UKIAH RESOURCE MANAGEMENT PLAN

U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT UKIAH FIELD OFFICE

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1.0 INTRODUCTION

This document serves to concisely present the decisions and vision for each of the nine management areas in the Ukiah Field Office. Please refer to the Proposed RMP and Final EIS (July 2006) for additional information such as detailed descriptions of setting, impacts, and alternatives considered.

1.1 LOCATION AND BACKGROUND

The Ukiah Field Office includes approximately 270,000 acres of BLM-managed surface acres and 214,000 additional subsurface acres (mineral estate) in northern California (see Figure 1). The geographic area includes all BLM-managed public lands within the counties of Marin, Solano, Sonoma, Mendocino (south of the City of Willits), Lake, Napa, Yolo, Colusa, and Glenn. Approximately 1.5 million people live within this region. Most of the population resides in the southern half of the Ukiah Field Office area, where BLM manages the least amount of public lands. The large metropolitan San Francisco Bay and the Sacramento Regions influence public lands administered by the field office, particularly as many of Ukiah's public land visitors come from these areas.

The Ukiah Field Office area of responsibility is not a continuous geographic area of public land. It is spread across nine counties, bounded by the Pacific Ocean on the west, San Francisco Bay on the south, the Sacramento River on the east, and Humboldt County on the north. The planning area is separated into nine management areas (see Figure 1) as follows:

- Cow Mountain
- Knoxville
- Indian Valley
- Cache Creek
- Cedar Roughs
- Berryessa
- Stornetta
- The Geysers
- Scattered Tracts

1.2 UKIAH FIELD OFFICE VISION STATEMENT

The following vision and mission statement was developed based on the direction, intent and spirit of the legislation and policies establishing management of the area, and input from the public during the scoping process for the plan:

"The BLM Ukiah Field Office will manage the public lands and split-estate mineral resources in ways that sustain their health, diversity, and productivity for the enjoyment of present and future generations."

Our vision for the Ukiah Field Office is to balance recreational opportunities and environmentally responsible commercial activities with the conservation of natural and cultural resources. To achieve that vision, the Ukiah Field Office will:

- Manage public lands as "keepers of the public trust," providing a variety of resource opportunities and open spaces for the benefit and enjoyment of everyone.
- Maintain and improve the health of our diverse landscapes and ecosystems.
- Protect the public lands from abuse.
- Respect community values and seek opportunities for local involvement in area conservation and use.

2.0 MANAGEMENT COMMON TO ALL AREAS

2.1 VISUAL RESOURCES MANAGEMENT

2.1.1 Introduction

The visual quality of the California coastal range and its open space are critical to maintaining the natural character of the lands managed by the Ukiah Field Office. Lands within the planning area are categorized according to the BLM's Visual Resource Management (VRM) classification system. The VRM system is used to ensure that any development or changes in the landscape of the decision area achieve the overall scenic goals and objectives of the assigned VRM class.

VRM Classes were developed in coordination with the BLM's Recreation Opportunity Spectrum (ROS). Although the ROS system was developed to inventory and manage recreational resources, it is a management tool that considers a number of factors and different resources. The ROS system inventories physical and social conditions and is also based on visitor experience, including visual experiences. For the RMP, VRM classes were, to a large degree, assigned to various ROS settings that were similar in how they related to the visual environment. The Recreation section contains a description of the ROS settings, including how the landscape in each setting is to appear. For example, the description of the Primitive Zone identifies the zone as having "an undisturbed landscape with no developed facilities" and that maintains "naturally appearing ROS settings." The VRM Classes that correspond to the ROS settings vary by area and are described in tables in the description of each area. VRM Class I is only considered for wilderness areas, WSAs, ACECs, and other areas where preservation of the natural landscape is a primary management objective.

In addition to coordinating VRM classes with ROS settings, a second step was undertaken to further refine VRM classes in some areas of the planning area. BLM lands that can be seen from Key Travel Routes (KTRs) or Key Observation Points (KOPs) often require additional protection than areas near them that are not visible from KTRs and KOPs.

Goals:

- Protect and enhance the scenic quality and visual integrity of the characteristic landscapes managed by Ukiah Field Office.
- Manage public lands in a manner that would protect the quality of the visual resources while allowing management activities to occur.

Management Actions:

- Seldom seen areas are areas that are not seen from identified viewing areas that are selected to
 represent sensitive viewing areas. Seldom seen areas will be identified and mapped at the activity
 plan and project level, and may have a management class that is less restrictive than the
 surrounding VRM management class. There will be no seldom seen areas within VRM
 Management Class I.
- Projects and their area of impact may have a short term impact management class one level less restrictive than the surrounding VRM management class, including that defined for seldom seen areas when within seldom seen areas. The short term impact management class may be in effect

for no greater than a two-year period. Short term impact provisions apply to areas within VRM Management Class I.

- Areas within the seen area of key travel routes (KTRs) or key observation points (KOPs) may be
 managed to one VRM Class more protective than the surrounding area. KTRs and KOPs can
 be located either on or outside of BLM lands.
- Wilderness Areas and Wilderness Study Areas will be managed as VRM Class I.

2.2 WILDLIFE AND FISH

2.2.1 Introduction

Wildlife and fisheries program guidance throughout the Ukiah Field Office lands will provide the framework to manage habitat and forage to maintain or enhance populations of special status species (including species listed under the Endangered Species Act), native species, and to support the goals and management strategies in California Department of Fish and Game (CDFG) cooperative management plans.

Goals:

- Ensure that native wildlife and fish species are provided habitat of sufficient quantity and quality
 to enhance biological diversity and sustain their ecological, economic, and social values. The aim
 is to have a full spectrum of biological communities, habitats, and their ecological processes
 throughout the Ukiah Field Office lands with populations of native species well-distributed
 across the landscape.
- Improve public awareness, understanding, and support for resolving issues surrounding wildlife and fish species conservation, management, and ecology.

Objective: Improve habitats to support increased population levels.

Management Actions:

The management approach discussed will be accomplished in cooperation with CDFG and the U.S. Fish and Wildlife Service (USFWS) to achieve stated goals and objectives. Management will include a range of specific actions for special status species with habitat occurring throughout the Ukiah Field Office lands, as well as other issues involving management and monitoring of wildlife and fish populations and their habitats.

2.2.1.1 Special Status Species

Threatened and Endangered Species

Objective: Through partnerships with local, state, and federal entities, minimize or eliminate the need for additional listing of species under the Endangered Species Act and contribute to the recovery of already listed species.

Management Actions:

Implement measures to promote the recovery and conservation of all threatened and endangered species on lands managed by the Ukiah Field Office. This will occur in accordance with applicable Endangered Species Act of 1973 regulations (50 CFR 402) and BLM policy (6840 Manual, IM UT No. 97-66). If any additional listed species or their habitats beyond the list considered in this planning process are found to be present on BLM lands in the future, the BLM will abide by the provisions of the ESA and manage these species and their habitats to promote recovery. Specific actions would include monitoring of listed species and their habitats on a regularly-scheduled basis. If any impacts are documented, immediate steps would be taken to prevent or mitigate these impacts, as applicable. If any projects are proposed by BLM or any other proponent where a listed species may be affected, the BLM will initiate consultation with the USFWS and/or National Oceanic and Atmospheric Administration (NOAA) to ascertain that such projects do not jeopardize the continued existence of a listed species or adversely modify designated critical habitat.

If any listed threatened and endangered (T&E) species are documented in the management area, begin regular monitoring to identify any important habitats. This would be accomplished in coordination with CDFG, USFWS, and NOAA.

Inventory for elderberry and the valley elderberry longhorn beetle (VELB) will be conducted consistent with the draft elderberry recovery plan, to identify and implement management actions needed for the expansion and recovery of the VELB. Other species specific actions are described in the management area decisions (Section 3).

2.2.1.2 Migratory Birds

Guidelines for the management of migratory birds are in the Executive Order (13186) for Conservation of Migratory Birds (January 11, 2001). Of the approximately 900 migratory birds occurring in the United States, 131 are included on the most recent list (2002) and were selected as species of management concern at the national level, known by the U.S. Fish and Wildlife Service (USFWS) as Birds of Conservation Concern (BCC). Migratory bird species on this list documented within the Ukiah Field Office lands include peregrine falcon (Falco peregrinus), prairie falcon (Falco mexicanus), burrowing owl (Athene cunicularia), long-billed curlew (Numenius americanus), rufous hummingbird (Selasphorus rufus), Lewis's woodpecker (Melanerpes lewis), olive-sided flycatcher (Contopus borealis) and Lawrence's goldfinch (Carduelis lawrence). The management goals for these species will generally be achieved by habitat protection and enhancement as described in the Vegetation section, as well as specific management actions described in the management area decisions (Section 3).

Management of migratory birds specifically at Cow Mountain and Cache Creek would be guided by recommendations included in several bird conservation plans prepared by the California Partners in Flight program. These plans include the Oak Woodlands, Riparian, and Coastal Scrub & Chaparral Plans and were written for land managers' use in improving habitat for landbirds. The plans are dynamic documents that follow a continuous process of developing and updating conservation recommendations for California's habitats based on the latest scientific monitoring and research data and helps provide the foundation for adaptive conservation management in California's habitats.

Focal species occurring at Cow Mountain and Cache Creek that are included within the Cal-PIF Oak Woodlands Conservation Plan include acorn woodpecker (*Melanerpes formicivorus*), blue-gray gnatcatcher

(Polioptila caerulea), lark sparrow (Chondestes grammacus), Nuttall's woodpecker (Picoides nuttalli), oak titmouse (Baeolophus inornatus), western bluebird (Sialia mexicana), western scrub jay (Aphelocoma californica), and yellow-billed magpie (Pica nuttalli) (Cache Creek only).

Focal species occurring at Cow Mountain and Cache Creek that are included within the Cal-PIF Riparian Conservation Plan include black-headed grosbeak (*Pheucticus melanocephalus*), common yellowthroat (*Geothlypis trichas*), song sparrow (*Melospiza melodia*), Swainson's thrush (*Catharus ustulatus*), tree swallow (*Tachycineta bicolor*), warbling vireo (*Vireo gilvus*), Wilson's warbler (*Wilsonia pusilla*) (Cow Mountain only), yellow-breasted chat (*Icteria virens*), and yellow warbler (*Dendroica petechia*).

