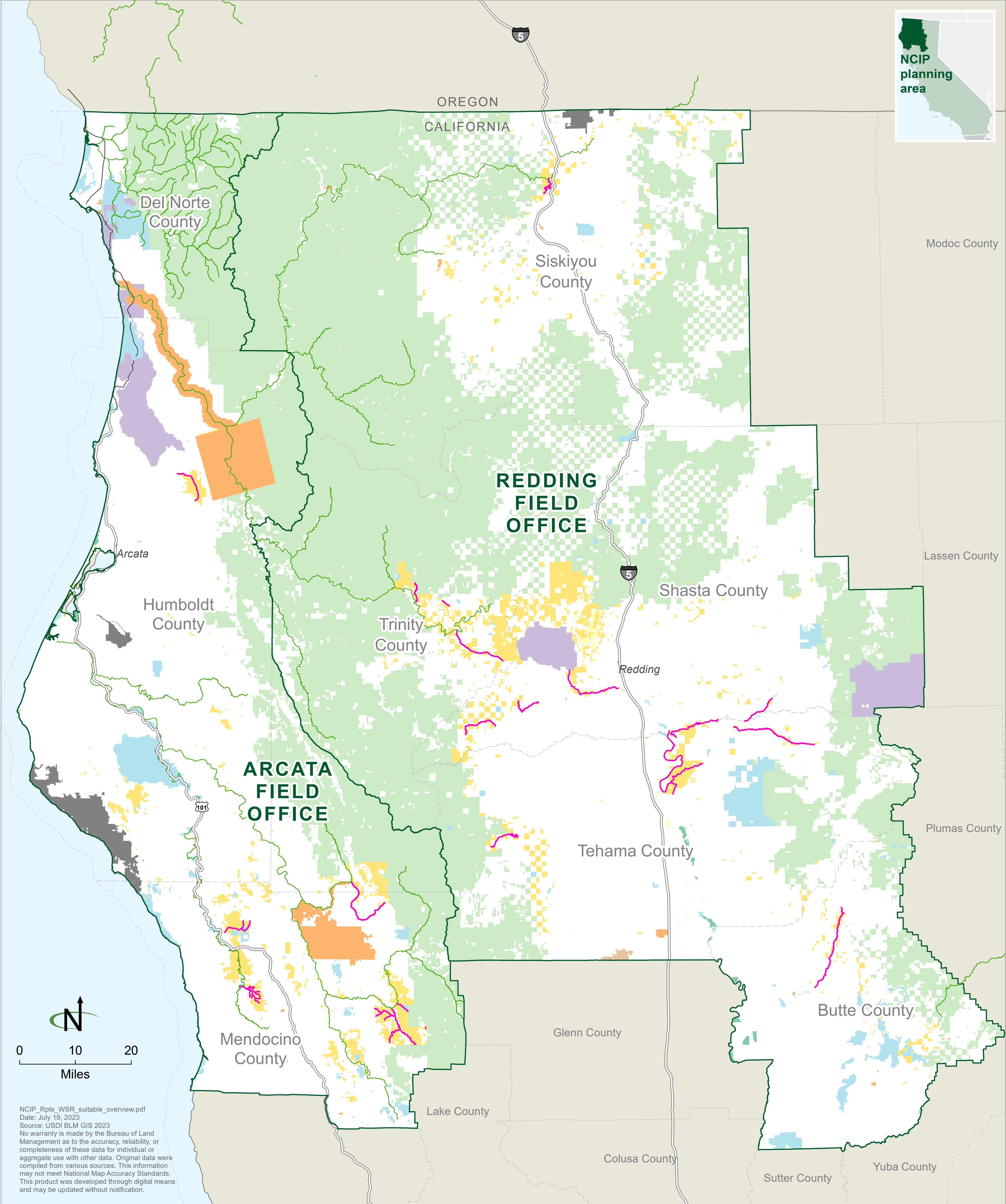
- | | | | |
|--|---|---|--|
|  Eligible river segment |  Bureau of Land Management |  Tribal Land |  BLM-administered land not included in the NCIP decision area |
|  Designated river segment |  Forest Service |  Other Federal |  NCIP planning area |
| |  National Park Service |  State | |
| |  Fish and Wildlife Service |  Private | |
| |  Bureau of Reclamation | | |



NCIP_Rpts_WSR_eligible_overview.pdf
 Date: July 19, 2023
 Source: USDI BLM GIS 2023
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Map 1-2 Suitable Rivers

- | | | | |
|--|---|---|--|
|  Suitable river segment |  Bureau of Land Management |  Tribal Land |  BLM-administered land not included in the NCIP decision area |
|  Designated river segment |  Forest Service |  Other Federal |  NCIP planning area |
| |  National Park Service |  State | |
| |  Fish and Wildlife Service |  Private | |
| |  Bureau of Reclamation | | |



NCIP_Rpts_WSR_suitable_overview.pdf
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I.2 STEPS IN THE WILD AND SCENIC RIVER STUDY PROCESS

The WSR study process is composed of three main components: the eligibility phase, assignment of a tentative classification, and the suitability phase. These steps are conducted in accordance with BLM Manual 6400, Wild and Scenic Rivers—Policy and Program Direction for Identification, Evaluation, Planning, and Management (BLM 2012) and the Wild and Scenic River Study Process technical report (Interagency Wild and Scenic Rivers Coordinating Council 1999). **Figure I-3**, Wild and Scenic Rivers Study Process, shows an overview of the WSR study process.

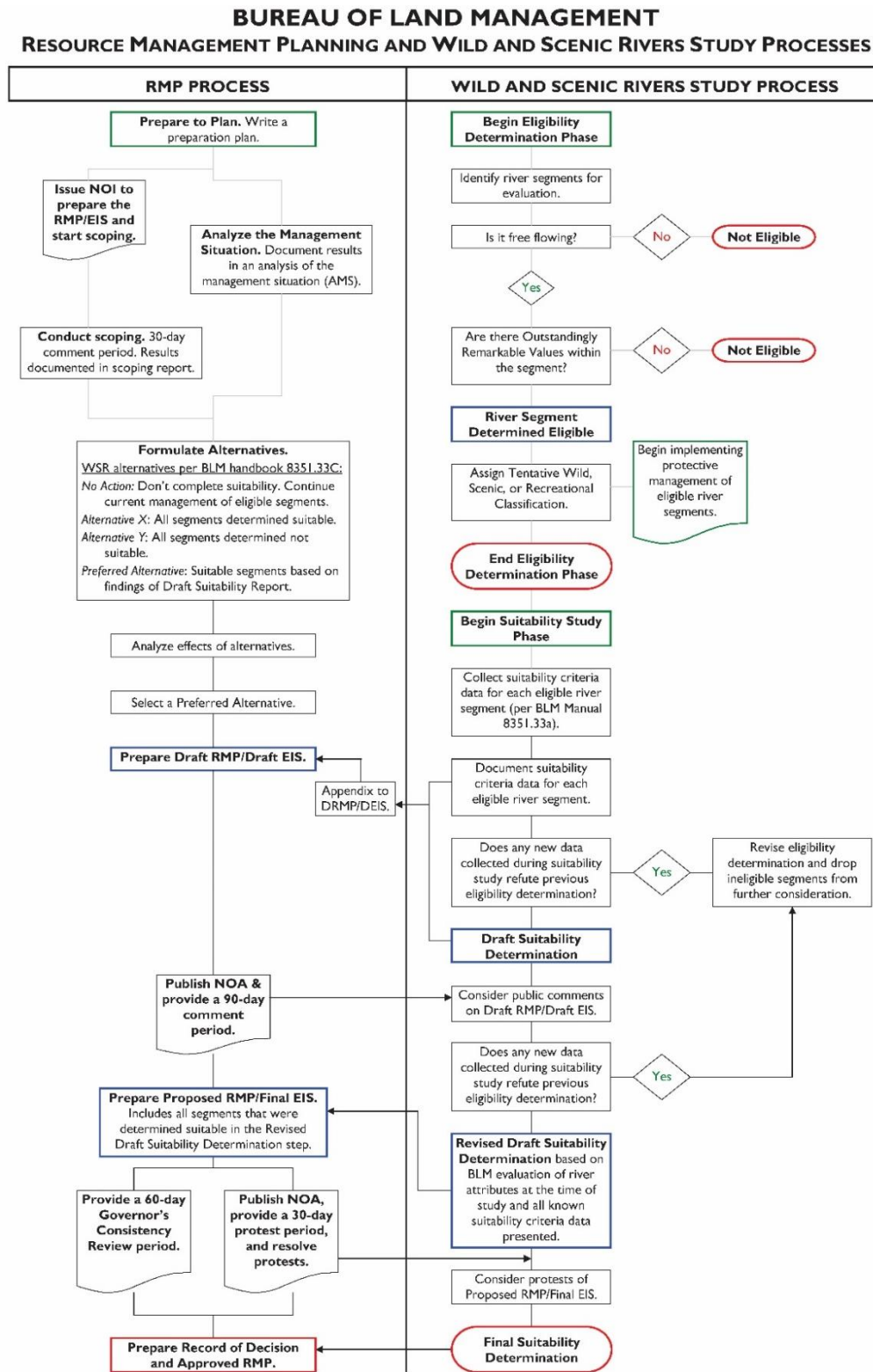
During all three steps, the analysis area for a river segment is the “river corridor.” BLM Manual 6400 defines the river corridor as “that portion of a river area either authorized by Congress or an agency for study and its immediate environment comprising a minimum area extending at least 0.25 miles (0.5 miles in Alaska) from each bank (BLM 2012).”

The eligibility phase determines whether a river corridor possesses the basic requirements (such as a free-flowing condition and the presence of one or more outstandingly remarkable values [ORVs]) to be eligible in the National System. Classification considers the level of development in the river corridor at the time of the eligibility study and assigns the corresponding classification, which from least to most developed are wild, scenic, and recreational. For more information on these steps, see the NCIP’s Wild and Scenic River Eligibility Report (BLM 2022) at <https://eplanning.blm.gov/eplanning-ui/project/2012803/510>.

The purpose of the suitability phase is to determine whether eligible river segments are suitable for inclusion in the National System per the criteria of the WSRA. Suitability considerations include the environmental and economic consequences of designation and the manageability of a river if Congress were to designate it. The suitability evaluation does not result in actual designation but only a suitability determination for designation. The BLM cannot administratively designate a river segment into the National System via a planning decision or other agency decision, and no segment studied is or will be automatically designated as part of the National System. Only Congress can designate a WSR. The BLM’s policy is to present the findings of this suitability to Congress, at which time Congress can decide to act on this information or not. In some instances, the Secretary of the Interior may designate a WSR when the governor of a state, under certain conditions, petitions for a river to be designated.

Members of Congress will ultimately choose the legislative language if any suitable segments are presented to them. Water-protection strategies and measures to meet the purposes of the WSRA will be the responsibility of Congress in any legislation proposed. BLM will manage suitable segments to protect the values for which they were found suitable for inclusion into the National System. Specific management decisions can be found in the NCIP RMP. Rivers found not suitable will be dropped from further consideration and managed according to the objectives outlined in the NCIP. Suitability determinations are draft until the record of decision for the NCIP is signed.

**Figure I-3
Wild and Scenic Rivers Study Process**



I.3 SUMMARY OF SUITABILITY FINDINGS

As documented in this report, 56 river or stream segments across 17 complexes were found suitable for inclusion in the National System (Table I-2, below).

**Table I-2
River or Stream Segments Determined Suitable in 2023**

River or Stream Segment	Length on BLM-Administered Land (miles)	Tentative Classification
Battle Creek	6.5	Recreational
Beegum Creek	4.7	Wild
Butte Creek I Segment B	4.5	Scenic
Canyon Creek	2.9	Recreational
Cedar Creek Segment A	3.9	Wild
Cedar Creek Segment B	1.5	Wild
Cedar Creek Tributary 1	0.5	Wild
Cedar Creek Tributary 2	0.4	Wild
Clear Creek Segment A	4.9	Scenic
Clear Creek Segment B	1.1	Scenic
Clear Creek Segment C	3.0	Scenic
Deep Hole Creek	3.1	Scenic
Eden Creek	3.3	Wild
Eden Creek Tributary 1	1.2	Wild
Eden Creek Tributary 2	1.2	Wild
Elder Creek	1.7	Wild
Elder Creek Tributaries	2.2	Wild
Elk Creek	3.3	Scenic
Grub Gulch	0.5	Scenic
Hulls Creek Segment A	4.9	Recreational
Hulls Creek Segment B	2.0	Scenic
Indian Creek I (Trinity River Tributary) Segment A	0.8	Wild
Indian Creek I (Trinity River Tributary) Segment B	2.9	Scenic
Indian Creek I (Trinity River Tributary) Segment C	1.7	Scenic
Inks Creek	1.0	Wild
Inks Creek Tributary	0.4	Wild
Lacks Creek	7.6	Wild
Lacks Creek Tributaries	3.6	Wild
Massacre Creek	1.8	Scenic
Middle Fork Cottonwood Creek Segment A	1.2	Recreational
Middle Fork Cottonwood Creek Segment B	3.4	Wild
Misery Creek	0.2	Wild
North Fork Battle Creek	0.9	Wild
North Fork Cedar Creek	1.0	Wild
North Fork Cottonwood Creek	2.1	Scenic
Paynes Creek	3.6	Scenic
Paralyze Canyon and Tributaries	7.7	Wild
Sacramento River Bend Tributary I Segment A	0.7	Wild

River or Stream Segment	Length on BLM-Administered Land (miles)	Tentative Classification
Sacramento River Bend Tributary 1 Segment B	0.3	Scenic
Sacramento River Bend Tributary 2	2.1	Scenic
Sacramento River Segment A	3.8	Recreational
Sacramento River Segment B	7.1	Scenic
Sacramento River Segment C	2.0	Recreational
Sacramento River Segment D	1.9	Recreational
Sacramento River Segment E	0.9	Wild
Sacramento River Segment F	0.1	Scenic
Shasta River Segment A	0.3	Scenic
Shasta River Segment B	3.1	Recreational
South Fork Battle Creek	4.5	Recreational
South Fork Cottonwood Creek Segment A	2.0	Wild
South Fork Cottonwood Creek Segment B	1.1	Scenic
Thatcher Creek	1.6	Wild
Turtle Creek	4.3	Scenic
West Branch Butte Creek I	0.8	Scenic
West Weaver Creek	1.4	Scenic
West Weaver Creek Tributary	0.1	Scenic

Source: BLM GIS 2023

Chapter 2. Suitability Determinations: Suitable Segments

The following river or stream segments, grouped by complex, were found suitable for inclusion in the National System. Complex maps of the 56 suitable segments and an overview map of the inventoried and eligible river or stream segments are included in **Appendix A**, Maps of Suitable Rivers and Streams.

2.1 BATTLE CREEK COMPLEX (BATTLE CREEK, NORTH FORK BATTLE CREEK AND SOUTH FORK BATTLE CREEK)

Complex Description:	Battle Creek acts as a border between Tehama and Shasta Counties and flows from the foothills of the northern Sierra Nevada to its confluence with the Sacramento River.		
Field Office:	Redding	Map:	Map A-1 in Appendix A
Suitability Determination:	All segments determined suitable for inclusion into the National System.		
<i>Battle Creek</i>			
BLM Segment Length:	6.5 miles	Area on BLM-Administered Land:	1,441 acres
Total Segment Length:	6.5 miles	Total Segment Area:	2,540 acres
ORVs:	Scenic, Recreation, Fish, Cultural	Tentative Classification:	Recreational
<i>North Fork Battle Creek</i>			
BLM Segment Length:	0.9 miles	Area on BLM-Administered Land:	164 acres
Total Segment Length:	0.9 miles	Total Segment Area:	530 acres
ORV:	Fish	Tentative Classification:	Wild
<i>South Fork Battle Creek</i>			
BLM Segment Length:	4.5 miles	Area on BLM-Administered Land:	1,021 acres
Total Segment Length:	4.5 miles	Total Segment Area:	2,216 acres
ORVs:	Scenic, Recreation, Fish, Cultural	Tentative Classification:	Recreational

2.1.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the Battle Creek Complex, four ORVs have been identified. ORVs for fish, recreation, cultural, and scenic values were identified as unique, rare, or exemplary at a comparative regional or national scale.

The Battle Creek Complex includes a scenic quality classification of A and offers a unique, regional opportunity for highly runnable, moderate rapids (challenging and accessible, appealing to a wider group of boaters) with a long season in a highly scenic, wildlife-rich riparian corridor. This segment is widely regarded as one of the most significant fish-producing streams in the Central Valley and supports federally listed endangered winter-run Chinook salmon, threatened spring-run salmon, and winter-run steelhead. Its perennial, cold water makes it a critical stronghold for the recovery of these salmonid species. The State of California also lists winter-run Chinook salmon as endangered (CDFW 2023).

The Battle Creek Complex and its rich salmon runs were attractive to prehistoric peoples who lived, worked, and played in extant villages; camps; rock shelters; and special use sites, such as flaked-stone workshops, along its banks. One midden site was excavated with human remains and unique artifacts; it showed indications of multiple periods of use. Another rock shelter exhibited evidence of Euro-American contact. A third location displayed a complex wall system of unknown use and is likely eligible for listing on the National Register of Historic Places as a larger district.

Factor 2: Current status of landownership and use in the area

Within the Battle Creek segment, BLM manages 1,441 acres (36 percent) of the river corridor, which totals 2,540 acres. The remaining 1,099 are a mix of private, US Fish and Wildlife Service (USFWS) and state lands. Within North Fork Battle Creek, BLM manages 164 acres (31 percent) of the river corridor, which totals 530 acres. The remaining 366 acres are state and private land. Within South Fork Battle Creek, BLM manages 1,021 acres (46 percent) of the river corridor, which totals 2,216 acres. The remaining 1,195 acres are private land.

Overlapping the corridor are two grazing allotments, Jellys/Battle Creek and Long Ranch. Currently, livestock grazing is not found to be impacting ORVs in the segment corridors, but livestock grazing may be curtailed if the segments were to be designated, and grazing is found to be impacting the ORVs.

All lands within the segment corridors are zoned by Tehama and Shasta Counties, as discussed in Factor 8 (see below). Federal and state landowners and other stakeholders in the area collaborate in the Greater Battle Creek Working Group to promote fisheries protection and restoration in the watershed. The Bureau of Reclamation and partners have been working for decades on the Battle Creek Salmon and Steelhead Restoration Project in the upper reaches in order to restore approximately 42 miles of habitat on Battle Creek and an additional 6 miles of habitat on tributaries to Battle Creek for threatened and endangered salmon and steelhead, while minimizing the loss of clean and renewable energy produced at PG&E's Battle Creek Hydroelectric Project. More recently, the BLM and other partners have placed more focus on restoration and protection of the lower reaches of Battle Creek, as described in the 2021 Lower Battle Creek Scoping Study.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the existing conditions of the segments and protect the identified ORVs. Designation would enhance the threatened fish populations by helping to preserve existing habitat. Winter-run Chinook salmon, spring-run salmon, and winter-run steelhead would continue to be protected under the Endangered Species Act (ESA) and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

The Coleman Fish Hatchery and Coleman Powerhouse, operated by the US Fish and Wildlife Service, are within the corridor near the center of the middle segment. The Coleman Adaptive Management Plan, developed by the US Bureau of Reclamation in cooperation with the USFWS, outlines the management structure to ensure necessary instream flows for the benefit of naturally occurring salmonid populations (BOR 2020). While the Coleman Powerhouse, operated by Pacific Gas & Electric, collects water from Battle Creek for the Coleman National Fish Hatchery, its production does not affect the free-flowing nature of this segment.

Currently, grazing is not found to be impacting the ORVs in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORVs. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORVs. Designation of these segments is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry. Segments with a recreational classification that are ultimately designated would be closed to mineral leasing, allow mineral material development with application of necessary conditions to protect resource values, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the eligible segments were added to the National System, the BLM would be most suited to manage the land and resources within this boundary, unless Congress designated another agency. A large portion of the Battle Creek segment corridors is also managed by the State of California and there could be an opportunity for co-management of the corridor between the two agencies.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection; however, it is assumed that the BLM would provide the majority of the administration, and the associated costs, for these segments.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. BLM administers approximately 39 percent of the corridor already. At this time, there are no plans for further acquisitions along the segment, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with the USFWS, US Bureau of Reclamation, Pacific Gas & Power, California Department of Fish and Wildlife (CDFW), Greater Battle Creek Working Group, and local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORVs within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

In addition, the US Bureau of Reclamation has been conducting the Battle Creek Salmon and Steelhead Restoration Project on the upper reaches of Battle Creek since 1999. The project is aimed at restoring approximately 48 miles of Chinook and steelhead habitat along the upper reaches of Battle Creek and its tributaries. The project would enable safe passage for naturally produced salmonids and would facilitate their population growth and recovery (BOR 2020). WSR designation aligns with this project because designation would provide downstream protection and enhancement of the habitat and species.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

The parcels of the segment corridors zoned by Tehama and Shasta Counties include Agricultural/Upland, which allows primarily livestock grazing; Natural Resources Lands and Recreation, which allow for recreational, conservation, or light agricultural types of uses; Timber Production, allowing for timber and timber related activities; and Unclassified (Tehama County 2023; Shasta County 2023). These zoning types would generally support the protection of ORVs and the prevention of incompatible development.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protections to WSRs' free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA (California Endangered Species Act), as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit

coordinates with NOAA (National Oceanic and Atmospheric Administration) Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2014).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (Clean Water Act) (California Water Board 2023). The Regional Water Quality Control Board has jurisdiction in each county. The Regional Water Quality Control Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the Water Quality Control Plan for the North Coast Region (regional Basin Plan), and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate the Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Two comments were related to each Battle Creek and North Fork Battle Creek, and three comments related to South Fork Battle Creek. All comments were supportive of the segments' designation as WSRs and specifically noted the anadromous fisheries supported by each segment (BLM 2022). There were no comments opposed to designating any of the Battle Creek Complex segments as WSRs.

Additionally, the Battle Creek Working Group was formed in the 1990s for the purpose of determining the most effective approach to restoring anadromous fish in the watershed. The working group continues to meet quarterly to review status of the ongoing restoration projects and discuss other management issues important to Battle Creek (Program 2023).

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of the segments within the Battle Creek Complex as WSRs would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Central Valley Regional Board, enforces California water quality laws. Designation of the segments within the Battle Creek Complex as WSRs would be consistent with the Central Valley Regional Board's mission of protecting water quality.

Portions of these segments overlap with the Sacramento River Bend Area of Critical Environmental Concern (ACEC), leading to additional protective management actions that would support the protection and enhancement of ORVs.

Additionally, the Battle Creek Salmon and Steelhead Restoration Project is aimed at restoring approximately 48 miles of Chinook and steelhead habitat along the upper reaches of Battle Creek and its tributaries. Designation as a WSR would support this project in the consistent management, protection, and enhancement of the federally listed endangered winter-run Chinook salmon, threatened spring-run salmon, and winter-run steelhead.

Factor 12: The contribution to the river system or basin integrity

The designation of the segments within the Battle Creek Complex would provide a significant contribution to the river system, as the upper reaches are identified as eligible for inclusion and currently undergoing habitat and population restoration projects with the US Bureau of Reclamation. Designation would provide additional protections, enhancements, and monitoring for the lower reaches of Battle Creek complex, aligning these reaches with the US Bureau of Reclamation’s restoration project. The lower reaches and watershed are a focus area for protection and restoration by various organizations, including the BLM, as described in the Lower Battle Creek Scoping Study completed in 2021. Designation would provide additional protections, enhancements, and monitoring for the lower reaches of Battle Creek complex, aligning these reaches with the restoration efforts in both the upper and lower watershed.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed new FERC (Federal Energy Regulation Commission) projects. There are no FERC projects proposed for the segments within the Battle Creek Complex outside of the existing Coleman Fish Hatchery along Battle Creek.

2.1.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Battle Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Battle Creek	Eligible	Suitable	Not Suitable	Suitable
North Fork Battle Creek	Eligible	Suitable	Not Suitable	Suitable
South Fork Battle Creek	Eligible	Suitable	Not Suitable	Suitable

2.1.3 Suitability Determination

The segments within Battle Creek Complex (Battle Creek, North Fork Battle Creek, and South Fork Battle Creek) were found to be **suitable for inclusion** in the National System based on the information within this report. Designation would provide consistent management of the river system and contribute to the ongoing state and local efforts to protect threatened and endangered species within the river. Additionally, there are collaborations ongoing to continue to restore, protect, and enhance portions of the Battle Creek Complex through other agencies and organizations.

2.2 BEEGUM CREEK

Corridor Description:	Beegum Creek is located on the border between Tehama and Shasta Counties and flows from the foothills of the northern Coast Ranges to its downstream boundary with Highway 36.		
BLM Segment Length:	4.7 miles	Area on BLM-Administered Land:	1,135 acres
Total Segment Length:	4.7 miles	Total Segment Area:	1,400 acres
ORVs:	Fish, Scenic	Field Office:	Redding
Tentative Classification:	Wild	Map:	Map A-2 in Appendix A
Suitability Determination:	Determined suitable for inclusion into the National System		

2.2.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Beegum Creek, two ORVs have been identified as making this segment a worthy addition to the National System. ORVs for fish and scenery were identified as unique, rare, or exemplary at a comparative regional or national scale.

Beegum Creek supports indigenous populations of state- and federally listed threatened spring-run Chinook salmon and federally listed threatened winter-run steelhead (CDFW 2023). The segment is noted for its value as a scenic resource. It is valued for the scenic views into the depths of the gorge as well as the views of the surrounding mountains, which include Beegum Peak and Sugarloaf Mountain.

Factor 2: Current status of landownership and use in the area

From the upstream boundary at the Shasta-Trinity National Forest (STNF) to the downstream terminus at Highway 36, the BLM manages 1,135 acres (45 percent) of the river corridor, which totals 1,400 acres. The remaining 265 acres are private land. Land within the river corridor is zoned by Shasta and Tehama Counties. Zoning classifications from Shasta and Tehama Counties include habitat protection and unclassified (Shasta County 2023), as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river’s existing condition and protect the identified ORVs. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM’s goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there is no FERC application for dams or diversions on file for this river segment (FERC 2023).

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a

wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry.

Currently, timber harvesting or other vegetation management activities are not found to be impacting the ORVs in the river corridor; however, should these activities be found to impact ORVs, they may be modified in the segment's corridor to minimize impacts on the ORVs.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality. This segment is adjacent to the STNF, where its upstream reaches were determined as suitable for inclusion into the National System (Forest Service 1995). By designating the BLM-administered segment, a significant contiguous corridor would be established to protect and enhance ORVs.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the Beegum Creek segment were added to the National System, the BLM and US Department of Agriculture, Forest Service (Forest Service) would co-manage this segment.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Approximately 45 percent of the river corridor is already on BLM-administered land. At this time, there are no plans for further acquisitions along Beegum Creek, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Cooperative efforts with the Forest Service would likely benefit the ORVs in the river corridor. The scenic and fish resources within the river corridor continue upstream into the STNF, and shared participation in the preservation and administration of Beegum Creek would support more consistent treatment of the ORVs.

Preservation and administration of the State-listed and federally listed species of salmon within Beegum Creek would also be supported by participation from state and federal agencies, including the CDFW and USFWS, who are both mandated to conserve listed resources. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Tehama and Shasta Counties. Zoning classifications from Shasta County include Habitat Protection and Unclassified (Shasta County 2023). The purpose of the habitat protection district is to protect the lands having significant wildlife habitat values. The unclassified district is intended to be applied as a holding district until a precise principal zone district has been adopted for the property. These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Zoning for the Tehama County portion of Beegum Creek includes Agricultural/Upland, which allows for primarily livestock grazing. Highway 36 is at the downstream end of the corridor; however, no other roads or other human-made structures are in the study area that would indicate any type of residential, commercial, industrial, or agricultural uses.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protections to WSRs' free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region 5 Central Valley Regional Water Quality Control Board has jurisdiction in Tehama County and portions of Shasta County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

One comment was received related to Beegum Creek. The comment was supportive of the segment’s designation as a WSR and specifically noted the fish and scenic ORVs met criteria for eligibility purposes (BLM 2022). There were no comments opposed to designating Beegum Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of Beegum Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act is administered by the Central Valley Regional Board, who also enforces California water quality laws. Designation of Beegum Creek as a WSR would be consistent with the Central Valley Regional Board’s mission of protecting water quality.

Additionally, portions of this segment overlap with the Beegum Creek Gorge ACEC, leading to additional protective management actions that would support the protection and enhancement of ORVs.

Factor 12: The contribution to the river system or basin integrity

The designation of Beegum Creek would provide a significant contribution to the Beegum Creek river system, as the segment corridor contains the unique and spectacular Beegum Gorge. Upstream portions of Beegum Creek have been found eligible for WSR designation through the STNF, meaning designation of this segment corridor would create a continuous segment, approximately 7 miles long, from Highway 36 to the Beegum Creek Campground.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Beegum Creek (FERC 2023).

2.2.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Beegum Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Beegum Creek	Eligible	Suitable	Not Suitable	Suitable

2.2.3 Suitability Determination

Beegum Creek was found **suitable for inclusion** in the National System. This finding supports the suitable finding in the 1995 Land and Resource Management Plan for the STNF, which proposed designating the Beegum Creek corridor from Round Bottom to the STNF’s boundary as suitable for inclusion in the National System (Forest Service 1995).

The 5-mile-long portion of Beegum Creek administered by the BLM is adjacent to the STNF; together, the BLM and Forest Service portions of Beegum Creek would create a significant contiguous corridor protecting the identified ORVs. Designation of Beegum Creek may also contribute to more consistent management of the ORVs.

2.3 BUTTE CREEK (SACRAMENTO RIVER) COMPLEX (BUTTE CREEK I SEGMENT B, AND WEST BRANCH BUTTE CREEK I)

Complex Description:	The segments within the Butte Creek Complex are located in Butte County in the foothills of the Sierra Nevada Mountains and contribute to the Sacramento River.		
Field Office:	Redding	Map:	See Map A-3 in Appendix A.
Suitability Determination:	All segments determined suitable for inclusion into the National System.		
Butte Creek I Segment B			
BLM Segment Length:	4.5 miles	Area on BLM-Administered Land:	1,179 acres
Total Segment Length:	4.5 miles	Total Segment Area:	1,887 acres
ORV:	Scenic, Recreation, Fish, Geology, Historic	Tentative Classification:	Scenic
West Branch Butte Creek I			
BLM Segment Length:	0.8 miles	Area on BLM-Administered Land:	182 acres
Total Segment Length:	0.8 miles	Total Segment Area:	488 acres
ORV:	Scenic, Recreation, Fish, Geology, Historic	Tentative Classification:	Scenic

2.3.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the segments of the Butte Creek Complex, five ORVs have been identified as making this segment a worthy addition to the National System. Scenic, recreation, fish, geology, and historic ORVs were identified as unique, rare, or exemplary at a comparative regional or national scale.

Butte Creek I Segment B and West Branch Butte Creek I have a scenic quality rating of A. Both of these segments provide diverse and high-quality recreational opportunities that include fishing, swimming, sunning, hiking, tubing, and picnicking. They are also an increasingly popular whitewater boating destination with unique rapids for the region.

The segments within Butte Creek Complex are all strongholds for federally listed threatened spring-run Chinook salmon. They are also some of the only streams in the Central Valley that have a genetically distinct wild population. These segments are important contributors to the recovery of threatened winter-run steelhead, and also support fall-run Chinook salmon.

Butte Creek I Segment B and West Branch Butte Creek I have eroded down through thousands of feet of Tertiary-aged volcanic rock into the underlying Sierra Nevada basement rock. Exposed along these corridors are outstanding examples of Tertiary auriferous stream channels and their associated drift mines, which are perched above the present creek beds; cross-cutting ultramafic intrusives; and exemplary

geology of the northern Sierra Nevada. Much of the canyon's upper segment is steep and rugged, with sheer canyon walls and abrupt rock pinnacles. The water in the upper segment flows over a boulder-covered bed, with many spectacular waterfalls in the creek and, after winter rains, waterfalls dropping into the creek from side drainages.

The dramatic canyon along Butte Creek I Segment B contains National Register of Historic Places-listed and -eligible heritage locations, such as mines, mined ground, and a townsite. These locations are related to the earliest days of the gold rush and more recent times. Also in this canyon is the historic Ponderosa Way, one of the major projects of the Works Progress Administration and Civilian Conservation Corps during the 1930s, the largest project in California under this Depression-era program. Furthermore, elements of the National Register of Historic Places eligible historic Centerville-DeSablá hydroelectric complex are on BLM-administered lands in this canyon.

West Branch Butte Creek I contains the gold rush community and mined landscape of Forks of Butte, which is listed on the National Register of Historic Places, as well as mines and mined ground potentially eligible for listing on the National Register of Historic Places. It also includes a historic bridge over the river constructed in the 1930s by the Civilian Conservation Corps as part of the very large Civilian Conservation Corps Ponderosa Way project, perhaps the largest project in the United States undertaken by the Civilian Conservation Corps, as well as short segments of the Ponderosa Way itself. Nearby are the foundations of an even earlier bridge from mining activities of the 1800s.

Factor 2: Current status of landownership and use in the area

Within Butte Creek I Segment B, BLM manages 1,179 acres (63 percent) of the segment corridor, which totals 1,887 acres. The remaining 708 acres are private land. Within West Branch Butte Creek I, the BLM manages 182 acres (37 percent) of the segment corridor, which totals 488 acres. The remaining 306 acres are private land.

All lands within the segment corridors are zoned by Butte County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the segments existing conditions and protect the identified ORVs. Designation would enhance the identified fish populations by helping to preserve existing habitat. Spring-run Chinook salmon would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are two applications for dams or diversions on file for this river; however they would be located outside of the WSR segment boundary. The Desabela Powerhouse, operated by Pacific Gas & Power, is located along Butte Creek. Management or designation of this segment would not impact current operations but could have the potential to limit future operations.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a wild classification that are ultimately designated would be closed to mineral leasing, closed to mineral material

development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, timber harvesting and other vegetation management activities have not been found to be impacting ORVs; however, if they were to be found impacting ORVs, they may be modified in the segment's corridor to minimize those impacts.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the Butte Creek Complex were added to the National System, the BLM would manage these the segments.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the segment corridors, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. BLM administers approximately 57 percent of the complex corridors. At this time, there are no plans for further acquisitions along the segments, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts between local advocate groups such as the Butte Creek Watershed Conservancy, Butte County Resource Conservation District, and Paradise Parks and Recreation District could provide additional management and support of designation. These agencies would also have the opportunity to continue as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORVs within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Butte County. Zoning classifications from Butte County include the Timber Production Zone, which allows for timber growth and production activities (Butte County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protections to a WSR's free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region 5 Central Valley Regional Water Quality Control Board has jurisdiction in Butte County and portions of Shasta County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Additionally, there are several local working groups and agencies with which designation of the segments within Butte Creek Complex would complement. The Butte Creek Watershed Conservancy is a local working group dedicated to the conservation of the Butte Creek watershed and support of the threatened and endangered species it provides for (Conservancy 2023). Designation of the segments and specifically the protection and enhancement of the recreation ORV would additionally complement the Butte County General Plan.

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Two comments were related to Butte Creek I Segment B. The comments were supportive of the segment's designations as WSRs and specifically noted the fish, scenic, recreation, fish geology and historic

ORVs as meeting eligibility criteria (BLM 2022). There were no comments related to West Branch Butte Creek I. There were no comments opposed to designating any of the segments within the Butte Creek Complex as WSRs.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of the segments within the Butte Creek Complex as WSRs would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Central Valley Regional Board, enforces California water quality laws. Designation of the segments within Butte Creek Complex as WSRs would be consistent with the Central Valley Regional Board’s mission of protecting water quality.

Additionally, portions of these segments overlap with the Forks of Butte Creek ACEC, leading to additional protective management actions that would support the protection and enhancement of ORVs.

Factor 12: The contribution to the river system or basin integrity

The Butte Creek Complex constitutes a small portion of the larger watershed, and much of the lower watershed is in private ownership with extensive water projects in the area. However, protecting this relatively intact portion of Butte Creek would continue to support the critical fisheries work in the basin.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for any of the segments within the Butte Creek Complex corridors.

2.3.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For segments within the Butte Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Butte Creek I Segment B	Eligible	Suitable	Not Suitable	Suitable
West Branch Butte Creek	Eligible	Suitable	Not Suitable	Suitable

2.3.3 Suitability Determination

The segments within the Butte Creek Complex (Butte Creek I Segment B, and West Branch Butte Creek I) were found **suitable for inclusion** in the National System based on the information within this report. The identified recreation and fisheries values are consistent with local ongoing planning efforts to provide high quality recreation for the communities of Paradise and Magalia following the Camp Fire and provide consistent management of habitat for threatened species. Local advocates and working groups such as the Butte Creek Watershed Conservancy, Butte County Resource Conservation District, and Paradise Parks and Recreation District could provide additional management and support of designation.

2.4 CANYON CREEK

Corridor Description:	Canyon Creek is located in Trinity County in the northern Coast Ranges and contributes to the designated Trinity River WSR.		
BLM Segment Length:	2.9 miles	Area on BLM-Administered Land:	671 acres
Total Segment Length:	2.9 miles	Total Segment Area:	1,122 acres
ORVs:	Fish, Scenic, Recreation	Field Office:	Redding
Tentative Classification:	Recreational	Map:	Map A-4 in Appendix A
Suitability Determination:	Determined suitable for inclusion into the National System		

2.4.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Portions of Canyon Creek that occur in the STNF have been identified as eligible for designation (Forest Service 1995). The STNF identified the following values for Canyon Creek: cultural/historical, fisheries, geology, visual quality/scenery, and wildlife. The BLM has identified scenic and fish values for the river corridor. The BLM has rated the scenic value of Canyon Creek as “A” (BLM 1993). The fish value recognizes Canyon Creek as an important producer of federal and state listed threatened coho salmon and state listed endangered and federal candidate spring-run Chinook and summer-run steelhead (CDFW 2023).

Factor 2: Current status of landownership and use in the area

From the upstream boundary at the STNF to the downstream terminus at Junction City, the BLM manages 671 acres (60 percent) of the river corridor, which totals 1,122 acres. The remaining 451 acres are a mix of USFS and private lands. Land within the river corridor is zoned by Trinity County. Zoning classifications from Trinity County include Open Space, Rural Residential, and Agricultural Forest. (Trinity County 2023).

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon, winter-run coho salmon, and summer-run steelhead would continue to be protected under state and federal laws and further enhanced by the National System.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no FERC applications for dams or diversions on file for this river segment (FERC 2023).