Focal species occurring at Cow Mountain and Cache Creek that are included within the Cal-PIF Coastal Scrub/ Chaparral Conservation Plan include black-chinned sparrow (*Spizella atrogularis*) (Cache Creek only), greater roadrunner (*Geococcyx californianus*), rufous-crowned sparrow (*Aimophila ruficeps*), sage sparrow (*Amphispiza belli*), and wrentit (*Chamaea fasciata*).

- Avoid and minimize adverse impacts on migratory bird resources when conducting any project
 work, including habitat restoration activities. Ensure that energy development has adequate
 measures to protect migratory bird habitat and flight routes. Best management practices to
 protect migratory birds from adverse impacts of energy development will be required (see
 Appendix I for wind energy related BMPs).
- Restore and enhance habitat for migratory birds in riparian and native oak habitats.
- Design a monitoring plan to provide long term data regarding bird populations and their habitats. Components of this plan will include the use of bird point counts or area searches with the intent of gathering statistically valid samples to assess the long-term effectiveness of management activities. Collaboration with other entities such as Partners in Flight (PIF), Audubon Society, or graduate students will be encouraged for this monitoring effort. There will be priority placed on any species found that are included in the PIF Species of Continental Importance for the U.S. and Canada. Appropriate management will be implemented to protect these species from habitat loss and impacts to the population.

2.2.1.3 Game Species

The two key game species on lands managed by the Ukiah Field Office for which the majority of habitat development projects are initiated include blacktail deer and tule elk.

Objective: Provide a mix of habitats necessary to support diverse and appropriate population levels of wildlife and fish game species. These habitats are intended to host a natural complement of species at population levels consistent with CDFG regulations.

2.2.1.4 Reintroductions and Augmentations

Objective: Maintain, restore, or enhance historic levels of wildlife species native to lands managed by the Ukiah Field Office.

Management Actions: Per BLM policy, native species will be used in reintroductions and augmentations unless it is determined that:

- Suitable native species are not available;
- The natural biological diversity of the proposed management area would not be diminished;
- Exotic and naturalized species can be confined within the proposed management area;
- Analysis of ecological site inventory information indicates that a site would not support reestablishment of a species that historically was part of the natural environment; and
- Resource management objectives cannot be met with native species.

Examples of introductions of a nonnative species could be the use of approved biocontrol agents for noxious weed control or stocking of wildlife ponds with game fish such as bluegill and bass.

2.2.1.5 Predator Control/Animal Damage Control

Currently, no animal damage control (ADC) plan exists for the Ukiah Field Office. As mentioned in Livestock Grazing Management, the BLM grazing allotments are relatively small and ADC activities are easily carried out on the adjoining private lands if necessary. However, with more recreationists visiting the larger blocks of public land, such as Cow Mountain, Cache Creek Natural Area, and Stornetta, emergency control measures may be warranted for human safety if an animal (e.g. mountain lion or black bear) attack occurs.

Management Actions:

- ADC activities will be compatible with resource objectives identified in land use and/or activity plans for the area.
- If an animal attack occurs or humans have been stalked by an animal, the appropriate ADC
 agency will conduct necessary control operations, in consultation with BLM, using permitted
 methods.
- To address protection of human health, safety, forest and range resources, other wildlife, agricultural crops, and livestock, the plan will be jointly prepared (if necessary) by the BLM and U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS).

2.3 VEGETATION MANAGEMENT

2.3.1 Introduction

Vegetation management includes different levels of prescribed burning and various methods for eradicating or reducing exotic or noxious weeds. Vegetation management could also include changing a vegetative community to a lower seral stage that provides more benefits (i.e., forage, cover) for wildlife populations. Methods of vegetation management considered include prescribed burning (see Fire Management); mechanical methods such as mowing, plowing, and mastication; livestock grazing; and the use of pesticides.

BLM Sensitive species are generally afforded the same protections under BLM policy as species listed as threatened or endangered through the Endangered Species Act.

Goals:

- Produce and/or maintain a mosaic of compositionally and structurally diverse habitat types and plant communities.
- Prevent the spread on noxious weeds.

Management Actions:

- All visitors, permittees, and operators are required to use California certified noxious weed seed-free hay, straw, or mulch when visiting or conducting activities on public lands covered by this plan. This requirement affects visitors who use hay, straw, or mulch on BLM-administered lands, such as: recreationists using pack and saddle stock, ranchers with grazing permits, outfitters, and contractors and operators who use straw or other mulch for erosion control or reclamation purposes. Individuals or groups are required to use California certified weed seed-free forage and mulch products, or use other approved products, such as processed grains and pellets, while on BLM-administered lands. Public land users are required to have a certificate that the product is weed free.
- To reduce the threat of sudden oak death (*Phytopthera ramorum*) to the oak woodlands and forested habitats, BLM will work cooperatively with the U.S. Department of Agriculture (USDA) and Mendocino County Agricultural Commission in addition to other applicable agencies to remain informed of current research related to the spread of this pathogen.
- Complete prescribed burning and non-fire fuels treatments as outlined in Fire Management
- Follow management prescriptions as described in the recovery plans for listed species known to occur in the planning area.

2.4 RIPARIAN AND WETLAND RESOURCES

2.4.1 Introduction

Riparian and wetland areas are functioning properly when adequate vegetation, landform, or large woody debris is present (For more on properly functioning condition, see U.S. Department of the Interior (USDI), Bureau of Land Management manual TR 1737-9 1993. Riparian Area Management, Process for Assessing Proper Functioning Condition). Approximately 91 percent (248 miles) of riparian areas are in Properly Functioning Condition (PFC).

Goal: Rehabilitate, restore, and maintain riparian and wetland areas.

Objectives:

- Achieve PFC in all riparian and wetland areas.
- Maintain native riparian communities and eradicate exotics on approximately 272 miles of streams.

Management Actions: Due to limitations on access, management activities for the Scattered Tracts unit may not be possible.

- Assess riparian areas that are not in PFC. Become familiar with riparian/wetland areas and their unique characterizations and interactions with vegetation, soils, and hydrology.
- Develop and implement projects or change impacting uses to achieve or maintain PFC.
- Continue to collaborate with watershed groups, educational institutions, resource conservation districts, and other interested parties in management activities.

2.5 CULTURAL AND HISTORIC RESOURCES

2.5.1 Introduction

The Ukiah Field Office manages a substantial amount of cultural resources, both archaeological and traditional cultural. Management efforts generally aim to prevent, and when necessary, reduce or eliminate damage from other uses. Management goals and objectives also prioritize increased user awareness of cultural resource values through public education and outreach.

Goals:

- Identify, preserve, and protect significant cultural resources and ensure that they are available for appropriate uses by present and future generations (FLPMA, Sec. 103 (c), 201 (a), 202 (c);
 National Historic Preservation Act (NHPA) Sec. 110 (a); Archaeological Resources Protection Act (ARPA), Sec. 14 (a)).
- Seek to reduce imminent threats and resolve potential conflicts from natural or human-caused deterioration, or potential conflict with other resource uses (FLPMA Section 103 (c), NHPA 106, 110 (a) (2)) by ensuring that all authorizations for land and resource use would comply with the NHPA.

Objectives: All cultural properties within the RMP area, whether already identified or projected to occur on the basis of existing data-synthesis, will be allocated to the uses in Table 2-1. These uses pertain specifically to cultural resources, and not to areas of land.

USE ALLOCATION 1

DESIRED OUTCOMES

(a) Scientific use

(b) Conservation for future use

(c) Traditional use

(d) Public use

Long-term preservation, on-site interpretation

(e) Experimental use

(f) Discharged from management

DESIRED OUTCOMES

Preserved until research potential is realized

Preserved until conditions for use are met

Long-term preservation

Protected until used

No use after recordation; not preserved

Table 2-1: Cultural Use Allocations and Desired Outcomes

Management Actions:

• Conduct field evaluations and establish use allocations consistent with those found in Table 2-1.

¹ The majority of the cultural properties will fall into categories (a) and (f). The less-common properties in categories (b)–(e) are likely to be associated with particular settings. Properties in categories (b)–(d) will require the most attention to balance their proactive uses with other land and resource uses.

- Prioritize archaeological inventory and site documentation for newly acquired public lands within Cache Creek and Stornetta, as well as uninventoried portions of Cow Mountain and Knoxville.
- Minimize and prevent human-caused damage to cultural resources and places, such as casual
 surface collection of artifacts and intentional vandalism, through educational and interpretive
 outreach programs. Utilize various interpretive mediums, signs, and public education programs
 to inform the public of cultural resource values where opportunities exist, and no harm would
 come to cultural resources as a result of undue attention.
- Minimize and prevent damage to cultural resources from streambank erosion and natural wearing down of land surfaces through scientific research and active site monitoring.
- Minimize and prevent impacts to traditional cultural resources and places by:
 - Restricting pesticide and herbicide use in traditionally used plant communities;
 - Controlling commercial collection of natural resources to prevent over-collection; and
 - Preventing environmental degradation caused by cattle grazing and other modern activities through regular and timely consultation with tribes and active site monitoring.
- Continue consultation with Tribes on cultural resources uses and places.
- Where feasible, BLM will implement a site stewardship program with cooperating Tribes to protect and monitor significant cultural resource areas.
- Build upon existing historic and prehistoric overviews for the North Coast Range geographic province through continued scientific research contributions.
- The Ukiah Field Office will operate within a framework that fosters and follows:
 - The development and maintenance of strong working relationships with tribal entities and Native American individuals through increased coordination and consultation, as well as ensuring that Native American resources, sites, places, and/or social values are given proper consideration in land use planning.
 - The continuation of cooperative relationships with educational institutions, students and other scientific researchers, tribes and volunteer organizations for the study and protection of cultural resources.
- All undertakings proposed within the Ukiah Field Office will be preceded by project specific archaeological inventories and tribal consultation to ensure proper consideration of all resource values. All authorizations for land and resource use will comply with Section 106 of the NHPA, consistent with and subject to the objectives established in the Plan for proactive use of cultural resources in the public interest (NHPA Sec. 106, 101(d)(6), 110(a)(2)(E); National BLM-ACHP-NCSHPO Programmatic Agreement of March 1997; California BLM-SHPO Protocol Agreement of 1998).
- Current practices for cultural resources management will continue to utilize the BLM 8100
 Manual Series, existing laws, regulations, policies, and the BLM California Programmatic
 Agreement (PA) with the SHPO. The PA prescribes the manner in which the BLM and the
 SHPO would cooperatively implement legal mandates, and is intended to ensure that the State
 organizes its programs to operate efficiently and effectively in accordance with the intent and
 requirements of the National Historic Preservation Act and other laws, regulations, and policies

requiring consideration of cultural resource values (FLPMA Sec. 103(c), 201(a), 202(c); NHPA Sec. 110(a); ARPA Sec. 14(a)).