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a recreational classification that are ultimately designated would be closed to mineral leasing, allow mineral material development with application of necessary conditions to protect resource values, and existing or

new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Further, any activity that affects the identified ORVs could be restricted. These activities could continue unless they are shown to affect the ORVs such that the segment would no longer be suitable for designation in the National System. The BLM has not identified any current uses that would be limited if Canyon Creek were included in the National System.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the Canyon Creek segment were added to the National System, the BLM would likely co-manage the segment with the STNF, as the Forest Service currently administers all upstream portions of Canyon Creek, including its headwaters.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, is shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation. If appropriate, administration and funding may be shared by the Forest Service, which administers the portions of Canyon Creek upstream of the study boundary.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. BLM administers approximately 60 percent of the corridor already. At this time, there are no plans for further acquisitions along the segment, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Cooperative efforts with the STNF would be likely to benefit ORVs in the river corridor. The scenic, recreation, and fish resources within the river corridor continue upstream into the STNF, and shared participation in the preservation and administration of Canyon Creek would support more consistent treatment of the ORVs.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's outstandingly remarkable values and preventing incompatible development

A review of Trinity County zoning and other land use controls found that there are no zoning ordinances specifically targeted at protecting WSRs and preventing incompatible development (Trinity County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in the river corridor. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on forest use projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

The private land in this segment's corridor and the surrounding area is often developed for rural residences or as small-scale cannabis farms. This type of development is typically supported by the local plans and may interfere with scenic and recreational ORVs on private lands. However, this kind of development is common in the area and does not stand out visually while on the creek. As described above, the water quality, riparian values, and fish habitat values are robustly protected by federal, state, and local policies.

Factor 10: The existing support or opposition of designation

The public was provided opportunities to offer input for eligibility and suitability determinations for WSRs. Comments were wide-ranging and included river-system, stream-specific, and ORV information.

There was one comment related to Canyon Creek. The comment was supportive of designation as a WSR and specifically the fisheries and recreational opportunities provided by the segment (BLM 2022). There were no comments opposed to designating Canyon Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Canyon Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of

Canyon Creek as a WSR would be consistent with the North Coast Regional Board’s mission of protecting water quality.

Additionally, portions of this segment overlap with the Trinity Alps Section 202 WSA, leading to additional protective management actions that would support the protection and enhancement of ORVs.

Factor 12: The contribution to river system or basin integrity

The designation of Canyon Creek would provide a significant contribution to the river system, as the river corridor contains the confluence of Canyon Creek with the Trinity River. Development activities, such as rural residences and roads, are within close proximity to Canyon Creek. In combination with the upper STNF portion of Canyon Creek, the lower, BLM-administered portions would allow for designation of 100 percent of Canyon Creek.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Canyon Creek.

2.4.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Canyon Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Canyon Creek	Eligible	Suitable	Suitable	Suitable

2.4.3 Suitability Determination

Canyon Creek was found **suitable for inclusion** in the National System. The Forest Service has also determined that the segment between the STNF boundary and the Trinity River is eligible for inclusion and recommends a classification of Recreational (Forest Service 1995). Together, designation of the BLM- and Forest Service-administered segments would add the entirety of Canyon Creek to the National System, a significant contribution, and increase the manageability of the segment entirety. Furthermore, coupled with the Trinity Alps Wilderness that occurs at the headwaters of Canyon Creek, the designation of Canyon Creek would create a watershed scale framework for a collaborative management direction aimed at conservation of the identified ORVs.

2.5 CEDAR CREEK COMPLEX (CEDAR CREEK SEGMENT A, CEDAR CREEK SEGMENT B, CEDAR CREEK TRIBUTARY 1, CEDAR CREEK TRIBUTARY 2, NORTH FORK CEDAR CREEK)

Complex Description:	The Cedar Creek Complex segments are located in Mendocino County in the northern Coast Ranges and contribute to the South Fork Eel designated WSR.		
Field Office:	Arcata	Map:	Map A-5 in Appendix A
Suitability Determination:	All segments within the Cedar Creek Complex were determined suitable for inclusion into the National System.		
<i>Cedar Creek Segment A</i>			
BLM Segment Length:	3.9 miles	Area on BLM-Administered Land:	1,115 acres
Total Segment Length:	7.1 miles	Total Segment Area:	1,297 acres
ORV:	Ecology, Scenic, Fish, Geology	Tentative Classification:	Wild
<i>Cedar Creek Segment B</i>			
BLM Segment Length:	1.5 miles	Area on BLM-Administered Land:	369 acres
Total Segment Length:	7.1 miles	Total Segment Area:	732 acres
ORVs:	Geology and Fish	Tentative Classification:	Wild
<i>Cedar Creek Tributary 1</i>			
BLM Segment Length:	0.5 miles	Area on BLM-Administered Land:	282 acres
Total Segment Length:	7.1 miles	Total Segment Area:	292 acres
ORV:	Ecology, Scenic, Fish, Geology	Tentative Classification:	Wild
<i>Cedar Creek Tributary 2</i>			
BLM Segment Length:	0.4 miles	Area on BLM-Administered Land:	109 acres
Total Segment Length:	7.1 miles	Total Segment Area:	258 acres
ORV:	Geology	Tentative Classification:	Wild
<i>North Fork Cedar Creek</i>			
BLM Segment Length:	1.0 miles	Area on BLM-Administered Land:	254 acres
Total Segment Length:	7.1 miles	Total Segment Area:	452 acres
ORV:	Geology	Tentative Classification:	Wild

2.5.1 Suitability Factor

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the Cedar Creek Complex, four ORVs, ecology, scenic, fish, and geology, were identified as unique, rare, or exemplary at a comparative regional or national scale.

Within Cedar Creek Segment A and Cedar Creek Tributary 1, a rare old-growth forest community is found in the segment corridors. This rare old-growth forest provides unique scenery, as well as ecological value.

Cedar Creek Segment A, Cedar Creek Segment B, and Cedar Creek Tributary 1 are important contributors to the recovery of federally listed threatened Chinook salmon and winter-run steelhead in the South Fork Eel River.

All of the segments within the Cedar Creek Complex include unique red serpentine soils that support unique plant communities within the segments within the Cedar Creek Complex.

Factor 2: Current status of landownership and use in the area

Within Cedar Creek Segment A, BLM manages 1,115 acres (89 percent) of the river corridor, which totals 1,297 acres. The remaining acres are state and private land. Within Cedar Creek Segment B, BLM manages 369 acres (50 percent) of the river corridor, which totals 732 acres. The remaining acres are state and private land. Within Cedar Creek Tributary 1, BLM manages 282 acres (97 percent) of the river corridor, which totals 292 acres. The remaining land is private land. Within Cedar Creek Tributary 2, BLM manages 109 acres (42 percent) of the river corridor, which totals 258 acres. The remaining acreage is a mix of state and private lands. Within North Fork Cedar Creek, BLM manages 254 acres (56 percent) of the river corridor, which totals 452 acres. The remaining are state and private lands.

All lands within the four segment corridors are zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the segment's existing condition and protect the identified ORVs. Designation of Cedar Creek Segment A, Cedar Creek Segment B, and Cedar Creek Tributary A would enhance fish and wildlife populations by helping to preserve existing habitat. Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for these segments.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry.

Currently, timber harvesting and other vegetation management activities have not been found to be impacting ORVs; however, if they were to be found impacting ORVs, they may be modified in the segment's corridor to minimize those impacts.

Designation of these segments is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If all segments within the Cedar Creek Complex were added to the National System, the BLM would manage this area.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the segment corridors, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

Within the Cedar Creek Complex, approximately 70 percent of the segment corridors are already on BLM-administered lands. At this time, there are no plans for further acquisitions along segments within the Cedar Creek Complex, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with state and local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If these segments were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORVs within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the segment corridors is zoned by Mendocino County. Zoning classifications within the corridors include Public Facilities and Rangeland, which allows for land to be set aside for specified public utility purposes and livestock grazing activities, respectively (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protections to a WSR's free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Mendocino County and portions of Shasta County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

There were two comments each received for Cedar Creek Segment A, Cedar Creek Segment B, Cedar Creek Tributary 1, Cedar Creek Tributary 2, and North Fork Cedar Creek. The comments were all supportive of each segment's designation as a WSR and specifically noted the fish, scenic, geology and ecology ORVs as meeting eligibility criteria. (BLM 2022). There were no comments opposed to designating any of the segments as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of the segments within the Cedar Creek Complex a WSRs would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of the segments within Cedar Creek Complex as WSRs would be consistent with the Regional Water Board's mission of protecting water quality.

Additionally, portions of these segments overlap with the South Fork Eel River WSA, leading to additional protective management actions that would support the protection and enhancement of ORVs.

Factor 12: The contribution to the river system or basin integrity

The segments within Cedar Creek Complex contribute to the designated South Fork Eel WSR. Portions of all the segments within the complex overlap with the South Fork Eel Wilderness, managed by BLM and designation would provide consistent management of these segments. The BLM-administered segments include significant amounts of cold water in the summer, which is critical for the South Fork Eel salmon and steelhead populations. The segments are well known throughout the region as an important watershed due in part to the large majority being located on public lands.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for any of the segments within the Cedar Creek Complex.

2.5.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For segments within the Cedar Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Cedar Creek Segment A	Eligible	Suitable	Not Suitable	Suitable
Cedar Creek Segment B	Eligible	Suitable	Not Suitable	Suitable
Cedar Creek Tributary 1	Eligible	Suitable	Not Suitable	Suitable
Cedar Creek Tributary 2	Eligible	Suitable	Not Suitable	Suitable
North Fork Cedar Creek	Eligible	Suitable	Not Suitable	Suitable

2.5.3 Suitability Determination

All segments within the Cedar Creek Complex were found **suitable for inclusion** in the National System based on the information within this report. The contribution to basin integrity would provide consistent management from the upper reaches of the segments in the SNTF through the downstream boundary near the confluence with the South Fork Eel designated WSR. These segments provide cold water, crucial in the summer months for the recovery of federally threatened Chinook salmon and winter-run steelhead. High percentage of public lands within the segment corridors ensures that protection and enhancement of identified ORVs would be achievable.

2.6 CLEAR CREEK COMPLEX (CLEAR CREEK SEGMENT A, CLEAR CREEK SEGMENT B, AND CLEAR CREEK SEGMENT C)

Complex Description:	The Clear Creek Complex is located in Shasta County on the border of the northern Coast Range and Sacramento Valley.		
Field Office:	Redding	Map:	Map A-6 in Appendix A
Suitability Determination:	All segments within the Clear Creek Complex were determined to be suitable for inclusion into the National System.		
Clear Creek Segment A			
BLM Segment Length:	4.9 miles	Area on BLM-Administered Land:	959 acres
Total Segment Length:	13.8 miles	Total Segment Area:	1,930 acres
ORV:	Recreation, Fish, Cultural	Tentative Classification:	Scenic
Clear Creek Segment B			
BLM Segment Length:	1.1 miles	Area on BLM-Administered Land:	322 acres
Total Segment Length:	13.8 miles	Total Segment Area:	603 acres
ORV:	Recreation, Fish	Tentative Classification:	Scenic
Clear Creek Segment C			
BLM Segment Length:	3.0 miles	Area on BLM-Administered Land:	794 acres
Total Segment Length:	13.8 miles	Total Segment Area:	1,210 acres
ORV:	Scenic, Recreation, Fish, Geology	Tentative Classification:	Scenic

2.6.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the Clear Creek Complex, five ORVs have been identified as making this segment a worthy addition to the National System. ORVs for fish, recreation, geology, cultural, and scenic values were identified as unique, rare, or exemplary at a comparative regional or national scale.

All segments in the Clear Creek Complex are important contributors to the recovery of federally listed threatened and indigenous spring-run Chinook salmon and winter-run steelhead in the Central Valley. In response to substantial declines of these anadromous fish populations in the 1990s and early 2000s, lower Clear Creek has been the subject of multiple projects that directly and indirectly support recovery of salmon and steelhead populations (USFWS 2015). Fish population numbers have been generally increasing since the start of these restoration projects. This has included BLM land acquisition along the creek and several large-scale restoration projects to restore the function of the creek. Additionally, a public access

greenway trail was constructed that provides access to several miles of Clear Creek above the confluence with the Sacramento River.

Recreation in Clear Creek consists of swimming, picnicking, tubing, hiking, and gold panning. These activities occur mainly in the warmer months. Geology in Clear Creek consists of the unique greenstone and erosion features found in Clear Creek Gorge. The scenic value for the assessed portions of Clear Creek have been rated by the BLM as “A” and have landform, vegetation, and water features with outstanding scenic quality (BLM 1993).

Culturally significant elements within Clear Creek include Horsetown and Briggsville, two of the earliest gold rush communities in California and the location of one of the earliest Euro-American gold discoveries made in 1848. Mining features from the gold rush to the mid-twentieth century constitute an important mining landscape. Also present are a rare historic granite quarry, cabin features, a lime kiln, and evidence of Chinese mining and settlement. Unmined remnants of prehistoric villages are also present in certain locations.

Characteristics that detract from making Clear Creek a worthy addition to the National System are related to the environmental impacts from historical mining in the area, the presence of an adjacent heavy industrial area and wastewater treatment plant, and a heavily populated urban area. The Whiskeytown Dam also provides a significant detractor that prevents natural flows from reaching lower Clear Creek.

Factor 2: Current status of landownership and use in the area

Within Clear Creek Segment A, BLM manages 959 acres (47 percent) of the segment corridor, which totals 1,930 acres. The remaining acres are a mix of Bureau of Indian Affairs land, State land, and private land. Within Clear Creek Segment B, BLM manages 322 acres (53 percent) of the segment corridor, which totals 603 acres. The remaining acres are a mix of State and private land. Within Clear Creek Segment C, BLM manages 794 acres (66 percent) of the segment corridor, which totals 1,210 acres. The remaining acres are a mix of National Park Service land and private land.

All lands within the three segment corridors are zoned by Shasta County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the segment’s existing condition and protect the identified ORVs. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the Clear Creek Technical Team, which is comprised of federal, state, local, and non-profit partners who work together to achieve restoration and fisheries goals in Clear Creek.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no FERC applications for dams or diversions on file for this river segment (FERC 2018).

Vegetation management activities would still occur within segment corridors but may be modified to minimize impacts on the ORVs. Recreation activities, including swimming, tubing, and hiking would continue within the corridors in a similar manner to current conditions, but future recreation

infrastructure development could be modified to minimize impacts to ORVs and reduce visible impacts from the creek corridor.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within the Clear Creek Complex were added to the National System, the BLM would be most suited to manage the land and resources within this boundary, unless Congress designated another agency.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

There has also been a long history of cooperation among state and federal agencies regarding funding for reviving and restoring salmon runs in the Clear Creek Complex. The result of the salmon habitat restoration projects has been a significant increase in the number of salmon spawning in Clear Creek. The success of the coordinated salmon restoration projects may indicate conditions favorable to future state and federal collaborations, including collaborative funding.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

Over the last few decades, the BLM has acquired several parcels in the Clear Creek corridor in order to facilitate the restoration and fisheries goals, as well as provide recreational opportunities. Currently, the BLM administers 9.1 miles of land along Clear Creek between Whiskeytown Dam and the Sacramento River. There are several more parcels in the Clear Creek corridor that the BLM will continue to pursue for acquisition from willing sellers. However, these acquisitions are not critical to the management of the corridor and no cost analysis or estimate was prepared as a part of this study.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Designation would complement the goals and objectives of the Clear Creek Technical Team, which is comprised of federal (BLM, USFWS, NOAA Fisheries, US Bureau of Reclamation, NPS), state (CDFW, Dept of Water Resources), local (Western Shasta Resource Conservation District), and non-profit partners who work together to achieve restoration and fisheries goals in Clear Creek. Together, these partners implement flow management and river restoration projects made possible through the Central

Valley Project Improvement Act Fish Restoration Plan (BOR 2022). Designation could further enhance this work and offer long term protection to the creek.

If the river were not included in the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORVs along the river area under existing laws, authorities, and ordinances. Applicable laws would include the ESA, the CWA, the CESA, and California Water Code.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

A review of Shasta County zoning and other land use controls found that there are no zoning ordinances specifically targeted at protecting WSRs and preventing incompatible development (Shasta County 2018).

Shasta County zoning along Clear Creek lists five classifications: Limited Residential, Unclassified, Habitat Protection, Exclusive Agriculture, and Open Space (Shasta County 2018). The majority of the Clear Creek corridor along the 6 miles before the Sacramento River has been zoned as Residential on the south side of Clear Creek. Downstream from the Whiskeytown Dam, zoning is primarily Unclassified with portions of residential zoning in isolated parcels. On the north side of Clear Creek is an industrial site that is approximately 3 miles long, which has been zoned as heavy industrial by the City of Redding (City of Redding 2018). The majority of the corridors within the complex contain zoning codes that would largely support the maintenance of ORVs within the corridor. The purpose of the limited residential zoning is intended for low-density, rural residential living environments generally in areas remote from a community or where few services are available. The purpose of the unclassified zoning is intended to be applied as a holding district until a precise principal zone district has been adopted for the property.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit represents CDFW on multiple work teams that make real-time water operation decisions for the state Water Project and Central Valley Project. The Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2018).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2018). The Region 5 Central Valley Regional Water Quality Control Board has jurisdiction in Shasta County. The mission of the Regional Board is to “develop and enforce water quality objectives and implementation plans that will best protect the beneficial uses of the state’s waters, recognizing local differences in climate, topography, geology and hydrology” (California Water Board 2018).

While the majority of the work and planning done by the Clear Creek Technical Team is on BLM or state lands, the Western Shasta Resource Conservation District and other partners on the team actively work with willing private landowners to protect riparian values and accomplish restoration projects where possible.

Factor 10: The existing support for or opposition to designation

The public provided input regarding WSRs during public scoping meetings. The public commented on the eligibility process in general and provided stream-specific ORV information.

The BLM received two comments related to the segments within the Clear Creek Complex. Comments specifically related to designation of Clear Creek as a WSR. All comments were supportive of Clear Creek's designation as a WSR and specifically noted the recreation and fish ORVs as meeting eligibility criteria (BLM 2022). There were no comments opposed to designating any of the segments within the Clear Creek Complex as WSRs.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

An ecosystem restoration program (ERP) conservation strategy for restoration of the Sacramento-San Joaquin Delta, Sacramento Valley, and San Joaquin Valley regions, implemented by the CDFW, USFWS, and NOAA Fisheries, addresses maintaining habitat in Clear Creek to support anadromous fish and riparian vegetation (CDFW 2014). The ERP outlines concepts and methods for restoration, including proposals that were funded to assess altered stream hydrology and ultimately alter the release of flows from Whiskeytown Dam to support anadromous fish populations (CDFW 2014). Designating the Clear Creek Complex as a WSR would support the ERP conservation strategy.

A recovery plan for Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead was drafted by NOAA Fisheries West Coast Region in 2014 (NOAA 2014). The recovery plan draws on the expertise of the Central Valley Technical Recovery Team, agency comanagers, and many public entities and individuals dedicated to recovering these fish. This voluntary recovery plan sets goals and prioritizes actions for the Sacramento-San Joaquin Delta and its watersheds, providing a framework for species recovery. The designation of the Clear Creek Complex as a WSR would be consistent with the goals and objectives of the recovery plan.

The Central Valley Project Improvement Act directs the Secretary of the Interior to develop and implement a program that makes all reasonable efforts to double natural production of anadromous fish in Central Valley streams (Section 3406(b)(1)). The program is known as the Anadromous Fish Restoration Program (AFRP). The AFRP is described in a restoration plan that contains the goals, objectives, and strategies of the AFRP. The restoration plan also lists actions and evaluations that are already underway or that may be implemented in the near future. The goals and objectives of the AFRP would be supported by designation of the Clear Creek Complex as a WSR.

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of the Clear Creek Complex as a WSR would support the goals and objectives of the CWA and ESA.

Additionally, portions of these segments overlap with the Upper and Lower Clear Creek ACEC, leading to additional protective management actions that would support the protection and enhancement of ORVs.

Factor 12: The contribution to the river system or basin integrity

Designating the Clear Creek segments would result in Clear Creek being protected in some form from where it exists Whiskeytown Dam until its confluence with the Sacramento River. This would support a watershed approach to protecting this important stream for fisheries and other values which is supported by the existing partner-focused, holistic protection strategy for the Clear Creek Complex watershed involving local, state, and federal agencies.

Factor 13: The potential for water resources development

As designation may limit development of water resource projects, such as irrigation and flood control measures, hydropower facilities, or dredging, current and proposed projects within the Clear Creek Complex were assessed for their potential to be limited by designation. Irrigation measures are unlikely to affect Clear Creek; this is because water rights are already fully appropriated, and there would be no further diversions. Irrigation dams are unlikely to be constructed, and irrigation dams, such as the McCormick-Saeltzer Dam, have been removed to facilitate salmon runs.

2.6.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For the segments within Clear Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Clear Creek Segment A	Eligible	Suitable	Not Suitable	Suitable
Clear Creek Segment B	Eligible	Suitable	Not Suitable	Suitable
Clear Creek Segment C	Eligible	Suitable	Not Suitable	Suitable

2.6.3 Suitability Determination

The segments within the Clear Creek Complex were identified as **suitable for inclusion** based on information within this report. Efforts to conserve the federally listed anadromous fish population in Clear Creek have been largely successful and have revived a salmon run that had previously been eliminated. There has been a remarkable degree of cooperation between local, state, and federal agencies to foster conservation of biological resources and to preserve the river corridor itself. Due to the need for consistent management strategies and the potential to preserve and strengthen existing conservation and restoration plans, adding Clear Creek to the National System would significantly increase the protection for the ORVs.

2.7 COTTONWOOD CREEK COMPLEX (MIDDLE FORK COTTONWOOD CREEK, NORTH FORK COTTONWOOD CREEK, SOUTH FORK COTTONWOOD CREEK)

Complex Description:	The segments within the Cottonwood Creek Complex are located in Shasta County.		
Field Office:	Redding	Map:	Map A-12 in Appendix A
Suitability Determination:	All segments within the Cottonwood Creek Complex were determined to be suitable for inclusion into the National System.		
<i>Middle Fork Cottonwood Creek Segment A</i>			
BLM Segment Length:	1.2 miles	Area on BLM-Administered Land:	446 acres
Total Segment Length:	1.2 miles	Total Segment Area:	635 acres
ORVs:	Fish, Scenic	Tentative Classification:	Recreational
<i>Middle Fork Cottonwood Creek Segment B</i>			
BLM Segment Length:	3.4 miles	Area on BLM-Administered Land:	1,078 acres
Total Segment Length:	3.4 miles	Total Segment Area:	1,571 acres
ORVs:	Fish, Scenic	Tentative Classification:	Wild
<i>North Fork Cottonwood Creek</i>			
BLM Segment Length:	2.1 miles	Area on BLM-Administered Land:	550 acres
Total Segment Length:	2.1 miles	Total Segment Area:	860 acres
ORV:	Scenic, Recreation, Fish	Tentative Classification:	Scenic
<i>South Fork Cottonwood Creek Segment A</i>			
BLM Segment Length:	2.0 miles	Area on BLM-Administered Land:	490 acres
Total Segment Length:	2.0 miles	Total Segment Area:	915 acres
ORV:	Scenic, Recreation, Geology and Fish	Tentative Classification:	Wild
<i>South Fork Cottonwood Creek Segment B</i>			
BLM Segment Length:	1.1 miles	Area on BLM-Administered Land:	304 acres
Total Segment Length:	1.1 miles	Total Segment Area:	574 acres
ORV:	Scenic, Recreation, Geology and Fish	Tentative Classification:	Scenic

2.7.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the Cottonwood Creek Complex, four ORVs have been identified as making this segment a worthy addition to the National System. ORVs for Scenic, recreation, geology and fish values were identified as unique, rare, or exemplary at a comparative regional or national scale.

The segments within the Cottonwood Creek Complex all have a scenic quality rating of “A” and are important contributors to the recovery of federally listed threatened winter-run steelhead in the Central Valley.

The North Fork Cottonwood Creek segment provides a primitive setting suitable for backcountry hiking and expert kayaking. The South Fork Cottonwood Creek Segment A and South Fork Cottonwood Creek Segment B are secluded, undeveloped, physically demanding, and inaccessible by roads or trail which gives them both a primitive setting and excellent opportunities for primitive types of outdoor experiences.

The South Fork Cottonwood Creek Segment A and South Fork Cottonwood Creek Segment B contain a spectacular display of the steeply dipping Cretaceous sedimentary rock layers paralleling the creek beds in several locations. The creek bottom is characterized as boulder strewn with innumerable cascading rapids and waterfalls.

Factor 2: Current status of landownership and use in the area

Within the Middle Fork Cottonwood Creek Segment A, BLM managed 446 acres (70 percent) of the segment corridor, which totals 635 acres. The remaining acres are private lands. Within the Middle Fork Cottonwood Creek Segment B, BLM manages 1,078 acres (69 percent) of the river corridor, which totals 1,571 acres. The remaining acres are private land. Within North Fork Cottonwood Creek, BLM manages 550 acres (64 percent) of the river corridor, which totals 860 acres. The remaining acres are private land. Within South Fork Cottonwood Creek Segment A, BLM manages 490 acres (54 percent) of the river corridor, which totals 915 acres. The remaining acres are private or Forest Service lands. Within South Fork Cottonwood Creek Segment B, BLM manages 304 acres (53 percent) of the river corridor, which totals 574 acres. The remaining acres are private land.

All lands within the segment corridors are zoned by Shasta County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the segment’s existing conditions and protect the identified ORVs. Designation would enhance fish populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment. Segments with a recreational classification that are ultimately designated would be closed to mineral leasing, allow mineral material development with application of necessary conditions to protect resource values, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, timber harvesting and other vegetation management activities have not been found to be impacting ORVs; however, if they were to be found impacting ORVs, they may be modified in the segment's corridor to minimize those impacts.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within the Cottonwood Creek Complex were added to the National System, BLM would manage the segments.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the segment corridors, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Approximately 63 percent of the segment corridors are on BLM-administered land. At this time, there are no plans for further acquisitions along segments within the Cottonwood Creek Complex although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

Preservation and administration of the state-listed and federally listed species of salmon within the segments of Cottonwood Creek Complex would also be supported by participation from state and federal agencies, including the CDFW and USFWS, who are both mandated to conserve listed resources.

If the segments were not added to the National System, federal, state and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the segment corridors is zoned by Shasta County. Zoning classifications include Timber Production, allowing for timber and timber related activities; Exclusive Agriculture, allowing for agriculture uses; Limited Agriculture, which supports part-time or hobby agricultural uses; Habitat Protection, which preserves important habitat; Government; and Unclassified. These types of agricultural or natural resource production zoning would largely support the maintenance of ORVs in the corridor (Shasta County 2023).

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the California Endangered Species Act (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region 5 Central Valley Regional Water Quality Control Board has jurisdiction in Tehama County and portions of Shasta County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were three comments received related to North Fork Cottonwood Creek Segment A, North Fork Cottonwood Creek Segment B, and Middle Fork Cottonwood Creek Segment B. The comments were supportive of the segment’s designation as a WSR and specifically noted the fish, recreational, and scenic ORVs as meeting eligibility criteria (BLM 2022). There were four comments related to South Fork Cottonwood Creek Segment A and B. The comments were supportive of WSR designation and specifically noted the fish, recreational, geologic, and scenic ORVs as meeting eligibility criteria (BLM 2022). There were no comments opposed to designating any of the segments within the Cottonwood Creek Complex as WSRs.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of the segments within the Cottonwood Creek Complex as WSRs would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Central Valley Regional Board, enforces California water quality laws. Designation of the segments within the Cottonwood Creek Complex as WSRs would be consistent with the Central Valley Regional Board’s mission of protecting water quality.

Additionally, portions of this segment overlap with the Yolla Bolly Contiguous Section 603 WSA, leading to additional protective management actions that would support the protection and enhancement of ORVs.

Factor 12: The contribution to the river system or basin integrity

Combined, these segments make up an important portion of the Sacramento River watershed. Cottonwood Creek is the largest undammed tributary in the basin and is a major source of sediment and gravel input into the Sacramento River. When paired with Beegum Creek (see Section 2.2), another segment determined suitable for inclusion into the National System, the integrity of the basin substantially increases.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for any segments within the Cottonwood Creek Complex.

2.7.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For segments within the Cottonwood Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Middle Fork Cottonwood Creek Segment A	Eligible	Suitable	Not Suitable	Suitable
Middle Fork Cottonwood Creek Segment B	Eligible	Suitable	Not Suitable	Suitable
North Fork Cottonwood Creek	Eligible	Suitable	Not Suitable	Suitable

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
South Fork Cottonwood Creek Segment A	Eligible	Suitable	Not Suitable	Suitable
South Fork Cottonwood Creek Segment B	Eligible	Suitable	Not Suitable	Suitable

2.7.3 Suitability Determination

The segments within the Cottonwood Creek Complex (Middle Fork Cottonwood Creek Segment A, Middle Fork Cottonwood Creek Segment B, North Fork Cottonwood Creek, South Fork Cottonwood Creek Segment A, and South Fork Cottonwood Creek Segment B) were found **suitable for inclusion** in the National System based on the information within this report. The contributions to basin integrity within the Sacramento River watershed and the combined mileage of habitat provided to threatened and endangered species make these segments worthy of designation.

2.8 ELDER CREEK COMPLEX (ELDER CREEK, ELDER CREEK TRIBUTARIES, PARALYZE CANYON AND TRIBUTARIES, AND MISERY CREEK)

Complex Description:	The segments within the Elder Creek Complex are in Mendocino County in the northern Coast Range and contribute to the designated South Fork Eel WSR.		
Field Office:	Arcata	Map:	Map A-7 in Appendix A
Suitability Determination:	All segments within the Elder Creek Complex were determined to be suitable for inclusion into the National System.		
<i>Elder Creek</i>			
BLM Segment Length:	1.7 miles	Area on BLM-Administered Land:	626 acres
Total Segment Length:	1.7 miles	Total Segment Area:	674 acres
ORV:	Fish, Ecology, Scenic, Research (Other)	Tentative Classification:	Wild
<i>Elder Creek Tributaries</i>			
BLM Segment Length:	2.2 miles	Area on BLM-Administered Land:	850 acres
Total Segment Length:	2.2 miles	Total Segment Area:	1,035 acres
ORVs:	Ecology, Scenic and Research (Other)	Tentative Classification:	Wild
<i>Paralyze Canyon and Tributaries</i>			
BLM Segment Length:	4.1 miles	Area on BLM-Administered Land:	1,133 acres
Total Segment Length:	4.1 miles	Total Segment Area:	1,212 acres
ORVs:	Ecology, Scenic and Research (Other)	Tentative Classification:	Wild

<i>Misery Creek</i>			
BLM Segment Length:	0.2 miles	Area on BLM-Administered Land:	119 acres
Total Segment Length:	0.2 miles	Total Segment Area:	230 acres
ORVs:	Ecology, Scenic and Research (Other)	Tentative Classification:	Wild

2.8.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the Elder Creek Complex, four ORVs have been identified as making this segment a worthy addition to the National System. Ecology, scenic, research, and fish ORVs were identified as unique, rare, or exemplary at a comparative regional or national scale.

The segments within the Elder Creek Complex are part of the California Coast Ranges Biosphere Reserve established in 1983 by United Nations Education, Scientific, and Cultural Organization. The biosphere reserve includes a highly diverse complex of evergreen sclerophyllous woodland and coastal, estuary, and marine ecosystems (BLM 2022). Elder Creek flows from pristine Douglas fir forested watersheds in the South Fork Eel Wilderness. This rare old-growth forest in the Elder Creek riparian corridor provides unique scenery and flows through visual resource management Class II lands. The relatively undisturbed watershed within Elder Creek has also been designated as a national natural landmark, and a hydrological benchmark.

Elder Creek is also an important contributor to the recovery of federally listed threatened coho salmon and winter-run steelhead in the South Fork Eel River. The State of California also lists coho salmon as threatened.

Factor 2: Current status of landownership and use in the area

Within Elder Creek, BLM manages 626 acres (93 percent) of the segment corridor, which totals 674 acres. The remaining acres are private land. Within Elder Creek Tributaries, BLM manages 850 acres (82 percent) of the segment corridor, which totals 1,035 acres. The remaining acres are private land. Within Paralyze Canyon and Tributaries, BLM manages 1,133 acres (93 percent) which totals 1,212 acres. The remaining acres are private land. Within Misery Creek, BLM manages 119 acres (52 percent) of the river corridor, which totals 230 acres. The remaining acres are private land. Land within all segment corridors is zoned by Mendocino County, as described in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the segments existing conditions and protect the identified ORVs. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversion on file for these segments.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry.

Uses that could be curtailed by designation would include harvesting forest products and agricultural activities, such as cattle grazing. These activities could continue unless they are shown to affect the ORVs such that the segment would no longer be suitable for designation in the National System.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within the Elder Creek Complex were added to the National System, the BLM and private entities would manage the segments.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the segment corridors, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the segment corridors. 87 percent of the complex corridor is already on BLM-administered land. At this time, there are no plans for further acquisitions along Elder Creek Complex, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the segments were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORVs within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County include Timberland Production, which allows for timber and timber-related activities, and Open Space, which supports lands to be kept undeveloped (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control has jurisdiction in Mendocino County and portions of Humboldt and Trinity Counties. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Two comments were received related to Elder Creek, Elder Creek Tributaries, and Paralyze Canyon and Tributaries. The comments were supportive of the segments' designation as a WSR and specifically noted the ecology, scenic, research, and fish ORVs as meeting eligibility criteria (BLM 2022). There were no comments opposed to designating any of the segments within Elder Creek Complex as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Elder Creek as a WSR would support the goals and

objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of Elder Creek as a WSR would be consistent with the Regional Water Board’s mission of protecting water quality.

Additionally, portions of these segments overlap with the South Fork Eel River Wilderness, leading to additional protective management actions that would support the protection and enhancement of ORVs.

Factor 12: The contribution to the river system or basin integrity

The segments within the Elder Creek Complex flow into the designated South Fork Eel WSR. The three segments contain undisturbed forest and aquatic ecosystems which include cold, clean water for the threatened coho salmon and winter-run steelhead. The watershed is well-known, as the UC-Berkeley Angelo Reserve conservation lands occur downstream (BLM 2022).

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Elder Creek.

2.8.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For segments within the Elder Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Elder Creek	Eligible	Suitable	Not Suitable	Suitable
Elder Creek Tributaries	Eligible	Suitable	Not Suitable	Suitable
Paralyze Canyon and Tributaries	Eligible	Suitable	Not Suitable	Suitable
Misery Creek	Eligible	Suitable	Not Suitable	Suitable

2.8.3 Suitability Determination

The segments within the Elder Creek Complex were found **suitable for inclusion** in the National System based on the information within this report. Designation would provide consistent management with the downstream reaches in the UC-Berkeley Angelo Reserve conservation lands. With the segments important contributions to the recovery of threatened fish species, designation would also enhance their protection as they flow into the designated South Fork Eel WSR.

2.9 ELK CREEK COMPLEX (EDEN CREEK, EDEN CREEK TRIBUTARY I, EDEN CREEK TRIBUTARY 2, ELK CREEK, DEEP HOLE CREEK)

Complex Description:	The segments within the Elk Creek Complex are located in Mendocino County in the northern Coast Ranges and contribute to the Middle Fork Eel designated WSR.		
Field Office:	Arcata	Map:	A-8 in Appendix A
Suitability Determination:	All segments within the Elk Creek Complex were determined to be suitable for inclusion into the National System.		
Deep Hole Creek			
BLM Segment Length:	3.1 miles	Area on BLM-Administered Land:	929 acres
Total Segment Length:	3.1 miles	Total Segment Area:	1,197 acres
ORV:	Fish	Tentative Classification:	Scenic
Eden Creek			
BLM Segment Length:	3.3 miles	Area on BLM-Administered Land:	900 acres
Total Segment Length:	3.3 miles	Total Segment Area:	1,313 acres
ORVs:	Fish, Cultural	Tentative Classification:	Wild
Eden Creek Tributary I			
BLM Segment Length:	1.2 miles	Area on BLM-Administered Land:	415 acres
Total Segment Length:	1.2 miles	Total Segment Area:	499 acres
ORV:	Cultural	Tentative Classification:	Wild
Eden Creek Tributary 2			
BLM Segment Length:	1.2 miles	Area on BLM-Administered Land:	457 acres
Total Segment Length:	1.2 miles	Total Segment Area:	607 acres
ORV:	Cultural	Tentative Classification:	Wild
Elk Creek			
BLM Segment Length:	3.3 miles	Area on BLM-Administered Land:	917 acres
Total Segment Length:	3.3 miles	Total Segment Area:	1,381 acres
ORVs:	Cultural, Fish	Tentative Classification:	Scenic

2.9.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the Elk Creek Complex, two ORVs have been identified as making this segment a worthy addition to the National System. ORVs for fish and cultural values were identified as unique, rare, or exemplary at a comparative regional or national scale.

Eden Creek, Elk Creek, and Deep Hole Creek are important contributors to the recovery of federally listed threatened winter-run steelhead in the Middle Fork Eel River. Additionally, several significant cultural sites have been recorded within Eden Creek Tributary 1, Eden Creek Tributary 2, and Elk Creek.

Factor 2: Current status of landownership and use in the area

Within Eden Creek, the BLM manages 900 acres (69 percent) of the river corridor, which totals 1,313 acres. The remaining acres are private land. Within Eden Creek Tributary 1, BLM manages 415 acres (83 percent) of the river corridor, which totals 499 acres. The remaining acres are private land. Within Eden Creek Tributary 2, BLM manages 457 acres (75 percent) of the river corridor, which totals 607 acres. The remaining acres are private land. Within Elk Creek, BLM manages 917 acres (66 percent) of the river corridor, which totals 1,381 acres. The remaining corridor contains National Forest System land and private land. Within Deep Hole Creek, BLM manages 929 acres (77 percent) of the river corridor, which totals 1,197 acres. The remaining acres are private land.

All lands within the Elk Creek Complex are zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the segments existing conditions and protect the identified ORVs. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Uses that could be curtailed by designation would include harvesting forest products and agricultural activities, such as cattle grazing. These activities could continue unless they are shown to affect the ORVs such that the segment would no longer be suitable for designation in the National System.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within Elk Creek Complex were added to the National System, the BLM would manage this area.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the complex corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

Approximately 75 percent of the complex corridor is on BLM-administered land. BLM is staged to acquire a large portion of the stream corridor in the next year, leading to increased protections and enhancements of ORVs, as well as consistent management throughout the larger river system.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with CDFW and local county entities would ensure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the segments within Elk Creek Complex were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORVs within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in these segments.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Lands within the segments corridors is zoned by Mendocino County. Zoning classifications include Public Facilities and Rangeland. Public facilities allow for public use activities. Rangeland allows for livestock grazing and the production, harvest, and protection of natural resources (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Mendocino County and portions of Shasta County. The Regional Water Board is responsible for The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Two comments were received related to Eden Creek, Eden Creek Tributary 1, Eden Creek Tributary 2, Deep Hole Creek, and Elk Creek. The comments were supportive of the segment's designation as a WSR and specifically noted the fish and cultural ORVs, as they apply (BLM 2022). There were no comments opposed to designating any of the Elk Creek Complex segments as WSRs.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of the segments within Elk Creek Complex as WSRs would support the goals and objectives of the CWA and ESA. On a state level, CESA, administered by the Regional Water Board, enforces California water quality laws. Designation of the segments within Elk Creek Complex as WSRs would be consistent with the Regional Water Board's mission of protecting water quality.

Additionally, portions of these segments overlap with the Yuki Wilderness, the Eden Valley Section 603 WSA, and the Eden Valley ACEC, leading to additional protective management actions that would support the protection and enhancement of ORVs.

Factor 12: The contribution to the river system or basin integrity

Elk Creek is a large stream that flows into the designated Middle Fork Eel WSR. The shared fish ORV extends to Eden Creek and Deep Hole Creek, meaning consistent management could be provided should designation occur. The BLM includes Eden Creek and Deep Hole Creek part of the Elk Creek Complex

because of the shared fish ORV. BLM is staged to acquire a large portion of the stream corridor in the next year.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for the segments within the Elk Creek Complex.