- The BLM will continue to consult with Native American Tribes and individuals to ensure
 compliance with federal laws, regulations and policies. Site monitoring activities, law
 enforcement patrols, and coordination and collaboration with Native Americans will continue, as
 will research and public education efforts.
- Take a proactive approach to archaeological surveys, site documentation and evaluations/NRHP nominations for newly acquired lands in Cache Creek and Stornetta.
- Develop Regional Overviews for Cow Mountain, Knoxville, and Stornetta.
- Identify at-risk sites throughout all lands managed by the Ukiah Field Office and develop protection and stabilization projects as needed.

2.6 LANDS AND REALTY

2.6.1 Introduction

The lands and realty program addresses the tenure, or ownership, of lands and interest in lands managed by the BLM. Additionally, the lands and realty program addresses land use authorizations, which include rights-of-way (ROWs), leases, and permits. Authorization of wind energy development and activities is addressed separately in the Wind Energy section. Lands may be identified as avoidance or exclusion areas for land use authorizations, defined as follows:

Avoidance area: An area only available for land use authorizations if there are no other reasonable alternatives for the authorization.

Exclusion area: An area that is not available for land use authorizations.

Existing withdrawals are described in Appendix B. Many of the existing withdrawals are currently being considered for revocation by the Department of the Interior. Proposed withdrawals are addressed in the Energy and Minerals section. BLM does not have authority to establish or revoke withdrawals; BLM makes recommendations to the Secretary of the Interior.

Goal:

In coordination with federal agencies, tribes, state and local governments, and private landowners, manage public land ownership to improve management efficiency and facilitate multiple uses and the public's enjoyment of these lands.

Objectives:

Land Tenure

- Retain public lands that enhance multiple uses and protect significant resource values.
- Dispose of lands and interest in lands to support local community and development needs and/or to improve efficiency in BLM management of lands and resources.
- Acquire lands to complement existing resource values and/or meet public needs.

Land Use Authorizations

• Meet public needs for land use authorizations (right-of-way, leases, and permits) while meeting plan goals and minimizing impacts to resource values.

Management Actions:

Land Tenure

- 1. Retain all lands, except where lands could be exchanged for lands that have greater management efficiency, to gain public values, or to serve important public purposes. This does not apply to lands identified below in #2 and #3.
- 2. Retain lands designated as Wilderness Areas, Wilderness Study Areas, Stornetta public lands, Cache Creek, and ACECs. Retain acquired lands and acquired interests in lands.
- Identify parcels depicted on Figures 11 through 18 for potential disposal (approximately 10,365 acres), subject to site specific assessment. These lands are identified as meeting the criteria for potential disposal by sale outlined in the Federal Land Policy and Management Act, Section 203. Prior to any disposal, a site-specific analysis must determine that the lands considered:
 - contain no significant wildlife, recreation, or other resource values the loss of which cannot be mitigated;
 - have no overriding public values;
 - are not within or adjacent to a special designation area; and
 - represent no substantial public investments.
- Analyze all proposed land ownership adjustment actions on a project-by-project basis and in project specific environmental reviews.
- Manage lands acquired within designated special management areas (including areas of critical environmental concern (ACECs), wilderness study areas (WSAs), wilderness areas, Special Recreation Management Areas (SRMAs), research natural areas, etc.) in the same manner as the surrounding special management area.
- Manage lands acquired outside of designated special management areas in the same manner as comparable surrounding public lands.
- Consider disposal of federal minerals underlying non-federal surface lands in federal ownership on a case-by-case basis if found to be in the public interest.
- Continue to acquire private inholdings adjacent to or within the eight management units (not including Scattered Tracts), from willing parties as opportunities arise.
- Continue to obtain legal public access or administrative access from willing landowners on a case-by-case basis as the need or opportunity arises.

Land Use Authorizations

- Wilderness study areas (WSAs) will be managed under the Interim Management Policy for Lands under Wilderness Review (H-8550-1); WSAs and designated wilderness areas are exclusion areas except as otherwise provided for by law.
- New land use authorizations will be located within or adjacent to existing land use
 authorizations, to the extent practical. In particular, new communication site users will be
 required to go into existing facilities that have available space or into existing multi-user facilities
 on peaks where they exist. Site plans will be completed prior to authorizing communications
 sites in new areas.
- Owners of non-federal land surrounded by public land managed under FLPMA will be allowed a
 degree of access across public land, which will provide for the reasonable use and enjoyment of
 the non-federal land.
- Applications for land use authorizations outside of exclusion areas will be analyzed and mitigation measures will be applied on a case-by-case basis.
- In accordance with current policy, land use authorizations will not be issued for uses that would involve the disposal or storage of materials which could contaminate the land (i.e., hazardous waste disposal sites, landfills, rifle ranges, etc.).
- Rights-of-way, leases, permits, or easements will not be required for those activities that are
 considered casual use of public lands.
- Suggested Practices for Raptor Protection on Power Lines (APLIC 1996), or subsequent versions of this
 guidance, will be implemented in the construction and operation of authorized facilities.

2.7 SPECIAL DESIGNATIONS

2.7.1 Introduction

Wilderness

The Ukiah Field Office currently manages two wilderness study areas (WSAs), which were designated as a part of BLM's original wilderness inventory (see Figure 2-1). Management of lands having wilderness characteristics is a part of BLM's multiple-use mandate, and is recognized within the spectrum of resource values and uses. Wilderness characteristics are associated with lands with the following traits:

- Affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable.
- Outstanding opportunities for solitude or a primitive and unconfined type of recreation.
- At least five thousand acres of land or of sufficient size as to make practicable its preservation and use in unimpaired condition.
- Potentially containing ecological, geological, or other features of scientific, educational, scenic, or historical value.

These lands may be managed to protect these wilderness values. They may also be managed for the use and enjoyment of the public, and may be devoted to the public purposes of recreation, scenic, scientific, educational, conservation, and historical uses. In addition, they could augment multiple-use management of adjacent and nearby lands through the protection of watersheds and water yield, wildlife habitat, natural plant communities, and similar natural values.

Certain lands within the Cache Creek and Berryessa management areas were assessed for their wilderness characteristics as part of this RMP process. Lands assessed were either new acquisitions since 1979, or other BLM lands existing in 1979 that were not originally designated WSA, but for which the situation has significantly changed, such that the lands may now have wilderness characteristics. The area was divided into identifiable subunits. Most of the assessment areas abut the existing Cache Creek WSA.

Other land acquisitions, including Black Forest (247 acres), Stornetta Ranch (1,132 acres), and American Land Conservancy parcels on Walker Ridge (480 acres), were too small and therefore lacked wilderness characteristics.

Wild and Scenic Rivers

In accordance with the Wild and Scenic Rivers Act (16 USC 1271-1287) and as part of the RMP process, BLM first conducted a review to assess and evaluate all river segments in the BLM Ukiah Field Office for eligibility for inclusion in the National Wild and Scenic River (NWSRS) System. Following an assessment of eligibility, BLM makes recommendations as to the suitability of eligible river segments for inclusion in the Wild and Scenic River System through the land use planning process.

Areas of Critical Environmental Concern (ACECs)

ACECs are areas of public land where special management attention is required to protect relevant and important natural and/or cultural resource values. The ACEC designation indicates that the BLM recognizes these significant values and has established special management measures to protect them.

Management Actions:

Wilderness

 Manage any future lands acquired within WSA boundaries to protect their wilderness characteristics.

Wild and Scenic Rivers

The following Protective Management will apply to river segments found to be suitable for inclusion in the NWSRS:

- Free-flowing Values: The free-flowing characteristics of river segments cannot be modified to allow stream impoundments, diversions, channelization, and/or rip-rapping to the extent the BLM is authorized under the law.
- River-related Values: Each segment shall be managed to protect identified outstandingly remarkable values (subject to valid existing rights) and, to the extent practicable such values shall be enhanced.

Classification Impacts: Management and development of the river and its corridor cannot be
modified, subject to valid existing rights, to the degree that its eligibility or suitability
classification would be affected.

ACECs

• Lands acquired adjacent to or sharing attributes of ACECs will be incorporated into that ACEC provided they have the same relevant and important values.

2.8 FOREST MANAGEMENT

2.8.1 Introduction

Commercial forest lands (capable of producing merchantable species of timber, as well as a variety of non-timber benefits) exist on public lands only in the Cow Mountain area, in the Scattered Tracts Area west of Highway 101, and the Black Forest.

Goal: Manage forested lands to protect and/or enhance recreational and biological resources.

Management Actions: No commercial timber harvest is allowed in any management area.

2.9 LIVESTOCK GRAZING MANAGEMENT

2.9.1 Common to All Management Areas

Objective: Livestock grazing will meet and follow the Northwestern California Standards and Guidelines for Livestock Grazing and will be manageable.

Management Actions:

- Livestock grazing will be modified or eliminated in allotments not meeting the Northwestern California Standards for Livestock Grazing where livestock is the cause for not meeting the standards.
- Determinations of whether an area is manageable for livestock grazing is be based on the following:
 - 20 AUMs or less of livestock forage, the area is not considered manageable due to the administrative costs involved.
 - Between 20 and 100 AUMs, the area is not likely to be manageable due to the administrative costs involved.
 - Over 100 AUMs of forage, the area is manageable for livestock grazing.
- Livestock will be excluded from areas burned by wildfire until monitoring results, documented in
 writing, show emergency stabilization and rehabilitation objectives have been met. Objectives
 must be clearly defined in the Emergency Stabilization and/or Rehabilitation Plan.