2.9.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For the segments within the Elk Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Deep Hole Creek	Eligible	Suitable	Not Suitable	Suitable
Elk Creek	Eligible	Suitable	Not Suitable	Suitable
Eden Creek	Eligible	Suitable	Not Suitable	Suitable
Eden Creek Tributary 1	Eligible	Suitable	Not Suitable	Suitable
Eden Creek Tributary 2	Eligible	Suitable	Not Suitable	Suitable

2.9.3 Suitability Determination

The segments within Elk Creek Complex (Elk Creek, Eden Creek, Eden Creek Tributary 1, Eden Creek Tributary 2, and Deep Hole Creek) were found **suitable for inclusion** in the National System based on the information within this report. A large portion of the segment corridors are already located on public lands which would mean management, protection, and enhancement of ORVs could occur effectively. Additionally, there is a need to protect and enhance the threatened winter-run steelhead. The segments within the Elk Creek Complex provide a great opportunity for consistent protection for these species as the segments flow into the designated Middle Fork Eel WSR.

2.10 HULLS CREEK COMPLEX (HULLS CREEK SEGMENT A AND HULLS CREEK SEGMENT B)

Complex Description:	The segments within HULLS CREEK COMPLEX are located in Mendocino County and Trinity County in the northern Coast Ranges and contribute to the designated North Fork Eel WSR.		
Field Office:	Arcata	Map:	Map A-9 Appendix A
Suitability Determination:	All segments within the HULLS CREEK COMPLEX were determined to be suitable for inclusion into the National System.		
HULLS CREEK SEGMENT A			
BLM Segment Length:	4.9 miles	Area on BLM-Administered Land:	757 acres
Total Segment Length:	16.3 miles	Total Segment Area:	1,953 acres
ORV:	Fish, Cultural	Tentative Classification:	Recreational

Hulls Creek Segment B			
BLM Segment Length:	2.0 miles	Area on BLM-Administered Land:	209 acres
Total Segment Length:	16.3 miles	Total Segment Area:	724 acres
ORV:	Fish	Tentative Classification:	Scenic

2.10.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the Hulls Creek Complex, one ORV has been identified as making these segments a worthy addition to the National System. An ORV for fish values was identified as unique, rare, or exemplary at a comparative regional or national scale.

The segments within Hulls Creek Complex are important contributors to the recovery of federally listed threatened Chinook salmon and winter-run steelhead in the North Fork Eel River.

There are cultural values along this segment of Hulls Creek as evidenced by multiple documented archaeological sites. The artifacts and features that have been found indicate that Indigenous people lived along the creek banks on both a short-term (camps) and long-term (villages) basis. Subsistence strategies varied as demonstrated in the artifact record: lithic tools were present that were likely used in hunting and processing activities, as well as ground stone for processing plant materials.

Factor 2: Current status of landownership and use in the area

Within Hulls Creek Segment A, BLM manages 757 acres (39 percent) of the river corridor, which totals 1,953 acres. The remaining acres are managed by Bureau of Indian Affairs and private land. Within Hulls Creek Segment B, BLM manages 209 acres (29 percent) of the river corridor, which totals 724 acres. The remaining acres are private land. Lands within both segment corridors are zoned by Mendocino and Trinity Counties, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the segments existing conditions and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Fall-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there are no applications for dams or diversions on file for either of these segments.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights,

and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment. Segments with a recreational classification that are ultimately designated would be closed to mineral leasing, allow mineral material development with application of necessary conditions to protect resource values, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORVs within the corridors; however, livestock grazing could be curtailed if the segments were to be designated, and grazing began to impact the ORVs. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORV.

Designation of these segments is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within Hulls Creek Complex were added to the National System, the BLM would manage this area.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of these segment corridors, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Approximately 36 percent of the total segment corridors are on BLM-administered land. At this time, there are no plans for further acquisitions along either of the Hulls Creek segments, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with the Bureau of Indian Affairs and local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the segments were not added to the National System, federal, state and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the segment's corridors is zoned by Mendocino and Trinity Counties. Zoning classifications from Mendocino County include Timberland Production Zone and Rangeland, allowing for Timber Production and grazing activities (Mendocino County 2023). Zoning classification from Trinity County include Unclassified (Trinity County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridors.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region North Coast Regional Water Quality Control Board has jurisdiction in Mendocino County and portions of Humboldt and Trinity Counties. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were two comments received related to Hulls Creek Segment A and Hulls Creek Segment B. The comments were supportive of designation as a WSR and specifically noted the fish and recreation ORVs as meeting eligibility criteria (BLM 2022). There were no comments opposed to designating either segment as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Hulls Creek Segment A and Hulls Creek Segment B as

WSRs would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of Hulls Creek Segment A and Hulls Creek Segment B as WSRs would be consistent with the North Coast Regional Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Hulls Creek Segments A and B combine to be the largest tributary of the designated North Fork Eel WSR. The lower section of the Hulls Creek is one of the few suitable Chinook salmon spawning tributaries in the North Fork Eel WSR. The headwaters contain cold water, providing important habitat for those species year-round.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for the segments within the Hulls Creek Complex.

2.10.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For segments within the Hulls Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Hulls Creek Segment A	Eligible	Suitable	Not Suitable	Suitable
Hulls Creek Segment B	Eligible	Suitable	Not Suitable	Suitable

2.10.3 Suitability Determination

The segments within the Hulls Creek Complex (Hulls Creek Segment A and Hulls Creek Segment B) were found **suitable for inclusion** in the National System based on the information within this report. The segments provide important contributions to the designated North Fork Eel WSR and provide year-round cold-water habitat for the threatened fish species.

2.11 INDIAN CREEK (TRINITY RIVER) COMPLEX (INDIAN CREEK I SEGMENT A, INDIAN CREEK I SEGMENT B, AND INDIAN CREEK I SEGMENT C)

Complex Description:	The segments within the Indian Creek (Trinity River) Complex are located in Trinity County in the northern Coast Range and contribute to the designated Trinity River WSR.		
Field Office:	Redding	Map:	Map A-10 Appendix A
Suitability Determination:	All segments within the Indian Creek (Trinity River) Complex were determined to be suitable for inclusion into the National System.		
Indian Creek I Segment A			
BLM Segment Length:	0.8 miles	Area on BLM-Administered Land:	123 acres
Total Segment Length:	12.6 miles	Total Segment Area:	400 acres
ORV:	Fish	Tentative Classification:	Wild
Indian Creek I Segment B			
BLM Segment Length:	2.9 miles	Area on BLM-Administered Land:	748 acres
Total Segment Length:	12.6 miles	Total Segment Area:	1,087 acres
ORV:	Cultural, Fish	Tentative Classification:	Scenic
Indian Creek I Segment C			
BLM Segment Length:	1.7 miles	Area on BLM-Administered Land:	482 acres
Total Segment Length:	12.6 miles	Total Segment Area:	797 acres
ORV:	Fish	Tentative Classification:	Scenic

2.11.1 Suitability Factor

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the Indian Creek (Trinity River) Complex, two ORVs have been identified.. Fish and cultural ORVs were identified as unique, rare, or exemplary at a comparative regional or national scale.

Indian Creek I Segment A, Indian Creek I Segment B, and Indian Creek I Segment C are important contributors to the recovery of federally listed threatened coho salmon in the Trinity River. They each also support wild winter-run steelhead. Coho salmon are also listed by the State of California as threatened.

Indian Creek I Segment B includes cultural resources stemming from the California gold rush era through the twentieth century. Miners left behind a townsite (Indian Creek, or Indeek); a mining landscape of tailings, ditches, headwalls, reservoirs, dams, and worked ground; and artifact dumps and remnants of mining structures. These remains have been determined in sections to be eligible for listing on the National Register of Historic Places, with other sections potentially eligible. The Indian Creek townsite itself has never been mined; however, it contains structure pads, cultivars, artifact concentrations, a well, and a fence as evidence of the past.

Factor 2: Current status of landownership and use in the area

Within Indian Creek I Segment A, BLM manages 123 acres (31 percent) of the river corridor, which totals 400 acres. The state and private entities manage the remaining acres within the river corridor. Within Indian Creek I Segment B, BLM manages 748 acres (69 percent) of the river corridor, which totals 1,087 acres. The remaining acres are private land. Within Indian Creek I Segment C, BLM manages 482 acres (60 percent) of the river corridor, which totals 797 acres. The remaining acres are private land. All lands within the segment corridors are zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the segments existing conditions and protect the identified ORVs. Designation would enhance the identified fish ORV populations by helping to preserve existing habitat. Threatened coho salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there are no applications for dams or diversions on file for either of these river segments.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Previously, the BLM has managed lands within the corridor as a grazing allotment for cattle; however, permitted cattle grazing is not currently occurring in the area on BLM-administered lands. Grazing has not been identified as an impact on the ORVs in the area, but grazing in the corridor may be limited in the future if impacts are observed. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORV.

Designation of these segments is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within the Indian Creek (Trinity River) Complex were added to the National System, the BLM would manage this area.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Approximately 59 percent of the total segment corridors is on BLM-administered lands. At this time, there are no plans for further acquisitions along any of the segments within the Indian Creek (Trinity River) Complex, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with the state and local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs. The Trinity River Restoration Partnership and the Yurok Tribe have shown interest in partnering with the BLM to conduct river restoration projects. This sort of cooperative support would help maintain and enhance the ORVs in the Indian Creek (Trinity River) Complex.

If the segments within Indian Creek (Trinity River) Complex were not added to the National System, federal, state and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Trinity County. Trinity County zoning information was not available at the time of this study; however, aerial imagery analysis shows rural residential and commercial infrastructure, including small-scale cannabis farms, on the private lands in or near the corridor. This activity is likely supported by the local plans. However, as described below, the water quality, riparian values, and fish habitat values of Indian Creek are robustly protected by federal, state, and local policies. .

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical

teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Humboldt County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The CWA and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were two comments related to the segments within the Indian Creek (Trinity River) Complex. The comments were supportive of designation as a WSR and specifically noted the fish and scenic ORVs as meeting eligibility criteria (BLM 2022). There were no comments opposed to designating any of the Indian Creek (Trinity River) Complex segments as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of the segments within Indian Creek (Trinity River) Complex as WSRs would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of the segments within Indian Creek (Trinity River) Complex as WSRs would be consistent with the North Coast Regional Board's mission of protecting water quality.

The Trinity River Restoration Program (TRPP) works collaboratively with Tribes, federal agencies, and state agencies, to restore river function in the Trinity River to support fish recovery. Designation of the Indian Creek (Trinity River) Complex would support the TRPP initiative to improve watershed health by conducting restoration activities on tributaries to the Trinity River.

Additionally, portions of this segment overlap with the Grass Valley Creek ACEC, leading to additional protective management actions that would support the protection and enhancement of ORVs.

Factor 12: The contribution to the river system or basin integrity

The segments within Indian Creek (Trinity River) Complex are important contributors to the recovery of the threatened coho salmon and support wild winter-run steelhead. The segments flow into the already designated Trinity River WSR, and designation of these segments would provide consistent management of ORVs. High levels of public lands within the segments corridors and ease of accessibility would mean

efficient and effective management for and protection and enhancement of the identified fish and cultural ORVs.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for any of the segments within Indian Creek (Trinity River) Complex.

2.11.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for VSRs. For segments within the Indian Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Indian Creek I Segment A	Eligible	Suitable	Not Suitable	Suitable
Indian Creek I Segment B	Eligible	Suitable	Not Suitable	Suitable
Indian Creek I Segment C	Eligible	Suitable	Not Suitable	Suitable

2.11.3 Suitability Determination

Based on the contribution this creek complex would offer to basin integrity, the relatively high percentage of public lands in the corridor, and because designation would complement existing agency priorities and programs for fish conservation and river restoration, the segments within the Indian Creek (Trinity River) Complex (Indian Creek I Segment A, Indian Creek I Segment B, and Indian Creek I Segment C) were found **suitable for inclusion** in the National System based on the information within this report.

2.12 LACKS CREEK COMPLEX (LACKS CREEK AND LACKS CREEK TRIBUTARIES)

Complex Description:	Lacks Creek is located in California’s Northern coast range within Humboldt County, approximately 20 miles north of Eureka.		
Field Office:	Arcata	Map:	Map A-11, Appendix A
Suitability Determination:	All segments within the Lacks Creek Complex were determined to be suitable for inclusion into the National System.		
Lacks Creek			
BLM Segment Length:	7.6 miles	Area on BLM-Administered Land:	2,050 acres
Total Segment Length:	7.6 miles	Total Segment Area:	2,495 acres
ORVs:	Fish, Ecology and Scenic,	Tentative Classification:	Wild

Lacks Creek Tributaries			
BLM Segment Length:	3.6 miles	Total Segment Area:	1,197 acres
Total Segment Length:	3.6 miles	Area on BLM-Administered Land:	1,364 acres
ORVs:	Ecology, Scenic	Tentative Classification:	Wild

2.12.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Three ORVs have been identified as making the segments within Lacks Creek Complex a worthy addition to the National System: fish, ecologic, and scenic. Lacks Creek and Lacks Creek Tributaries are important producers of federally-listed threatened Chinook salmon and winter-run steelhead trout. The segments are also recognized for the rare old-growth forest community within the riparian corridors and the unique scenery that the old-growth forest provides.

Factor 2: Current status of landownership and use in the area

Within Lacks Creek, BLM manages 2,050 acres (82 percent) of the segment corridor, which totals 2,495 acres. The remaining acres are private land. Land within the river corridor is zoned by Humboldt County. Within Lacks Creek Tributaries, BLM manages 1,197 acres (87 percent) of the segment corridor, which totals 1,364 acres. The remaining acres are private land.

Lands within both segment corridors is zoned by Humboldt County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the segment’s existing conditions and protect the identified ORVs. Designation would enhance fish populations by helping to preserve existing old-growth forest habitat, which is also scenic. Designation would complement the goals and objectives of the BLM.

Designation may prohibit harvesting of forest products around the segments within Lacks Creek Complex. Other resource uses that would be curtailed may include agricultural activities and water diversions or impoundments on Lacks Creek. Mining has historically occurred in the Redwood Creek watershed, and mining activity within Lacks Creek would likely be foreclosed. Any activity that would impede the free-flowing nature of Lacks Creek would be foreclosed by designation. These activities could continue unless they are shown to affect the ORVs such that the segment would no longer be suitable for designation in the National System.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry.

Uses that could be curtailed by designation would include harvesting forest products and agricultural activities such as cattle grazing. These activities could continue unless they are shown to affect the ORVs such that the segment would no longer be suitable for designation in the National System.

Factor 4: The federal agency that will administer the area should it be added to the National System

As the portion of the Lacks Creek Complex that is eligible for designation occurs primarily on land administered by the BLM, the BLM would be most suited to manage the land and resources within this boundary, unless Congress designated another agency.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

It is not expected that WSR designation would substantially increase management costs in this segment, as portions of Lacks Creek are already being managed in a way that would be similar to management under WSR designation. Specifically, management of the portions of Lacks Creek designated as a Resource Natural Area/Area of Critical Environmental Concern would be similar to expected management under WSR designation.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

As the BLM is currently responsible for the preservation and administration of eligible portions of Lacks Creek, other federal agencies, the State of California, or its political subdivisions would likely provide minimal, if any, support in the preservation and administration of portions of Lacks Creek complex under WSR designation.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

A review of Humboldt County zoning and other land use controls found that there are no zoning ordinances specifically targeted at protecting WSRs and preventing incompatible development (Humboldt County 2018).

Land within the river corridor is zoned by Humboldt County. Zoning classifications from Humboldt County include Timberland Production Zone, allowing for timber and timber-related activities, and Agriculture Exclusive, which allows agricultural activities (Humboldt County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2018).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2018). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Humboldt County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on forest use projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2018).

Factor 10: The existing support for or opposition to designation

The public provided input regarding WSRs during public scoping meetings, and the public commented on the eligibility process in general and provided stream-specific ORV information.

Three comments were received that specifically related to designation of Lacks Creek. All three comments were supportive of designation of Lacks Creek as a WSR and specifically its ORV for anadromous fish. There were two comments received related to Lacks Creek Tributaries. The comments were supportive of designation as a WSR and specifically the ecological and scenic ORVs. (BLM 2022). There were no comments opposed to designating either of the segments within Lacks Creek Complex as WSRs.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Lacks Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of Lacks Creek as a WSR would be consistent with the North Coast Regional Board's mission of protecting water quality.

Additionally, portions of these segments overlap with the Lacks Creek ACEC, leading to additional protective management actions that would support the protection and enhancement of ORVs.

Factor 12: The contribution to the river system or basin integrity

Designation of the segments within Lacks Creek Complex would provide a significant contribution to the water quality and biological resources in the Redwood Creek watershed. Anadromous fish inhabit much of Lacks Creek and Lacks Creek is a significant tributary to the Redwood Creek watershed.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Lacks Creek. As the land use around Lacks Creek is primarily timber production, the construction of irrigation dams and irrigation and flood control measures is unlikely. As the segments within Lacks Creek Complex are relatively small creeks in a remote wilderness area upstream of Redwood National Park, the construction of hydroelectric dams is also unlikely.

2.12.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For segments within the Lacks Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Lacks Creek	Eligible	Suitable	Suitable	Suitable
Lacks Creek Tributaries	Eligible	Suitable	Suitable	Suitable

2.12.3 Suitability Determination

Lacks Creek and its tributaries were found **suitable for inclusion** into the National System based on information within this report. A significant portion of the Lacks Creek watershed is on federally owned land administered by the BLM. The surrounding land is privately owned and used for timber production. Adding Lacks Creek to the National System would preserve the ORVs by restricting activities in the river corridor. Lacks Creek is also within the Redwood Protection Zone and is a major tributary to Redwood Creek, which flows into Redwood National Park. Preserving Lacks Creek through inclusion in the National System would also contribute to integrity of the Redwood Protection Zone and the preservation of the downstream resources in Redwood Creek and Redwood National Park. Overall, designation of Lacks Creek and its tributaries would provide a significant contribution to the water quality and biological resources in the Lacks Creek and Redwood Creek watersheds.

2.13 SACRAMENTO RIVER COMPLEX (INKS CREEK, INKS CREEK TRIBUTARY, SACRAMENTO RIVER SEGMENTS A-F, SACRAMENTO RIVER BEND TRIBUTARY I, MASSACRE CREEK, SACRAMENTO RIVER BEND TRIBUTARY 2, PAYNES CREEK, TURTLE CREEK).

Complex Description:	The segments within the Sacramento River Complex are located in Tehama County and contribute to the Sacramento River watershed.		
Field Office:	Redding	Map:	See Map A-13 in Appendix A
Suitability Determination:	All segments within the Sacramento River Complex were determined suitable for inclusion into the National System		
<i>Inks Creek</i>			
BLM Segment Length:	1.0 miles	Area on BLM-Administered Land:	348 acres
Total Segment Length:	1.0 miles	Total Segment Area:	441 acres
ORVs:	Fish, Cultural, Ecology	Tentative Classification:	Wild
<i>Inks Creek Tributary</i>			
BLM Segment Length:	0.4 miles	Area on BLM-Administered Land:	236 acres
Total Segment Length:	0.4 miles	Total Segment Area:	236 acres
ORV:	Fish, Cultural and Ecology	Tentative Classification:	Wild
<i>Massacre Creek</i>			
BLM Segment Length:	1.8 miles	Area on BLM-Administered Land:	503 acres
Total Segment Length:	1.8 miles	Total Segment Area:	659 acres
ORVs:	Cultural, Ecology	Tentative Classification:	Scenic
<i>Paynes Creek</i>			
BLM Segment Length:	7.7 miles	Area on BLM-Administered Land:	2,273 acres
Total Segment Length:	7.7 miles	Total Segment Area:	2,628 acres
ORV:	Scenic, Fish, Cultural, Ecology	Tentative Classification:	Scenic
<i>Sacramento River Segment A</i>			
BLM Segment Length:	3.8 miles	Area on BLM-Administered Land:	499 acres
Total Segment Length:	3.8 miles	Total Segment Area:	1,698 acres
ORVs:	Scenic, Fish, Cultural, Ecology, Recreation	Tentative Classification:	Recreational

2. Suitability Determinations: Suitable Segments (Sacramento River Complex)

Sacramento River Segment B			
BLM Segment Length:	7.1 miles	Area on BLM-Administered Land:	1,012 acres
Total Segment Length:	7.1 miles	Total Segment Area:	2,390 acres
ORVs:	Scenic, Recreation, Cultural, Ecology, Fish	Tentative Classification:	Scenic
Sacramento River Segment C			
BLM Segment Length:	2.0 miles	Area on BLM-Administered Land:	358 acres
Total Segment Length:	2.0 miles	Total Segment Area:	775 acres
ORVs:	Scenic, Recreation, Cultural, Ecology, Fish	Tentative Classification:	Recreational
Sacramento River Segment D			
BLM Segment Length:	1.9 miles	Area on BLM-Administered Land:	530 acres
Total Segment Length:	1.9 miles	Total Segment Area:	725 acres
ORVs:	Scenic, Recreation, Cultural, Ecology, Fish	Tentative Classification:	Recreational
Sacramento River Segment E			
BLM Segment Length:	0.9 miles	Area on BLM-Administered Land:	175 Acres
Total Segment Length:	0.9 miles	Total Segment Area:	420 acres
ORV:	Scenic, Recreation, Cultural, Ecology, Fish	Tentative Classification:	Wild
Sacramento River Segment F			
BLM Segment Length:	0.1 miles	Area on BLM-Administered Land:	45 acres
Total Segment Length:	0.1 miles	Total Segment Area:	166 acres
ORV:	Scenic, Recreation, Cultural, Ecology, Fish	Tentative Classification:	Scenic
Sacramento River Bend Tributary I Segment A			
BLM Segment Length:	0.7 miles	Area on BLM-Administered Land:	239 acres
Total Segment Length:	0.7 miles	Total Segment Area:	335 acres
ORV:	Cultural, Ecology	Tentative Classification:	Wild
Sacramento River Bend Tributary I Segment B			
BLM Segment Length:	0.3 miles	Area on BLM-Administered Land:	162 acres
Total Segment Length:	0.3 miles	Total Segment Area:	228 acres
ORV:	Ecology, Cultural	Tentative Classification:	Scenic

Sacramento River Bend Tributary 2			
BLM Segment Length:	2.1 miles	Area on BLM-Administered Land:	653 acres
Total Segment Length:	2.1 miles	Total Segment Area:	726 acres
ORVs:	Cultural, Ecology	Tentative Classification:	Scenic
Turtle Creek			
BLM Segment Length:	4.3 miles	Area on BLM-Administered Land:	1,413 acres
Total Segment Length:	4.3 miles	Total Segment Area:	1,446 acres
ORV:	Cultural, Ecology	Tentative Classification:	Scenic

2.13.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the Sacramento River Complex, there were five ORVs, scenic, fish, cultural, ecological, and recreational, identified as unique, rare, or exemplary at a comparative regional or national scale.

Sacramento River Segments A, B, C, D, E, F, and Paynes Creek have a scenic quality rating of “A.”

Inks Creek, Inks Creek Tributary, and Paynes Creek are important contributors to the recovery of federally listed threatened spring-run Chinook salmon and winter-run steelhead in the Central Valley.

Sacramento River Segments A, B, C, D, E, F, and Paynes Creek are important contributors to the recovery of federally listed endangered winter-run Chinook salmon, federally listed threatened spring-run Chinook salmon, winter-run steelhead trout, and the regionally significant fishery for fall-run Chinook salmon. Winter-run Chinook salmon are also listed by the State of California as endangered.

All segments within the Sacramento River Complex support the imperiled Great Valley Mixed Riparian Forest and Great Valley Cottonwood Riparian Forest. The extensive riparian area is a key remnant of critical habitat for wildlife species in the Sacramento Valley dependent on this dense cover.

Sacramento River Segments A, B, C, D, E, and F contains a rich array of prehistoric sites and remnants of the historic Blue Ridge Flume that ran through the area in the 1870s.

Bordering Inks Creek, Inks Creek Tributary, Sacramento River Bend Tributary I Segment A and Segment B are very large prehistoric Indian villages, camps, and lithic scatters that hold considerable value to Tribes, the public, and the archaeological community. Along a single mile of this stream, from its mouth into the interior, there are at least seven prehistoric sites, including a village nearly an acre in size and likely several feet deep. Along this stretch, artifacts have also been found; some were 12 feet deep and possibly of great antiquity. Workers and supporters related to the historic Blue Ridge Flume nearly 150 years ago used the area around the mouth of the creek as a dump for lumber carried by the flume. A camp was here with historic archaeological remains. After the extension of the flume to Red Bluff, a high trestle spanned this creek at its mouth. Artifacts and foundation remnants can still be found related to the flume’s alignment. A narrow section of the creek bordered by a split lava flow was once the swimming hole for the nearby historic Inks Creek Ranch. Rock walls from historic animal husbandry can also be found along this creek.

The Massacre Creek segment includes a prehistoric village with a deep midden deposit. This site adjoining the stream contains human remains and evidence of several long periods of human use focused on hunting and gathering local resources. There is a foundation of a stockman's cabin, lithic scatters, and a large prehistoric village near the Sacramento River. The Blue Ridge Flume passed over the stream at Massacre Flat, where a flume tender's cabin once stood. While the name Massacre Flat has an unknown derivation, there is the possible association of this stream and the flat nearby where a historical battle took place.

Paynes Creek is one of the principal secondary drainages to the Sacramento River in the Sacramento River Bend area. Along its course, there are numerous prehistoric archaeological sites, including villages, rock enclosure camps, hunting blinds, rock shelters, rock stacks, and lithic scatters. One large rock shelter or cave has deposits of human activity going back 7,000 years. A rock enclosure camp provides a glimpse into hunter-forager activities, primarily related to geophyte exploitation. The historic Blue Ridge Flume crossed at the mouth of Paynes Creek. It was a development related to the early lumber industry in Tehama County. Foundations and artifacts connected to that flume still exist.

Sacramento River Segments A, B, C, D, E, and F are heavily used for boat and shoreline fishing, rafting, canoeing, swimming, sightseeing, and hunting. Developed recreation sites are along the corridors for boat access, camping, target shooting, and picnicking.

Turtle Creek flows out of Hog Lake, which is surrounded by Indian milling and rock features and a small village. The drainage continues toward the Sacramento River past a modest prehistoric village. This village exhibits multiple periods of occupation. Farther down the stream is a rock enclosure camp with a cupule petroglyph and shallow midden deposit. This unusual, complex camp has proved to be a valuable resource to the heritage-oriented community.

Turtle Creek persists into its volcanic canyon with cascades and a waterfall passing by flaked-stone scatters and a rock shelter that was excavated by Chico State; these proved to be thousands of years old and at least 10 feet deep. Petroglyphs and the only pictograph known in the northern Sacramento Valley, a set of red handprints, occur here. The historic Blue Ridge Flume also crosses this stream near its mouth.

Factor 2: Current status of landownership and use in the area

Within the Inks Creek, BLM manages 348 acres (79 percent) of the segment corridor, which total 441 acres. The remaining acres are private land.

Within the Inks Creek Tributary, BLM manages 236 acres (100 percent) of the segment corridor, which totals 236 acres.

Within Massacre Creek, BLM manages 503 acres (43 percent) of the river corridor, which totals 659 acres. The remaining acres are private land.

Within Paynes Creek, BLM manages 2,273 acres (86 percent) of the river corridor, which totals 2,628 acres. The remaining acres are private land.

Within the Sacramento River Segments A, B, C, D, E, and F, the BLM manages 2,439 acres (37 percent) of the total segment corridors, which totals 6,174 acres. The remaining acres are state or private land.

Within the Sacramento River Bend Tributary 1 and 2 segments, the BLM manages 401 acres (71 percent) of the river corridor, which totals 563 acres. The remaining acres are private land.

Within Turtle Creek, the BLM manages 1,413 acres (97 percent) of the river corridor, which totals 1,446 acres. The remaining acres are private land.

All land within the segments' corridors is zoned by Tehama County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORVs. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Additionally, designation would support the protection of historic and cultural resources, as well as unique and threatened habitats. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there is one application for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment. Segments with a recreational classification that are ultimately designated would be closed to mineral leasing, allow mineral material development with application of necessary conditions to protect resource values, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting ORVs within the segment corridors; however, livestock grazing could be curtailed if a segment were to be designated, and grazing began to impact its ORVs.

Designation of the Sacramento River Complex segments is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality.

Designation of the Sacramento River Complex segments will have a mixed effect on recreation in the area. Recreation is a major use in the complex area, with hiking, biking, horse riding, hunting, fishing, and wildlife/nature being the primary activities. Recreation use will still continue in this area and some types or recreation, especially dispersed uses may increase and be enhanced with designation. However, designation would guide how and where future recreation infrastructure development occurs in the river corridor itself. This could limit some more developed recreation uses such as trailheads and campgrounds in the river corridor, especially in wild segments.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within the Sacramento River Complex were added to the National System, the BLM would manage this area.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the segments' corridors, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

Over the last few decades, the BLM has acquired several parcels in the Sacramento River Complex corridors and in the greater watershed in order to facilitate conservation goals in the area as well provide public access and recreational opportunities. Currently, the BLM administers 64 percent of land in the Sacramento River Complex corridors. The BLM is actively pursuing additional acquisitions from willing sellers in the area; this would likely continue regardless of designation but could put increased priority on acquisitions in the corridor. No cost analysis or estimate was prepared as a part of this study due to the unknown nature of willing sellers in the area.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with the State of California and local county entities would ensure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

Preservation and administration of the state-listed and federally listed species of salmon and steelhead within the segment of the Sacramento River Complex would also be supported by participation from state and federal agencies, including the CDFW and USFWS, who are both mandated to conserve listed resources.

If the segments were not added to the National System, federal, state and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in these segments.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the segments' corridors is zoned by Tehama County. Zoning classifications include Government; Agricultural/Upland District, allowing for grazing and agricultural activities; and Primary Floodplain, allowing for the support of the river channel to protect safety and property (Tehama County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region 5 Central Valley Regional Water Quality Control Board has jurisdiction in Tehama County and portions of Shasta County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There was one comment received related to Inks Creek and Inks Creek Tributary, specifically in support of a WSR designation and the associated fish, cultural, and ecological ORVs. There was one comment received related to Massacre Creek, which was supportive of a WSR designation and the ecology ORV.

There were seven comments received related to Sacramento River Bend Tributary 1 Segment A and Segment B, and Sacramento River Bend Tributary 2. The comments were supportive of a WSR designation and the associated cultural and ecological ORVs.

There were seven comments received related to Sacramento River Segments A, B, C, D, E, and F. The comments were supportive of a WSR designation and specifically the fish, scenic, cultural, ecological, and recreational ORVs.

There were no comments received related to Turtle Creek. Additionally, there were no comments related to opposition of WSR designation for any of the segments within the Sacramento River Complex.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of the segments within the Sacramento River Complex as WSRs would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Central Valley Regional Board, enforces California water quality laws. Designation of the segments within the Sacramento River Complex as WSRs would be consistent with the Central Valley Regional Board's mission of protecting water quality.

Additionally, portions of these segments overlap with the Sacramento River Bend ACEC, leading to additional protective management actions that would support the protection and enhancement of ORVs.

Factor 12: The contribution to the river system or basin integrity

The multitude of eligible segments within the Sacramento River Complex and the large amount of land within the segments' corridors that is on BLM-administered lands allowed for a holistic approach to protection strategies and partnerships with federal, non-federal, and the public. Adequate access throughout the corridors ensures effectiveness of management actions to protect and enhance all of the identified ORVs.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are currently no FERC projects proposed for any of the Sacramento River Complex segments.

2.13.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For segments within the Sacramento River Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Inks Creek	Eligible	Suitable	Not Suitable	Suitable
Inks Creek Tributary	Eligible	Suitable	Not Suitable	Suitable
Sacramento River Segment A	Eligible	Suitable	Not Suitable	Suitable
Sacramento River Segment B	Eligible	Suitable	Not Suitable	Suitable
Sacramento River Segment C	Eligible	Suitable	Not Suitable	Suitable
Sacramento River Segment D	Eligible	Suitable	Not Suitable	Suitable
Sacramento River Segment E	Eligible	Suitable	Not Suitable	Suitable
Sacramento River Segment F	Eligible	Suitable	Not Suitable	Suitable
Sacramento River Bend Tributary 1	Eligible	Suitable	Not Suitable	Suitable
Sacramento River Bend Tributary 2	Eligible	Suitable	Not Suitable	Suitable

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Massacre Creek	Eligible	Suitable	Not Suitable	Suitable
Paynes Creek	Eligible	Suitable	Not Suitable	Suitable
Turtle Creek	Eligible	Suitable	Not Suitable	Suitable

2.13.3 Suitability Determination

The Sacramento River Complex was found **suitable for inclusion** in the National System based on the information within this report. High percentages of BLM-administered lands with the corridors, ecological connectivity, and consistency of management throughout the segments affords the BLM an opportunity to protect and enhance the identified ORVs that is not typical.

2.14 SHASTA RIVER COMPLEX (SHASTA RIVER SEGMENT A AND SHASTA RIVER SEGMENT B)

Complex Description:	The segments within the Shasta River Complex are located in Siskiyou County and contribute to the designated Klamath River WSR.		
Field Office:	Redding	Map:	Map A-15 Appendix A
Suitability Determination:	All segments within the Shasta River Complex were determined to be suitable for inclusion into the National System.		
Shasta River Segment A			
BLM Segment Length:	0.3 miles	Area on BLM-Administered Land:	149 acres
Total Segment Length:	5.5 miles	Total Segment Area:	205 acres
ORV:	Fish, Scenic, Cultural, Recreation	Tentative Classification:	Scenic
Shasta River Segment B			
BLM Segment Length:	3.1 miles	Area on BLM-Administered Land:	885 acres
Total Segment Length:	5.5 miles	Total Segment Area:	1,266 acres
ORVs:	Fish, Scenic, Cultural, Recreation	Tentative Classification:	Recreational

2.14.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the Shasta River Complex, four ORVs have been identified as making this segment a worthy addition to the National System. Fish, scenic, cultural, and recreation ORVs were identified as unique, rare, or exemplary at a comparative regional or national scale.

Both segments in the Shasta River Complex are important contributors to the recovery of federally listed threatened coho salmon in the Klamath River. It also supports one of the largest populations of fall-run Chinook salmon in the basin. Due to its unique capacity to produce fish, the Shasta River Complex has received a large investment in restoration and protection for imperiled species. This river segment is of Class A scenic quality.

These two segments contain important salmonid habitat, the salmon extremely vital to Native American culture now and in the past. Near to these segments on BLM-administered land is a large village site that test excavations proved is thousands of years old and that is eligible for listing on the National Register of Historic Places. Historic gold mining remnants are present in the canyon, including cabin pads, tailings, and scattered artifacts. Historic Highway 99 and its steel-cantilevered truss Pioneer Bridge, which have historic importance, are on BLM-administered lands in this scenic canyon setting. Route 99, earlier known as the Pacific Highway, dates to 1925 and is an important state landmark.

Factor 2: Current status of landownership and use in the area

Within Shasta River Segment A, BLM manages 149 acres (72 percent) of the river corridor, which totals 205 acres. The remaining acres are private land. Within Shasta River Segment B, BLM manages 885 acres (69 percent) of the river corridor, which totals 1,266 acres. The remaining acres are private or state lands. All lands within the segments' corridors is zoned by Siskiyou County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the segment's existing conditions and protect the identified ORVs. Designation would enhance fish populations by helping to preserve existing habitat. Coho salmon, fall-run Chinook salmon, and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Additionally, designation would protect the unique prehistoric artefacts and cultural resources found adjacent to these segments. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment. Segments with a recreational classification that are ultimately designated would be closed to mineral leasing, allow mineral material development with application of necessary conditions to protect resource values, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, timber harvesting and other vegetation management activities have not been found to be impacting ORVs; however, if they were to be found impacting ORVs, they may be modified in the segment's corridor to minimize those impacts.

Designation of these segments is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within the Shasta River Complex were added to the National System, the BLM would manage this area.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the segments' corridors, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Throughout the complex, over 70 percent of the segments' corridors are on BLM-administered land. At this time, there are no plans for further acquisitions along Shasta River Complex segments although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

Preservation and administration of the state-listed and federally listed species of salmon within Shasta River Segment A would also be supported by participation from state and federal agencies, including the CDFW and the USFWS, who are both mandated to conserve listed resources.

If the river were not added to the National System, federal, state and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Siskiyou County. Zoning classifications from Siskiyou County include Non-Prime Agriculture District, allowing for agriculture activities (Siskiyou County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control has jurisdiction in Siskiyou County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act, and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were four comments received related to Shasta River Segment A and Segment B. The comments were supportive of WSR designations and specifically the fish, scenic, cultural, and recreational ORVs (BLM 2022). There were no comments opposed to designating either of the segments as WSRs.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Shasta River Segment A as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of Shasta River Segment A as a WSR would be consistent with the North Coast Regional Board's mission of protecting water quality.

Additionally, portions of these segments overlap with the Shasta and Klamath Rivers Canyon ACEC, leading to additional protective management actions that would support the protection and enhancement of ORVs.

Factor 12: The contribution to the river system or basin integrity

Adjacent to the designated Klamath River WSR, designation of the Shasta River Complex segments would increase basin integrity and protection and enhancement of ORVs throughout the Klamath River system. The Klamath River is currently undergoing several major dam removal projects to enhance fisheries habitat for threatened and endangered species; the Shasta River Complex segments would also aid in the protection and enhancement of these species.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for either segment within the Shasta River Complex.

2.14.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For segments within the Shasta River Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Shasta River Segment A	Eligible	Suitable	Not Suitable	Suitable
Shasta River Segment B	Eligible	Suitable	Not Suitable	Suitable

2.14.3 Suitability Determination

Shasta River Complex was found **suitable for inclusion** in the National System based on the information within this report. With a large portion of lands within the corridor on BLM-administered land and adequate access, BLM would be afforded an opportunity for consistent management and effective manageability. Adjacent to the already designated Klamath River WSR provides another opportunity for consistent management of ORVs throughout the river system, especially in the wake of the major dam removal process currently ongoing in the Klamath River.

2.15 THATCHER CREEK

Corridor Description:	Thatcher Creek is located in Mendocino County and contributes to the designated Middle Fork Eel River WSR.		
Field Office:	Arcata	Map:	Map A-16 in Appendix A
Suitability Determination:	Thatcher Creek was determined to be suitable for inclusion into the National System.		
Thatcher Creek			
BLM Segment Length:	1.6 miles	Area on BLM-Administered Land:	547 acres
Total Segment Length:	1.6 miles	Total Segment Area:	752 acres
ORV:	Fish	Tentative Classification:	Wild

2.15.1 Suitability Factors**Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System**

Within Thatcher Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish values was identified as unique, rare, or exemplary at a comparative regional or national scale.

Thatcher Creek is an important contributor to the recovery of federally-listed threatened Chinook salmon and winter-run steelhead in the Middle Fork Eel River. The watershed upstream of BLM-administered lands is almost entirely managed by CDFW or the Forest Service.

Factor 2: Current status of landownership and use in the area

Within this segment, the BLM manages 547 acres (73 percent) of the river corridor, which totals 752 acres. The remaining acres are managed by the state, Forest Service, and private land. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORVs. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Chinook salmon and winter-run steelhead in the Middle Fork Eel River would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there is no application for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry.