- Areas available for livestock grazing will be rested from grazing for two growing seasons after seeding projects.
- Public lands that are available for grazing may also be available for disposal (see Lands and Realty section).
- With the exception of Stornetta, areas outside the existing allotments are available for livestock use as a tool for weed control and/or hazardous fuels reduction.

2.10 FIRE MANAGEMENT

Management Actions: Develop and maintain a Fire Management Plan (FMP). A FMP is a strategic document that identifies and integrates all wildland fire management guidance, direction, and activities. It reflects and integrates fire management direction from the RMP, subsequent amendments to the RMP, and other applicable Special Management and/or Activity Plans.

Wildfire Suppression

Goal: Provide an appropriate management response on all wildland fires, emphasizing firefighter and public safety.

Management Actions:

- Prioritize fires based on values to be protected commensurate with cost.
- ACECs, SRMAs, Wilderness areas, WSAs, Wild and Scenic River Corridors (suitable and designated), and certain other public lands require modified suppression techniques to protect the known values. Modified suppression techniques will be identified in subsequent activity plans for these critical areas.
- Identify high priority wildfire risk areas (e.g., Wildland Urban Interface, critical habitats and cultural areas) in the FMP.
- The FMP will list Values At-risk and the Communities At-risk within each Fire Management Unit (FMU). These lists may change as communities are removed or added each year.
- Limit the intensity of fire suppression efforts to the most economical response consistent with human and resource values at risk.
- Prohibit the use of bulldozers and other heavy equipment in WSAs, riparian areas, cultural sites, and ACECs. This restriction may be lifted by the Field Manager to protect human life, private property, structures, visitor safety or sensitive or valuable resources.
- Protect sensitive cultural resource sites from damage by fire and/or fire suppression actions.
- When determining the most appropriate fire management response, compare the potential
 effects that could occur from the fire itself, versus potential impacts from proposed suppression
 activities. Choose suppression tactics that would be the least impacting on sensitive resources,
 recognizing that in some cases this could result in more acres burned.

- Limit the use of fire retardant drops to prevent damage to vernal pools and associated aquatic species. Retardant should be kept away from waterways.
- Coordinate with tribes if known Traditional Cultural Properties (TCP) are involved in wildland fires based on resource specialist information.

Fuels Management

Goal:

- Manage fuels to mimic the natural role of fire while enhancing resource values.
- Reduce fire risk to the wildland urban interface (WUI) communities.
- Promote greater diversity within plant communities with the use of fire.
- Protect riparian and wetland areas.

Management Actions:

- Monitor fire/fuels treatment effects and adjust plans as needed.
- Work collaboratively with managing partners, Joint Fire Science Program and academic
 institutions to design and implement monitoring and/or research studies to evaluate the post
 treatment effects of prescribed burning, mechanical, biological and/or chemical treatments.
- Develop prescribed burn units within the Cache Creek, Cow Mountain, and Indian Valley management units that will be treated on a rotational basis.
- Develop and maintain fuel breaks along the wildland urban interface using prescribed fire, mechanical, hand, biological and/or chemical treatments.
- Work with local fire safe councils in the planning, devleopment and implementation of risk
 assessment and community protection plans. The risk assessment and community protection
 plans will set forth and prioritize hazard reduction projects.
- Protect the primitive nature of public lands within WSAs from any action affecting the overall "naturalness" of the area. Restrict the use of heavy mechanical equipment within WSAs.
- Maintain necessary width along riparian reserves in matrix lands to meet Aquatic Conservation Strategy objectives of the NFP.

Fuels Management – Prescribed Burning

Goal: Improve ecological conditions and reduce the risk of catastrophic wildfire through the use of prescribed burning.

Management Actions:

- Use fire as a natural land management tool for the control and eradication of noxious weeds (see Vegetation Management section).
- In setting the average annual acreage to be burned through prescription, the intent is to burn on
 a rotational basis within approximately three of the eight management areas annually. Prescribed

burning will not be conducted in all of the management units each year. Constraints in obtaining the desired prescribed burn prescription include smoke management, air quality management, and personnel and resource availability.

- Utilize prescribed burning to manage the chaparral community for fuel hazard reduction, wildlife habitat improvement, and increased local water yield and watershed enhancement.
- Work collaboratively with managing partners to design and implement prescribed fire and fuels
 management projects across agency boundaries, where this interaction will improve the overall
 success of the project.
- Prescribed burn plans for hazard reduction and vegetation management activities will occur during project level implementation and include appropriate environmental analysis.
- Smoke management plans are required for all prescribed burn projects.
- Establish a fire effects monitoring system that inventories pre-burn species composition and resulting post fire response, over time.
- Targets for prescribed burning are outlined in the management area decions (Section 3)

<u>Fuel Management – Mechanical Treatments</u>

Goal: Improve ecological conditions and reduce the risk of catastrophic wildfire through mechanical treatments.

Management Actions:

- In setting decadal acres to be mechanically treated, the intent is to rotate within approximately three to four of the eight management areas annually. Funding and staffing constraints can limit the number of projects that can be completed annually.
- Treated acres include mechanical treatments for fuels hazard reduction as well as mechanical treatments for fire science research and pre-treatment and/or line construction for prescribed burn projects.
- Work collaboratively with local managing agencies and cooperator to design and implement fuels
 hazard reduction projects across agency boundaries, where this interaction will improve the
 overall success of the project.
- Project level plans will include appropriate environmental analysis.
- Targets for mechanical treatments are outlined in the management area decisions (Section 3). The acre targets only relate to acres for the initial entry. The acres displayed may relate to a single project within the ten year period or may be separated into several projects. There may be follow-up/maintenance entries into project areas for a portion or the whole area for each year or every other year for up to ten years. The FMP will be updated annually to display the estimated number of acres needed for follow-up/maintenance entries for implemented and planned projects.

Fire Rehabilitation, Stabilization & Restoration

Goal: Rehabilitate burned areas to mitigate adverse effects of fire on natural and cultural resources.

Management Actions:

- Native species will be used in reseedings to minimize noxious weed invasion.
- Develop local or regional "Normal Fire Year Rehabilitation Plans."
- Monitor rehabilitation efforts to facilitate future planning and implementation.

Prevention and Risk Mitigation & Education

Goal: Increase public's knowledge of the natural role of fire in the ecosystem, and hazards and risks associated with living in the WUI.

Management Actions:

- Work with communities, Fire Safe Councils, and other federal and state agencies in the development and implementation of risk assessment and community protection plans.
- Educate the public on fire risk and prevention measures.
- Employ fire prevention strategies that reduce human ignition occurrence on public land within the Ukiah Field Office.

2.11 ENERGY AND MINERALS

2.11.1 Introduction

This section addresses management options for solid minerals and fluid minerals. Solid minerals include locatable minerals and salable minerals. Fluid minerals are leasable minerals, including oil and gas and geothermal energy. Wind Energy is addressed in the Wind Energy section. See Appendix F for the Reasonable Foreseeable Development (RFD) Scenarios for oil and gas resources in the Ukiah Field Office; Appendix E for the Solid Minerals RFD, and; Appendix D for the Geothermal RFDs.

Goals:

- Provide necessary solid minerals to meet public demand, while protecting the natural resources in the planning area.
- Provide necessary access to federal mineral resources for energy development (oil, gas, and geothermal) to meet public demand, while protecting the natural resources in the planning area.

2.11.2 Management Actions:

New withdrawal proposals will be considered on a case-by-case basis, where resource values or
agency investments are best protected by withdrawals. Lands proposed to be withdrawn should
be the minimum area required for the intended use and where applicable alternative prescriptions
(i.e., the use of rights-of-way, leases, permits, or cooperative agreements) are inadequate to
protect the resource values.

• Existing withdrawals are outlined in Appendix B. Existing withdrawals will continue to be reviewed on a periodic basis and may be recommended for revocation according to the FLPMA.

Solid Minerals

- Lands in the Ukiah Field Office are available for locatable mineral entry and development and
 mineral materials sales except withdrawals, as outlined below, and as outlined in the management
 area decisions (Section 3).
- Wilderness study areas (WSAs) will be managed under the Interim Management Policy for Lands
 under Wilderness Review (H-8550-1). Locatable mineral exploration and development activities
 within WSAs can occur in accordance with the mining laws, but are limited to only those actions
 that do not require reclamation, unless the operation had established grandfathered uses or valid
 existing rights by October 21, 1976. WSAs are closed to mineral materials disposal.

Fluid Minerals

Lands in the planning area are available for fluid mineral leasing except withdrawals, as outlined below, and in the management area decisions (Section 3).

 Wilderness study areas (WSAs) will be managed under the Interim Management Policy for Lands under Wilderness Review (H-8550-1).

2.12 WIND ENERGY

2.12.1 Introduction

Wind energy is managed as a land use authorization, under the right-of-way authority. Because of the unique nature of wind energy management, it is addressed in an independent section, separate from Energy and Minerals and Lands and Realty. See Appendix G for the Reasonable Foreseeable Development (RFD) Scenario for wind energy resources in the Ukiah Field Office. See Appendix H for Wind Energy Potential in the Ukiah Field Office as shown by the National Renewable Energy Laboratory (NREL).

Public land that is designated as an exclusion area is not be available for wind energy development. Public land that is designated as an avoidance area will only be available for wind energy development if there are no other reasonable alternatives for the development. Areas not designated for exclusion or avoidance are available for wind energy development.

Goals:

- Increase renewable energy production on federal land, involving all interested persons in a careful and open process.
- Meet national energy needs, while protecting sensitive resources for future generations.

Management Actions:

- The planning area is generally available for consideration of wind energy development, except as outlined below and in the management area decisions (Section 3).
- All wind energy development will be subject to the Wind Energy Best Management Practices (see Appendix I).
- Wilderness areas and wilderness study areas (WSAs) are designated as exclusion areas.

2.13 TRAVEL MANAGEMENT AND ROUTE DESIGNATION

2.13.1 Introduction

The purpose of travel management is to provide a route network for recreational use and public access to the BLM managed lands, while minimizing impacts on natural and cultural resources in the area. These routes are designed and managed to blend with the character of each geographic zone, and to allow for a diversity of uses and experiences. This route system is both manageable and sustainable, and is compatible with the new Recreation Opportunity Spectrum (ROS) program (see Recreation section). Restrictions on use are sometimes needed to ensure safety or to protect resources from degradation due to excessive erosion.