Currently, grazing is not found to be impacting the ORV in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORV. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORV.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Thatcher Creek were added to the National System, the BLM and the Forest Service would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 72 percent of the river corridor is already on BLM-administered land. At this time, there are no plans for further acquisitions along Thatcher Creek although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with the Forest Service, CDFW, and local county entities would ensure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County Timber Production Zones and Forest Land, allowing for timber production and harvesting activities (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The North Coast Regional Water Quality Control Board has jurisdiction in Mendocino County and portions of Shasta County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take

enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were two comments received related to Thatcher Creek. The comments were supportive of its designation as a WSR and specifically the associated fish ORV (BLM 2022). There were no comments opposed to designating Thatcher Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of Thatcher Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of Thatcher Creek as a WSR would be consistent with the North Coast Regional Board’s mission of protecting water quality.

Additionally, portions of this segment overlap with the Yuki Wilderness, leading to additional protective management actions that would support the protection and enhancement of ORVs.

Factor 12: The contribution to the river system or basin integrity

The Thatcher Creek watershed is contained entirely on public lands, offering a prime opportunity for protection and enhancement of its identified ORV. Adjacent to the designated Middle Fork Eel WSR, designation would provide consistent management.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Thatcher Creek.

2.15.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Thatcher Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Thatcher Creek	Eligible	Suitable	Not Suitable	Suitable

2.15.3 Suitability Determination

Thatcher Creek was found **suitable for inclusion** in the National System based on the information within this report. The segment is adjacent to an already designated WSR, lending an opportunity for consistent

management, protection, and enhancement of the identified ORVs. Additionally, the entire watershed is contained on public lands, leading to ease of access and effective manageability.

2.16 WEST WEAVER CREEK COMPLEX (WEST WEAVER CREEK, WEST WEAVER CREEK TRIBUTARY, AND GRUB GULCH)

Complex Description:	The segments within the West Weaver Creek Complex are located in Trinity County and contribute to the designated Trinity River WSR.		
Field Office:	Redding	Map:	Map A-17 in Appendix A
Suitability Determination:	All segments within the West Weaver Creek Complex were determined to be suitable for inclusion into the National System		
West Weaver Creek			
BLM Segment Length:	1.4 miles	Area on BLM-Administered Land:	365 acres
Total Segment Length:	1.4 miles	Total Segment Area:	651 acres
ORV:	Fish, Cultural	Tentative Classification:	Scenic
West Weaver Creek Tributary			
BLM Segment Length:	0.1 miles	Area on BLM-Administered Land:	90 acres
Total Segment Length:	0.1 miles	Total Segment Area:	151 acres
ORVs:	Fish, Cultural	Tentative Classification:	Scenic
Grub Gulch			
BLM Segment Length:	0.5 miles	Area on BLM-Administered Land:	86 acres
Total Segment Length:	0.5 miles	Total Segment Area:	291 acres
ORV:	Cultural	Tentative Classification:	Scenic

2.16.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the West Weaver Creek Complex, two ORVs have been identified as making this segment a worthy addition to the National System. Cultural and fish ORVs were identified as unique, rare, or exemplary at a comparative regional or national scale.

The town of Weaverville owes part of its existence to the extensive gold rush and later-period gold mining in various forms of extracting gold along West Weaver Creek and its tributary Grub Gulch. Here, Euro-American and Chinese miners toiled, using pan, rocker, sluice box, monitors, and dredges in the recovery

process. Left behind along this creek system are the extensive tailings and tailing features, rock walls, headwalls, ditches, dams, structure areas, cultivars, and other important evidence of their presence. These largely undisturbed remains have high interpretive value for scientists and the public in better understanding the mining operations that were undertaken here.

The segments within West Weaver Creek Complex are important contributors to the recovery of federally listed threatened coho salmon. They also help support the winter-run steelhead population in the Trinity River watershed.

Factor 2: Current status of landownership and use in the area

Within West Weaver Creek, the BLM manages 365 acres (56 percent) of the river corridor, which totals 651 acres. The remaining acres are managed by the Forest Service and private land. Within West Weaver Creek Tributary, the BLM manages 90 acres (60 percent) of the river corridor, which totals 151 acres. The remaining acres are private land. Within Grub Gulch, BLM manages 86 acres (30 percent) of the river corridor, which totals 291 acres. The remaining acres are private and Forest Service land.

All lands within the segments' corridors are zoned by Trinity County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORVs. Designation would enhance fish populations by helping to preserve existing habitat. Coho salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there are no applications for dams or diversions on file for these river segments.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, timber harvesting is not found to be impacting the ORVs in the segments' corridors; however if the segment were to be designated, and timber harvesting or other vegetation management activities were to be found impacting ORVs, they may be modified in the segments' corridors to minimize impacts.

Designation of these segments is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within the West Weaver Creek Complex were added to the National System, the BLM and the Forest Service would manage the segments.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Throughout the entire complex, approximately 50 percent of the river corridor is BLM-administered land. At this time, there are no plans for further acquisitions along the West Weaver Creek Complex segments, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

The West Weaver Creek Complex flows through the Weaverville Community Forest, a grassroots community-led initiative to help protect and manage the federal lands surrounding the town of Weaverville. The Forest Service, BLM, Trinity County Resource Conservation District, and community members serve on the Weaverville Community Forest Steering Committee to collaborate on management of the area. This partnership between federal agencies, local organizations, and the public would help support the management of the creek complex for its ORVs and long-term protection.

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs. If segments were not added to the National System, federal, state, and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in these segments.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Trinity County zoning was not available at the time of this study. Aerial imagery analysis showed no roads, development, or otherwise within the WSR corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). Region I North Coast Regional Water Quality Control Board has jurisdiction in Tehama County and portions of Shasta County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were three comments received related to the West Weaver Creek Complex. The comments were supportive of a WSR designation and specifically the associated fish ORV. Two comments were received related to Grub Gulch specifically, and three comments were related to West Weaver Creek and its tributary. There were no comments opposed to designating any of the segments within the West Weaver Creek Complex as WSRs.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of West Weaver Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Region I Regional Board, enforces California water quality laws. Designation of West Weaver Creek as a WSR would be consistent with the North Coast Region I Regional Board's mission of protecting water quality.

Designation would support the goals and objectives outlined in the Weaverville Community Forest Strategic Plan which was completed in 2021 through a collaborative process with various agencies and

community members. Information in the strategic plan includes guidelines for collaboratively managing creeks for sustainable water yield and fish habitat. The TRPP works collaboratively with Tribes, federal agencies, and state agencies, to restore river function in the Trinity River to support fish recovery. Designation of the Weaver Creek Complex would support the TRRP’s initiative to improve watershed health by conducting restoration activities on tributaries to the Trinity River.

Factor 12: The contribution to the river system or basin integrity

The segments within the West Weaver Creek Complex are identified as having high intrinsic potential for coho salmon habitat within the Trinity River Basin. An already designated WSR, the Trinity River would benefit from these segments gaining designation as well. Ecological connectivity would increase within the basin and protection, management, and enhancement of ORVs would be consistent throughout the segments.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for the segments included in the West Weaver Creek complex.

2.16.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For segments within the West Weaver Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
West Weaver Creek	Eligible	Suitable	Not Suitable	Suitable
West Weaver Creek Tributary	Eligible	Suitable	Not Suitable	Suitable
Grub Gulch	Eligible	Suitable	Not Suitable	Suitable

2.16.3 Suitability Determination

The segments within West Weaver Creek Complex were found **suitable for inclusion** in the National System based on the information within this report. Designation would provide consistent management of these and already designated segments within the Trinity River basin. The segments represent a large tract of lands with majority public ownership, leading to good access and manageability. This would provide efficient management, protection, and enhancement of the identified ORVs. Opportunities for partner engagement for management would include local Tribes, the Weaverville Community Forest organization, and the Trinity River Restoration Partnership.

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Chapter 3. Suitability Determination: Not Suitable Segments

The following segments were determined to be not suitable for inclusion into the National System due to a variety of reasons. The rationale is provided for each segment determined to be not suitable for inclusion.

3.1 ANCESTOR CREEK

Corridor Description:	Ancestor Creek is in Mendocino County in the northern Coast Ranges and contributes to the Mattole River watershed.		
BLM Segment Length:	0.3 miles	Area on BLM-Administered Land:	41 acres
Total Segment Length:	0.3 miles	Total Segment Area:	207 acres
ORV:	Fish	Field Office:	Arcata
Tentative Classification:	Scenic	Map:	Map A-1 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		

3.1.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Ancestor Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish was identified as unique, rare, or exemplary at a comparative regional or national scale.

Ancestor Creek is an important contributor to the recovery of federally listed threatened coho salmon and winter-run steelhead in the Mattole River. The State of California also lists coho salmon as threatened.

Factor 2: Current status of landownership and use in the area

The BLM manages 41 acres (20 percent) of the river corridor, which totals 207 acres. The remaining 166 acres are private and state lands. The state holds 92 acres and the private lands total 74 acres. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river’s existing condition and protect the identified ORV. Designation would enhance fish populations by helping to preserve existing habitat. Coho salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM’s goals and objectives. Designation could prohibit development of hydroelectric power facilities. Currently, there are no FERC applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, timber harvesting and other vegetation management activities have not been found to be impacting ORVs; however, if they were to be found impacting ORVs, they may be modified in the segment's corridor to minimize those impacts.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the Ancestor Creek were added to the National System, the BLM and the state would co-manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Twenty percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along the Ancestor Creek segment, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with the state and local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORV within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County include Timber Production Zone and Forest Land, which allow for timber production and harvesting activities (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with the NOAA Fisheries and the USFWS. The USFWS and NOAA Fisheries are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under CWA (California Water Board 2023). The North Coast Regional Water Quality Control Board has jurisdiction in Mendocino County and portions of Shasta County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act (The Porter-Cologne Water Quality Control Act), the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the state's waters. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

There were no scoping comments submitted pertaining to Ancestor Creek.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Ancestor Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of

Ancestor Creek as a WSR would be consistent with the Regional Water Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Ancestor Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for the Ancestor Creek segment.

3.1.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Ancestor Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Battle Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.1.3 Suitability Determination

Ancestor Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.2 BAKER CREEK

Corridor Description:	Baker Creek is in Humboldt County in the northern Coast Ranges; it contributes to the Mattole River watershed.		
BLM Segment Length:	0.3 miles	Area on BLM-Administered Land:	104 acres
Total Segment Length:	0.3 miles	Total Segment Area:	223 acres
ORV:	Fish	Field Office:	Arcata
Tentative Classification:	Scenic	Map:	Map A-1 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		

3.2.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Baker Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish was identified as unique, rare, or exemplary at a comparative regional or national scale.

Baker Creek is an important contributor to the recovery of federally listed threatened coho salmon, Chinook salmon, and winter-run steelhead in the Mattole River. The State of California also lists coho salmon as threatened.

Factor 2: Current status of landownership and use in the area

The BLM manages 104 acres (47 percent) of the total 223-acre river corridor. The remaining 119 acres are state (37 acres) and private (82 acres) land.

Zoning classifications from Humboldt County include a timberland production zone, which allows the land to be devoted to and used for growing and harvesting timber, along with other compatible uses, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would enhance fish populations by helping to preserve existing habitat. Coho salmon, spring-run Chinook salmon, and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORV in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORV. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORV.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Baker Creek were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 46 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Baker Creek, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with the state and local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and the ORV within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

The southeast section of the Baker Creek corridor includes a 15-year renewal of a conditional use permit, surface mining permit and reclamation plan for the existing Baker Creek Quarry. These permits were renewed by the BLM in March 2021. A notice of a mitigated negative declaration was signed by the BLM finding no significant adverse environmental effects.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Humboldt County. Zoning classifications from Humboldt County include a Timber Production Zone, which allows for timber production activities (Humboldt County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protections to WSRs' free-flow status, ORVs, and tentative classifications. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the federal ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). Region I North Coast Regional Water Quality Control Board has jurisdiction in Humboldt County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

There were no scoping comments received related to Baker Creek.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Baker Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, CESA, administered by the Regional Water Board, enforces California water quality laws. Designation of Baker Creek as a WSR would be consistent with the Regional Water Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Baker Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. One FERC project is proposed for the Baker Creek segment.

3.2.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Baker Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Baker Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.2.3 Suitability Determination

Baker Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide consistent management of the river system; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. Additionally, there are federal and state laws that currently apply protections to portions of the ORV. These protections will ensure ORVs and free-flow are protected into the future without WSR designation. Finally, there are collaborations ongoing to continue to restore, protect, and enhance portions of Baker Creek through other agencies and organizations.

3.3 BEAR CREEK COMPLEX (BEAR CREEK SEGMENT A AND BEAR CREEK SEGMENT B)

Corridor Description:	Bear Creek is in Shasta County and contributes to the Sacramento River watershed.		
Field Office:	Redding	Map:	Map A-3 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System.		
Bear Creek Segment A			
BLM Segment Length:	1.8 miles	Area on BLM-Administered Land:	441 acres
Total Segment Length:	8.3 miles	Total Segment Area:	818 acres
ORVs:	Fish, Recreation	Tentative Classification:	Scenic
Bear Creek Segment B			
BLM Segment Length:	1.9 miles	Area on BLM-Administered Land:	469 acres
Total Segment Length:	8.3 miles	Total Segment Area:	866 acres
ORVs:	Fish, Recreation	Tentative Classification:	Wild

3.3.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the Bear Creek Complex, two ORVs have been identified as making this segment a worthy addition to the National System. Fish and recreation ORVs were identified as unique, rare, or exemplary at a comparative regional or national scale.

Much of the Bear Creek Complex is secluded and undeveloped. Access is physically demanding, and this segment is inaccessible by roads or trails. The lack of accessibility and the secluded location contribute to an unmodified natural environment and excellent opportunities for primitive and unconfined types of recreation. The segments are important contributors to the recovery of federally listed threatened winter-run steelhead in the Central Valley.

Factor 2: Current status of landownership and use in the area

For Bear Creek Segment A, BLM manages 441 acres (54 percent) of the segment corridor, which totals 818 acres. The remaining 377 acres are private land. For Bear Creek Segment B, BLM manages 469 acres (54 percent) of the river corridor, which totals 866 acres. The remaining 396 acres are private land. Lands within both segment corridors is zoned by Shasta County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORVs. Designation would enhance fish populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORVs in the river corridor; however, livestock grazing could be curtailed if a segment were to be designated, and grazing began to impact the associated ORVs. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORVs.

Designation of these segments is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within the Bear Creek Complex were added to the National System, the BLM would manage this area.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 54 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along either of the Bear Creek segments, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORVs within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Shasta County. Zoning classifications from Shasta County include Exclusive Agriculture and Agricultural Preserve; these classifications allow for a combination of agricultural activities. The intent for areas zoned as exclusive agriculture and agricultural preserve is for agricultural purposes (Shasta County 2023).

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protections to WSRs' free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make

recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region 5 Central Valley Regional Water Quality Control Board has jurisdiction in Tehama County and portions of Shasta County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Two comments were received related to Bear Creek Segment A and Bear Creek Segment B. The comments were supportive of designation as WSRs and specifically noted the fish and recreation ORVs as meeting eligibility criteria (BLM 2022). There were no comments opposed to designating either segment as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of these segments as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Central Valley Regional Board, enforces California water quality laws. Designation of Bear Creek Segment A as a WSR would be consistent with the Central Valley Regional Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

The segments with Bear Creek Complex contain a minimal amount of BLM-administered lands within its segment corridors and contain fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are currently no FERC projects proposed for the segments within the Bear Creek Complex.

3.3.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For segments within Bear Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Bear Creek Segment A	Eligible	Suitable	Not Suitable	Not Suitable
Bear Creek Segment B	Eligible	Suitable	Not Suitable	Not Suitable

3.3.3 Suitability Determination

Bear Creek Segment A and Bear Creek Segment B were found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. When looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.4 BELL SPRINGS CREEK COMPLEX (BELL SPRINGS CREEK AND BELL SPRINGS CREEK TRIBUTARY)

Corridor Description:	Bell Springs Creek is in Mendocino County and contributes to the Eel River watershed.		
Field Office:	Arcata	Map:	Map A-5 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		
<i>Bell Springs Creek</i>			
BLM Segment Length:	1.3 miles	Area on BLM-Administered Land:	164 acres
Total Segment Length:	1.3 miles	Total Segment Area:	483 acres
ORV:	Fish	Tentative Classification:	Wild
<i>Bell Springs Creek Tributary</i>			
BLM Segment Length:	0.4 miles	Area on BLM-Administered Land:	237 acres
Total Segment Length:	0.4 miles	Total Segment Area:	252 acres
ORV:	Ecology, Scenic	Tentative Classification:	Scenic

3.4.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the Bell Springs Creek Complex, three ORVs have been identified as making this segment a worthy addition to the National System. ORVs for fish, ecology, and scenic were identified as unique, rare, or exemplary at a comparative regional or national scale.

Bell Springs Creek is an important contributor to the recovery of federally listed threatened Chinook salmon and winter-run steelhead in the Eel River.

Within Bell Springs Tributary, a rare old-growth forest community is located in the riparian corridor. This rare old-growth forest in the riparian corridor provides unique scenery.

Factor 2: Current status of landownership and use in the area

Within Bell Springs Creek, BLM manages 164 acres (34 percent) of the river corridor, which totals 483 acres. The remaining 319 acres are private land. Within Bell Springs Creek Tributary, BLM manages 237 acres (94 percent) of the river corridor, which totals 252 acres. The remaining 15 acres are private land. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the segments' existing conditions and protect the identified ORVs. Designation would enhance fish populations by helping to preserve existing habitat. Federally listed threatened Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for these segments.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORVs in the segment corridors; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORVs. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORVs.

Designation of these segments is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within Bell Springs Creek Complex were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the segment corridors. Over 34 percent of the total complex corridor is already on BLM-administered land. At this time, there are no plans for further acquisitions along the segments, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the segments were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORVs within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in these segments.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the segment corridors is zoned by Mendocino County. Zoning classifications from Mendocino County include Rangeland, which allows for rangeland activities; Forestland; and Timberland, which allow for growing, harvesting, and production of timber-related products (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protections to WSRs' free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Mendocino County and portions of Shasta County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Two comments were received related to Bell Springs Creek and Bell Springs Creek Tributary. The comments were supportive of the segments' designation as WSRs and specifically noted the fish, ecology, and scenic ORVs as meeting eligibility criteria (BLM 2022). There were no comments opposed to designating either segment as WSRs.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Bell Springs Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of Bell Springs Creek as a WSR would be consistent with the Regional Water Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

The segments within Bell Springs Creek Complex contain a minimal amount of BLM-administered lands within its segment corridors, and contain fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Bell Springs Creek.

3.4.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For the segments within Bell Springs Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Bell Springs Creek	Eligible	Suitable	Not Suitable	Not Suitable
Bell Springs Creek Tributary	Eligible	Suitable	Not Suitable	Not Suitable

3.4.3 Suitability Determination

The segments within Bell Springs Creek Complex were found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.5 BIG CHICO CREEK COMPLEX (BIG CHICO CREEK SEGMENT A, BIG CHICO CREEK SEGMENT B)

Corridor Description:	The segments within the Big Chico Creek Complex are located in Butte County in the foothills of the Sierra Nevada.		
Field Office:	Redding	Map:	Map A-6 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		
Big Chico Creek Segment A			
BLM Segment Length:	0.9 miles	Area on BLM-Administered Land:	221 acres
Total Segment Length:	4.2 miles	Total Segment Area:	723 acres
ORV:	Recreation	Tentative Classification:	Scenic
Big Chico Creek Segment B			
BLM Segment Length:	0.6 miles	Area on BLM-Administered Land:	144 acres
Total Segment Length:	4.2 miles	Total Segment Area:	300 acres
ORV:	Recreation	Tentative Classification:	Recreational

3.5.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the Big Chico Creek Complex, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for recreation was identified as unique, rare, or exemplary at a comparative regional or national scale.

Most of the Big Chico Creek Complex segment corridors are in remote, rugged, natural settings that offer users outstanding opportunities for primitive types of recreation.

Factor 2: Current status of landownership and use in the area

Within Big Chico Creek Segment A, BLM manages 221 acres (31 percent) of the total 723-acre river corridor. The remaining 502 acres are private land. Within Big Chico Creek Segment B, BLM manages 144 acres (48 percent) of the river corridor, which totals 300 acres. The remaining 156 acres are private land. Land within the river corridor is zoned by Butte County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment. Segments with a recreational classification that are ultimately designated would be closed to mineral leasing, allow mineral material development with application of necessary conditions to protect resource values, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, timber harvesting is not found to be impacting the ORVs in the segments' corridors; however, if the segment were to be designated, and timber harvesting or other vegetation management activities were to be found impacting ORVs, activities may be modified in the segments' corridors to minimize impacts.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within the Big Chico Creek Complex were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 30 percent of the total complex corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along these segments, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the segments were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORV within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Butte County. Zoning classifications from Butte County include Timberland Production Zone, which allows for growing and harvesting timber (Butte County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protections to a WSR's free-flow status, ORVs, and tentative classification.

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region 5 Central Valley Regional Water Quality Control Board has jurisdiction in Butte County and portions of Shasta County. The Regional Water Board is responsible for enforcing CESA, the regional Basin Plan, and permits that have been issued for projects. CESA and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate CESA, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

One comment was received related to Big Chico Creek Segment A and Big Chico Creek Segment B. The comment was supportive of the segments' designation as WSRs and specifically noted the recreation and habitat connectivity provided by the segments. (BLM 2022). There were no comments opposed to designating either segment as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The CWA protects the nation's waters and the BLM is required to assist in implementing the law. Designation of the segments within Big Chico Creek Complex would support the goals and objectives of this law. On a state level, the Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of the segments within Big Chico Creek Complex as WSRs would be consistent with the Regional Water Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

The segments within Big Chico Creek Complex contain a minimal amount of BLM-administered lands within its segments' corridors and contain fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. One FERC project is proposed for Big Chico Creek; however, the project would be located outside of the WSR segments.

3.5.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For the segments within Big Chico Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Big Chico Creek Segment A	Eligible	Suitable	Not Suitable	Not Suitable
Big Chico Creek Segment B	Eligible	Suitable	Not Suitable	Not Suitable

3.5.3 Suitability Determination

Big Chico Creek Segment A was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.6 BOARD TREE CANYON

Corridor Description:	Board Tree Canyon is in Mendocino County in the northern Coast Ranges.		
Field Office:	Arcata	Map:	Map A-40 in Appendix A, Eligibility Study
BLM Segment Length:	0.3 miles	Area on BLM-Administered Land:	217 acres
Total Segment Length:	0.3 miles	Total Segment Area:	222 acres
ORVs:	Fish, Ecology, Scenic	Tentative Classification:	Wild
Suitability Determination:	Not suitable for inclusion into the National System		

3.6.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Board Tree Canyon, three ORVs have been identified as making this segment a worthy addition to the National System. Fish, ecology, and scenery ORVs were identified as unique, rare, or exemplary at a comparative regional or national scale.

A rare old-growth forest community is in the riparian corridor. This rare old-growth forest in the riparian corridor provides unique scenery. Board Tree Canyon is an important contributor to the recovery of federally listed threatened winter-run steelhead in the Eel River.

Factor 2: Current status of landownership and use in the area

The BLM manages 217 acres (97 percent) of the total 222-acre river corridor. The remaining 5 acres are private land. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORVs. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry.

Currently, timber harvesting and other vegetation management activities have not been found to be impacting ORVs; however, if they were to be found impacting ORVs, they may be modified in the segment's corridor to minimize those impacts.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Board Tree Canyon were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 97 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Board Tree Canyon, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would

continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORVs within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County include Rangeland and Forestland, which allow for agricultural and production of timber activities (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protections to a WSR's free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Mendocino County and portions of Shasta County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

There were no comments received related to Board Creek Canyon.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of Board Creek Canyon as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of Board Creek Canyon as a WSR would be consistent with the Regional Water Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Board Tree Canyon contains a minimal amount of BLM-administered lands within its segment corridor surrounded by private lands, meaning limited availability for access and manageability. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Board Tree Canyon.

3.6.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Board Tree Canyon, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Board Tree Canyon	Eligible	Suitable	Not Suitable	Not Suitable

3.6.3 Suitability Determination

Board Tree Canyon was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.7 BRIN CANYON CREEK

Corridor Description:	Brin Canyon Creek is in Mendocino and Trinity Counties in the northern Coast Ranges.		
Field Office:	Arcata	Map:	Map A-7 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		
BLM Segment Length:	0.9 miles	Area on BLM-Administered Land:	311 acres
Total Segment Length:	0.9 miles	Total Segment Area:	385 acres
ORV:	Fish	Tentative Classification:	Scenic

3.7.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Brin Canyon Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish was identified as unique, rare, or exemplary at a comparative regional or national scale.

Factor 2: Current status of landownership and use in the area

The BLM manages 311 acres (81 percent) of the total 385-acre river corridor. The remaining 74 acres are private land. Land within the river corridor is zoned by Mendocino and Trinity Counties, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, timber harvesting and other vegetation management activities have not been found to be impacting ORVs; however, if they were to be found impacting ORVs, they may be modified in the segment's corridor to minimize those impacts.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Brin Canyon Creek were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 80 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Brin Canyon Creek, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORV within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino and Trinity Counties Zoning classifications from Mendocino and Trinity Counties include a Timber Production Zone, which allows for timber harvesting activities, and unclassified. (Trinity County 2023; Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protection to a WSR's free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region 5 North Coast Regional Water Quality Control Board has jurisdiction in Mendocino County and portions of Trinity County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Two comments were received related to Brin Canyon Creek. The comments were supportive of the segment's designation as a WSR and specifically the associated fish ORV (BLM 2022). There were no comments received opposed to designating Brin Canyon Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Brin Canyon Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of Brin Canyon Creek as a WSR would be consistent with the Central Valley Regional Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Brin Canyon Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Brin Canyon Creek.

3.7.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Brin Canyon Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Brin Canyon Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.7.3 Suitability Determination

Brin Canyon Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.8 BUTLER CREEK

Corridor Description:	Butler Creek is in Mendocino County in the northern Coast Ranges; it contributes to the South Fork Eel River watershed.		
Field Office:	Arcata	Map:	Map A-8 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		
BLM Segment Length:	0.8 miles	Area on BLM-Administered Land:	347 acres
Total Segment Length:	0.8 miles	Total Segment Area:	372 acres
ORV:	Fish	Tentative Classification:	Wild

3.8.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Butler Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish was identified as unique, rare, or exemplary at a comparative regional or national scale.

Butler Creek is an important contributor to the recovery of federally listed threatened coho salmon and winter-run steelhead in the South Fork Eel River. The State of California also lists coho salmon as threatened under the CESA.

Factor 2: Current status of landownership and use in the area

The BLM manages 270 acres (72 percent) of the total 372-acre river corridor. The remaining 102 acres are private land. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORVs. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Coho salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry.

Currently, timber harvesting and other vegetation management activities have not been found to be impacting ORVs; however, if they were to be found impacting ORVs, they may be modified in the segment's corridor to minimize those impacts.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Butler Creek were added to the National System, the BLM and private entities would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 72 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Butler Creek, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and the ORV within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County include Timberland Production, which allows for timber harvesting activities (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protections to WSRs' free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Mendocino County and portions of Shasta County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

There were no comments received related to Butler Creek.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of Butler Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of Butler Creek as a WSR would be consistent with the Regional Water Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Butler Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Butler Creek.

3.8.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Butler Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Butler Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.8.3 Suitability Determination

Butler Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.9 BUTTE CREEK I SEGMENT A (SACRAMENTO RIVER)

Corridor Description:	Butte Creek I Segment A is in Butte County in the foothills of the Sierra Nevada.		
Field Office:	Redding	Map:	Map A-6 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		
BLM Segment Length:	0.7 miles	Area on BLM-Administered Land:	89 acres
Total Segment Length:	0.7 miles	Total Segment Area:	484 acres
ORVs:	Fish, Recreation	Tentative Classification:	Scenic

3.9.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Butte Creek I Segment A, two ORVs have been identified as making this segment a worthy addition to the National System. ORVs for fish and recreation were identified as unique, rare, or exemplary at a comparative regional or national scale.

Butte Creek I Segment A is a stronghold for federally listed threatened spring-run Chinook salmon. It also is one of the only streams in the Central Valley that has a genetically distinct wild population. Butte Creek is an important contributor to the recovery of threatened winter-run steelhead, and it also supports fall-run Chinook salmon. Butte Creek I Segment A also includes increasingly popular whitewater boating with unique rapids for the region.

Factor 2: Current status of landownership and use in the area

The BLM manages 89 acres (18 percent) of the river corridor, which totals 484 acres. The remaining 395 acres are private land. Land within the river corridor is zoned by Butte County, as discussed in Criterion 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORVs. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are two applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORVs in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORVs. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORVs.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Butte Creek I Segment A were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 18 percent of the river corridor is already on BLM-administered land. At this time, there are no plans for further acquisitions along Butte Creek I Segment A, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would

continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORVs within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Butte County. Zoning classifications from Butte County include the timber production zone, which allows for timber growth and production activities (Butte County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The statelocal government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protections to WSRs' free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the federal ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region 5 Central Valley Regional Water Quality Control Board has jurisdiction in Butte County and portions of Shasta County. The Regional Water Board is responsible for enforcing the Act, the Basin Plan, and permits that have been issued for projects. The Act and the Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate the Act, the Basin Plan, or a permit (California Water Board 2023).

Criterion 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Two comments were related to Butte Creek I Segment A. The comments were supportive of the creek's designation as a WSR and specifically the fish and recreation ORVs (BLM 2022). There were no comments opposed to designating Butte Creek I Segment A as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of Butte Creek I Segment A as a WSR would support the goals and objectives of the CWA and ESA. On a state level, the Act, administered by the Central Valley Regional Board, enforces California water quality laws. Designation of Butte Creek I Segment A as a WSR would be consistent with the Central Valley Regional Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Coleman Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. Two FERC projects are proposed for Butte Creek I Segment A.

3.9.2 Land Use Plan Alternatives

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Butte Creek I Segment A	Eligible	Suitable	Not Suitable	Not Suitable

3.9.3 Suitability Determination

Butte Creek I Segment A was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide consistent management of the river system; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.10 BUTTE CREEK 2 (VAN DUZEN RIVER) COMPLEX (BUTTE CREEK 2, BUTTE CREEK 2 TRIBUTARY 1, BUTTE CREEK TRIBUTARY 2)

Corridor Description:	Butte Creek 2 (Van Duzen Creek) is in Humboldt County in the northern Coast Ranges.		
Field Office:	Arcata	Map:	Map A-9 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		
Butte Creek 2			
BLM Segment Length:	1.8 miles	Area on BLM-Administered Land:	618 acres
Total Segment Length:	1.8 miles	Total Segment Area:	853 acres
ORVs:	Ecology, Scenic, Fish	Tentative Classification:	Wild
Butte Creek 2 Tributary 1			
BLM Segment Length:	1.3 miles	Area on BLM-Administered Land:	265 acres
Total Segment Length:	1.3 miles	Total Segment Area:	486 acres
ORVs:	Ecology, Scenic	Tentative Classification:	Wild
Butte Creek 2 Tributary 2			
BLM Segment Length:	0.1 miles	Area on BLM-Administered Land:	49 acres
Total Segment Length:	0.1 miles	Total Segment Area:	149 acres
ORVs:	Ecology, Scenic	Tentative Classification:	Wild

3.10.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Butte Creek 2 Complex, three ORVs have been identified as making this segment a worthy addition to the National System. Ecology, scenic, and fish ORVs were identified as unique, rare, or exemplary at a comparative regional or national scale.

A rare old-growth forest community is located in the riparian corridors. This rare old-growth forest provides unique scenery. These segments are important contributors to the recovery of federally listed threatened winter-run and summer-run steelhead in the Van Duzen River. The State of California also lists summer-run steelhead as endangered under the CESA.

Factor 2: Current status of landownership and use in the area

Within Butte Creek 2, BLM manages 618 acres (72 percent) of the total 853-acre river corridor. The remaining 235 acres are private land. Within Butte Creek 2 Tributary 1, BLM manages 265 acres (55

percent) of the river corridor, which totals 485 acres. The remaining 220 acres are private land. Within Butte Creek 2 Tributary 2, BLM manages 49 acres (33 percent) of the river corridor, which totals 149 acres. The remaining 100 acres are private land. Land within the river corridor is zoned by Humboldt County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing conditions and protect the identified ORVs. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for these segments.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry.

Currently, timber harvesting and other vegetation management activities have not been found to be impacting ORVs; however, if they were to be found impacting ORVs, they may be modified in the segment's corridor to minimize those impacts.

Designation of these segments is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within Butte Creek 2 Complex were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the segment corridors, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the segment corridors. Over 72 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Butte Creek 2 Complex, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated VSRs.

If the segments were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORVs within the segment corridors under existing laws, authorities, and ordinances. It is not anticipated that VSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Humboldt County. Zoning classifications from Humboldt County include Unclassified, Timber Production Zone, and Agricultural Exclusive; these classifications allow for timber and agricultural activities (Humboldt County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protections to VSRs' free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Humboldt County and portions of Shasta County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Four comments were received related to Butte Creek 2, Butte Creek 2 Tributary 1, and Butte Creek 2 Tributary 2. The comments were supportive of the segment designations as WSRs and noted the associated fish, scenic, and ecological ORVs as meeting eligibility criteria (BLM 2022). There were no comments received opposed to designating any of the segments within Butte Creek 2 Complex as WSRs.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of Butte Creek 2 as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of Butte Creek 2 as a WSR would be consistent with the Regional Water Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

The segments within Butte Creek 2 Complex contain a minimal amount of BLM-administered lands within its segment corridor and have limited access for manageability. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. One FERC project is proposed for Butte Creek 2; however, it is proposed for outside the corridor boundaries for this segment.

3.10.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For the segments within Butte Creek 2, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Butte Creek 2	Eligible	Suitable	Not Suitable	Not Suitable
Butte Creek 2 Tributary 1	Eligible	Suitable	Not Suitable	Not Suitable
Butte Creek 2 Tributary 2	Eligible	Suitable	Not Suitable	Not Suitable

3.10.3 Suitability Determination

The segments within Butte Creek 2 Complex were found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide consistent management of the river system; however, the percentage of BLM-managed lands within the corridor is minimal and fragmented. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the

systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation. Additionally, the BLM-administered lands over which the segment flows are contained in an ACEC, providing further protection to the segment and its ORVs.

3.11 CASOOSE CREEK

Corridor Description:	Casoose Creek is in Trinity County in the northern Coast Ranges.		
Field Office:	Arcata	Map:	Map A-10 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		
BLM Segment Length:	1.6 miles	Area on BLM-Administered Land:	520 acres
Total Segment Length:	1.6 miles	Total Segment Area:	851 acres
ORV:	Fish	Tentative Classification:	Scenic

3.11.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Casoose Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish was identified as unique, rare, or exemplary at a comparative regional or national scale.

Casoose Creek is an important contributor to the recovery of federally listed threatened winter-run steelhead in the North Fork Eel River.

Factor 2: Current status of landownership and use in the area

The BLM manages 520 acres (61 percent) of the total 851-acre river corridor. The remaining 331 acres are private land. Land within the river corridor is zoned by Trinity County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river’s existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM’s goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a

scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORV in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORV. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORV.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Casoose Creek were added to the National System, the BLM and private entities would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 61 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Casoose Creek, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORV within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Trinity County zoning was not available at the time of this study. An aerial imagery analysis showed no roads or development within the river corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protections to WSRs' free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Trinity County and portions of Shasta County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Two comments were received related to Casoose Creek. The comments were supportive of the segment's designation as a WSR and the associated fish ORV (BLM 2022). There were no comments received opposed to designating Casoose Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Casoose Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act,

administered by the Regional Water Board, enforces California water quality laws. Designation of Casoose Creek as a WSR would be consistent with the Regional Water Board’s mission of protecting water quality.

Factor 12: The contribution to river contribution to the river system or basin integrity

Casoose Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Casoose Creek.

3.11.2 Land Use Plan Alternatives

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Casoose Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.11.3 Suitability Determination

Casoose Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.12 CEDAR GULCH

Corridor Description:	The location of the sensitive cultural site is withheld.		
Field Office:	Redding	Map:	N/A
Suitability Determination:	Not suitable for inclusion into the National System		
BLM Segment Length:	0.2 miles	Area on BLM-Administered Land:	36 acres
Total Segment Length:	0.2 miles	Total Segment Area:	187 acres
ORV:	Cultural	Tentative Classification:	Scenic

3.12.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Cedar Gulch, one ORV has been identified as making this segment a worthy addition to the National System. A cultural ORV was identified as unique, rare, or exemplary at a comparative regional or national scale.

This small stream segment passes within yards of a historic Shasta cemetery, used from the mid-nineteenth century until the early twentieth century. The BLM has restored the looted cemetery by filling holes, constructing a fence, and erecting a number of large and small signs. This is a sacred site to the Shasta Indians. Archaeologists have published a scientific report on artifacts found here that were left by looters. These artifacts indicate early interactions between Euro-American traders and Shasta Indians.

Factor 2: Current status of landownership and use in the area

The BLM manages 36 acres (19 percent) of the river corridor, which totals 187 acres. The remaining 151 acres are private land. Land within the river corridor is zoned by Siskiyou County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the Cedar Gulch were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Only 19 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Cedar Gulch, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with and local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORV within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Siskiyou County. Zoning classifications from Siskiyou County include nonprime agriculture lands, which allows for general agricultural activities to occur (Siskiyou County 2023).

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protections to WSRs' free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the federal ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region 5 Central Valley Regional Water Quality Control Board has jurisdiction in Siskiyou County and portions of Shasta County. The Regional Water Board is responsible for enforcing the Act, the Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing

administrative civil liabilities (fines) against persons who violate the Porter-Cologne Water Quality Control Act, the Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

There were no comments related to Cedar Gulch.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of the McAdam Creek Complex as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of the McAdam Creek Complex as a WSR would be consistent with the North Coast Regional Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Cedar Gulch contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Cedar Gulch.

3.12.2 Land Use Plan Alternatives

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Cedar Gulch	Eligible	Suitable	Not Suitable	Not Suitable

3.12.3 Suitability Determination

Cedar Gulch was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide consistent management of the river system; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.13 CHAMISE CREEK COMPLEX (CHAMISE CREEK AND CHAMISE CREEK TRIBUTARIES)

Corridor Description:	Chamise Creek is in Mendocino County in the northern Coast Ranges.		
Field Office:	Arcata	Map:	Map A-5 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		
Chamise Creek			
BLM Segment Length:	0.5 miles	Area on BLM-Administered Land:	206 acres
Total Segment Length:	0.5 miles	Total Segment Area:	403 acres
ORVs:	Ecology, Scenic	Tentative Classification:	Wild
Chamise Creek Tributaries			
BLM Segment Length:	0.6 miles	Area on BLM-Administered Land:	221 acres
Total Segment Length:	0.6 miles	Total Segment Area:	385 acres
ORVs:	Ecology, Scenic	Tentative Classification:	Wild

3.13.1 Suitability Factors**Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System**

Within Chamise Creek Complex, two ORVs have been identified as making this segment a worthy addition to the National System. Ecology and scenic ORVs were identified as unique, rare, or exemplary at a comparative regional or national scale.

A rare old-growth forest community is in the riparian corridors. This rare old-growth forest provides unique scenery.

Factor 2: Current status of landownership and use in the area

Within Chamise Creek, BLM manages 206 acres (51 percent) of the total 403-acre river corridor. The remaining 197 acres are private land. Within Chamise Creek Tributaries, BLM manages 221 acres (57 percent) of the river corridor, which totals 385 acres. The remaining 164 acres are private land. Land within the river corridor is zoned by Mendocino County, as described in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORVs. Designation would enhance the scenic and ecology ORVs by helping to preserve the existing resources that contribute to these ORVs.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for these segments.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry.

Currently, grazing is not found to be impacting the ORVs in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORVs. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORVs.

Designation of these segments is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Chamise Creek Complex were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 51 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Chamise Creek Complex, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the segments were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORVs within the segments corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in these segments.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications include Timber Production Zone, Forest Land, and Public Utility Zone; these classifications allow for timber production and land designated to public utilities (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protections to WSRs' free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Mendocino County and portions of Shasta County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on forest use projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

One comment was received related to Chamise Creek and Chamise Creek Tributaries. The comment was supportive of the segments' designations as WSRs and specifically noted the associated scenic and ecology ORVs as meeting eligibility criteria (BLM 2022). There were no comments received opposed to designating Chamise Creek or Chamise Creek Tributaries as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of Chamise Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of Chamise Creek as a WSR would be consistent with the Regional Water Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

The Chamise Creek Complex contains a minimal amount of BLM-administered lands within its segment corridors and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Chamise Creek.

3.13.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For the segments within the Chamise Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Chamise Creek	Eligible	Suitable	Not Suitable	Not Suitable
Chamise Creek Tributaries	Eligible	Suitable	Not Suitable	Not Suitable

3.13.3 Suitability Determination

Chamise Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide consistent management of the river system; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.14 CHARLTON CREEK COMPLEX (CHARLTON CREEK AND CHARLTON CREEK TRIBUTARIES)

Corridor Description:	Charlton Creek is in Mendocino County in the northern Coast Ranges.		
Field Office:	Arcata	Map:	Map A-5 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		
Charlton Creek			
BLM Segment Length:	2.3 miles	Area on BLM-Administered Land:	699 acres
Total Segment Length:	2.3 miles	Total Segment Area:	1,083 acres
ORVs:	Ecology, Scenic	Tentative Classification:	Wild
Charlton Creek Tributaries			
BLM Segment Length:	2.5 miles	Area on BLM-Administered Land:	875 acres
Total Segment Length:	2.5 miles	Total Segment Area:	1,328 acres
ORVs:	Ecology, Scenic	Tentative Classification:	Wild

3.14.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the Charlton Creek Complex, two ORVs have been identified as making this segment a worthy addition to the National System. Ecology and scenery ORVs were identified as unique, rare, or exemplary at a comparative regional or national scale.

A rare old-growth forest community is in the riparian corridor. This rare old-growth forest in the riparian corridor provides unique scenery.

Factor 2: Current status of landownership and use in the area

Within Charlton Creek, BLM manages 699 acres (64 percent) of the total 1,083-acre river corridor. The remaining 384 acres are private land. Within Charlton Creek Tributaries, BLM manages 875 acres (66percent) of the river corridor, which totals 1,328 acres. The remaining 453 acres are private land. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORVs. Designation would protect the ORVs by protecting the resources that contribute to them. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversion on file for these segments.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry.

Currently, grazing is not found to be impacting the ORVs in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORVs. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORVs.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within Charlton Creek Complex were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 64 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Charlton Creek Complex, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the segments were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORVs within the

river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in these segments.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County include Public Facilities, which allow for public utility, and Forest Land and Timberland Production zoning, which allow for timber and timber-related uses (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protections to WSRs' free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the federal ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control has jurisdiction in Mendocino County and portions of Humboldt and Trinity Counties. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Two comments were received related to Charlton Creek and Charlton Creek Tributaries. The comments were supportive of the segments' designation as a WSR and specifically noted the associated ecology and scenic ORVs as meeting eligibility criteria (BLM 2022). There were no comments received opposed to designating Charlton Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Charlton Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of Charlton Creek as a WSR would be consistent with the Regional Water Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

The segments within the Charlton Creek Complex contain a minimal amount of BLM-administered lands within its segment corridors and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Charlton Creek Complex.

3.14.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Battle Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Charlton Creek	Eligible	Suitable	Not Suitable	Not Suitable
Charlton Creek Tributaries	Eligible	Suitable	Not Suitable	Not Suitable

3.14.3 Suitability Determination

The segments within the Charlton Creek Complex were found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.15 COLEMAN CREEK

Corridor Description:	Coleman Creek is in Humboldt County and contributes to the Eel River watershed.		
Field Office:	Arcata	Map:	Map A-13 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		
BLM Segment Length:	1.1 miles	Area on BLM-Administered Land:	270 acres
Total Segment Length:	1.1 miles	Total Segment Area:	487 acres
ORV:	Fish	Tentative Classification:	Scenic

3.15.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Coleman Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish was identified as unique, rare, or exemplary at a comparative regional or national scale.

Coleman Creek is an important contributor to the recovery of federally listed threatened winter-run steelhead in the Eel River.

Factor 2: Current status of landownership and use in the area

The BLM manages 270 acres (55 percent) of the total 487-acre river corridor. The remaining 217 acres are private land. Land within the river corridor is zoned by Humboldt County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORV in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORV. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORV.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Coleman Creek were added to the National System, the BLM and private entities would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 55 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Coleman Creek, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with and local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORV within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Humboldt County. Zoning classifications from Humboldt County include Agriculture Exclusive and Timber Production Zone; these classifications allow for timber production and predominately agricultural activities (Humboldt County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protection to a WSR's free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Humboldt County and portions of Mendocino and Trinity Counties. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

One comment was received related to Coleman Creek. The comment was supportive of the segment's designation as a WSR and specifically the associated fish ORV (BLM 2022). There were no comments opposed to designating Coleman Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Coleman Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of Coleman Creek as a WSR would be consistent with the Regional Water Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Coleman Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Coleman Creek.

3.15.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Coleman Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Coleman Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.15.3 Suitability Determination

Coleman Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.16 CRUSO CABIN CREEK

Corridor Description:	Cruso Cabin Creek is in Mendocino County in the northern Coast Ranges.		
Field Office:	Arcata	Map:	Map A-19 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		
BLM Segment Length:	0.3 miles	Area on BLM-Administered Land:	99 acres
Total Segment Length:	0.3 miles	Total Segment Area:	211 acres
ORV:	Fish	Tentative Classification:	Scenic

3.16.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Cruso Cabin Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish has been identified as unique, rare, or exemplary at a comparative regional or national scale.

Cruso Cabin Creek is an important contributor to the recovery of federally listed threatened winter-run steelhead in the South Fork Eel River.

Factor 2: Current status of landownership and use in the area

The BLM manages 99 acres (47 percent) of the total 211-acre river corridor. The remaining 112 acres are private land. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORV in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORV. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORV.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the Cruso Cabin Creek were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Forty-seven percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Cruso Cabin Creek, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORV within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County include the Timber Production Zone and Forest Land, which allow for timber harvesting activities (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protection to a WSR's free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make

recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the federal ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Mendocino County and portions Humboldt and Trinity Counties. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate the Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Two comments were received related to Cruso Cabin Creek. The comments were supportive of the creek's designation as a WSR and specifically the associated fish ORV (BLM 2022). There were no comments received opposed to designating Cruso Cabin Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Cruso Cabin Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of Cruso Cabin Creek as a WSR would be consistent with the North Creek Regional Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Cruso Cabin Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Cruso Cabin Creek.

3.16.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Cruso Cabin Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Cruso Cabin Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.16.3 Suitability Determination

Cruso Cabin Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.17 DEER CREEK

Corridor Description:	Deer Creek is in Tehama County in the Cascade Mountain Range.		
Field Office:	Redding	Map:	Map A-15 Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System.		
BLM Segment Length:	0.2 miles	Area on BLM-Administered Land:	91 acres
Total Segment Length:	0.2 miles	Total Segment Area:	253 acres
ORV:	Recreation, Fish, Scenery	Tentative Classification:	Scenic

3.17.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Deer Creek, three ORVs have been identified as making this segment a worthy addition to the National System. ORVs for recreation, scenery, and fish were identified as unique, rare, or exemplary at a comparative regional or national scale.

Deer Creek offers a unique and popular wilderness whitewater boating run. Deer Creek is of class A scenic quality. Deer Creek is a stronghold for federally listed threatened spring-run Chinook salmon. It also is one of the only streams in the Central Valley that has a genetically distinct wild population. Deer Creek is an important contributor to the recovery of threatened winter-run steelhead, and it also supports fall-run Chinook salmon.

Factor 2: Current status of landownership and use in the area

The BLM manages 39 acres (25 percent) of the total 153-acre river corridor. The remaining acres are private (103 acres) or Forest Service land (11 acres). Land within the river corridor is zoned by Siskiyou County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORVs. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there is one application for a dam or diversion on file from Pacific Gas and Electric Company for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, timber harvesting is not found to be impacting the ORVs in the segment corridor; however if the segment were to be designated, and timber harvesting or other vegetation management activities were to be found impacting ORVs, they may be modified in the segment corridor to minimize impacts.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Deer Creek were added to the National System, the BLM and Forest Service would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 25 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Deer Creek, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with the Forest Service and local county entities would ensure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORVs within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Tehama County. Zoning classifications from Siskiyou County include Nonprime Agriculture Land, which allows for general agricultural activities (Siskiyou County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Siskiyou County and portions of Tehama County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Two comments were received related to Deer Creek. The comments were supportive of the creek's designation as a WSR and specifically the associated fish, recreation and scenic ORVs (BLM 2022). There were no comments received opposed to designating Deer Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Deer Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of Deer Creek as a WSR would be consistent with the Regional Water Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Deer Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. One FERC project is proposed for Deer Creek.

3.17.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Deer Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Deer Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.17.3 Suitability Determination

Deer Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.18 EAST BRANCH SOUTH FORK EEL RIVER

Corridor Description:	The East Branch South Fork Eel River is in Mendocino County in the northern Coast Ranges.		
Field Office:	Arcata	Map:	Map A-16 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		
BLM Segment Length:	1.2 miles	Area on BLM-Administered Land:	310 acres
Total Segment Length:	1.2 miles	Total Segment Area:	739 acres
ORV:	Fish	Tentative Classification:	Scenic

3.18.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the East Branch South Fork Eel River, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish was identified as unique, rare, or exemplary at a comparative regional or national scale.

The East Branch South Fork Eel River is an important contributor to the recovery of federally listed threatened Chinook salmon and winter-run steelhead in the South Fork Eel River.

Factor 2: Current status of landownership and use in the area

The BLM manages 310 acres (42 percent) of the total 739-acre river corridor. The remaining 429 acres are state or private lands. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river’s existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM’s goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there is one application from Pacific Gas and Electric for this river, however it is located outside of the BLM-administered lands.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights,

and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Uses that could be curtailed by designation would include harvesting forest products and agricultural activities, such as cattle grazing. These activities could continue unless they are shown to affect the ORV such that the segment would no longer be suitable for designation in the National System.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the East Branch South Fork Eel River were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Forty-two percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along the East Branch South Fork Eel River, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with the State of California and local county entities would ensure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORV within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County include Rangeland, which allows for livestock grazing activities and the production, harvest, and protection of natural resources. Another zoning classification within the river corridor is Public Facilities, which allows for public utilities (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control has jurisdiction in Mendocino County and portions of Humboldt and Trinity Counties. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Two comments were received related to the East Branch South Fork Eel River. The comments were supportive of the segment's designation as a WSR and specifically the associated fish ORV (BLM 2022). There were no comments opposed to designating the East Branch South Fork Eel River as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of the East Branch South Fork Eel River as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of the East Branch South Fork Eel River as a WSR would be consistent with the Regional Water Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

East Branch South Fork Eel River contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. One FERC project is proposed for the East Branch South Fork Eel River; however, its proposed location is outside of this segment corridor.

3.18.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For East Branch South Fork Eel River, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
East Branch South Fork Eel River	Eligible	Suitable	Not Suitable	Not Suitable

3.18.3 Suitability Determination

The East Branch South Fork Eel River was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide consistent management of the river system; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.19 ELKHORN CREEK

Corridor Description:	Elkhorn Creek is in Mendocino County in the northern Coast Ranges.			
Field Office:	Arcata	Map:	Map A-19 in Appendix A, Eligibility Study	
Suitability Determination:	Not suitable for inclusion into the National System			
BLM Segment Length:	0.1 miles	Area on BLM-Administered Land:	79 acres	
Total Segment Length:	0.1 miles	Total Segment Area:	165 acres	
ORV:	Fish	Tentative Classification:	Scenic	

3.19.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Elkhorn Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish was identified as unique, rare, or exemplary at a comparative regional or national scale.

Elkhorn Creek is an important contributor to the recovery of federally listed threatened winter-run steelhead in the South Fork Eel River.

Factor 2: Current status of landownership and use in the area

The BLM manages 79 acres (48 percent) of the total 165-acre river corridor. The remaining 86 acres are private land. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversion on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORV in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORV. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORV.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Elkhorn Creek were added to the National System, the BLM and private entities would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 48 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Elkhorn Creek, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORV within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County include Rangeland and Public Facilities. Rangeland zoning allows for livestock grazing activities and the production, harvest, and protection of natural resources. Public Facilities zoning allows for public utility uses (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the federal ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control has jurisdiction in Mendocino County and portions of Humboldt and Trinity Counties. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Two comments were received related to Elkhorn Creek. The comments were supportive of the creek’s designation as a WSR and specifically the associated fish ORV (BLM 2022). There were no comments received opposed to designating Elkhorn Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of Elkhorn Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of Elkhorn Creek as a WSR would be consistent with the Regional Water Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Elkhorn Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Elkhorn Creek.

3.19.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Elkhorn Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Elkhorn Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.19.3 Suitability Determination

Elkhorn Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.20 EUBANK CREEK

Corridor Description:	Eubank Creek is in Humboldt County in the northern Coast Ranges.		
Field Office:	Arcata	Map:	Map A-27 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		
BLM Segment Length:	0.2 miles	Area on BLM-Administered Land:	38 acres
Total Segment Length:	0.2 miles	Total Segment Area:	200 acres
ORV:	Fish	Tentative Classification:	Scenic

3.20.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Eubank Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish was identified as unique, rare, or exemplary at a comparative regional or national scale. Eubank Creek is an important contributor to the recovery of federally listed threatened coho salmon, Chinook salmon, and winter-run steelhead in the Mattole River. The State of California also lists coho salmon as threatened under the CESA.

Factor 2: Current status of landownership and use in the area

The BLM manages 37 acres (19 percent) of the total 200-acre river corridor. The remaining 163 acres are private land. Land within the river corridor is zoned by Humboldt County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversion on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, timber harvesting and other vegetation management activities have not been found to be impacting ORVs; however, if they were to be found impacting ORVs, they may be modified in the segment's corridor to minimize those impacts.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Eubank Creek were added to the National System, the BLM and private entities would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Nineteen percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Eubank Creek, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORV within the

river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Humboldt County. Zoning classifications from Humboldt County include the Timberland Production Zone, which allows for timber and timber-related activities, and Unclassified, which does not have precise zoning classifications due to a lack of information (Humboldt County 2023).

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protections to a WSR's free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control has jurisdiction in portions of Humboldt County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

One comment was received related to Eubank Creek. The comment was supportive of the creek's designation as a WSR and specifically the associated fish ORV (BLM 2022). There were no comments received opposed to designating Eubank Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of Eubank Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, CESA, administered by the Regional Water Board, enforces California water quality laws. Designation of Eubank Creek as a WSR would be consistent with the Regional Water Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Eubank Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Eubank Creek.

3.20.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Eubank Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Eubank Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.20.3 Suitability Determination

Eubank Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.21 FISH CREEK

Corridor Description:	Fish Creek is in Mendocino County in the northern Coast Ranges.		
Field Office:	Arcata	Map:	Map A-38 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		
BLM Segment Length:	2.5 miles	Area on BLM-Administered Land:	705 acres
Total Segment Length:	2.5 miles	Total Segment Area:	1,145 acres
ORV:	Fish	Tentative Classification:	Scenic

3.21.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Fish Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish was identified as unique, rare, or exemplary at a comparative regional or national scale.

Fish Creek is an important contributor to the recovery of federally listed threatened winter-run steelhead in the Eel River.

Factor 2: Current status of landownership and use in the area

The BLM manages 705 acres (61 percent) of the total 1,145-acre river corridor. The remaining 440 acres are private or state lands. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversion on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights,

and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORV in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORV. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORV.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Fish Creek were added to the National System, the BLM, the State, and private entities would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 61 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Fish Creek, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with the State of California and local county entities would ensure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORV within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County include Rangeland and Public Facilities. Rangeland allows for livestock grazing activities and the production, harvest, and protection of natural resources. Public Facilities allow for public utility use

(Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protection to a WSR's free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control has jurisdiction in Mendocino County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

There were five comments received related to Fish Creek. The comments were supportive of the creek's designation as a WSR and specifically the associated fish ORV (BLM 2022). There were no comments opposed to designating Fish Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Fish Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of Fish Creek as a WSR would be consistent with the Regional Water Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Fish Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Fish Creek.

3.21.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for VSRs. For Fish Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Fish Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.21.3 Suitability Determination

Fish Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without VSR designation.

3.22 FOURMILE CREEK

Corridor Description:	Fourmile Creek is in Humboldt County in the northern Coast Ranges.		
Field Office:	Arcata	Map:	Map A-21 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		
BLM Segment Length:	4.2 miles	Area on BLM-Administered Land:	859 acres
Total Segment Length:	4.2 miles	Total Segment Area:	1,405 acres
ORV:	Fish	Tentative Classification:	Scenic

3.22.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Fourmile Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish was identified as unique, rare, or exemplary at a comparative regional or national scale.

Fourmile Creek is an important contributor to the recovery of federally listed threatened coho salmon, Chinook salmon, and winter-run steelhead in the Mattole River. The State of California also lists coho salmon as threatened under the CESA.

Factor 2: Current status of landownership and use in the area

The BLM manages 859 acres (61 percent) of the total 1,405-acre river corridor. The remaining 546 acres are private land. Land within the river corridor is zoned by Humboldt County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORV in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORV. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORV.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Fourmile Creek were added to the National System, the BLM and private entities would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 61 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Fourmile Creek, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with and local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORV within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Humboldt County. Zoning classifications from Humboldt County include the Timber Production Zone, which allows for timber growth and harvesting activities (Humboldt County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protection to a WSR's free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Humboldt County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Two comments were received related to Fourmile Creek. The comments were supportive of the creek’s designation as a WSR and specifically the associated fish ORV (BLM 2022). There were no comments received opposed to designating Fourmile Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of Fourmile Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of Fourmile Creek as a WSR would be consistent with the Regional Water Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Fourmile Creek contributes to the Mattole River watershed and contains ecological connectivity opportunities as it is an important contributor to the recovery of federally listed threatened coho salmon, Chinook salmon, and winter-run steelhead in the Mattole River.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Fourmile Creek.

3.22.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Fourmile Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Fourmile Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.22.3 Suitability Determination

Ancestor Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.23 GRINDSTONE CREEK

Corridor Description:	Grindstone Creek is in Humboldt County in the northern Coast Ranges.		
Field Office:	Arcata	Map:	Map A-21 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		
BLM Segment Length:	1.5 miles	Area on BLM-Administered Land:	447 acres
Total Segment Length:	1.5 miles	Total Segment Area:	767 acres
ORV:	Fish	Tentative Classification:	Wild

3.23.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Grindstone Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish was identified as unique, rare, or exemplary at a comparative regional or national scale.

Grindstone Creek is an important contributor to the recovery of federally listed threatened coho salmon, Chinook salmon, and winter-run steelhead in the Mattole River. The State of California also lists coho salmon as threatened under the CESA.

Factor 2: Current status of landownership and use in the area

The BLM manages 447 acres (58 percent) of the total 767-acre river corridor. The remaining acres are private (193 acres) and state (127 acres) land. Land within the river corridor is zoned by Humboldt County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river’s existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM’s goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORV in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORV. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORV.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Grindstone Creek were added to the National System, the BLM, State, and private entities would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 58 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Grindstone Creek, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with state and local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORV within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Humboldt County. Zoning classifications from Humboldt County include Unclassified and the Timber Production Zone, which allow for timber growth and production activities (Humboldt County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protection to a WSR's free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the federal ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Humboldt County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Two comments were received related to Grindstone Creek. The comments were supportive of the creek's designation as a WSR and specifically the associated fish ORV (BLM 2022). There were no comments received opposed to designating Grindstone Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist

in implementing these two laws. Designation of Grindstone Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of Grindstone Creek as a WSR would be consistent with the Regional Water Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Grindstone Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Grindstone Creek.

3.23.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Grindstone Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Grindstone Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.23.3 Suitability Determination

Grindstone Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, there are federal and state laws that currently apply protections to portions of the segment and would be unnecessarily duplicated through WSR designation. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.24 HAYSHED CREEK

Corridor Description:	Hayshed Creek is in Mendocino County in the northern Coast Ranges and contributes to the designated Eel River WSR.		
Field Office:	Arcata	Map:	Map A-17 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System		
BLM Segment Length:	1.7 miles	Area on BLM-Administered Land:	567 acres
Total Segment Length:	1.7 miles	Total Segment Area:	686 acres
ORV:	Fish	Tentative Classification:	Wild

3.24.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Hayshed Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish was identified as unique, rare, or exemplary at a comparative regional or national scale.

Hayshed Creek is an important contributor to the recovery of federally listed threatened Chinook salmon and winter-run steelhead in the Middle Fork Eel River.

Factor 2: Current status of landownership and use in the area

The BLM manages 567 acres (83 percent) of the total 686-acre river corridor. The remaining 119 acres are private land. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry.

Currently, timber harvesting and other vegetation management activities have not been found to be impacting ORVs; however, if they were to be found impacting ORVs, they may be modified in the segment's corridor to minimize those impacts.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Hayshed Creek were added to the National System, the BLM and private entities would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Eighty-three percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Hayshed Creek, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORV within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County include Rangeland, Public Facilities, and Timberland Production Zones. These classifications allow for timber production activities, livestock grazing, and lands set aside for public utility use (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protection to a WSR's free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make

recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the federal ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Mendocino County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

There were no comments received related to Hayshed Creek.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of Hayshed Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of Hayshed Creek as a WSR would be consistent with the Regional Water Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Hayshed Creek contributes to the designated Eel River WSR. Designation of Hayshed Creek would provide consistent management of the Eel River tributaries and enhance protections of identified ORVs overall.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Hayshed Creek.

3.24.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Hayshed Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Hayshed Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.24.3 Suitability Determination

Hayshed Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.25 HORSE CANYON CREEK

Corridor Description:	Horse Canyon Creek is in Mendocino Counties in the northern Coast Ranges.		
Field Office:	Arcata	Map:	Map A-7 in Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System.		
BLM Segment Length:	0.7 miles	Area on BLM-Administered Land:	203 acres
Total Segment Length:	0.7 miles	Total Segment Area:	338 acres
ORV:	Fish	Tentative Classification:	Scenic

3.25.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Horse Canyon Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish was identified as unique, rare, or exemplary at a comparative regional or national scale.

Horse Canyon Creek is an important contributor to the recovery of federally listed threatened winter-run steelhead in the North Fork Eel River.

Factor 2: Current status of landownership and use in the area

The BLM manages 203 acres (60 percent) of the total 338-acre river corridor. The remaining 135 acres are private land. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the BLM's goals and objectives.

Designation could prohibit development of hydroelectric power facilities. Currently, there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined

suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, timber harvesting and other vegetation management activities have not been found to be impacting ORVs; however, if they were to be found impacting ORVs, they may be modified in the segment's corridor to minimize those impacts.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Horse Canyon Creek were added to the National System, the BLM and private entities would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet the overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Sixty percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Horse Canyon Creek, although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect the land under their jurisdiction for the riparian values and ORV within the river corridor under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County include Timberland Production Zone and Public Utility; these classifications allow for timber production activities and for land to be set aside for public utility use (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in California.

The CDFW has several measures that can provide protection to a WSR's free-flow status, ORVs, and tentative classification. These include a mandate to protect native species threatened with extinction under the CESA, as well as the CDFW's Lake and Streambed Alternation Program to protect the natural flow of a river, its banks, and the streambed. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS. NOAA Fisheries and the USFWS are on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water-pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Mendocino County. The Regional Water Board is responsible for enforcing The Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued for projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the state. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river system, stream-specific, and ORV information.

Two comments were received related to Horse Canyon Creek. The comments were supportive of the creek's designation as a WSR and specifically the associated fish ORV (BLM 2022). There were no comments opposed to designating Horse Canyon Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist

in implementing these two laws. Designation of Horse Canyon Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Regional Water Board, enforces California water quality laws. Designation of Horse Canyon Creek as a WSR would be consistent with the Regional Water Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Horse Canyon Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Horse Canyon Creek.

3.25.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Horse Canyon Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Horse Canyon Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.25.3 Suitability Determination

Horse Canyon Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.26 INDIAN CREEK 2 (EEL RIVER TRIBUTARY)

Corridor Description:	This segment is a tributary of Eel River that steams southeast of Farley, California in the Mendocino National Forest. This segment is within Mendocino County.		
Field Office:	Arcata	Map:	Map A-24 Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System.		
BLM Segment Length:	1.8 miles	Area on BLM-Administered Land:	453 acres
Total Segment Length:	1.8 miles	Total Segment Area:	797 acres
ORV:	Fish	Tentative Classification:	Recreational

3.26.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Indian Creek 2 (Eel River Tributary), one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish was identified as unique, rare, or exemplary at a comparative regional or national scale.

Indian Creek 2 (Eel River Tributary) is an important contributor to the recovery of federally listed threatened winter-run steelhead in the Eel River.

Factor 2: Current status of landownership and use in the area

The BLM manages 453 acres (56 percent) of the total 797-acre river corridor. The remaining 344 acres are private land. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there are no applications for dams or diversion on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a recreational classification that are ultimately designated would be closed to mineral leasing, allow mineral material development with application of necessary conditions to protect resource values, and existing or

new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORV in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORV. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORV.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Indian Creek 2 (Eel River Tributary) was added to the National System, the BLM and private entities would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 56 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Indian Creek 2 (Eel River Tributary), although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County include Rangeland, which allows for livestock grazing activities and the production, harvest, and

protection of natural resources, and Public Facilities, which allows for public utility (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control has jurisdiction in Mendocino County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were two comments received related to Indian Creek 2 (Eel River Tributary). The comments were supportive of a WSR designation and specifically the associated fish ORV (BLM 2022). There were no comments received opposed to designating Indian Creek 2 (Eel River Tributary) as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Indian Creek 2 (Eel River Tributary) as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of Indian Creek 2 (Eel River Tributary) as a WSR would be consistent with the North Coast Regional Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Indian Creek 2 contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Indian Creek 2.

3.26.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Indian Creek 2, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Indian Creek 2	Eligible	Suitable	Not Suitable	Not Suitable

3.26.3 Suitability Determination

Indian Creek 2 (Eel River Tributary) was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.27 MAD RIVER

Corridor Description:	Mad River is located northeast of Lone Star Junction within Humboldt County.		
Field Office:	Arcata	Map:	Map A-26 Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System.		
BLM Segment Length:	0.9 miles	Area on BLM-Administered Land:	228 acres
Total Segment Length:	0.9 miles	Total Segment Area:	763 acres
ORV:	Fish	Tentative Classification:	Scenic

3.27.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Mad River, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish values was identified as unique, rare, or exemplary at a comparative regional or national scale.

Factor 2: Current status of landownership and use in the area

The BLM manages 228 acres (29 percent) of the total 763-acre river corridor. The remaining 535 acres are private land. Land within the river corridor is zoned by Humboldt County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry.

Currently, grazing is not found to be impacting the ORV in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORV. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORV.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the Mad River were added to the National System, the BLM and private entities would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 29 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Mad River although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with and local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state and local land management agencies could continue to protect land under their jurisdiction for the riparian values and the ORV within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Humboldt County. Zoning classifications from Humboldt County include Timber Production Zone and Agricultural Exclusive, allowing for timber growing and harvesting and agricultural activities (Humboldt County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Humboldt County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The

Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were two comments received related to the Mad River. The comments were supportive of a WSR designation and specifically the associated fish ORV (BLM 2022). There were no comments received opposed to designating Mad River as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of the Mad River as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of the Mad River as a WSR would be consistent with the North Coast Regional Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Mad River contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for the Mad River.

3.27.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Mad River, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Mad River	Eligible	Suitable	Not Suitable	Not Suitable

3.27.3 Suitability Determination

Mad River was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently

apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.28 MATTOLE RIVER COMPLEX (MATTOLE RIVER SEGMENT A, MATTOLE RIVER SEGMENT B, MATTOLE RIVER SEGMENT C)

Complex Description:	The Mattole River Complex is in Humboldt County in the north Coast Ranges and contributes to the Mattole River watershed.		
Field Office:	Arcata	Map:	Map A-21 Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System.		
<i>Mattole River Segment A</i>			
BLM Segment Length:	0.5 miles	Area on BLM-Administered Land:	85 acres
Total Segment Length:	14.7 miles	Total Segment Area:	291 acres
ORV:	Fish	Tentative Classification:	Wild
<i>Mattole River Segment B</i>			
BLM Segment Length:	1.6 miles	Area on BLM-Administered Land:	366 acres
Total Segment Length:	14.7 miles	Total Segment Area:	597 acres
ORV:	Fish	Tentative Classification:	Scenic
<i>Mattole River Segment C</i>			
BLM Segment Length:	0.2 miles	Area on BLM-Administered Land:	38 acres
Total Segment Length:	14.7 miles	Total Segment Area:	217 acres
ORV:	Fish	Tentative Classification:	Scenic

3.28.1 Suitability Factor

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the Mattole River Complex, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish values was identified as unique, rare, or exemplary at a comparative regional or national scale.

The Mattole River Complex is an important contributor to the recovery of federally-listed threatened coho salmon, Chinook salmon, and winter-run steelhead. Coho salmon are also listed by the State of California as threatened under the CESA.

Factor 2: Current status of landownership and use in the area

Within Mattole River Segment A, BLM manages 85 acres (29 percent) of the total 291-acre river corridor. The remaining 207 acres are private land. Within Mattole River Segment B, The BLM manages 366 acres (44 percent) of the river corridor, which totals 597 acres. The remaining 231 acres are private land. Within Mattole River Segment C, BLM manages 37 acres (17 percent) of the river corridor, which totals 217 acres. The remaining 180 acres are private land. Land within the river corridor is zoned by Humboldt County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the segment's existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there is no application for dams or diversions on file for these segments.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORV in the segment corridors; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORV. Timber harvesting or other vegetation management activities may be modified in the segments corridors to minimize impacts on the ORV.

Designation of these segments is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within the Mattole River Complex were added to the National System, the BLM and private entities would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the segment corridors. Over 29 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along the Mattole River Complex although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with and local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If these segments were not added to the National System, federal, state and local land management agencies could continue to protect land under their jurisdiction for the riparian values and the ORV within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the segment corridors is zoned by Humboldt County. Zoning classifications from Humboldt County include Timber Production Zone, allowing for timber harvesting activities (Humboldt County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North

Coast Regional Water Quality Control Board has jurisdiction in Humboldt County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were two comments received related to Mattole River Segment A, Mattole River Segment B, and Mattole River Segment C. The comments were supportive of designation as a WSR and specifically the associated fish ORV (BLM 2022). There were no comments received opposed to designating any of the segments within the Mattole River Complex as WSRs.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of the Mattole River Complex as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of the Mattole River Complex as a WSR would be consistent with the North Coast Regional Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

The Mattole River Complex contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for the segments within the Mattole River Complex.

3.28.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For the segments within the Mattole River Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Mattole River Segment A	Eligible	Suitable	Not Suitable	Not Suitable
Mattole River Segment B	Eligible	Suitable	Not Suitable	Not Suitable

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Mattole River Segment C	Eligible	Suitable	Not Suitable	Not Suitable

3.28.3 Suitability Determination

The segments within the Mattole River Complex were found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation. Additionally, while outside organizations have had success in creek protection and restoration across boundaries in this watershed, the BLM-administered lands are small and scattered tracts, making management for ORVs difficult. BLM-managed segments would not lend to comprehensive protections for the watershed.

3.29 McADAM CREEK COMPLEX (McADAM CREEK AND McADAM CREEK TRIBUTARY)

Corridor Description:	The location of the sensitive cultural site is withheld.		
Field Office:	Reeding	Map:	N/A
Suitability Determination:	Not suitable for inclusion into the National System.		
<i>McAdam Creek</i>			
BLM Segment Length:	0.5 miles	Area on BLM-Administered Land:	166 acres
Total Segment Length:	0.5 miles	Total Segment Area:	339 acres
ORV:	Cultural	Tentative Classification:	Scenic
<i>McAdam Creek Tributary</i>			
BLM Segment Length:	0.5 miles	Area on BLM-Administered Land:	148 acres
Total Segment Length:	0.5 miles	Total Segment Area:	301 acres
ORV:	Cultural	Tentative Classification:	Scenic

3.29.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the McAdam Creek Complex, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for cultural values was identified as unique, rare, or exemplary at a comparative regional or national scale.

Factor 2: Current status of landownership and use in the area

BLM manages 165 acres (49 percent) of the total 332-acre river corridor. The remaining acres are state, Forest Service, and private land. Land within the river corridor is zoned by Siskiyou County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would protect sensitive cultural sites and would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there are no applications for dams or diversions on file for these segments.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORV in the segment corridors; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORV. Timber harvesting or other vegetation management activities may be modified in the segment corridors to minimize impacts on the ORV.

Designation of these segments is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the McAdam Creek Complex were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 49 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along the McAdam Creek Complex although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with the state, Forest Service, and local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Siskiyou County. Zoning classifications from Siskiyou County include Rural Residential Agricultural, allowing for small scale homesteading activities (Siskiyou County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Siskiyou County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were no comments received related to the McAdam Creek Complex.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of the McAdam Creek Complex as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of the McAdam Creek Complex as a WSR would be consistent with the North Coast Regional Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

The McAdam Creek Complex contribution to the larger river system is low and there are not opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for the McAdam Creek Complex.

3.29.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Battle Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
McAdam Creek	Eligible	Suitable	Not Suitable	Not Suitable
McAdam Creek Tributaries	Eligible	Suitable	Not Suitable	Not Suitable

3.29.3 Suitability Determination

The segments within the McAdam Creek Complex were found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation. Additionally, archeological laws offer robust protections for the site and the surroundings.

3.30 MILL CREEK

Corridor Description:	This segment is located southeast of the Dye Creek Preserve and northwest of Buena Vista within Tehama County.		
Field Office:	Redding	Map:	Map A-32 Appendix A, Eligibility Study
Suitability Determination:	Not suitable for inclusion into the National System.		
BLM Segment Length:	0.2 miles	Area on BLM-Administered Land:	50 acres
Total Segment Length:	0.2 miles	Total Segment Area:	176 acres
ORV:	Scenic, Geology, Cultural, Fish, Wildlife	Tentative Classification:	Wild

3.30.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Mill Creek, five ORVs have been identified as making this segment a worthy addition to the National System. Scenic, geology, cultural, fish, and wildlife ORVs were identified as unique, rare, or exemplary at a comparative regional or national scale.

Mill Creek has a scenic quality rating of “A.” Flowing out of the Cascade Range, the creek has cut its way into Cenozoic volcanic rocks and sediments of volcanic origin. A large Yahi Indian village, with house pits, rock talus features, and several small occupation rock shelters, are on BLM-administered lands along this creek. These sites are part of a larger complex of archaeological locations in this stretch of Mill Creek Canyon that are eligible for listing on the National Register of Historic Places as a district due to their scientific values.

Mill Creek is regarded as one of the best remaining habitats in the Central Valley and is a stronghold for federally listed threatened spring-run Chinook salmon. It is one of the only streams in the Central Valley that has a genetically distinct wild population. Mill Creek is an important contributor to the recovery of threatened winter-run steelhead, and it also supports fall-run Chinook salmon. The geological formations along the creek provide excellent nesting areas for several species of raptors, including prairie falcons, red tailed hawks, turkey vultures, and golden eagles.

Factor 2: Current status of landownership and use in the area

The BLM manages 50 acres (28 percent) of the total 175-acre river corridor. The remaining 265 acres are private land. Land within the river corridor is zoned by Tehama County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river’s existing condition and protect the identified ORVs. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and

further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there are four applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Mill Creek were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 28 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Mill Creek although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with the local county entities would ensure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

Mill Creek is included in the California Wild and Scenic River System and includes the stipulation that no new dam, reservoir, diversion, or other water impoundment facility shall be constructed on Mill Creek from the headwaters of East Sulphur Creek within Section 15 T30N R4E to the United States Geological Survey gauging station in the northeast quarter of the northwest quarter of Section 6 T25N, R1W.

If the river were not added to the National System, federal, state and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Tehama County. Zoning classifications from Tehama County include Agricultural Upland, allowing for grazing and agricultural compatible uses Activities. (Tehama County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region 5 Central Valley Regional Water Quality Control Board has jurisdiction in Tehama County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were two received comments related to Mill Creek. The comments were supportive of designation as a WSR and specifically the associated fish and scenic ORVs as meeting eligibility criteria (BLM 2022). There were no comments received opposed to designating Mill Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of Mill Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Central Coast Regional Board, enforces California water quality laws. Designation of Mill Creek as a WSR would be consistent with the Central Coast Regional Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Mill Creek contains a minimal amount of land on BLM-administered lands within its segment corridor and contains fragmented pieces at best. Access and manageability opportunities are low. The contribution to the larger river system is high, however it is also a designated California Wild and Scenic River, which provides protection to the segments, the water quality, and the identified ORVs.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed within the segment corridor.

3.30.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Mill Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Mill Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.30.3 Suitability Determination

Mill Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.31 PIPE CREEK

Corridor Description:	Pipe Creek is located in Humboldt County. This segment is located southeast of Harris, California.		
Field Office:	Arcata	Map:	See Map A30 in Appendix A, Eligibility Report
Suitability Determination:	Not suitable for inclusion into the National System.		
BLM Segment Length:	0.6 miles	Area on BLM-Administered Land:	125 acres
Total Segment Length:	0.6 miles	Total Segment Area:	306 acres
ORV:	Fish	Tentative Classification:	Scenic

3.31.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Pipe Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish values was identified as unique, rare, or exemplary at a comparative regional or national scale.

Pipe Creek is an important contributor to the recovery of federally-listed threatened winter-run steelhead in the Eel River.

Factor 2: Current status of landownership and use in the area

The BLM manages 125 acres (60 percent) of the total 306-acre river corridor. The remaining 181 acres are private land. Land within the river corridor is zoned by Humboldt County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORV in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORV. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORV.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Pipe Creek were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 60 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Pipe Creek although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

Preservation and administration of the state-listed and federally listed species of salmon within Pipe Creek would also be supported by participation from state and federal agencies, including the CDFW and USFWS, who are both mandated to conserve listed resources.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Humboldt County. Zoning classifications from Humboldt County include Timberland Production, allowing for timber and timber-related activities. The intent for areas zoned as Rural Residential Agriculture is for single family residential and general agriculture uses

(Humboldt County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control has jurisdiction in Humboldt County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were five comments received related to Pipe Creek. The comments were supportive of designation as a WSR and specifically the associated fish ORV (BLM 2022). There were no comments received opposed to designating Pipe Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Pipe Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of Pipe Creek as a WSR would be consistent with the North Coast Regional Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Pipe Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Pipe Creek.