Definitions:

- Official use means use by an employee, agent, or designated representative of the Federal Government or one of its contractors, in the course of his employment, agency or representation.
- Open area means an area where all types of vehicle use is permitted at all times, anywhere in the area subject to the operating regulations and vehicle standards set forth in 43 CFR 8341 and 8342.
- Limited area means an area restricted at certain times, in certain areas, and/or to certain vehicular use. These restrictions may be of any type, but can generally be accommodated within the following type of categories; numbers of vehicles; types of vehicles; time or season of vehicle use; permitted or licensed use only; use on existing roads and trails; use on designated roads and trails; and other restrictions.
- Closed area means an area where off-road vehicle use is prohibited. Use of off-road vehicles in
 closed areas may be allowed for certain reasons; however, such use shall be made only with the
 approval of the authorized officer.
- Off-road vehicle means any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding:
 - Any nonamphibious registered motorboat;
 - Any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes;
 - Any vehicle whose use is expressly authorized officer, or otherwise officially approved;

- Vehicles in official use; and
- Any combat or combat support vehicle when used in times of national defense emergencies.

Goals:

- Develop a comprehensive travel management system that improves access and recreation
 opportunities, provides experiences that complement the character of each geographic zone and
 the surrounding regions, and minimizes impacts to the resources.
- Improve on-the-ground travel management operations and maintenance programs to sustain and enhance recreation opportunities.
- Improve signing, mapping, and travel information and education for BLM public lands visitors.
- Expand and pursue partnerships, sources of funding, and guidance for transportation and travel management.
- Provide administrative/official, fire and emergency access for management and protection of the area visitors, resources, and facilities.
- Improve public access to trailheads, campgrounds, and other BLM managed lands and facilities.
- Fulfill legal access requirements to private landowners and other right-of-way holders and land
 use permittees. (Specific access issues regarding private landowners are beyond the scope of this
 plan and would be addressed on an individual basis with each landowner.)
- Minimize impacts to water quality and other resource objectives through proper design and maintenance of routes.

2.13.2 Management Actions

- All lands managed by the Ukiah Field Office, with the exception of wilderness study areas (WSAs), are designated as limited to designated routes for motorized and OHV use.
- WSAs are designated as closed to OHV use.
- The tables in Appendix A define the route network and outline what uses would be allowed on individual routes.
- Any future trail development will be consistent with the management zone prescriptions and
 recreation program goals. Potential trail connections could include utilizing existing jeep roads
 and fire breaks/roads. Re-routing some of these segments may be required due to excessive
 steepness, erosion or poorly designed segments. These re-routed segments will be closed and
 rehabilitated.
- The route network will be mapped and maps made available to the public.
- BLM will coordinate with adjacent Federal, State, and County agencies for consistent travel management.
- BLM will coordinate with agencies, groups, and individuals to develop a route system that is both manageable and sustainable.
- Coordinate with and assist County agencies in ensuring that the county road system complements BLM resource protection and public access needs.

Follow the OHV Management Guidelines developed by the Northwest California Resource
Advisory Council where feasible and as consistent with goals and objectives for other resources
and uses as outlined in the plan (see Appendix J).

2.14 RECREATION

Recreation management is one of the major challenges in the Ukiah Field Office, as recreational use represents the greatest demand for use of the public lands in the planning area and the natural resources can be degraded if too many people visit at the same time. There is a strong consensus among user groups that maintaining a positive experience, including maintenance of existing facilities and trails, is important; also, increasing demands indicate the need for a wide variety of activities and experiences. The RMP provides a broad spectrum of recreation management, including facilities development, signage, permitting systems to balance access levels, and opportunities for visitors to find solitude. As a result, management zones are planned for different types and levels of recreation use, so as to direct users to the areas most appropriate for their interests and activities.

The RMP was developed with two concepts as the primary framework: Recreation Opportunity Spectrum (ROS) and Special Recreation Management Areas. A recreation opportunity is a chance to engage in a preferred activity within a desired setting to realize desired experiences. The ROS is a framework characterizing the relationship between human uses and physical settings. Opportunities for recreation are classified along a spectrum ranging from Primitive to Urban. The classifications are based upon a combination of qualities provided by nature, qualities associated with recreational use, and conditions provided by management. Variations on these qualities provide an array of opportunities and ample choices for recreationists.

Goals:

- Provide a range of outdoor recreation settings, experiences, and opportunities that balance the public's demand while minimizing recreation impacts to other resources.
- Ensure a quality experience and enjoyment of natural and cultural resources.
- Manage off-highway vehicle, non-motorized, and mechanized use on BLM-administered land to protect natural resources, provide visitor safety, and minimize conflicts among various users.
- Encourage collaborative partnerships, volunteers, and citizen-centered public service.

2.14.1 Recreation Opportunity Spectrum (ROS)

ROS is used as a management tool for a number of reasons. ROS serves as a method of inventorying existing physical and social conditions, assists in the analysis of the impacts of activities, and helps structure management decisions. ROS helps ensure that activities sharing access to resources are complementary and it assists in the development of goals, indicators and standards. In this plan, ROS is used to ensure that recreational uses that occur at the same time and in the same area are compatible. ROS classes will help users and managers determine appropriate uses of recreational resources in the Ukiah Field Office. ROS classes are an important part of an integrated management program that meets the goals and objectives of the RMP and addresses resource impacts.

Management of recreation opportunities through the ROS is guided by BLM Manual 8320. ROS management is consistent with the Travel Management and Route Designation and Visual Resource decisions and other resource management considerations. The following describe the ROS zones.

Primitive Zone

Primitive Zone is undisturbed natural landscape with no developed facilities. Management activities would use the least intrusive methods to maintain and restore the area to a natural functioning ecosystem. Important resource management objectives would be accomplished primarily with hand tools. Appropriate public use would include non-mechanized and non-motorized activities with no facilities other than trails. This environmental setting offers the greatest opportunity for solitude, challenge, and self-sufficiency.

Objective: Provide a variety of non-motorized and non-mechanized recreational experiences while maintaining the high visual quality of the area and protecting the area's natural resources.

Physical Setting/Facilities

Maintain a naturally appearing landscape, with the sights, sounds, and forces of nature being the predominant physical features and sensations that visitors experience. The works and impacts of humans are minimal in extent and transitory in nature.

Social Setting

Provide for levels of use that meet public demand and allow freedom of access while managing to provide opportunities for solitude and quality, primitive recreation.

Visitors are expected to practice a level of personal responsibility and self-sufficiency commensurate with a self-directed primitive experience.

Management Presence

The majority of management actions will occur off-site so that visitors can experience freedom to choose travel and camping locations once they enter the Primitive Zone. Management actions will prepare visitors to enter and use the primitive area safely and with minimal impacts to resources and other visitors.

Management presence on-site is subtle, with minimal levels of direct visitor contact by BLM specialists and intermittent patrols by law enforcement rangers.

Allowable Uses

In general, only non-motorized recreation activities are allowed, including hiking, backpacking, equestrian use, camping, environmental education, hunting, wildlife viewing, and other activities consistent with the goal of emphasizing primitive experiences.

Domestic Animals

Dogs and pack livestock may be limited to designated routes and/or designated areas only.

Management Actions

Actions proposed to achieve zone management objectives include permit systems for organized groups and resource monitoring.

Visitor Use Management

- Use Allocations. If use results in unacceptable resource damage, a comprehensive visitor use allocation plan will be developed to manage anticipated increasing visitor numbers. This system would be designed to prevent unacceptable resource impacts and ensure a high quality visitor experience. The visitor use allocation system would attempt to redistribute use as one means to reduce resource impacts and visitor encounters. Visitor use allocation would be based on existing and projected visitor use numbers and measurable resource impacts. This allocation system is an adaptive strategy that would progress, as needed and based upon monitoring information, from limits on commercial groups to permitting all users within established limits on popular holiday weekends, to high-use season permits, to year round permits, as future increases in visitation necessitate. These programs serve to protect natural resources and provide quality opportunities for the types of experiences called for under area management goals. The need for such a system may be based on factors such as measurable resource damage/deterioration, decreasing visitor enjoyment of the area, visitor conflicts, and permittee complaints. The advantages of establishing a use allocation system are to prevent undesirable resource deterioration and ensure continued high quality primitive experiences. The disadvantages of such a system include the potential inconvenience for visitors to obtain a permit and disallowing some people and organized groups from visiting the backcountry during heavy use periods. In addition, implementing and managing such a program would increase the administrative burden (i.e., additional time and money) for the BLM.
- Special Recreation Permits. Permit applications would be accepted for non-motorized recreational activities for both commercial and non-commercial activities. Competitive events are not considered appropriate for the Primitive Zone goals and objectives. Applications are reviewed on the case-by-case basis and a NEPA analysis may be required. The concept of managing specific areas within the Primitive Zone for higher or lower visitation is an attempt to accommodate organized groups and an optimum number of visitors while protecting the opportunities for solitude and primitive recreation.

Facility Development

There will be no facility development.

Trails

New trails development or construction is not a priority or emphasized in primitive areas.

Signage and Interpretation

All signs and interpretive information will be installed in other zones to provide for visitor safety and resource protection.

Monitoring

Some monitoring will be necessary to determine visitor use levels, vandalism, potential visitor safety problems, and resource damage. Monitoring will be conducted by use of observation sheets, patrol logs and/or direct visitor contact.

Backcountry Zone

Backcountry is essentially roadless, with a primary management goal focused on recognizing and managing this unique and undeveloped area. This zone primarily provides a wildland recreation experience to visitors while protecting resources such as watersheds, wildlife, and open coastal range grasslands. This environmental setting offers a great opportunity for solitude, challenge, and self-sufficiency.

The BLM will achieve most important resource management objectives and actions with hand tools. Appropriate public use includes non-motorized activities with few facilities for resource protection, such as trails, signs, and sanitary facilities.

Objective: Provide high quality non-motorized and mechanized recreational opportunities. Allow for levels of predominantly self-directing recreational use that provide for high quality opportunities for solitude and freedom of access while protecting the diverse scenic and natural resources in the area.