3.31.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Pipe Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Pipe Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.31.3 Suitability Determination

Pipe Creek was found not suitable for inclusion in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.32 RATTLESNAKE CREEK

Corridor Description:	Rattlesnake Creek is located in Mendocino County west of Cummings, California. This segment flows through Tehachapi Mountains,		
Field Office:	Arcata	Map:	See Map A11 in Appendix A, Eligibility Report
Suitability Determination:	Not suitable for inclusion into the National System.		
BLM Segment Length:	0.6 miles	Area on BLM-Administered Land:	162 acres
Total Segment Length:	0.6 miles	Total Segment Area:	299 acres
ORV:	Fish	Tentative Classification:	Recreational

3.32.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Rattlesnake Creek, one ORV has identified as making this segment a worthy addition to the National System. An ORV for fish values was identified as unique, rare, or exemplary at a comparative regional or national scale.

Rattlesnake Creek is an important contributor to the recovery of federally listed threatened coho salmon, Chinook salmon, and winter-run steelhead. Coho salmon are also listed by the State of California as threatened under the CESA.

Factor 2: Current status of landownership and use in the area

The BLM manages 157 acres (52 percent) of the total 299-acre river corridor. The remaining 142 acres are private land. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon, coho salmon, and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a recreational classification that are ultimately designated would be closed to mineral leasing, allow mineral material development with application of necessary conditions to protect resource values, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, timber harvesting and other vegetation management activities have not been found to be impacting ORVs; however, if they were to be found impacting ORVs, they may be modified in the segment's corridor to minimize those impacts.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Rattlesnake Creek were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 52 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Rattlesnake Creek although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

Preservation and administration of the state-listed and federally listed species of salmon within Rattlesnake Creek would also be supported by participation from state and federal agencies, including the CDFW and USFWS, who are both mandated to conserve listed resources.

If the river were not added to the National System, federal, state and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County include Timberland Production Zone, allowing for timber and timber-related activities (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical

teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control has jurisdiction in Mendocino County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were two comments received related to Rattlesnake Creek. The comments were supportive of designation as a WSR and specifically the fish ORV (BLM 2022). There were no comments received opposed to designating Rattlesnake Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Rattlesnake Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of Rattlesnake Creek as a WSR would be consistent with the North Coast Regional Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Rattlesnake Creek contains a minimal amount of scattered BLM-administered lands within its segment corridor. The segment is adjacent to the designated Eel River WSR; designation of Rattlesnake Creek would provide consistent management.

Factor 13: The potential for water resources development

The potential for water resource developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Rattlesnake Creek.

3.32.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Rattlesnake Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Rattlesnake Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.32.3 Suitability Determination

Ancestor Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, though the segment is adjacent to a designated WSR, the segment is in a highly developed area with little land administered by BLM, leading to low access and manageability.

3.33 SACRAMENTO RIVER SEGMENT G

Corridor Description:	Sacramento River Segment G is located in Tehama County and contributes to the Sacramento River Watershed		
Field Office:	Redding	Map:	See Map A32 in Appendix A, Eligibility Report
Suitability Determination:	Not suitable for inclusion into the National System.		
BLM Segment Length:	0.1 miles	Area on BLM-Administered Land:	17 acres
Total Segment Length:	0.1 miles	Total Segment Area:	161 acres
ORV:	Scenic, Recreation, Cultural, Ecology, Fish	Tentative Classification:	Wild

3.33.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Sacramento River Segment G, five ORVs have been identified as making this segment a worthy addition to the National System. Scenic, recreation, cultural, ecological, and fish ORVs were identified as unique, rare, or exemplary at a comparative regional or national scale.

Sacramento River Segment G has a scenic quality rating of “A.” The river is heavily used for boat and shoreline fishing, rafting, canoeing, swimming, sightseeing, and hunting. Developed recreation sites are along the corridor for boat access, camping, target shooting, and picnicking. The segment contains a rich array of prehistoric sites and remnants of the historic Blue Ridge Flume that ran through the area in the 1870s (BLM 2022).

Sacramento River Segment G supports the imperiled Great Valley Mixed Riparian Forest and Great Valley Cottonwood Riparian Forest. Sacramento River Segment G is an important contributor to the recovery of federally listed endangered winter-run Chinook salmon, federally listed threatened spring-run Chinook

salmon, winter-run steelhead trout, and the regionally significant fishery for fall-run Chinook salmon. Winter-run Chinook salmon are also listed by the State of California as endangered under the CESA.

Factor 2: Current status of landownership and use in the area

The BLM manages 17 acres (10 percent) of the total 161-acre river corridor. The remaining 145 acres are private land. Land within the river corridor is zoned by Tehama County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORVs. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Spring-run Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there is one application for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the Sacramento River Segment G were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 10 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Sacramento River Segment G although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated VSRs.

Preservation and administration of the state-listed and federally listed species of salmon within Sacramento River Segment G would also be supported by participation from state and federal agencies, including the CDFW and the USFWS, who are both mandated to conserve listed resources.

If the river were not added to the National System, federal, state and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that VSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Tehama County. Zoning classifications from Tehama County include Primary Floodplain, allowing for the support of the river channel to protect safety and property (Tehama County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region 5 Central Valley Regional Water Quality Control Board has jurisdiction in Tehama County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were two comments received related to Sacramento River Segment G. The comments were supportive of designation as a WSR and specifically the associated scenic, recreation, cultural, ecology, fish ORVs (BLM 2022). There were no comments received opposed to designating Sacramento River Segment G as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of Sacramento River Segment G as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Central Valley Regional Board, enforces California water quality laws. Designation of Sacramento River Segment G as a WSR would be consistent with the Central Valley Regional Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Sacramento River Segment G contains a minimal amount of BLM-administered lands within its segment corridor and is a very small segment of the river. The segment contributes to the larger Sacramento River watershed.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There is one FERC project proposed for Sacramento River Segment G, though is the project would be located outside of the segment corridor.

3.33.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Sacramento River Segment G, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Sacramento River Segment G	Eligible	Suitable	Not Suitable	Not Suitable

3.33.3 Suitability Determination

Sacramento River Segment G was found **not suitable for inclusion** in the National System based on the information within this report. Designation would also provide consistent management of the river system, however there are federal and state laws that currently apply protections to portions of the segment, which would be unnecessarily duplicated through WSR designation. Additionally, there are collaborations ongoing to continue to restore, protect, and enhance portions of Sacramento River Segment G through other agencies and organizations.

3.34 SCHOOL SECTION CREEK COMPLEX (SCHOOL SECTION CREEK, SCHOOL SECTION CREEK TRIBUTARY 1, AND SCHOOL SECTION CREEK TRIBUTARY 2)

Complex Description:	The segments within the School Section Creek Complex are located in Mendocino County and contribute to the designated Eel River WSR.		
Field Office:	Arcata	Map:	See Map A33 in Appendix A, Eligibility Report
Suitability Determination:	Not suitable for inclusion into the National System.		
School Section Creek			
BLM Segment Length:	0.8 miles	Area on BLM-Administered Land:	279 acres
Total Segment Length:	0.8 miles	Total Segment Area:	463 acres
ORV:	Botany, Fish	Tentative Classification:	Scenic
School Section Creek Tributary 1			
BLM Segment Length:	1.0 miles	Area on BLM-Administered Land:	258 acres
Total Segment Length:	1.0 miles	Total Segment Area:	559 acres
ORV:	Botany	Tentative Classification:	Scenic
School Section Creek Tributary 2			
BLM Segment Length:	0.7 miles	Area on BLM-Administered Land:	204 acres
Total Segment Length:	0.7 miles	Total Segment Area:	345 acres
ORV:	Botany	Tentative Classification:	Scenic

3.34.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the School Section Creek Complex, two ORVs have been identified as making this segment a worthy addition to the National System. ORVs for botany and fish values were identified as unique, rare, or exemplary at a comparative regional or national scale.

The segments within the School Section Creek Complex support a hydrologically connected, serpentine-influenced, unique, and exemplary hanging fen with endemic, special status rare plants. School Section Creek is an important contributor to the recovery of federally-listed threatened winter-run steelhead in the South Fork Eel River.

Factor 2: Current status of landownership and use in the area

Within School Section Creek, BLM manages 279 acres (60 percent) of the total 463-acre river corridor. The remaining 184 acres are private land. Within School Section Creek Tributary 1, BLM manages 258

acres (46 percent) of the river corridor, which totals 558 acres. The remaining 301 acres are private land. Within School Section Creek Tributary 2, BLM manages 204 acres (59 percent) of the river corridor, which totals 345 acres. The remaining 141 acres are private land. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the segments existing conditions and protect the identified ORVs. Designation would enhance fish and plant populations by helping to preserve existing habitat. Winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there are no applications for dams or diversions on file for these segments.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORVs in the river corridor; however, livestock grazing could be curtailed if the segments were to be designated, and grazing began to impact the ORVs. Timber harvesting or other vegetation management activities may be modified in the segment corridors to minimize impacts on the ORVs.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within the School Section Creek Complex were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 60 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along School Section Creek although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

Preservation and administration of the state-listed and federally-listed species of salmon within the School Section Creek Complex would also be supported by participation from state and federal agencies, including the CDFW and USFWS, who are both mandated to conserve listed resources.

If the segments were not added to the National System, federal, state and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County include Timberland Production Zone, allowing for timber and timber related activities, and Public Facilities, which utilizes land for the benefit of the public (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control has jurisdiction in Mendocino County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and

permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were no comments received related to the segments within the School Section Creek Complex (BLM 2022).

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of the School Section Creek Complex as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of School Section Creek as a WSR would be consistent with the North Coast Regional Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

The segments within the School Section Creek Complex contain a majority of BLM-administered land. The segments overlap with the South Fork Eel River Wilderness and contribute to the South Fork Eel River.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for the School Section Creek Complex.

3.34.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For segments within the School Section Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
School Section Creek	Eligible	Suitable	Not Suitable	Not Suitable
School Section Creek Tributary 1	Eligible	Suitable	Not Suitable	Not Suitable
School Section Creek Tributary 2	Eligible	Suitable	Not Suitable	Not Suitable

3.34.3 Suitability Determination

The School Section Creek Complex was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide consistent management of the river

system, however; the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.35 SCORPION GULCH

Corridor Description:	Scorpion Gulch is located in Shasta County, south of Fairview, California. This segment flows within the Klamath Mountains.		
Field Office:	Redding	Map:	See Map A34 in Appendix A, Eligibility Report
Suitability Determination:	Not suitable for inclusion into the National System.		
BLM Segment Length:	0.7 miles	Area on BLM-Administered Land:	256 acres
Total Segment Length:	0.7 miles	Total Segment Area:	357 acres
ORV:	Cultural	Tentative Classification:	Scenic

3.35.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Scorpion Gulch, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for cultural values was identified as unique, rare, or exemplary at a comparative regional or national scale.

A number of the earliest historic lode gold mines in California, including the Washington, Philadelphia, Tom Green, and Brunswick mines, occur along this stream segment. Historic archaeological remains include mines, waste-rock piles, mill sites, artifact dumps, structures, roads, and trails that help in the interpretation of the mining history of this county and beyond. Furthermore, one of the earliest towns in Shasta County, Monroeville, has structural and other archaeological remains, including evidence of gold rush placer mining, scattered along the stream. Both Euro-American and Chinese operations are represented. This mining district of placer and lode mines is a significant representation of the long history of mining in the Klamath Mountains with well-preserved archaeological and historic architectural values, including the historic, renovated Washington Mill.

Factor 2: Current status of landownership and use in the area

The BLM manages 256 acres (71 percent) of the total 357-acre river corridor. The remaining 101 acres are private land. Land within the river corridor is zoned by Shasta County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would preserve historic and cultural resources unique to this location. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Scorpion Gulch were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 71 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Scorpion Gulch although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Shasta County. Zoning classifications from Shasta County include Mineral Resource, allowing for mining activities, and Unclassified (Shasta County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region 5 Central Valley Regional Water Quality Control Board has jurisdiction in Shasta County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There was one comment received related to Scorpion Gulch. The comment was supportive of designation as a WSR and specifically the associated cultural ORV as meeting eligibility criteria (BLM 2022). There were no comments received opposed to designating Scorpion Gulch as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The CWA is a federal law that is meant to provide for the quality of the nation's waters. The BLM is required to assist in implementing this law. Designation of Scorpion Gulch as a WSR would support the goals and objectives of the CWA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of Scorpion Gulch as a WSR would be consistent with the North Coast Regional Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

The contribution of Scorpion Gulch to the larger river system is low and there are not opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Scorpion Gulch.

3.35.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Scorpion Gulch, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Scorpion Gulch	Eligible	Suitable	Not Suitable	Not Suitable

3.35.3 Suitability Determination

Scorpion Gulch was found **not suitable for inclusion** in the National System based on the information within this report. Designation would also provide consistent management of the river system, however there are federal and state laws that currently apply protections to portions of the segment, which would be unnecessarily duplicated through WSR designation. Additionally, there are collaborations ongoing to continue to restore, protect, and enhance portions of Scorpion Gulch through other agencies and organizations.

3.36 SEVENMILE CREEK COMPLEX (SEVENMILE CREEK AND SEVENMILE CREEK TRIBUTARIES)

Corridor Description:	The segments within the Sevenmile Creek Complex are located within Tehama County.		
Field Office:	Redding	Map:	Map A-31, Appendix A Eligibility Report
Suitability Determination:	All segments within the Sevenmile Creek Complex were determined to be not suitable for inclusion into the National System.		
Sevenmile Creek			
BLM Segment Length:	1.3 miles	Area on BLM-Administered Land:	417 acres
Total Segment Length:	1.3 miles	Total Segment Area:	775 acres
ORV:	Cultural, Ecology	Tentative Classification:	Scenic
Sevenmile Creek Tributaries			
BLM Segment Length:	5.8 miles	Area on BLM-Administered Land:	1,587 acres
Total Segment Length:	5.8 miles	Total Segment Area:	2,228 acres
ORV:	Cultural, Ecology	Tentative Classification:	Scenic

3.36.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the Sevenmile Creek Complex, two ORVs have been identified as making this segment a worthy addition to the National System. Cultural and ecological ORVs were identified as unique, rare, or exemplary at a comparative regional or national scale.

Along these segments, Native Americans camped in rock-ringed structures, leaving their important cultural deposits behind. At least four rock enclosures and open camps are found here, as well as a short segment of the historically important Tehama Wagon Road dating to the 1860s.

Additionally, Sevenmile Creek and Sevenmile Creek Tributaries support the imperiled Great Valley Mixed Riparian Forest and Great Valley Cottonwood Riparian Forest vegetation types.

Factor 2: Current status of landownership and use in the area

Within Sevenmile Creek, BLM manages 417 acres (53 percent) of the river corridor, which totals 775 acres. The remaining 358 acres are private land. Within Sevenmile Creek Tributaries, BLM manages 1,587 acres (71 percent) of the river corridor, which totals 2,228 acres. The remaining 641 acres are private land. All lands within the segment corridors are zoned by Tehama County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the segment's existing conditions and protect the identified ORVs. Designation would enhance fish populations by helping to preserve existing habitat. Designation would also protect the cultural and historic resources unique to this segment. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORV in either segment's corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORV. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORV.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within the Sevenmile Creek Complex were added to the National System, the BLM would manage this area.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the segments' corridors, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Throughout the entire complex, approximately 67 percent of the segment corridors are on BLM-administered land. At this time, there are no plans for further acquisitions along the segments within the Sevenmile Creek Complex although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the segments were not added to the National System, federal, state and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in these segments.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the segment corridors is zoned by Tehama County. Zoning classifications from Tehama County include Agricultural/Upland District, which allows for grazing and agricultural activities; and Government (Tehama County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The

Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region 5 Central Valley Regional Water Quality Control Board has jurisdiction in Tehama County and portions of Shasta County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were three comments received related to Sevenmile Creek and Sevenmile Creek Tributaries. The comments were supportive of a WSR designation and specifically the associated cultural and ecological ORVs (BLM 2022). There were no comments opposed to designating the Sevenmile Creek Complex as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The CWA is a federal law that is meant to provide for the quality of the nation's waters. The BLM is required to assist in implementing this law. Designation of the segments within the Sevenmile Creek Complex as WSRs would support the goals and objectives of the CWA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Central Valley Regional Board, enforces California water quality laws. Designation of the segments within the Sevenmile Creek Complex as WSRs would be consistent with the Central Valley Regional Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

While Sevenmile Creek is located close the Sacramento Bend Complex, this creek is fairly minor in comparison to the other creeks and rivers in the complex, and offers minimal contribution to the identified ORVs when compared with the rest of the complex. Sevenmile Creek is extremely flashy, making river management difficult. Additionally, in contrast with the rest of the creek and river segments in the Sacramento Bend Complex, the BLM does not manage the majority of the Sevenmile Creek corridor, making management difficult. The area the BLM does manage is part of an ACEC which will provide adequate protections to the uplands and intermittent stream characteristics of the Sevenmile Creek area.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for either of the segments within the Sevenmile Creek Complex.

3.36.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For the segments within the Sevenmile Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Sevenmile Creek	Eligible	Suitable	Not Suitable	Not Suitable
Sevenmile Creek Tributaries	Eligible	Suitable	Not Suitable	Not Suitable

3.36.3 Suitability Determination

The segment within the Sevenmile Creek Complex were found to be **not suitable for inclusion** in the National System based on the information within this report. Designation would provide consistent management of the river system and the identified ORVs within them, however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.37 SHELL ROCK CREEK

Corridor Description:	Shell Rock Creek is located in Mendocino County. This segment is located between Dunlap Place and Twin Rocks, California, and is a tributary of the Eel River.		
Field Office:	Arcata	Map:	See Map A36 in Appendix A, Eligibility Report
Suitability Determination:	Not suitable for inclusion into the National System.		
BLM Segment Length:	1.4 miles	Area on BLM-Administered Land:	411 acres
Total Segment Length:	1.4 miles	Total Segment Area:	550 acres
ORV:	Fish, Geologic Scenic	Tentative Classification:	Scenic

3.37.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Shell Rock Creek, three ORVs have been identified as making this segment a worthy addition to the National System. Fish, geology, and scenic ORVs were identified as unique, rare, or exemplary on a comparative regional or national scale.

Shell Rock Creek is an important contributor to the recovery of federally-listed threatened winter-run steelhead in the Eel River. The geologic formation at Shell Rock is unique to the area. The landscape is rated as scenic quality “A.”

Factor 2: Current status of landownership and use in the area

The BLM manages 411 acres (74 percent) of the total 550-acre river corridor. The remaining 265 acres are private land. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river’s existing condition and protect the identified ORVs. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORVs in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORVs. Timber harvesting or other vegetation management activities may be modified in the segment’s corridor to minimize impacts on the ORVs.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the Shell Rock Creek were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 74 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Shell Rock Creek although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

Preservation and administration of the state-listed and federally listed species of salmon within Shell Rock Creek would also be supported by participation from state and federal agencies, including the CDFW and USFWS, who are both mandated to conserve listed resources.

If the river were not added to the National System, federal, state and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County include Public Facility, allowing for public purpose (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control has jurisdiction in Mendocino County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the

regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were four comments received related to Shell Rock Creek. The comments were supportive of designation as a WSR and specifically the associated fish, geologic, and scenic ORVs (BLM 2022). There were no comments received opposed to designating Shell Rock Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of Shell Rock Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of Shell Rock Creek as a WSR would be consistent with the North Coast Regional Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Shell Rock Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Shell Rock Creek.

3.37.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Shell Rock Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Shell Rock Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.37.3 Suitability Determination

Shell Rock Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would

not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.38 SHOLES CREEK

Corridor Description:	Sholes Creek is located in Humboldt County. This segment is located to the east of the King Range Conservation Area.		
Field Office:	Arcata	Map:	See Map A21 in Appendix A, Eligibility Report
Suitability Determination:	Not suitable for inclusion into the National System.		
BLM Segment Length:	2.0 miles	Area on BLM-Administered Land:	523 acres
Total Segment Length:	2.0 miles	Total Segment Area:	806 acres
ORV:	Fish	Tentative Classification:	Scenic

3.38.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Sholes Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish values was identified as unique, rare, or exemplary at a comparative regional or national scale.

Sholes Creek is an important contributor to the recovery of federally-listed threatened coho salmon, Chinook salmon, and winter-run steelhead in the Mattole River. Coho salmon are also listed by the State of California as threatened under the CESA.

Factor 2: Current status of landownership and use in the area

The BLM manages 523 acres (64 percent) of the total 805-acre river corridor. The remaining 282 acres are private land. Land within the river corridor is zoned by Humboldt County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Chinook salmon, coho salmon, and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there are no applications for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORV in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORV. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORV.

Designation of this segment would likely increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Sholes Creek were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 64 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Sholes Creek although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

Preservation and administration of the state-listed and federally listed species of salmon within Sholes Creek would also be supported by participation from state and federal agencies, including the CDFW and the USFWS, who are both mandated to conserve listed resources.

If the river were not added to the National System, federal, state and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river

corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Humboldt County. Zoning classifications from Humboldt County include Timberland Production Zone, allowing for timber and timber related activities (Humboldt County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were four comments received related to Sholes Creek. The comments were supportive of designation as a WSR and specifically the associated fish ORV (BLM 2022). There were no comments received opposed to designating Sholes Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Sholes Creek as a WSR would support the goals and

objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of Sholes Creek as a WSR would be consistent with the North Coast Regional Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Ancestor Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Sholes Creek.

3.38.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Sholes Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Sholes Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.38.3 Suitability Determination

Sholes Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.39 TENMILE CREEK

Corridor Description:	Tenmile Creek is located in Mendocino County and flows along the southern border of the Elkhorn Ridge Wilderness.		
Field Office:	Arcata	Map:	See Map A8, Appendix A Eligibility Report
Suitability Determination:	Not suitable for inclusion into the National System.		
BLM Segment Length:	0.4 miles	Area on BLM-Administered Land:	111 acres
Total Segment Length:	0.4 miles	Total Segment Area:	259 acres
ORV:	Fish, Recreation	Tentative Classification:	Wild

3.39.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Tenmile Creek, two ORVs have been identified as making this segment a worthy addition to the National System. Fish and recreational ORVs were identified as unique, rare, or exemplary on a comparative regional or national scale.

Tenmile Creek is an important contributor to the recovery of federally listed threatened coho salmon, Chinook salmon, and winter-run steelhead. Coho salmon are also listed by the State of California as threatened under the CESA. Tenmile Creek provides outstanding whitewater rafting opportunities and serves as the gateway to the class IV–V run through the Elkhorn Ridge Wilderness.

Factor 2: Current status of landownership and use in the area

Within this segment, the BLM manages 111 acres (43 percent) of the total 259-acre river corridor. The remaining 148 acres are private land. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORVs. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Coho salmon, chinook salmon, and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there is no application for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry.

Currently, grazing is not found to be impacting the ORVs in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORVs. Timber harvesting or other vegetation management activities may be modified in the segment corridor to minimize impacts on the ORVs.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Tenmile Creek were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 42 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Tenmile Creek although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with the CDFW and local county entities would ensure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County include Timber Production Zones and Forest Land, allowing for timber production and harvesting activities (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The North Coast

Regional Water Quality Control Board has jurisdiction in Mendocino County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There was one comment received related to Tenmile Creek. The comment was supportive of designation as a WSR and specifically the associated fish and recreational ORVs (BLM 2022). There were no comments received opposed to designating Tenmile Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of Tenmile Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of Tenmile Creek as a WSR would be consistent with the North Coast Regional Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Tenmile Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Tenmile Creek.

3.39.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Tenmile Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Tenmile Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.39.3 Suitability Determination

Tenmile Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.40 TOM LONG CREEK COMPLEX (TOM LONG CREEK, TOM LONG CREEK TRIBUTARIES)

Complex Description:	Tom Long Creek is located in Humboldt County near the South Fork Eel River.		
Field Office:	Arcata	Map:	See Map A16 in Appendix A, Eligibility Report
Suitability Determination:	Not suitable for inclusion into the National System.		
Tom Long Creek			
BLM Segment Length:	0.3 miles	Total Segment Area:	214 acres
Total Segment Length:	0.3 miles	Area on BLM-Administered Land:	118 acres
ORV:	Ecology, Scenic, Fish	Tentative Classification:	Wild
Tom Long Creek Tributaries			
BLM Segment Length:	0.8 miles	Total Segment Area:	186 acres
Total Segment Length:	0.8 miles	Area on BLM-Administered Land:	421 acres
ORV:	Ecology, Scenic	Tentative Classification:	Wild

3.40.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the Tom Long Creek Complex, three ORVs have been identified as making this segment a worthy addition to the National System. Ecology, scenic, and fish ORVs were identified as unique, rare, or exemplary at a comparative regional or national scale.

A rare old-growth forest community is in the Tom Long Creek Complex segment corridors. The rare old-growth forest provides unique scenery. These segments are important contributors to the recovery of federally-listed threatened winter-run steelhead in the South Fork Eel River.

Factor 2: Current status of landownership and use in the area

Within Tom Long Creek, the BLM manages 118 acres (55 percent) of the total 214-acre river corridor. The remaining 96 acres are private land. Within Tom Long Creek Tributaries, BLM manages 185 acres (44 percent) of the river corridor, which totals 420 acres. The remaining 235 acres are private land. Land within the river corridor is zoned by Humboldt County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORVs. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there is no application for dams or diversions on file for these segments.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry.

Currently, grazing is not found to be impacting the ORVs in the segment corridors however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORVs. Timber harvesting or other vegetation management activities may be modified in the segment corridors to minimize impacts on the ORVs.

Designation of these segments is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within the Tom Long Creek Complex were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 55 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions

along the Tom Long Creek Complex although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If these segments were not added to the National System, federal, state, and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the segment corridors is zoned by Humboldt County. Zoning classifications from Humboldt County include Timber Production Zone, allowing for timber production activities (Humboldt County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). Region I North Coast Regional Water Quality Control Board has jurisdiction in Humboldt County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were no comments received related to Tom Long Creek or Tom Long Creek Tributaries.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of the Tom Long Creek Complex as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Region I North Coast Regional Board, enforces California water quality laws. Designation of the Tom Long Creek Complex as a WSR would be consistent with the Region I North Coast Regional Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

The segments within the Tom Long Creek Complex contain a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for the Tom Long Creek Complex.

3.40.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For segments within the Tom Long Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Tom Long Creek	Eligible	Suitable	Not Suitable	Not Suitable
Tom Long Creek Tributaries	Eligible	Suitable	Not Suitable	Not Suitable

3.40.3 Suitability Determination

The segments within the Tom Long Creek Complex were found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.41 TOMKI CREEK

Corridor Description:	Tomki Creek is located in Mendocino County and contributes to the designated Eel River VSR.		
Field Office:	Arcata	Map:	See Map A38 in Appendix A, Eligibility Report
Suitability Determination:	Not suitable for inclusion into the National System.		
BLM Segment Length:	2.6 miles	Area on BLM-Administered Land:	646 acres
Total Segment Length:	2.6 miles	Total Segment Area:	1,716 acres
ORV:	Fish	Tentative Classification:	Scenic

3.41.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Tomki Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish values was identified as unique, rare, or exemplary at a comparative regional or national scale.

Tomki Creek is an important contributor to the recovery of federally-listed threatened Chinook salmon and winter-run steelhead in the Eel River.

Factor 2: Current status of landownership and use in the area

Within the segment, the BLM manages 646 acres (38 percent) of the total 1,716-acre river corridor. The remaining 1,070 acres are private land. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river's existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Chinook salmon and winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there is no application for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights,

and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, grazing is not found to be impacting the ORV in the river corridor; however, livestock grazing could be curtailed if the segment were to be designated, and grazing began to impact the ORV. Timber harvesting or other vegetation management activities may be modified in the segment's corridor to minimize impacts on the ORV.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Tomki Creek were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 37 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Tomki Creek although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with the local county entities would ensure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated WSRs.

If the river were not added to the National System, federal, state, and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that WSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County Timber Production Zones and Forest Land, allowing for timber production and harvesting activities (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The North Coast Regional Water Quality Control Board has jurisdiction in Mendocino County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were two comments received related to Tomki Creek. The comments were supportive of designation as a WSR and specifically the associated fish ORV (BLM 2022). There were no comments received opposed to designating Tomki Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Tomki Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the North Coast Regional Board, enforces California water quality laws. Designation of Tomki Creek as a WSR would be consistent with the North Coast Regional Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Tomki Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Tomki Creek.

3.41.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Tomki Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Tomki Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.41.3 Suitability Determination

Tomki Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.42 WHITE ROCK CREEK COMPLEX (WHITE ROCK CREEK, WHITE ROCK CREEK TRIBUTARY 1, WHITE ROCK CREEK TRIBUTARY 2, WHITE ROCK CREEK TRIBUTARY 3, AND WHITE ROCK CREEK TRIBUTARY 4)

Complex Description:	White Rock Creek is located in Mendocino County next to Board Tree Canyon.		
Field Office:	Arcata	Map:	Map A40 in Appendix A, Eligibility Report
Suitability Determination:	Not suitable for inclusion into the National System.		
White Rock Creek			
BLM Segment Length:	2.5 miles	Area on BLM-Administered Land:	722 acres
Total Segment Length:	2.5 miles	Total Segment Area:	1,046 acres
ORV:	Ecology, Scenic, Fish	Tentative Classification:	Scenic
White Rock Creek Tributary 1			
BLM Segment Length:	0.3 miles	Area on BLM-Administered Land:	141 acres
Total Segment Length:	0.3 miles	Total Segment Area:	209 acres
ORV:	Scenic	Tentative Classification:	Scenic
White Rock Creek Tributary 2			

BLM Segment Length:	0.9 miles	Area on BLM-Administered Land:	362 acres
Total Segment Length:	0.9 miles	Total Segment Area:	450 acres
ORV:	Ecology, Scenic, Fish	Tentative Classification:	Wild
White Rock Creek Tributary 3			
BLM Segment Length:	1.9 miles	Area on BLM-Administered Land:	635 acres
Total Segment Length:	1.9 miles	Total Segment Area:	747 acres
ORV:	Ecology, Scenic, Fish	Tentative Classification:	Scenic
White Rock Creek Tributary 4			
BLM Segment Length:	0.4 miles	Area on BLM-Administered Land:	234 acres
Total Segment Length:	0.4 miles	Total Segment Area:	240 acres
ORV:	Ecology, Scenic, Fish	Tentative Classification:	Scenic

3.42.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within the White Rock Creek Complex, three ORVs have been identified as making this segment a worthy addition to the National System. Ecology, scenic and fish ORVs were identified as unique, rare, or exemplary at a comparative regional or national scale.

A rare old-growth forest community is in the White Rock Creek Complex corridor. The rare old-growth forest provides unique scenery. These segments are also important contributors to the recovery of federally-listed threatened winter-run steelhead in the Eel River.

Factor 2: Current status of landownership and use in the area

Within White Rock Creek, the BLM manages 722 acres (69 percent) of the total 1,046-acre river corridor. The remaining 324 acres are private land. Within White Rock Creek Tributary 1, BLM manages 141 acres (67 percent) of the river corridor, which totals 209 acres. The remaining 68 acres are private land. Within White Rock Creek Tributary 2, BLM manages 362 acres (80 percent) of the river corridor, which totals 450 acres. The remaining 88 acres are private land. Within White Rock Creek Tributary 3, BLM manages 635 acres (85 percent) of the river corridor, which totals 747 acres. The remaining 88 acres are private land. Within White Rock Creek Tributary 4, the BLM manages 234 acres (97 percent) of the river corridor, which totals 240 acres. The remaining 6 acres are private land. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the segments existing conditions and protect the identified ORVs. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there is no application for dams or diversions on file for these river segments.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. For segments with a wild classification that are ultimately designated, management actions would close the area to mineral leasing, close to mineral material development, and recommend the area for withdrawal from mineral entry. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, timber harvesting and other vegetation management activities have not been found to be impacting ORVs; however, if they were to be found impacting ORVs, they may be modified in the segment's corridor to minimize those impacts.

Designation of these segments is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORVs and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If the segments within the White Rock Creek Complex were added to the National System, the BLM would manage the segments.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 69 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions within the White Rock Creek Complex although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated VSRs.

If these segments were not added to the National System, federal, state, and local land management agencies could continue to protect land under their jurisdiction for the riparian values and ORVs within the river corridors under existing laws, authorities, and ordinances. It is not anticipated that VSR designation would substantially increase management costs in this segment.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the complex corridors is zoned by Mendocino County. Zoning classifications from Mendocino County include Timber Production Zones and Forest Land, allowing for timber production and harvesting activities (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Mendocino County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were two comments received related to the segments within the White Rock Creek Complex. The comments were supportive of designation as WSRs and specifically the associated fish ORV as meeting eligibility criteria (BLM 2022). There were no comments received opposed to designating the segments within the White Rock Creek Complex as WSRs.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation’s waters. The BLM is required to assist in implementing these two laws. Designation of the White Rock Creek Complex as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Region I North Coast Regional Board, enforces California water quality laws. Designation of White Rock Creek as a WSR would be consistent with the Region I North Coast Regional Board’s mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

The segments within the White Rock Creek Complex contain a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resources developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for the White Rock Creek Complex.

3.42.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For the segments within the White Rock Creek Complex, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
White Rock Creek	Eligible	Suitable	Not Suitable	Not Suitable
White Rock Creek Tributary 1	Eligible	Suitable	Not Suitable	Not Suitable
White Rock Creek Tributary 2	Eligible	Suitable	Not Suitable	Not Suitable
White Rock Creek Tributary 3	Eligible	Suitable	Not Suitable	Not Suitable
White Rock Creek Tributary 4	Eligible	Suitable	Not Suitable	Not Suitable

3.42.3 Suitability Determination

The segments within the White Rock Creek Complex were found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor

is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

3.43 WOODMAN CREEK

Corridor Description:	Woodman Creek is located in Mendocino County near Card Place, California.		
Field Office:	Arcata	Map:	Map A4I in Appendix A, Eligibility Report
Suitability Determination:	Not suitable for inclusion into the National System.		
BLM Segment Length:	0.5 miles	Area on BLM-Administered Land:	180 acres
Total Segment Length:	0.5 miles	Total Segment Area:	415 acres
ORV:	Fish	Tentative Classification:	Scenic

3.43.1 Suitability Factors

Factor 1: Characteristics that do, or do not, make the area a worthy addition to the National System

Within Woodman Creek, one ORV has been identified as making this segment a worthy addition to the National System. An ORV for fish values was identified as unique, rare, or exemplary at a comparative regional or national scale.

Woodman Creek is an important contributor to the recovery of federally listed threatened winter-run steelhead in the Eel River.

Factor 2: Current status of landownership and use in the area

Within Woodman Creek, the BLM manages 180 acres (43 percent) of the total 415-acre river corridor. The remaining 235 acres are private land. Land within the river corridor is zoned by Mendocino County, as discussed in Factor 8.

Factor 3: Reasonably foreseeable potential uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National System

The basic objectives of designation are to maintain the river’s existing condition and protect the identified ORV. Designation would enhance fish and wildlife populations by helping to preserve existing habitat. Winter-run steelhead would continue to be protected under the ESA and further enhanced by the National System. Designation would complement the goals and objectives of the BLM.

Designation could prohibit development of hydroelectric power facilities. Currently there is no application for dams or diversions on file for this river segment.

Management actions in the RMP identify limits on mineral leasing, mineral materials development and recommendations for withdrawals from locatable mineral entry for river and stream segments determined suitable; however, those limits depend on the tentative classification of the segment. Segments with a scenic classification that are ultimately designated would be closed to mineral leasing, closed to mineral material development, and existing or new mining activity would be allowed, subject to valid existing rights, and conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment.

Currently, timber harvesting and other vegetation management activities have not been found to be impacting ORVs; however, if they were to be found impacting ORVs, they may be modified in the segment's corridor to minimize those impacts.

Designation of this segment is likely to increase focused efforts and collaborations on river restoration projects to protect and enhance the ORV and water quality.

Factor 4: The federal agency that will administer the area should it be added to the National System

If Woodman Creek were added to the National System, the BLM would manage this river.

Factor 5: The extent to which the agency proposes that administration of the river, including the costs thereof, be shared by state and local agencies

The BLM would encourage state and local agency cooperation in the management and maintenance of the river corridor, where appropriate, to meet overall goals of river protection. Administration and funding would be determined in cooperation with state and local agencies after designation.

Factor 6: The estimated cost of acquiring necessary lands or interests in land within the corridor, as well as the cost of administering the area should it be added to the National System

The BLM would pursue land acquisition only from willing sellers within the river corridor. Over 43 percent of the river corridor is on BLM-administered land. At this time, there are no plans for further acquisitions along Woodman Creek although land acquisition criteria in the NCIP may allow for future acquisitions.

Factor 7: The extent that other federal agencies, the state, or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the National System

Coordinating with local county entities would assure compliance with state and county regulations for access, use, and management of any future designated river. In addition, cooperative efforts would continue with these agencies as participants in the development of river management plans for designated VSRs.

Factor 8: An evaluation of local zoning and other land use controls in protecting the river's ORVs and preventing incompatible development

Land within the river corridor is zoned by Mendocino County. Zoning classifications from Mendocino County include Timber Production Zones and Forest Land, allowing for timber production and harvesting activities (Mendocino County 2023). These types of zoning codes would largely support the maintenance of ORVs in the corridor.

Factor 9: The state/local government's capacity to manage and protect the ORVs on nonfederal lands

A variety of local, state, and governmental agencies and commercial, private, and nonprofit entities have a role in planning for, providing, and managing recreation and open space resources and services in the State of California.

The CDFW has a mandate to protect native species threatened with extinction under the CESA. The CDFW also coordinates with other state and federal entities through the Water Operations Unit. The Water Operations Unit coordinates with NOAA Fisheries and the USFWS on several fisheries technical teams that make recommendations for adjusting operations to minimize adverse effects on state- and federally-listed fish species and to ensure compliance with the ESA and the CESA (CDFW 2023).

The State Water Resources Control Board is responsible for water quality and is the state water pollution control agency for all purposes under the CWA (California Water Board 2023). The Region I North Coast Regional Water Quality Control Board has jurisdiction in Mendocino County. The Regional Water Board is responsible for enforcing the Porter-Cologne Water Quality Control Act, the regional Basin Plan, and permits that have been issued on projects. The Porter-Cologne Water Quality Control Act and the regional Basin Plan prohibit the discharge of materials that adversely affect the beneficial uses of the waters of the State. The Regional Water Board has the authority to take enforcement action, ranging from a notice of violation to issuing administrative civil liabilities (fines) against persons who violate The Porter-Cologne Water Quality Control Act, the regional Basin Plan, or a permit (California Water Board 2023).

Factor 10: The existing support for or opposition to designation

The public was provided opportunities to offer input for eligibility and will be able to review and provide comment on this suitability report for WSRs. Comments on the eligibility report were wide-ranging and included river-system, stream-specific, and ORV information.

There were two comments received related to Woodman Creek. The comments were supportive of designation as a WSR and specifically the associated fish ORV (BLM 2022). There were no comments received opposed to designating Woodman Creek as a WSR.

Factor 11: The consistency of designation with other agency plans, programs, and policies in meeting regional objectives

The ESA and the CWA are two federal laws that are meant to provide for the recovery and preservation of endangered and threatened species and the quality of the nation's waters. The BLM is required to assist in implementing these two laws. Designation of Woodman Creek as a WSR would support the goals and objectives of the CWA and ESA. On a state level, The Porter-Cologne Water Quality Control Act, administered by the Region I North Coast Regional Board, enforces California water quality laws. Designation of Woodman Creek as a WSR would be consistent with the Region I North Coast Regional Board's mission of protecting water quality.

Factor 12: The contribution to the river system or basin integrity

Woodman Creek contains a minimal amount of BLM-administered lands within its segment corridor and contains fragmented pieces at best. The contribution to the larger river system is low and there are no opportunities for adjacent designations, meaning low ecological connectivity opportunities.

Factor 13: The potential for water resources development

The potential for water resource developments, such as a dam, water conduit, reservoir, powerhouse, or transmission line, was determined by a review of proposed FERC projects. There are no FERC projects proposed for Woodman Creek.

3.43.2 Land Use Plan Alternatives

Chapter 2 of this RMP outlines the management actions for WSRs. For Woodman Creek, the suitability determinations across alternatives are as follows:

Segment Name	Alternative A	Alternative B	Alternative C	Alternative D
Woodman Creek	Eligible	Suitable	Not Suitable	Not Suitable

3.43.3 Suitability Determination

Woodman Creek was found **not suitable for inclusion** in the National System based on the information within this report. Designation would provide protection and enhancement of the identified ORVs; however, the percentage of BLM-managed lands within the corridor is minimal, fragmented, and would not provide adequate access for management of ORVs. The surrounding land uses and management direction is not consistent with management of ORV and when looking at the larger river system, this segment does not provide a critical link to the systems approach. Additionally, there are federal and state laws that currently apply protections to portions of the segment. These protections will ensure ORVs and free-flow are protected into the future without WSR designation.

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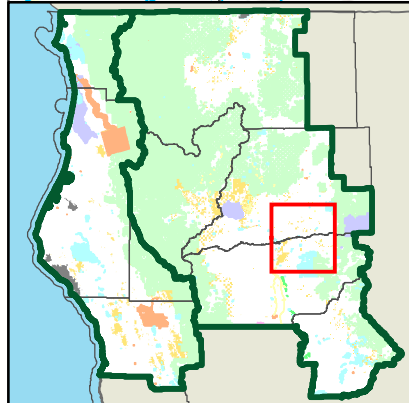
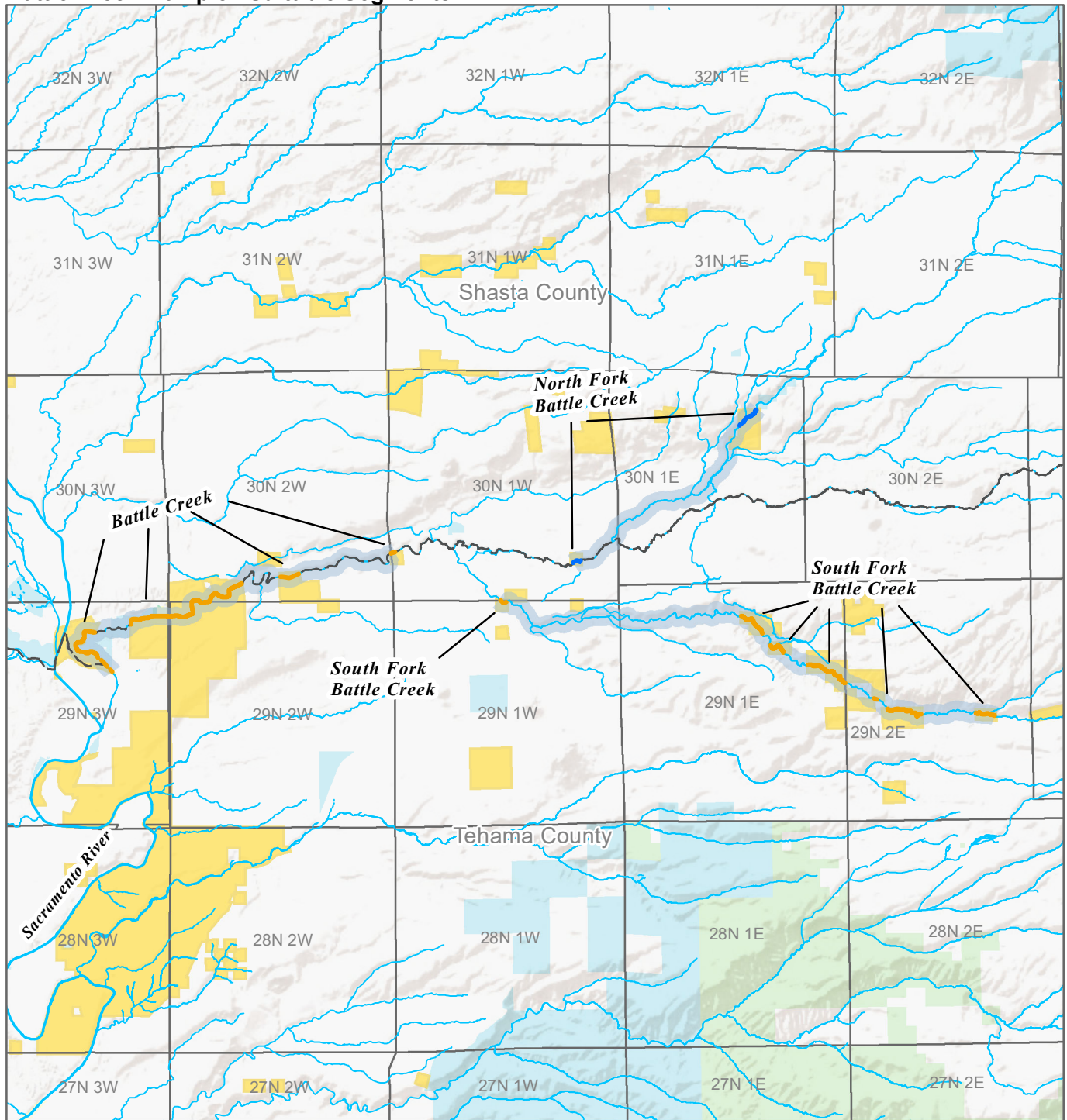
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Appendix A

Maps

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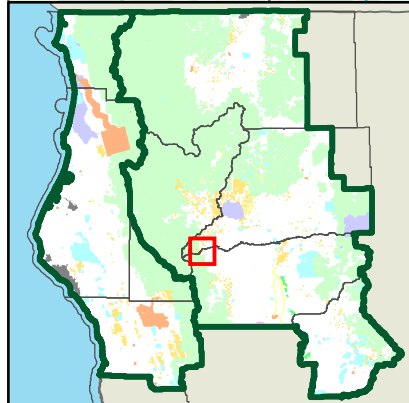
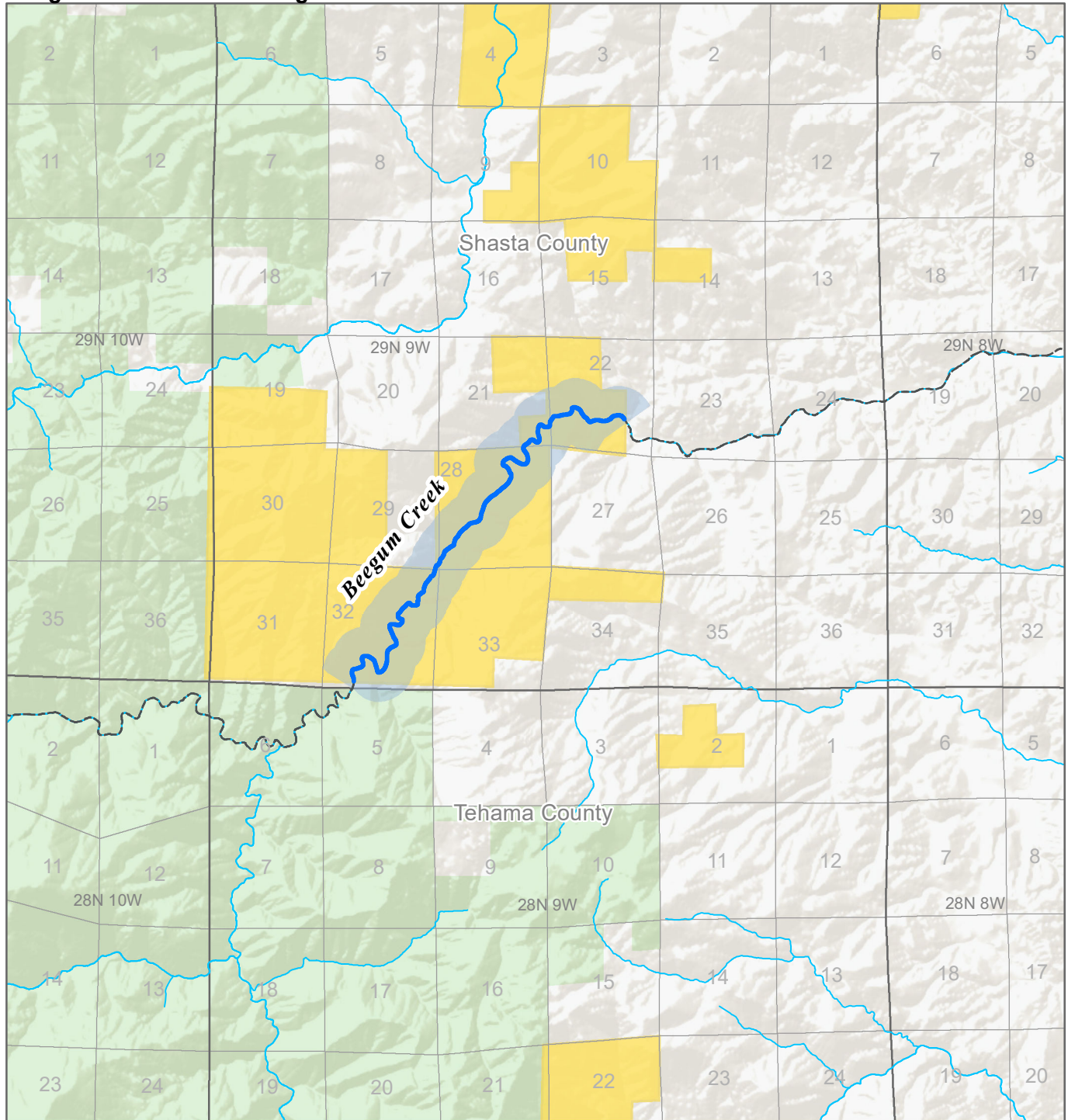
**Map A-1:
Battle Creek Complex Suitable Segments**



Preliminary Classification		Stream
Recreational	Bureau of Land Management	Forest Service
Wild	Fish and Wildlife Service	Bureau of Reclamation
Total suitable segment interim management corridor	State	Private

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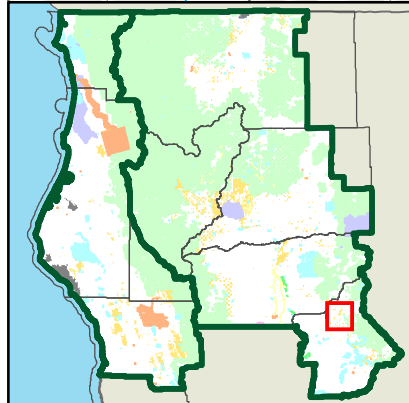
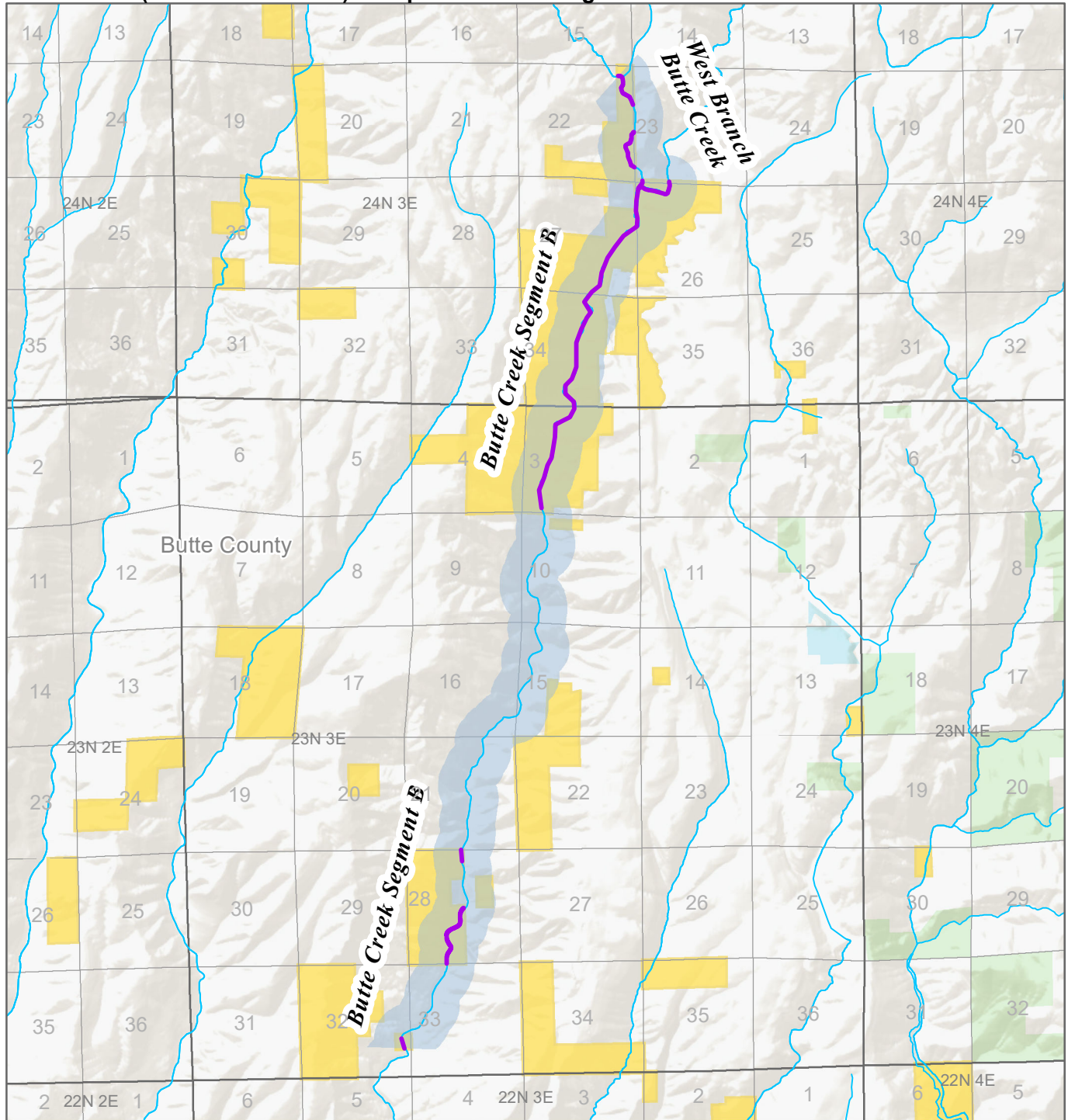
**Map A-2:
Beegum Creek Suitable Segments**



Preliminary Classification		Stream
Wild		Bureau of Land Management
		Forest Service
Total suitable segment interim management corridor		Bureau of Reclamation
		Private

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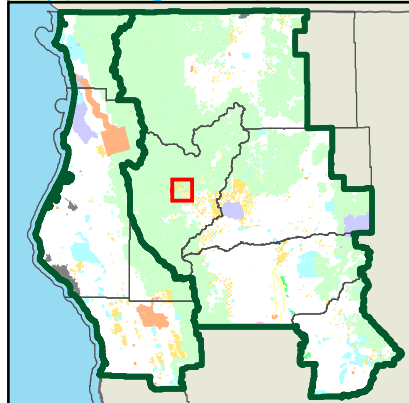
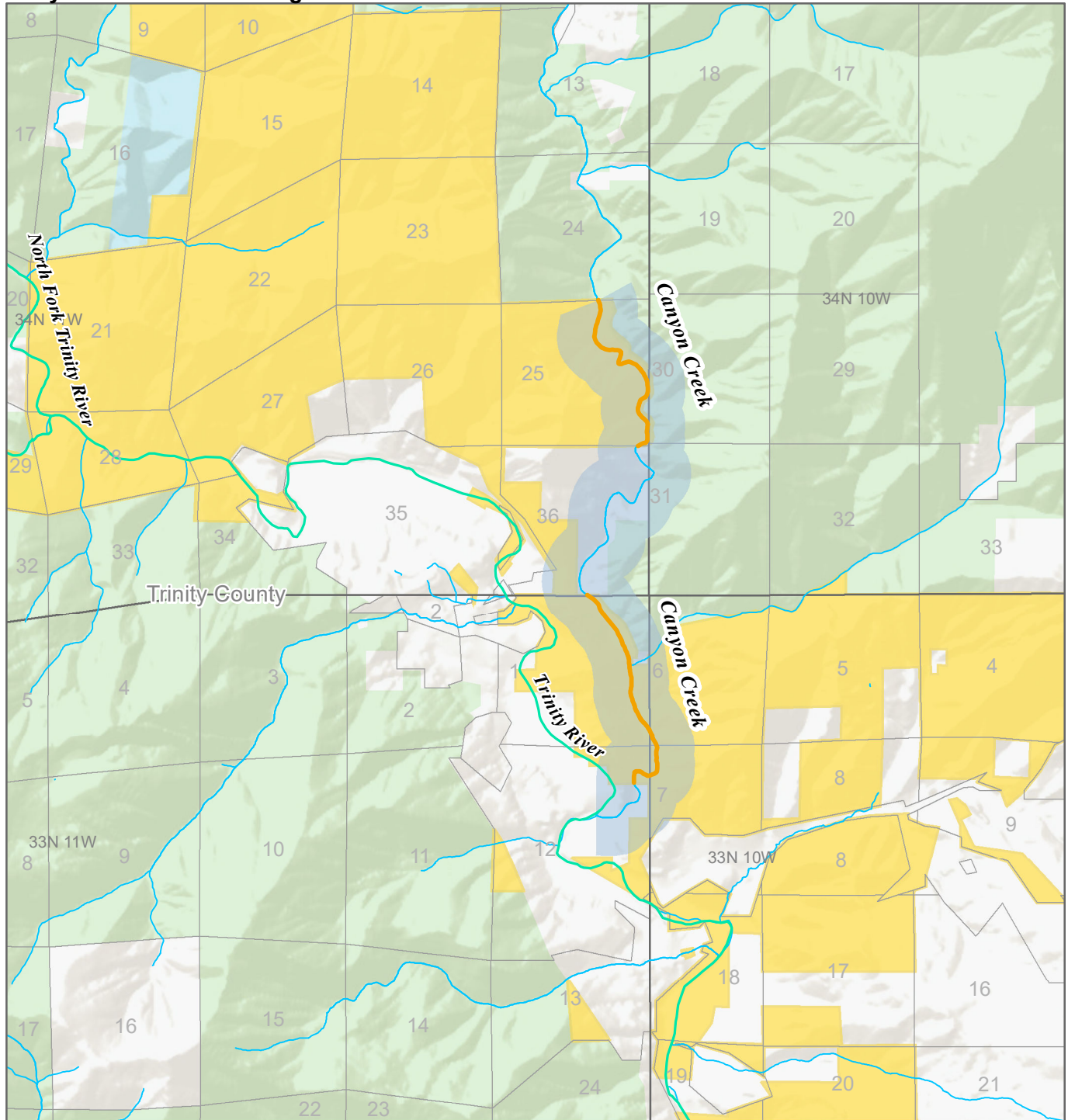
**Map A-3:
Butte Creek (Sacramento River) Complex Suitable Segments**



Preliminary Classification		Stream
Scenic	Bureau of Land Management	Forest Service
Total suitable segment interim management corridor	State	Private

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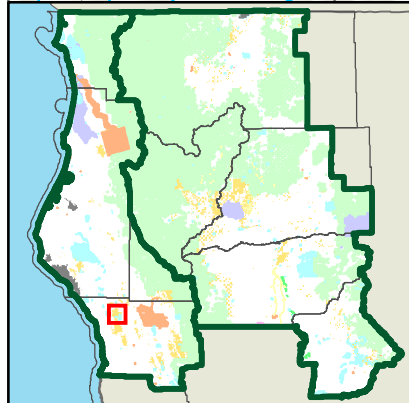
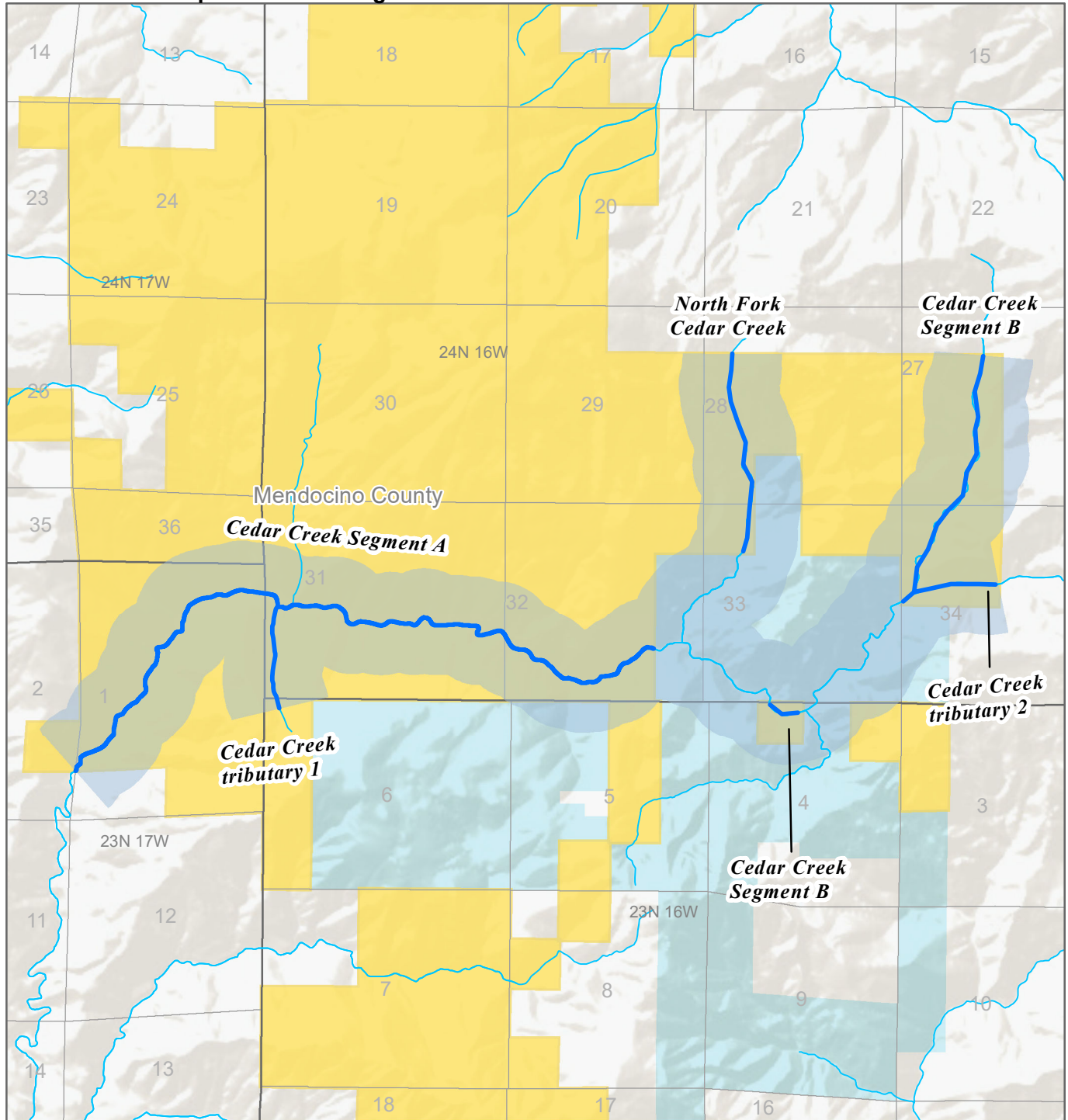
**Map A-4:
Canyon Creek Suitable Segments**









Preliminary Classification		Stream
Recreational	Bureau of Land Management	Forest Service
Total suitable segment interim management corridor	State	Private
Designated wild and scenic river		

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**Map A-5:
Cedar Creek Complex Suitable Segments**

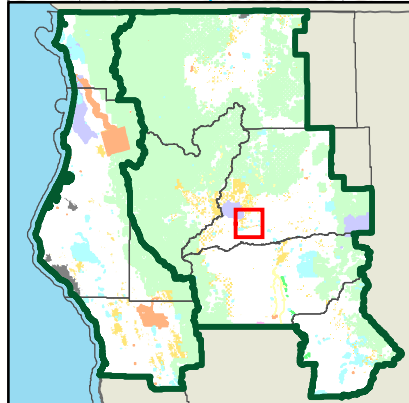
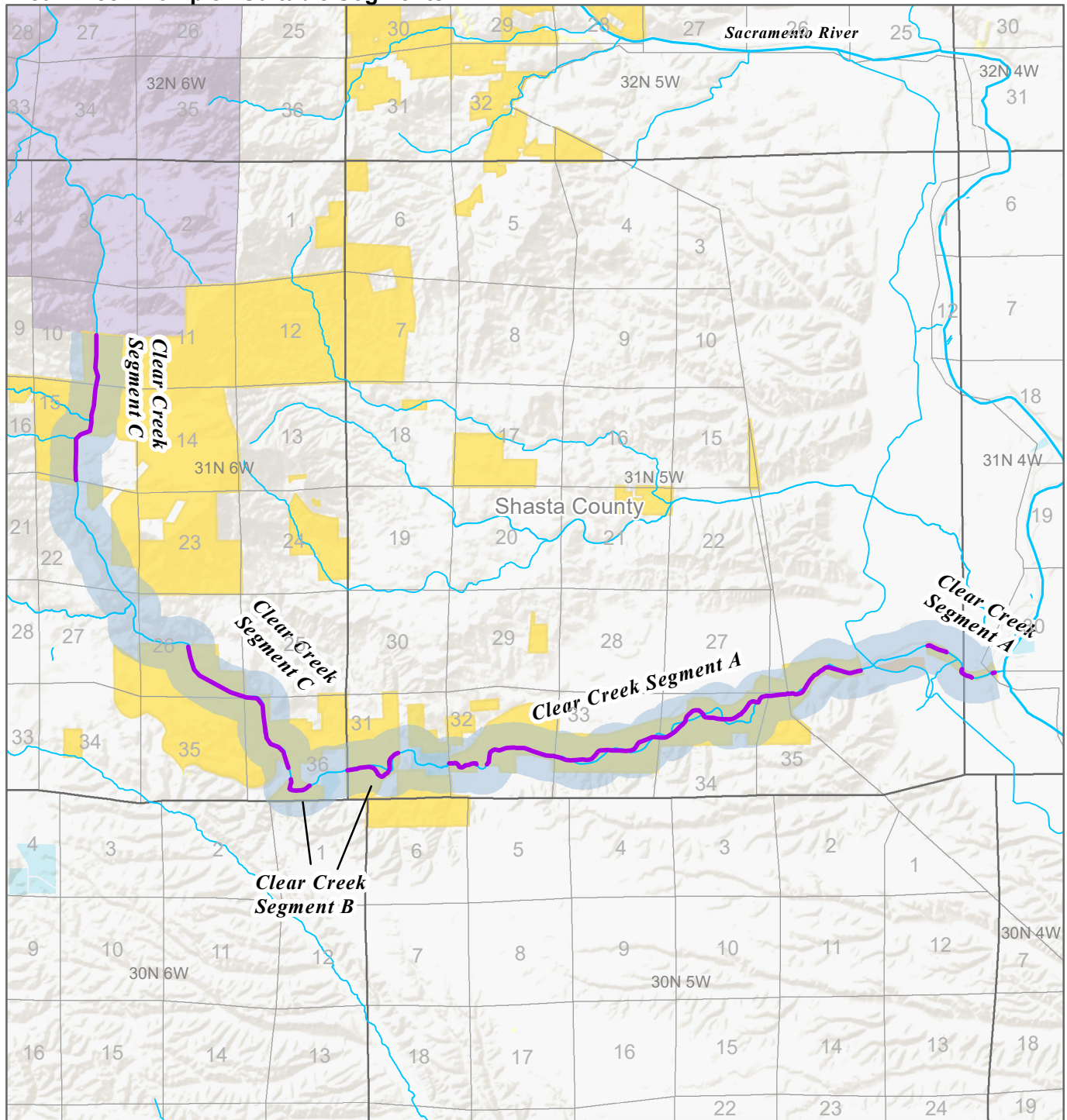


Preliminary Classification










-  Wild
-  Bureau of Land Management
-  State
-  Private
-  Total suitable segment interim management corridor
-  Stream

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**Map A-6:
Clear Creek Complex Suitable Segments**

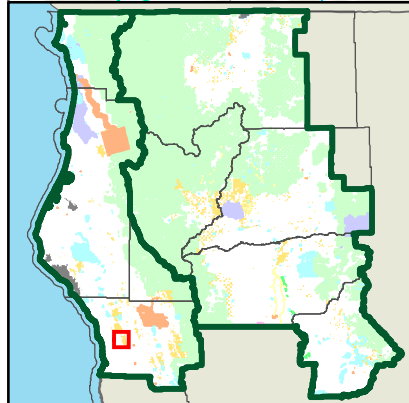
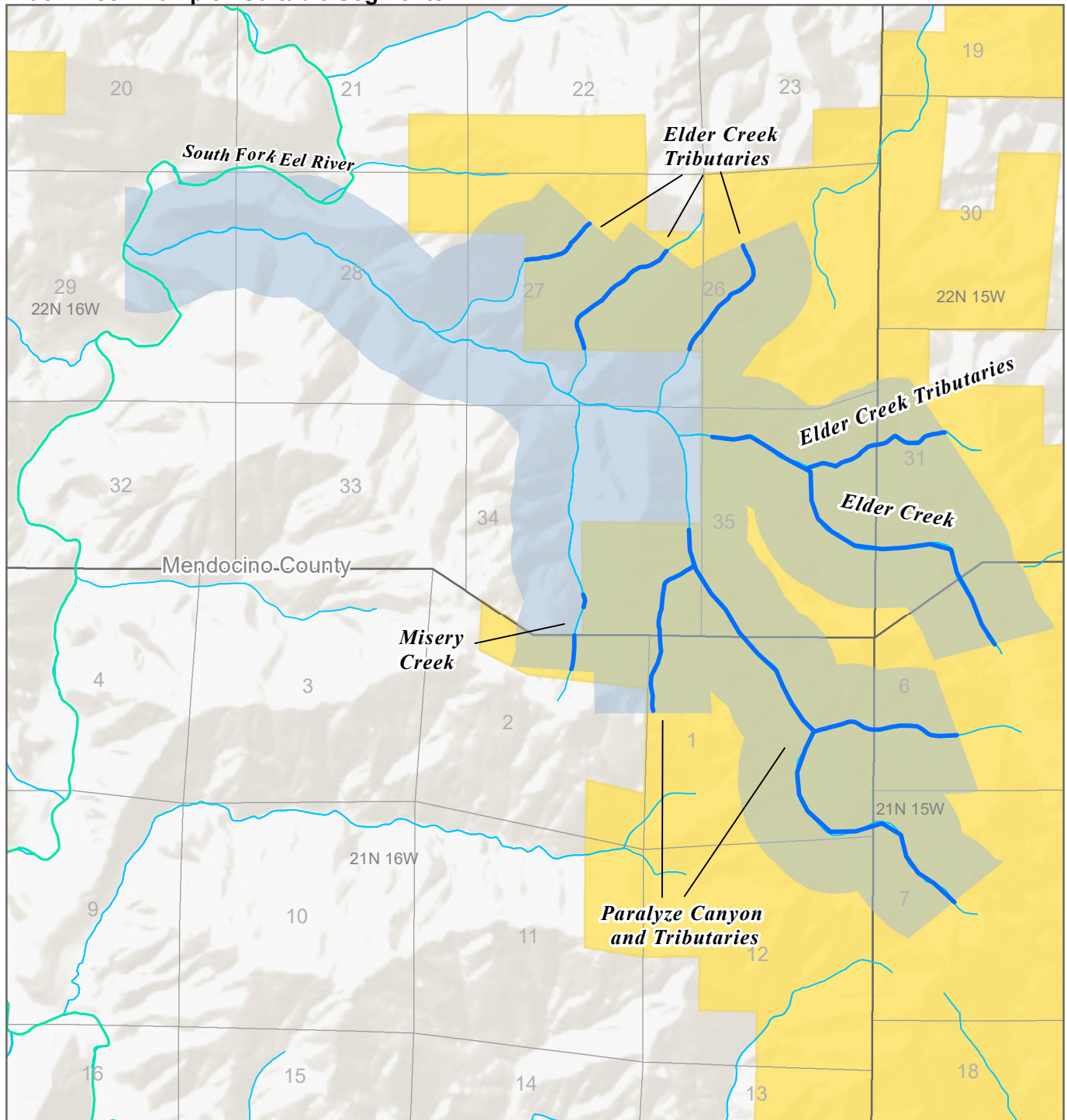


Preliminary Classification







-  Scenic
-  Total suitable segment interim management corridor
-  Stream
-  Bureau of Land Management
-  National Park Service
-  Bureau of Reclamation
-  Tribal Land
-  State
-  Private

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**Map A-7:
Elder Creek Complex Suitable Segments**

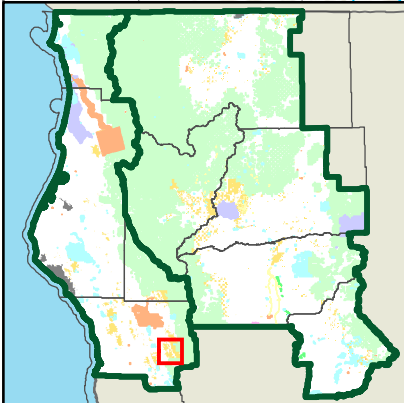
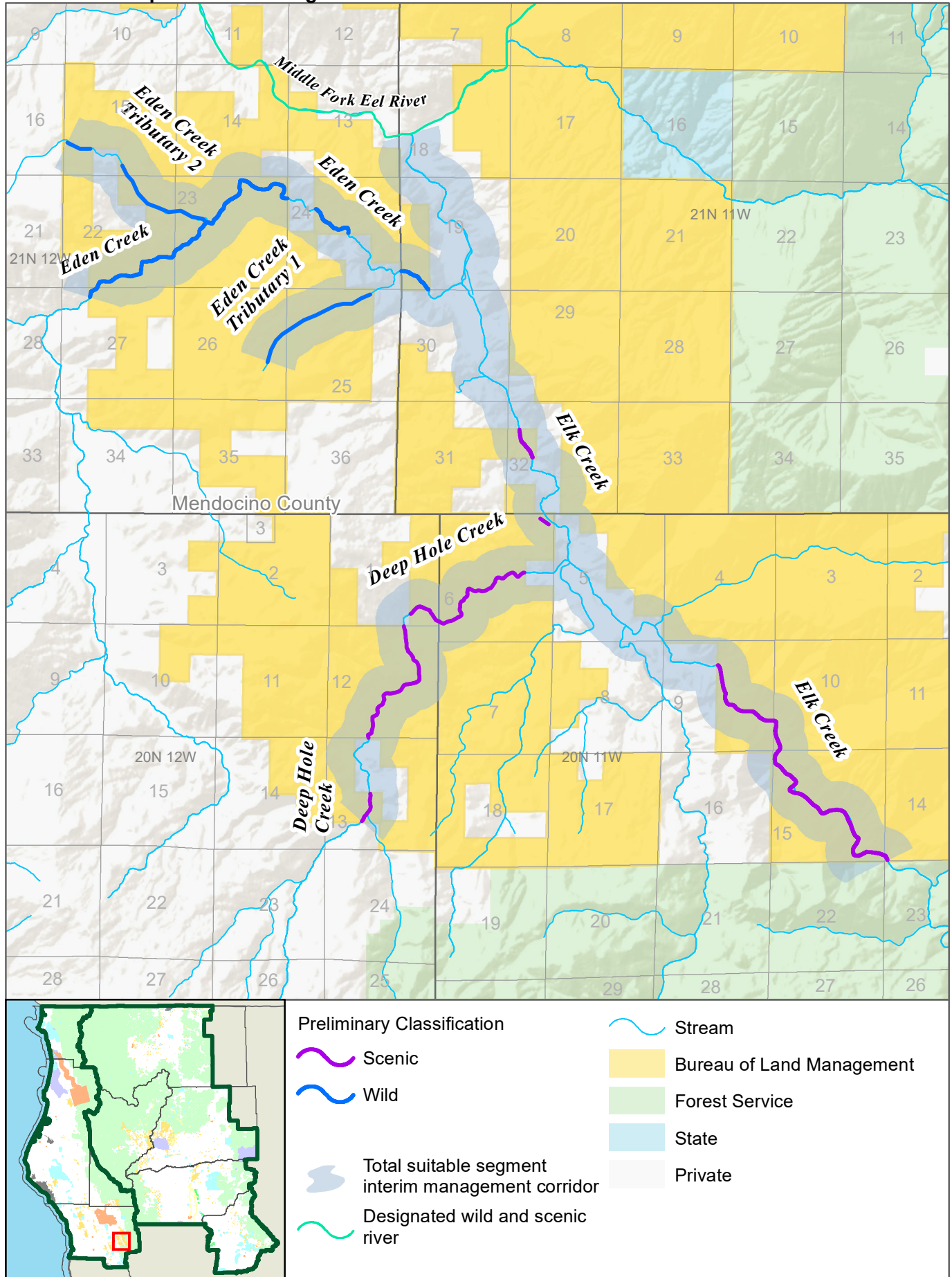


Preliminary Classification

-  Wild
-  Total suitable segment interim management corridor
-  Designated wild and scenic river
-  Bureau of Land Management
-  Private
-  Stream


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**Map A-8:
Elk Creek Complex Suitable Segments**