Physical Setting/Facilities

Maintain a naturally appearing landscape, with the sights, sounds, and forces of nature being the predominant physical features and sensations that visitors experience. The works and impacts of humans are minimal in extent and natural in appearance.

Maintain a network of backcountry trails and directional signing. Other facilities will be the minimum necessary for visitor safety (commensurate with the backcountry setting) and resource protection. Onsite facilities will be provided only after alternative means of addressing resource protection and safety issues have been exhausted. Facilities will not be installed for visitor convenience.

Social Setting

Provide for levels of use that allow for solitude and low levels of encounters between visitors at most locations and times of the year. Levels of use during summer weekends and at popular campsites will allow moderate levels of encounters between visitors.

Visitors are expected to practice a level of personal responsibility and self-sufficiency commensurate with a self-directed backcountry experience.

Allowable Uses

In general, non-motorized and mechanized recreation activities are allowed, including hiking, backpacking, mountain biking, equestrian use, camping, environmental education, hunting, wildlife viewing, and other activities consistent with the goal of emphasizing backcountry experiences.

Domestic Animals

Dogs under control and pack livestock (horses and llamas) allowed, but may be limited to designated routes.

Management Actions

Actions proposed to achieve zone management objectives include permit systems, developing facilities for resource protection, maintaining a trail system, signing and interpretive information, visitor use, and resource monitoring, and identification of special management areas.

Visitor Use Management

• Use Allocations. Same as Primitive zone

Facility Development

Minimal backcountry facilities will be developed to provide a level of visitor safety. Facilities will be installed in the backcountry only after other management techniques have been proven ineffective at resource protection.

Trails

Maintain network of backcountry trails for predominantly self-directed hiking/backpacking, mountain biking and equestrian use to offer a diversity of backcountry use opportunities.

Signage and Interpretation

Minimal backcountry signs and interpretive information will be installed and maintained, as required to provide for visitor safety and resource protection. All signs and interpretive structures will be aesthetically pleasing (i.e., natural wood routed signs rather than metal) with consistent style by sign type.

A minimal level of signing is critical to ensure that visitors do not get lost, trespass onto private land, suffer health risks (such as drinking untreated water from developed water sources), or damage sensitive natural or cultural resources.

Proposed actions include but are not limited to the following:

- Provide directional signs at all trail junctions.
- Install identification signs, where necessary, to post private land boundaries to help prevent trespass onto private lands.
- Install identification signs to point out backcountry campsites, water sources, sensitive resource areas, or other important features, where necessary for visitor safety and resource protection.

Monitoring

Conduct a comprehensive monitoring program to determine impacts from recreational use on natural and cultural resources in the backcountry, assess social impacts of changing visitor use, make necessary adjustments to the visitor use permitting program, and achieve zone management objectives. The monitoring program will include the following:

- Collection of visitor use statistics, particularly along the more heavily used sections of the
 backcountry. This will be accomplished through trailhead registers, traffic counters, patrol logs
 (counting cars at parking areas as well as backcountry users), Special Recreation Permit
 information, establishment of a backcountry permit system, and correspondence with visitors.
- Collection of resource impact information, particularly along trails and campsites. This includes
 campsite inventory, evaluation of human and stock impacts on resources, as well as identifying
 resource problems like sanitation, litter, proliferation of fire rings, etc... Separate monitoring of
 resources such as cultural sites, invasive plants, and water quality will also be conducted as
 needed by resource specialists.
- Survey of visitor preferences and experiences. This survey will determine trends in visitor enjoyment of the area and changes in social impacts from projected increases in future visitor use. This survey will also improve our visitor use data.
- Evaluation (through contact with visitors, written responses at trailhead registers, visitor surveys, on site observations, etc.) of significant changes in activity preferences, new technologies, commercial interest, and economic, demographic, and environmental conditions.
- Implementation and continuance of an effective monitoring program is essential to development of the visitor use permitting program as well as keeping abreast of overall trends in user interests, preferences, satisfaction, and types of use.

Middlecountry Zone

The Middlecountry Zone is generally a naturally appearing landscape except for obvious primitive roads. Trails are maintained and marked with simple trailhead developments, signs, and basic sanitation facilities. It is often the buffer between Frontcountry and Backcountry Zones, allowing motorized and mechanized recreational use.

Objective: Provide a variety of non-motorized and mechanized recreational experiences while maintaining the high visual quality of the area and protecting the area's natural resources. Manage for a variety of recreational activities to complement the recreational opportunities in the Frontcountry and Backcountry Zones.

Physical Setting/Facilities

Maintain a naturally appearing landscape with visitor access provided through a network of trails that complement the character of the area. Maintain a system of on-site facilities to allow visitors the opportunities for camping, day use and trailhead access to the backcountry trails and area. Provide adequate signing and informational facilities to provide the visitor with directional, interpretive, and

regulatory information necessary to enhance their recreational experiences and protect important natural and cultural resources in the area.

Social Setting

Provide for levels and types of recreational use that meet public demand. Visitors are expected to practice a level of personal responsibility in following management guidelines and regulations to protect natural and cultural resources in the area, the recreational facilities and respect the rights of other recreationists and adjacent private landowners.

Allowable Uses

In general, a variety of mechanized, motorized and non-motorized recreation activities are allowed, including hiking, backpacking, equestrian use, OHV use, camping, mountain biking, environmental education, hunting, wildlife viewing, and other activities consistent with the goal of emphasizing Middlecountry experiences.

Domestic Animals

No control on dogs and pack livestock other than standard regulations prohibiting wildlife harassment and if problems arise.

Management Actions

Management actions would occur on-site and off-site so that visitors can experience a mix of personal freedom and security. Management actions would inform visitors of recreational opportunities, safety concerns, and regulations designed to protect natural and cultural resources in the area. Management presence on-site is more apparent, with moderate levels of patrols of law enforcement rangers, and other staff specialists.

Actions to achieve zone management objectives include developing facilities to accommodate visitor needs and resource protection, maintaining a trail system, signing and interpretive information, visitor use and resource monitoring, and facility patrols and maintenance.

Visitor Use Management

Use Allocations. Same as Primitive zone.

Facility Development

Recreation facilities will be developed to meet the needs of visitors, to protect resources and to promote visitor safety and knowledge of the area. The overall goal of facilities is to serve as basic staging areas and access corridors to allow visitors to enjoy the area and not to provide for a high level of comfort and convenience.

The major objectives of Middlecountry Zone are twofold: first, to provide access from Frontcountry to the interior of an area; second, to provide for mountain biking and other recreational activities which require the use of mechanized equipment, or a high level of facility development. To accomplish these goals, a sufficient number and quality of day use facilities and trails are necessary. There will be no

developed campsites (including car camping) as not to compete with local, independently provided camping facilities.

Trails

Develop and maintain trail network to provide access within Middlecountry Zones for predominantly self-directed hiking/backpacking, wildlife viewing, mountain biking, nature study and equestrian use. Trails for mechanized use will be developed.

Signage and Interpretation

Same as Backcountry Zone.

Monitoring

Same as Backcountry Zone.

Frontcountry Zone

Frontcountry serves as the transition zone between the Middlecountry Zones and adjacent private lands, and represents a broad mix of uses and tools for management. Most BLM roads and facilities function as "staging areas" to provide access for visitors into middle and backcountry zones. Public uses are more extensive, including target shooting, parking facilities and camping facilities. Also, a primary management focus includes more intensive on-the-ground actions and the most active resource management activities could occur.

Despite the concentration of roads and facilities in this zone, some parts of the Frontcountry Zone contain minimal roads and facility developments. These lands often interface with surrounding private lands.

Objective: Provide a mix of mechanized, motorized and non-motorized recreational experiences. Allow recreational facilities and access for camping and day use at a level which maintains the moderate visual quality of the area and balances the protection of the area's natural resources with visitor needs.

Physical Setting/Facilities

Maintain a naturally appearing landscape as much as possible with visitor access provided through a network of roads and/or trails.

Develop on-site facilities to allow visitors opportunities for camping and day use as well as trailhead access to trail system. Develop a trail system. Install informational facilities to provide the visitor with the directional, interpretive, and regulatory information necessary to enhance their recreational experiences and protect important natural and cultural resources in the area.

Social Setting

Provide for types and levels of recreational use that provide the less rugged opportunities emphasized within the Backcountry Zone. The Frontcountry Zone also provides visitors choices in where they may access Middle or Backcountry Zones.

Visitors are expected to practice a level of personal responsibility in following management guidelines and regulations to protect the natural and cultural resources in the area, the recreational facilities and respect the rights of other recreationists and adjacent private land owners.

Allowable Uses

In general, a mix of mechanized, motorized and non-motorized recreational uses are allowed, including car camping, driving for pleasure, hiking, mountain biking, OHV use, equestrian use, hunting, wildlife viewing, and other activities compatible with the management objectives for this zone.

Domestic Animals

Controlled dogs on leash and pack livestock may be limited to designated areas within recreation sites.

Management Actions

Management actions will continue to occur both on-site and off-site so visitors can experience a mix of personal choice and security. Management actions will inform visitors of recreational opportunities, safety concerns, and regulations designed to protect the natural and cultural resources in the area.

Management presence on-site will continue to be more apparent than in the backcountry, with regular patrols of campgrounds (including fee collections), day use facilities, trailheads, etc... by law enforcement rangers, maintenance and fire control personnel, and other staff members responsible for updating kiosk information, monitoring visitor use, and other tasks.

Actions to achieve zone management objectives include maintaining existing facilities to accommodate visitor needs and resource protection, maintaining a road and trail system, signing and interpretive information, visitor use and resource monitoring, and facility patrols and maintenance.

Visitor Use Management

Use Allocations. Same as Primitive zone.

Facility Development

Same as Middlecountry Zone. These facilities include trailhead parking and informational kiosks at all trailheads, including an expanded, paved or graveled trailhead facility at the more heavily used access locations.

Trails

Establish and maintain a trail network for shared use and if necessary some areas of separated use (motorized, non-motorized, and mechanized recreation) to avoid visitor conflict.

Signage and Interpretation

Same as Backcountry Zone.

Monitoring

Same as Backcountry Zone.

Rural Zone

Rural Zone represents areas of mostly privately owned land except for small scattered parcels managed by BLM. Development is more industrial, intense and visible with the primary uses and management goals focused on developing recreation opportunities in collaboration with adjacent private land owners and county agencies.