Preliminary Classification


-  Scenic
-  Wild

 Total suitable segment interim management corridor

 Designated wild and scenic river

 Stream

 Bureau of Land Management

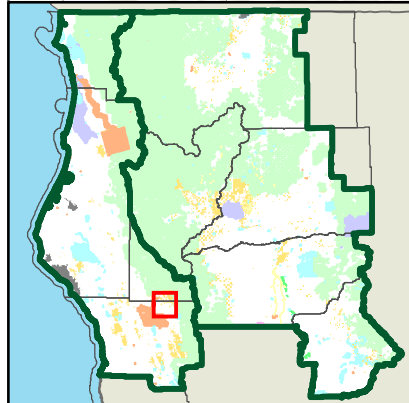
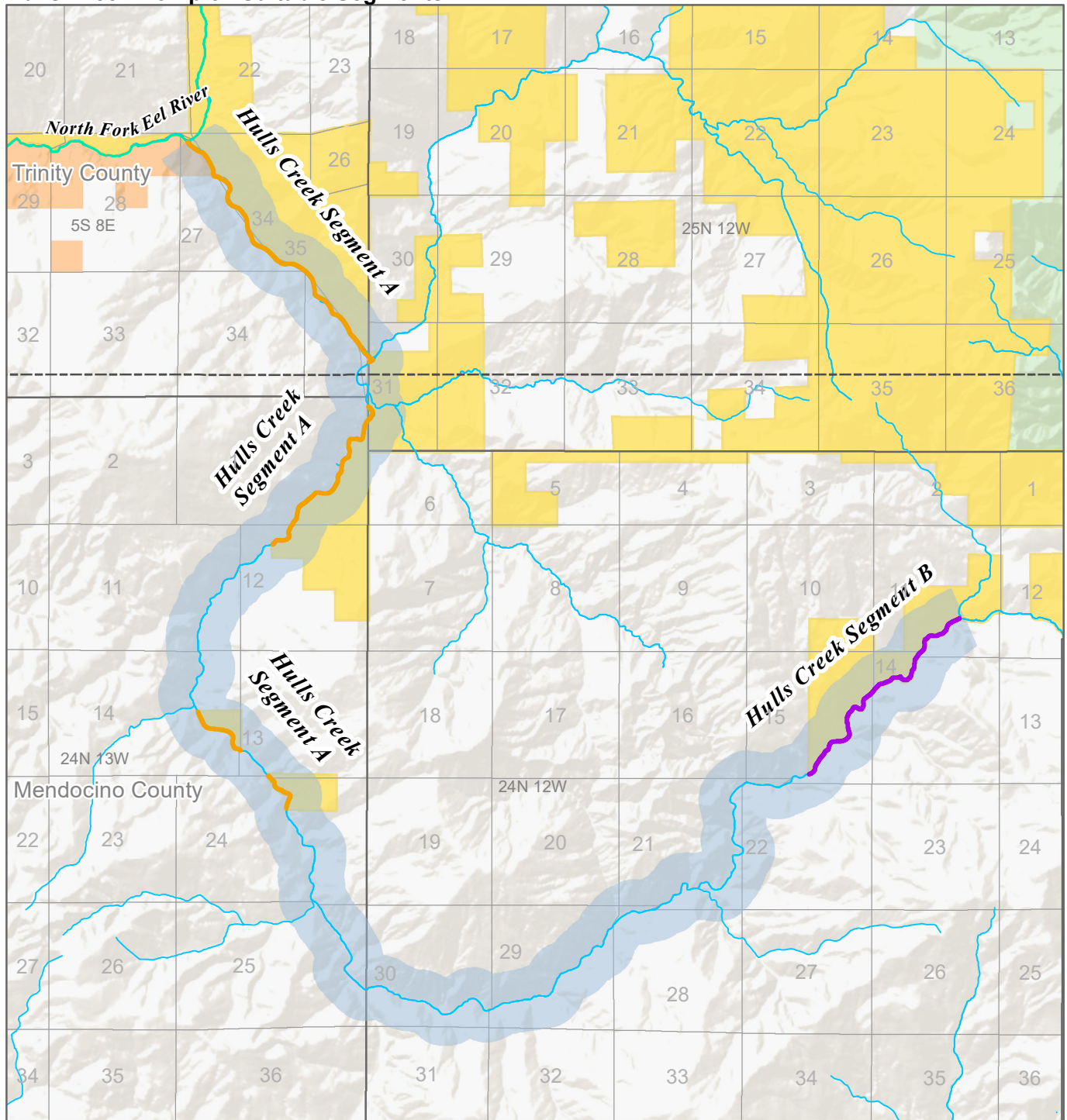
 Forest Service

 State

 Private

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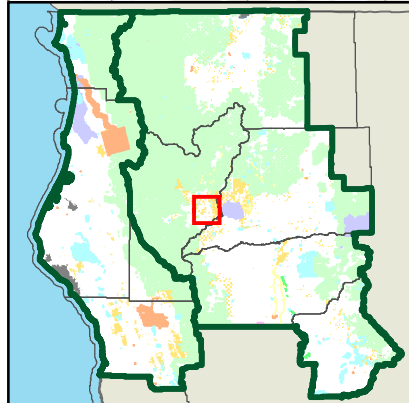
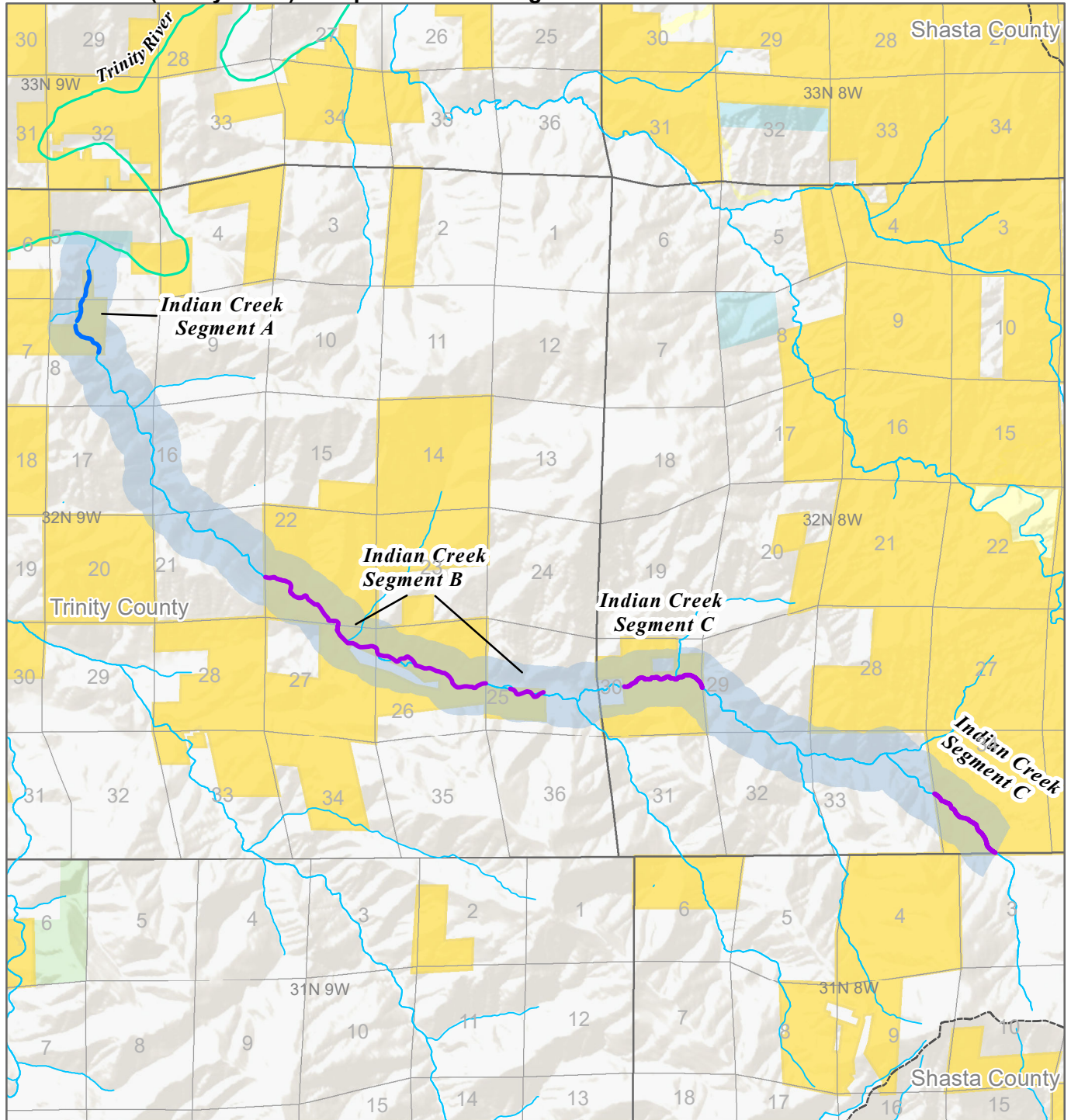
**Map A-9:
Hulls Creek Complex Suitable Segments**



Preliminary Classification		Stream
Recreational		Bureau of Land Management
Scenic		Forest Service
		Tribal Land
Total suitable segment interim management corridor		Private
Designated wild and scenic river		

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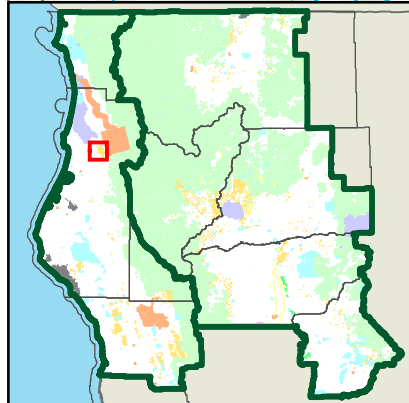
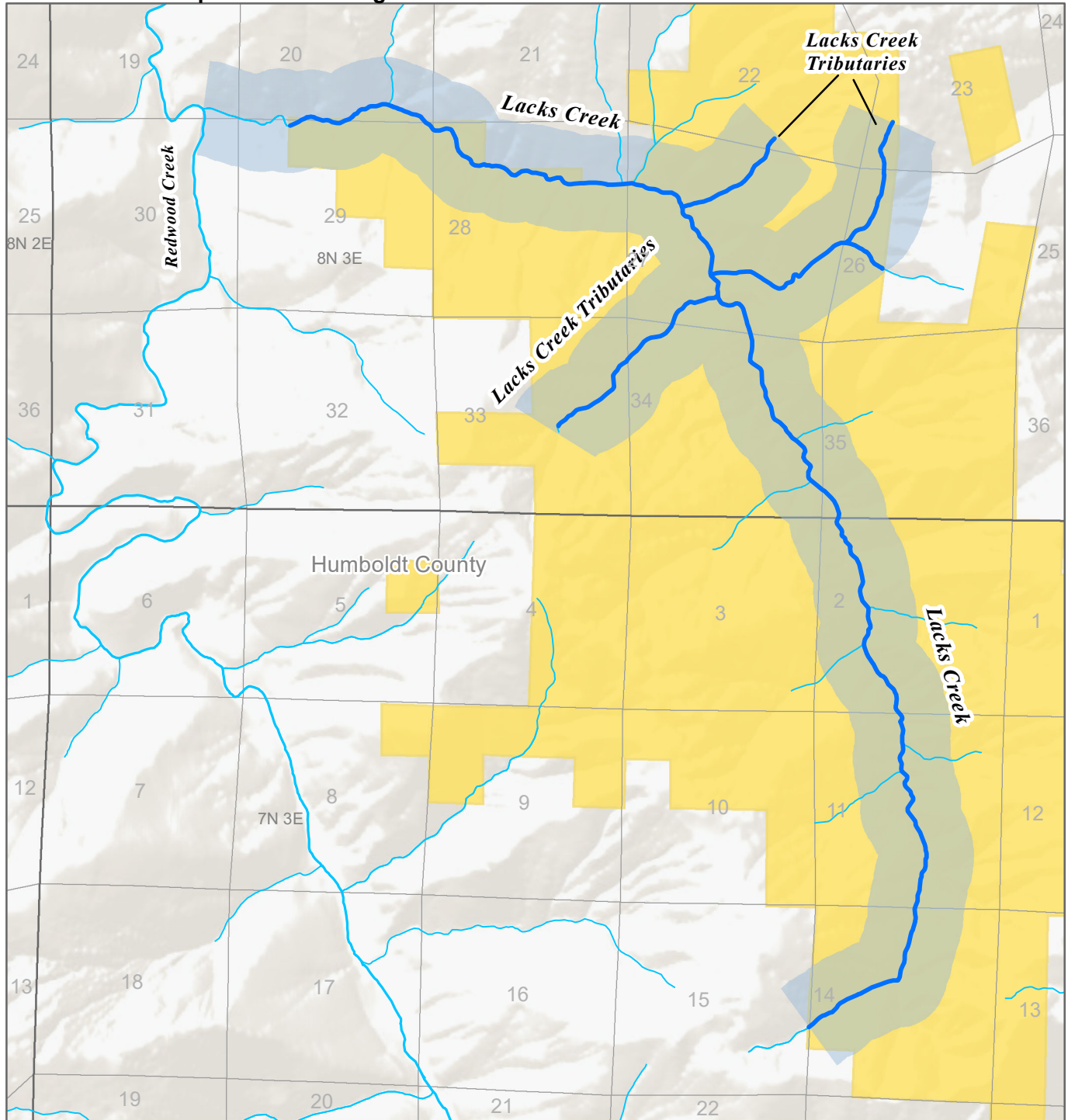
**Map A-10:
Indian Creek (Trinity River) Complex Suitable Segments**








Preliminary Classification		Stream
Scenic	Bureau of Land Management	Forest Service
Wild	Bureau of Reclamation	State
Total suitable segment interim management corridor	Private	
Designated wild and scenic river		

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**Map A-11:
Lacks Creek Complex Suitable Segments**

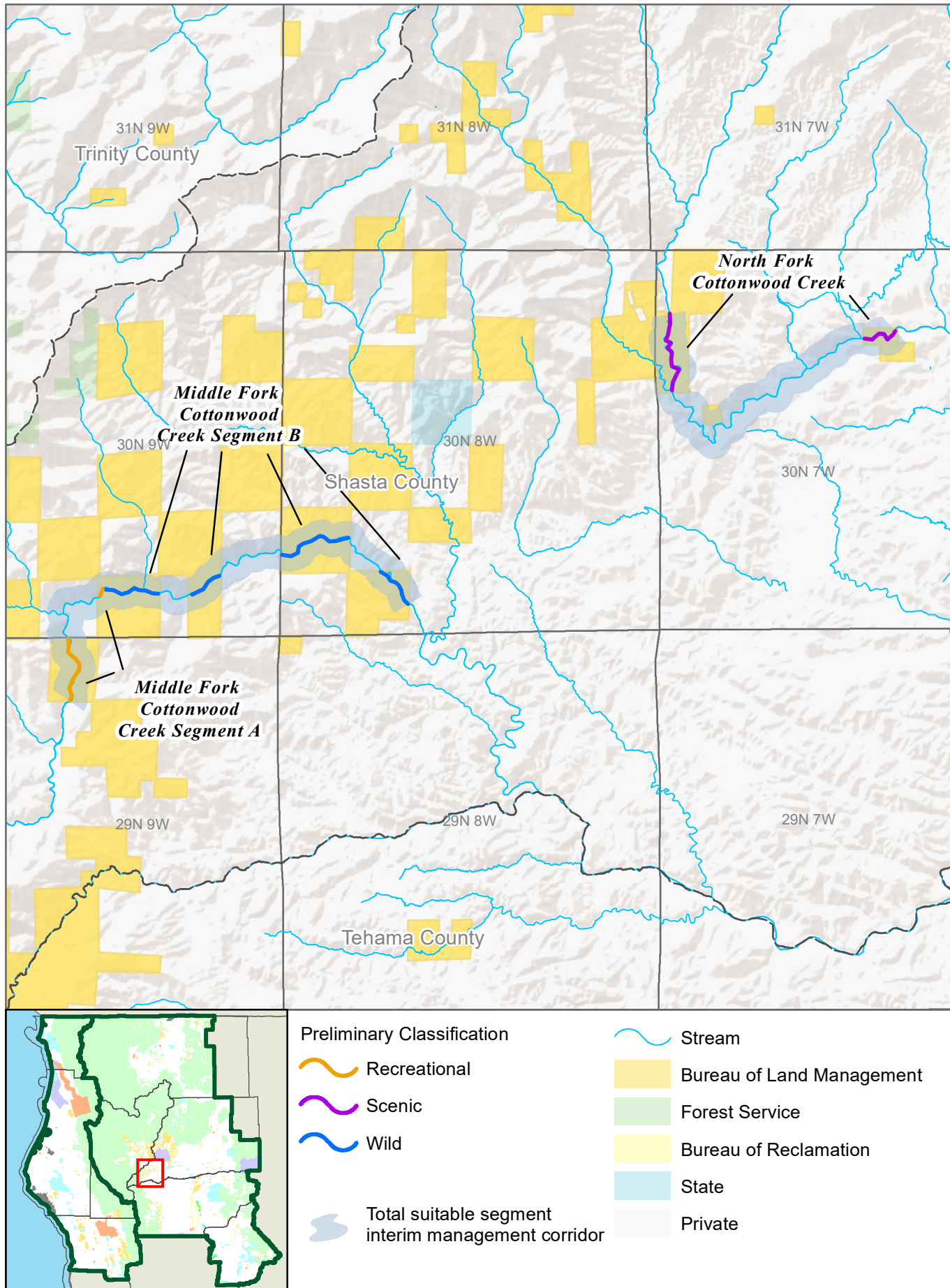


Preliminary Classification

-  Wild
-  Total suitable segment interim management corridor
-  Stream
-  Bureau of Land Management
-  Private

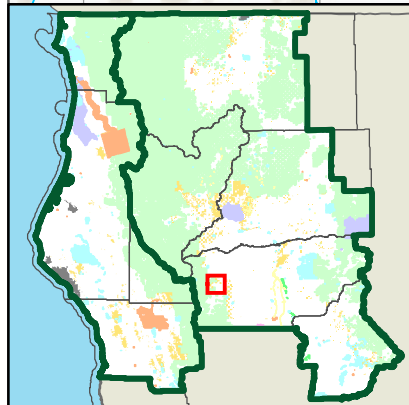
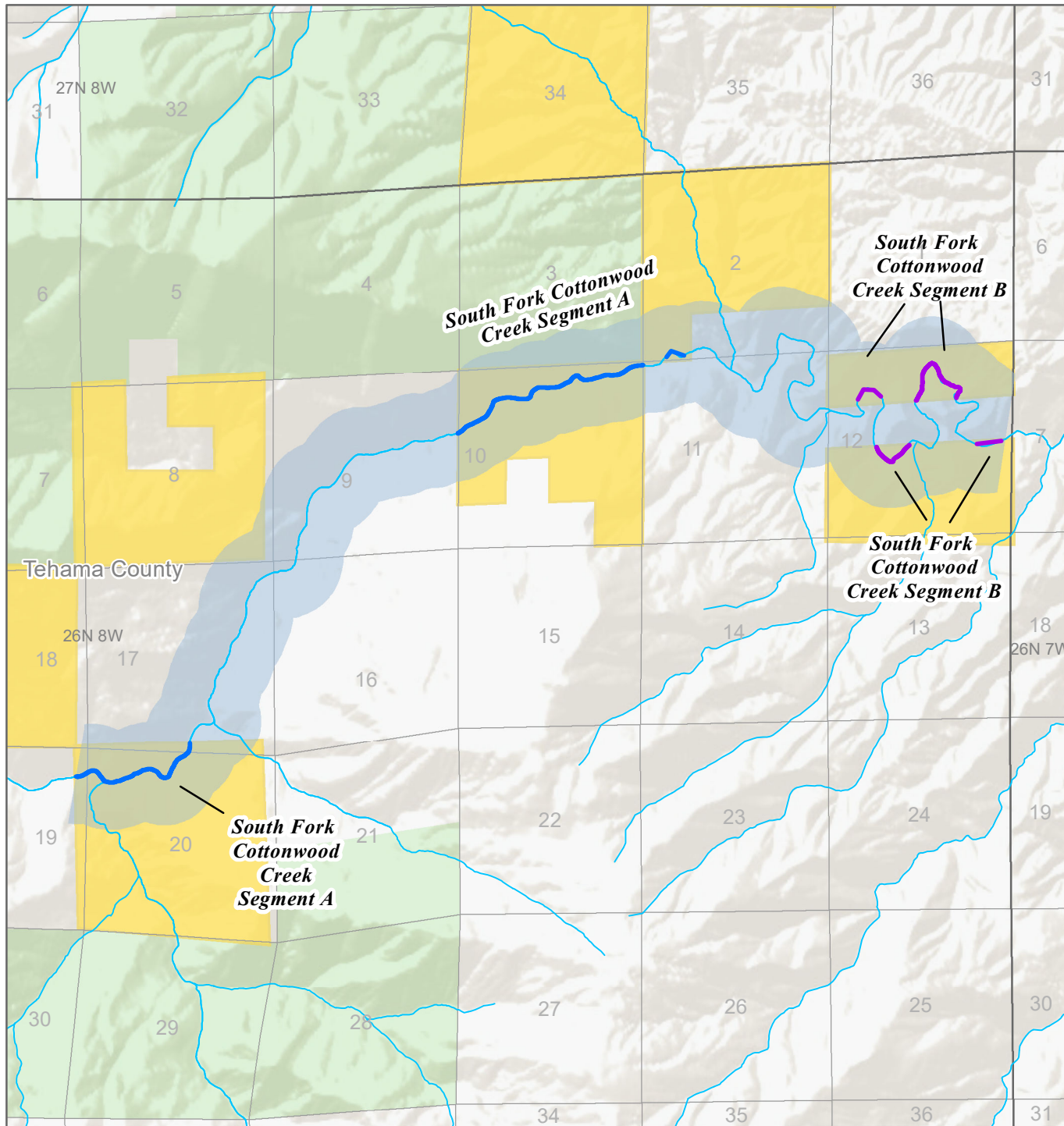
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**Map A-12:
Cottonwood Creek Complex—North Suitable Segments**



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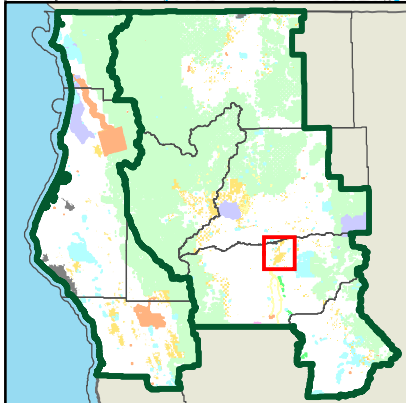
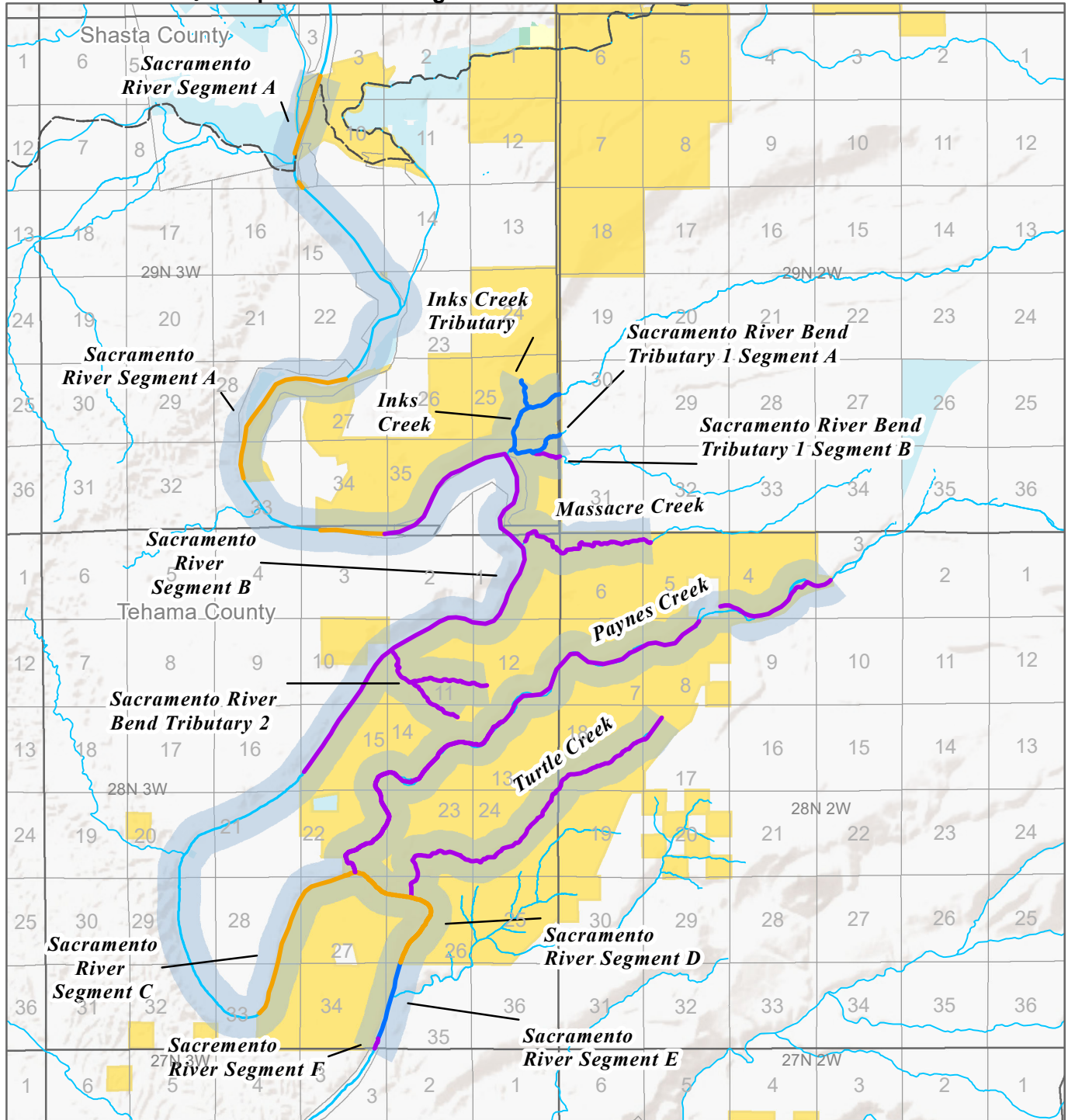
**Map A-13:
Cottonwood Creek Complex—South Suitable Segments**



- | | | |
|-----------------------------------|--|---------------------------|
| Preliminary Classification | | Stream |
| | Scenic | Bureau of Land Management |
| | Wild | Forest Service |
| | Total suitable segment interim management corridor | Private |

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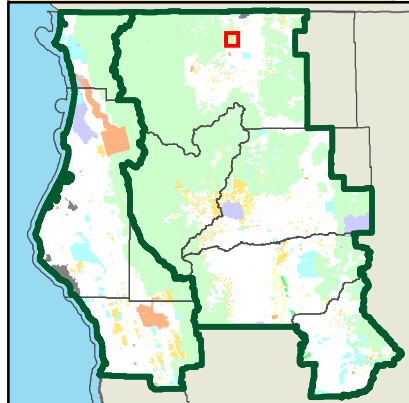
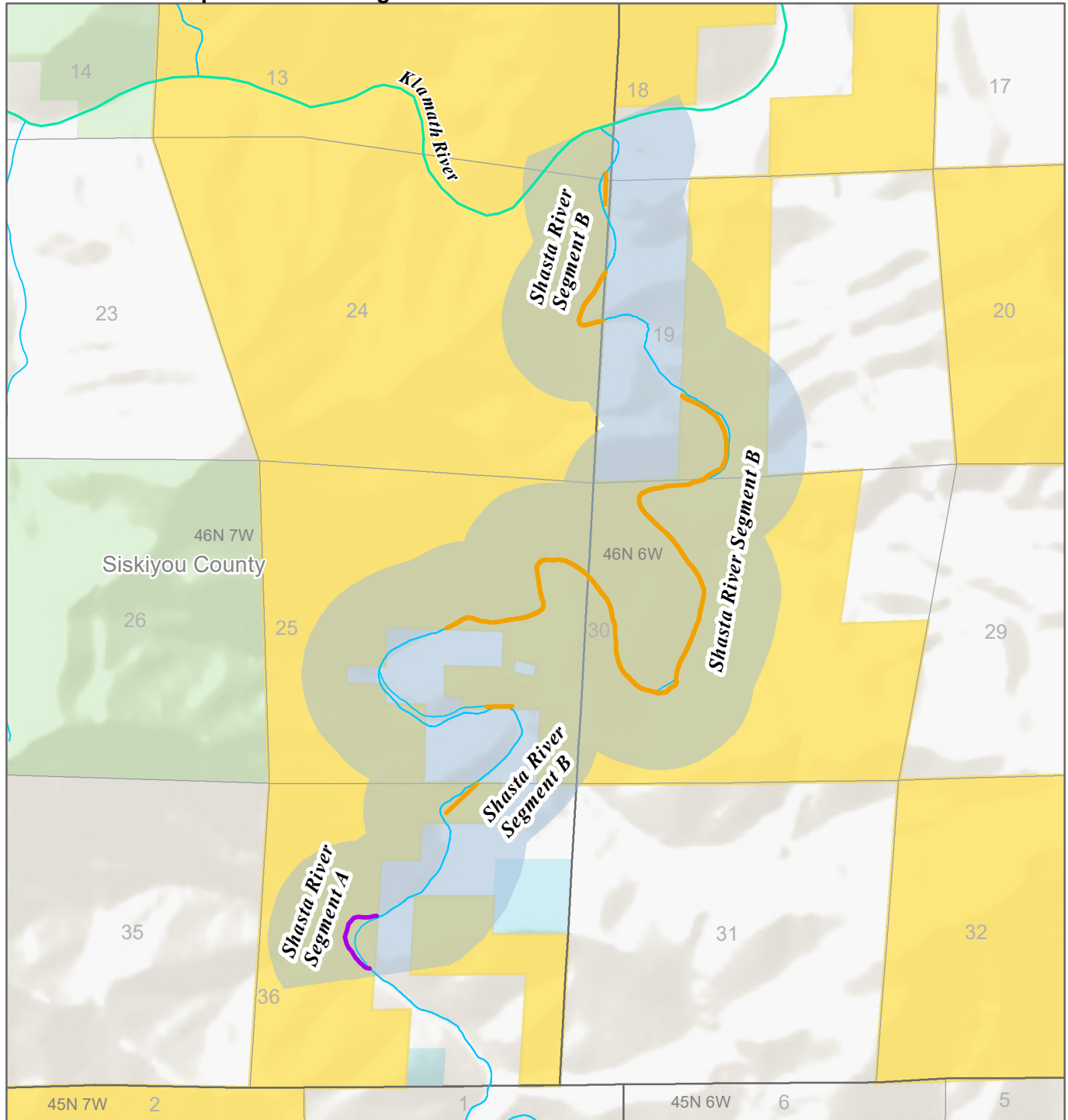
**Map A-14:
Sacramento River Complex Suitable Segments**



Preliminary Classification		Stream
Recreational	Bureau of Land Management	Fish and Wildlife Service
Scenic	Bureau of Reclamation	State
Wild	Private	
Total suitable segment interim management corridor		

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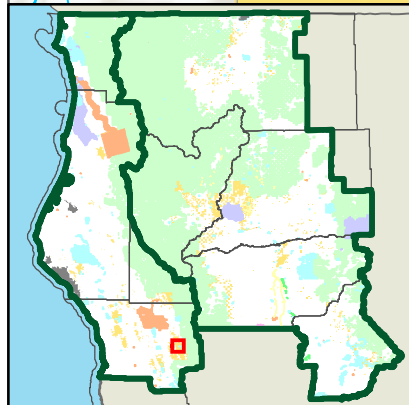
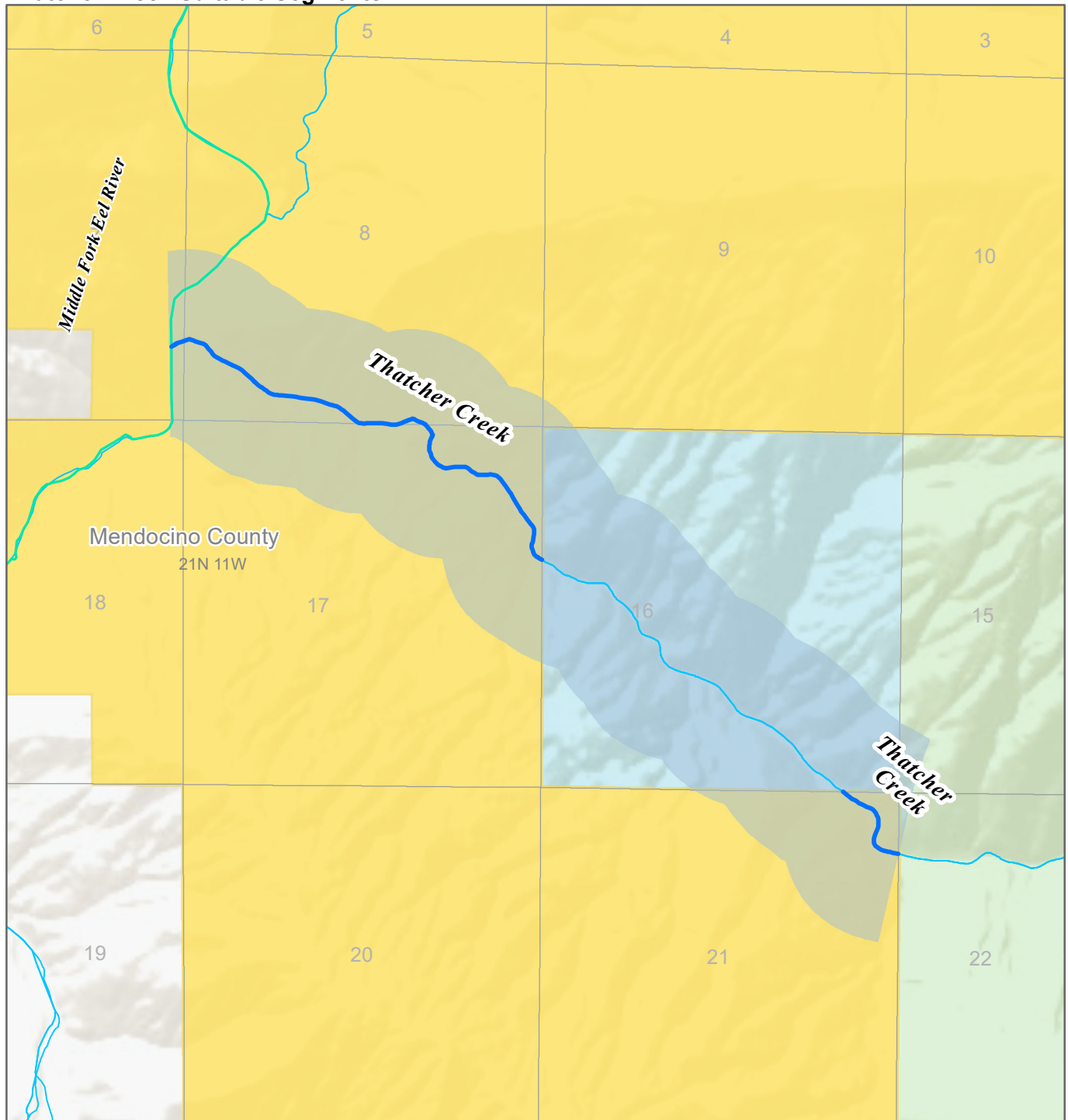
**Map A-15:
Shasta River Complex Suitable Segments**



Preliminary Classification		Stream
Recreational		Bureau of Land Management
Scenic		Forest Service
	Total suitable segment interim management corridor	State
	Designated wild and scenic river	Private


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**Map A-16:
Thatcher Creek Suitable Segments**



Preliminary Classification

 Wild

 Total suitable segment interim management corridor


 Designated wild and scenic river

 Stream

 Bureau of Land Management

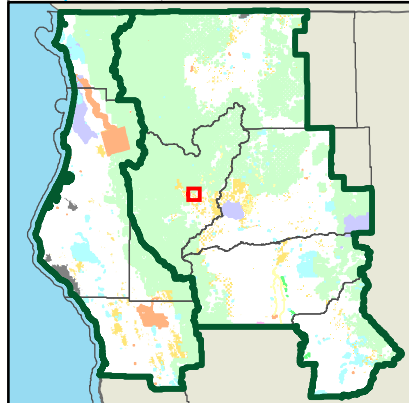
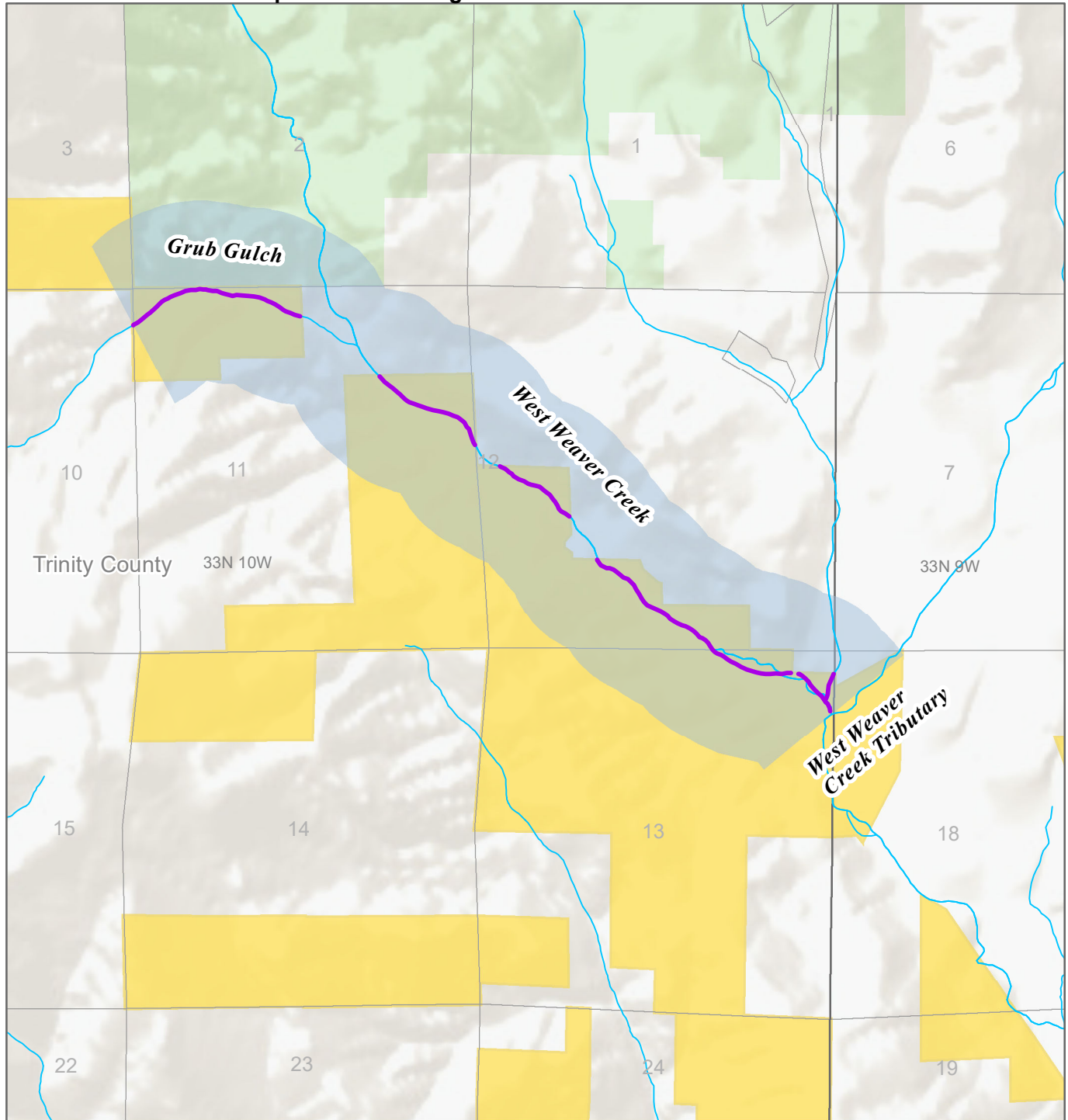
 Forest Service







 State

 Private

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**Map A-17:
West Weaver Creek Complex Suitable Segments**



Preliminary Classification		 Stream
 Scenic	 Bureau of Land Management	 Forest Service
 Total suitable segment interim management corridor	 Private	

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