Objective: Maintain an equal balance of development and naturally appearing landscape with visitor experiences provided through shared development of a network of roads and/or trails. Develop on-site facilities to allow visitors opportunities for camping and day use as well as trailhead access to trail systems. Develop a trail system. Install informational facilities to provide the visitor with the directional, interpretive, and regulatory information necessary to enhance their recreational experiences and protect important natural and cultural resources in the area.

Physical Setting/Facilities

The landscape is substantially modified by industrial development with structures, pipelines, and paved roads.

Construct and maintain modern facilities (campgrounds, parking areas, group gathering sites, etc...) to allow visitors access to the less developed areas. Provide information and interpretive resources to promote environmental education and appreciation of the unique features of the area.

Social Setting

Provide for levels and types of recreational use that can be accommodated on-site without causing undue conflicts with other users.

Visitors are expected to practice a level of personal responsibility in following management guidelines, regulations to protect the area and its facilities, and respect the rights of others.

Allowable Uses

In general, mechanized, motorized and non-motorized recreation activities are allowed, including hiking, backpacking, hunting, mountain biking, equestrian use, camping, environmental education, wildlife viewing, and other activities consistent with the management goals and objectives for this area.

Domestic Animals

Dogs are required to be on leash. Pack livestock allowed only in designated areas.

Management Actions

Management actions occur on-site although information concerning recreation opportunities will be available for people before arriving. Management actions will inform visitors of recreational opportunities, safety concerns, and regulations designed to protect the resources of the area.

Management presence on-site is more apparent than Frontcountry with regular patrols of facilities. There will be a greater focus on guided activities (i.e., environmental education programs).

Actions proposed to achieve zone management objectives include permit systems for organized groups, maintaining a trail network and facilities, signing and interpretive information, and visitor use and resource monitoring.

Visitor Use Management

Use Allocations. Same as Primitive zone

Facility Development

Develop recreation facilities to meet the minimal needs of visitors, to protect resources, and to promote visitor safety and knowledge of the area. The overall goal of facilities is to serve as staging areas and access corridors to allow visitors to enjoy the area and identify other experiences the area offers. These facilities include trailhead parking and informational kiosks at all trailheads, including an expanded, paved or graveled trailhead facility at the more heavily used access locations.

Trails

Establish and maintain a trail network for multiple use and if necessary some areas of separated use (motorized, non-motorized, and mechanized recreation) to avoid visitor conflict.

Signage and Interpretation

Same as Backcountry Zone.

Monitoring

Same as Backcountry Zone.

Urban Zone

Urban Zones are dominated by urban development with residential areas, retail/commercial facilities (laundry, gas stations, groceries, etc...) and are along or near primary highways, municipal streets, and roads.

Objectives: BLM lands within residential areas potentially serve as major access points, open space, and parks in the community. They will be managed to offer recreation and environmental education opportunities to visitors who want "back yard" access. Management will focus on interpreting the significant natural and cultural resources of the area through community partnerships. The BLM will also provide more developed opportunities for group gatherings and individual use while still maintaining

open space and scenic quality of the area. The high levels of use and easy access require careful monitoring of resources.

Physical Setting/Facilities

Complement the development of the surrounding structures by maintaining open space and protecting scenic views.

Maintain a system of on-site day use facilities to allow visitors access to provide more developed recreation opportunities, and provide information and interpretive resources to promote environmental education and appreciation for the area.

Social Setting

Provide for types and levels of recreational use that can be physically accommodated by on-site facilities without causing undue conflicts with other recreational users and local residents and without degrading the recreational facilities and surrounding landscape.

Visitors are expected to practice a level of personal responsibility in following management guidelines and regulations to protect the area and respect the rights of others.

Allowable Uses

In general, the following activities are allowed and typical: individual and group picnicking; group events, such as weddings, memorial services, etc...; sightseeing; environmental education; wildlife viewing; staging for Frontcountry use; and other activities compatible with the management goal and objectives for this zone.

Domestic Animals

Dogs are required on leash and pack livestock allowed only under specific authorizations and stipulations (e.g., horse diapers).

Management Actions

Management actions will occur on-site although information concerning recreation opportunities will be available for people before arriving. Management actions will inform visitors of recreational opportunities, safety concerns, and regulations designed to protect the natural and cultural resources in the area.

Management presence on-site is more apparent than in the Frontcountry, with regular patrols of day use facilities by BLM staff law enforcement personnel, maintenance personnel, and other staff specialists responsible for updating kiosk information, monitoring visitor use, and other tasks. There will be a greater focus on guided activities (i.e., interpretive walks, environmental education programs, etc.) in this zone.

Actions proposed to achieve zone management objectives include permit systems, developing facilities to accommodate visitor needs and resource protection, signing and interpretive information, visitor use and facility condition monitoring, and facility patrols and maintenance.

Visitor Use Management

Use Allocations. Although the major emphasis of the proposed visitor use allocation system, maximum numbers of people permitted for group use would be determined based on the physical capacity of the sites with permit stipulations designed to minimize conflicts with nearby residents and other public land users.

Facility Development

Recreational and interpretive facilities will be developed, as needed, to accommodate growing visitation, public need for information and education, and staging facilities for recreational activities. Facilities will be installed to provide adequate day use recreational opportunities and overnight parking for backcountry users consistent with maintaining an overall natural, aesthetically pleasing landscape. Proposed actions include but are not limited to the following:

- Ensure adequate provisions for persons with disabilities and accommodate heavy seasonal use.
- Develop a group use area (and group use policy) for weddings, memorials, picnics, etc.
- Evaluate proposed additional projects (such as a children's playground) on a case-by-case basis
 to ensure that they maintain the scenic environment and are consistent with the overall theme
 and ambience of the park.

Trails

Maintain wheelchair accessible trails to provide access between facilities (restroom, picnic areas, interpretive signs, parking area, etc.).

Signage and Interpretation

Same as Backcountry Zone.

Monitoring

Although monitoring efforts will be focused primarily within Middle, Back, and Frontcountry Zones, some monitoring of the Urban Zone is necessary to determine visitor use levels, vandalism, or deterioration of recreational facilities, potential visitor safety problems, and resource damage. Monitoring of visitor use will be conducted by use of traffic counters, observation sheets and patrol logs, and direct visitor contact.

2.14.1.1 Special Recreation Management Area (SRMA)

SRMAs are defined under BLM manual 8320 - Planning for Recreation Resources as:

"...areas where significant public recreation issues or management concerns occur. Special or more intensive types of management are typically needed. Detailed recreation planning is required in these areas and greater managerial investments (e.g. facilities, supervision, etc.) is likely. There may be none to several of these areas within a field office. The size of these

management units is typically over 1,000 acres, but exceptions can occur for smaller sites (e.g. very large campground units, trail segments, historical sites, etc.)." (BLM 1981)

SRMAs are designated to meet the goals and objectives of the recreation program and to adhere to agency guidance as described above. SRMAs are designed to be complementary to Recreation Opportunity Spectrum classes, but do not replace ROS classifications. The eight management areas (minus Scattered Tracts) are designated as SRMAs.

2.14.2 Common to All Management Areas

Allowable Uses

Allowable uses for ROS zones are outlined in the management area decisions (Section 3). Uses are defined as follows:

- Non-motorized Non-motorized recreation includes hiking, backpacking, bird and wildlife
 viewing, equestrian use, environmental education, sightseeing, picnicking and photography.
 Non-motorized recreation does not include activities listed as motorized or mechanized
 recreation.
- Mechanized Mechanized recreation includes cycling, mountain biking, handgliding, and rockclimbing using assistive devices.
- *Motorized* Motorized recreation includes the use of OHVs (as described in the Travel Management and Route Designation section) and car touring.
- Shooting Shooting, for purposes of this document, includes all non-hunting discharge of firearms and use of paintball devices.

Recreational uses not specifically addressed (such as new emerging forms of recreation) are allowed to the extent they are consistent with the goals and allowable uses of the ROS zone and consistent with goals and objectives for other resources. Such uses will be monitored to assess potential conflicts, impacts to sensitive resources, and visitor safety issues.

Figures 2 through 10 delineate the ROS zones in the management areas.

Special Recreation Permits. Permit applications for competitive, commercial, organized group, and vending recreational activities are reviewed on the case-by-case basis and must be consistent with the goals, objectives, and allowable uses for the area. A detailed NEPA analysis may be necessary.

Visitor Fees. Visitor fees will be consistent with the Federal Lands Recreation Enhancement Act (2005) and guidelines established by the Northwest California Resource Advisory Council (see Appendix K).

Management Actions:

- Provide adequate and timely maintenance of all facilities, roads, trails, and signs.
- Provide supplementary rules and regulations, where required, to protect resources and visitor safety. Such rules may include provisions such as campfire prohibitions during times of extreme fire danger and disallowing motorized boat use on Hathaway Creek

- BLM will periodically assess whether experiences for visitors, as described in the ROS zones for
 particular areas, are being provided with management. If desired experiences are not being
 provided, BLM will determine whether to change management or change the desired experience
 in a particular area.
- Construct fences or barriers where needed to control unauthorized visitation or use from public land onto private land. Install effective barriers to preclude vehicle use within designated closed areas.
- Ensure that Universal Accessibility Standards are met for all new developed facilities and, where feasible, the retrofitting of existing facilities.
- Evaluate all applications for special recreation permits on a case-by-case basis. Approve only those requests that are consistent with the decisions of the geographic area.
- Special Recreation Permits will be in compliance with the BLM Recreation Permit
 Administration (Handbook 2930-1, Appendix P) and include the stipulations identified (see
 Appendix L).
- All trails will be numbered/named and posted.
- Weed-free hay is required for equestrian use (see Vegetation section)

2.15 INTERPRETATION AND EDUCATION

2.15.1 Introduction

Interpretation is a communication tool designed to enhance understanding, appreciation and protection of natural and cultural resources. It involves translating the technical language of the sciences and bureaucracy into terms and ideas that the general public can readily understand and relate to, in a way that reveals meanings and relationships in an entertaining and interesting way.

The Ukiah Field Office interpretive program fosters an appreciation for the resources and an understanding about the relationships between people and the public lands managed by BLM. Interpretation communicates how the BLM manages resources and provides opportunities for public use. A result of effective interpretation and education is a public which is more environmentally responsible while enjoying their public lands, and willing to assist the BLM in solving and preventing complex environmental issues.

Objectives:

- Promote public understanding of and cooperation with BLM policies, standards and environmental guidelines.
- Enhance visitor experiences on public lands.
- Provide for public safety.

Management Actions:

- Provide interpretive opportunities to diverse audiences in a variety of settings, using a variety of
 effective techniques.
- Provide current, accurate, and descriptive information that facilitates basic safety while minimizing negative impacts to resource values.
- Develop thematic interpretive services that promote and encourage public understanding of resource management goals, and the importance of resources to individuals and communities.
- Elicit public acceptance of and voluntary compliance with management decisions and statutory regulations through effective interpretive techniques.
- Foster partnerships with other agencies, cooperating associations and friends groups to achieve mutual interpretive goals.

2.15.1.1 Common to All Management Areas (Except Berryessa)

Adequate interpretive facilities will be constructed to promote visitor orientation, safety and education and to promote resource protection, based on identified need. Identify and develop new interpretive exhibits and kiosks throughout the management areas. Existing exhibits and kiosks will be maintained or updated as required. Detached visitor centers may be constructed if need and funding is identified. Guided interpretive programs and off-site presentations will be scheduled based on identified need. Assist local schools to develop curriculum based educational materials. Promote availability of off-site programs and presentations. Websites will be used for both information distribution and interpretive presentations. Off-site presentations may include county fairs and recreational trade shows. Develop interpretive curriculum for integration with local schools. Actively seek opportunities for off-site and classroom presentations of curriculum.

2.16 SOIL RESOURCES

Goals:

- Maintain or improve soil health and fertility.
- Prevent or minimize soil erosion, compaction.
- Minimize and monitor the amount of suspended sediment entering the waterways within the planning area.

Objectives

- Reduce the possibility of mass wasting on unstable soils by avoiding uses and management activities in sensitive areas, when possible.
- Minimize the loss of topsoil, soil conditions, soil types, and their influence on a case-by-case basis.

Management Actions:

 Design and construct roads to cause minimal disruption of natural drainage patterns. The following provisions for two components of road drainage must be included in every project: 1) road surface drainage (including drainage which originates from the cutbank, road surface and fillslope), and 2) hillslope drainage (including drainage from large springs, gullies and streams which cross the road alignment) ¹.

- Implement BMPs and mitigation measures (see Appendix M) at the site-specific project level to maintain or improve soil resources.
- When assessing proposed activities, especially those proposed in slump or unstable areas, give
 greater consideration to soils susceptible to compaction and ensure soils would be addressed in
 consideration of the intensity of the disturbance.
- No trails will be built where the soil erodibility factor is greater than K 32 ² or the when the slope is greater than 16 percent.
- Evaluate existing trails and roads for sediment production and drainage in areas where naturally
 occurring asbestos (NOA) is likely to be present. Perform surface and/or air analysis to
 determine the presence of NOA.
- Post signage to inform users that NOA is present in areas found to contain NOA amounts greater than 0.25 percent (per specimen) or where airborne NOA is found at hazardous levels. Coordinate these actions with appropriate local, state, and federal agencies.
- Inventory sediment production of existing roads and trails. If sediment production is outside of accepted parameters, implement mitigation measures to remedy the situation (see Appendix M).
- Access riparian areas and establish photo points for long term monitoring, and inspect for livestock trespass and influence on the riparian areas. Monitoring data will provide information to determine if existing management is satisfactory or needs to be changed.

2.17 WATER RESOURCES

Goals:

In general, the desired condition demonstrates:

- appropriate water temperature,
- non-existent turbidity with the exception of a storm event,
- lack of contaminants,
- absence of exotic species and barriers,
- presence of woody debris,
- native vegetation on streambanks,
- functioning floodplains, and

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¹ Handbook for Forest and Ranch Roads: A Guide for planning, designing, constructing, reconstructing, maintaining and closing wildland roads. Prepared by William E. Weaver, PhD, and Danny K. Hagans; Pacific Watershed Associates, for the Mendocino County Resource Conservation District.

² K is the soil erodibility factor. This number which reflects the susceptibility of a soil type to erosion. The higher the K factor roads and trails are cut through the higher the erosion potential they have.

• maintenance of channel equilibrium.

Objectives:

- The physical, chemical, and biological components of stream habitats are maintained in a manner such that each stream or stream reach supports a desired variety of native species appropriate to its capability.
- Achieve and maintain the beneficial uses of water bodies as outlined by Regional Water Quality Control Board Basin Plans.
- Contribute to surface and groundwater compliance with the objectives of the Clean Water Act
 (CWA) and meet California state water quality standards for all water bodies in planning area.
 The State of California has established water quality standards for temperature, suspended sediment, and the presence of methylmercury.

Management Actions:

- Livestock would be grazed in a manner which does not degrade water quality, soils, and riparian/wetland areas values. If monitoring indicates that resource values are being degraded, the grazing operation would be modified so as to protect and restore the degraded areas.
- Prioritize any improvement projects as follows:
 - Where beneficial uses of water bodies have been listed as threatened or impaired pursuant to Section 303(d) of the CWA.;
 - Where aquatic habitat is present or has been present for Federally listed species under the ESA; and
 - In designated water resource sensitive areas such as riparian and wetland areas.

Objective: Develop and complete projects to reduce sediment load and regulate/stabilize water temperature.

Management Actions:

- Establish a priority list to collect baseline data for areas.
- Field monitoring data will be used to develop projects and priorities. If field monitoring results show that water quality is being degraded, BLM will either develop mitigation projects or change impacting land uses to reduce or eliminate sources of water quality degradation.
- Coordinate with the appropriate Regional Water Quality Contraol Boards and the U.S. Army Corps of Engineers in the management of wetland and water resources.
- Continue to collaborate with watershed groups, educational institutions and resource conservation districts on management activities.
- Where methylmercury issues are present, work with EPA and the State to assess methylmercury issues and then develop and implement any necessary mitigation of methylmercury.

2.18 AIR QUALITY

2.18.1 Introduction

There are eight separate air quality management districts (AQMDs) within the Ukiah Field Office. They are the Bay Area AQMD, Colusa County AQMD, Glenn County AQMD, Mendocino County AQMD, Lake County AQMD, Sacramento AQMD, Sonoma County AQMD and Yolo-Solano AQMD. All burn projects require close coordination with the local AQMDs. With the exception of the Lake County AQMD, all the other air basins are non-attainment area for PM₁₀ (particulate matter includes dust, soot, and other very small solid material released into the air).

Objectives:

- Prevent significant deterioration of air quality within the Ukiah Field Office.
- Minimize or prevent air quality degradation throughout the planning area by applying mitigation measures on a project by project basis.
- Meet the National Ambient Air Quality Standards under the Clean Air Act.

Management Actions:

- Require burn plans for all prescribed burn projects.
- Require smoke management plans for all prescribed burning.

Discussion: Smoke management is a significant concern in the implementation of prescribed burns. Examples of smoke sensitive areas include cities, residential areas, schools, airports, parks, highways, business districts, hospitals and any other areas where the public may be impacted from the emitted smoke. Constraints and restrictions on prescribed burning due to smoke management issues is likely to increase over the coming years, especially as the urban population expands. Planned burns may also be cancelled as multiple agencies (i.e., BLM, CDF, U.S. Forest Service (USFS), etc.) all seek authorization to burn on the same limited number of approved burn days.

- Require permits, where necessary, for stationary facilities.
- Participate in state and tribal smoke management programs in accordance with the EPA Interim Air Quality Policy for Wildland and Prescribed Fires (EPA 1998).

3.0 MANAGEMENT AREA DECISIONS

3.1 COW MOUNTAIN

3.1.1 Introduction

The Cow Mountain area is about 60,000 acres, of which about 50,000 acres are public lands, located in the mountains east of Ukiah, south of Highway 20, north of Hopland, and west of Scotts Valley, with a few small private in-holdings within a large block of public land. The area is further delineated between North Cow Mountain and South Cow Mountain.

3.1.2 Decision

The following decisions are in addition to the common decisions described in Section 2 that are specific to the Cow Mountain Management Area:

3.1.2.1 Visual Resources Management

Backcountry Zones: VRM Class II

Middlecountry Zones: VRM Class II

• Frontcountry Zones: VRM Class III

3.1.2.2 Wildlife and Fish

- Threatened and Endangered Species: Maintain current levels and quality of fish habitat for the Central California Coast steelhead ecologically significant unit (ESU). Evaluate all maintenance work for impacts with steelhead prior to project commencement.
- Migratory Birds: See common decisions
- Habitat: Minimize any disturbances to wildlife and fisheries habitat from proposed projects on public lands, especially in riparian habitat such as Scotts Creek. An increased level of prescribed burning will be implemented (see under Fire Management) within chaparral habitat on North and South Cow Mountain. Burning will focus on those burns that improve habitat conditions, as well as reduce fuels hazards. Protection of priority habitats will include active measures such as increasing the amount of priority vegetative species in the riparian areas such as Scotts Creek and other drainages on the west side of Cow Mountain, as well as native oak habitats found primarily near the boundaries with private lands. Specific measures, such as brush conversion to native grasses and brush piling to benefit species, may be considered if appropriate.

Avoid and minimize adverse impacts to fisheries when conducting any project work, including habitat restoration activities. Restore and enhance game fisheries habitat in those streams having the greatest potential such as Scotts, Benmore, Willow, Mill, McClure, and Sulphur Creeks. Any habitat enhancements proposed for game species will be carefully evaluated prior to approval in order to eliminate any conflicts with listed fish species. The potential exists for expanding game fish populations in ponds throughout the Cow Mountain zone.

An expanded level of habitat development will benefit both game and non-game species. Noxious weed reduction, brush conversions, native plant re-establishment, and water developments for habitat improvement will be implemented in priority locations throughout North and South Cow Mountain at an increased level (see Vegetation Management for Cow Mountain).

• Reintroductions and Augmentations: Species introductions will emphasize native species historically occurring on lands within the Cow Mountain geographic zone, with the exceptions previously discussed. Exceptions may be made for insects, plant pathogens, or other approved bio-control agents used to complete a specific resource objective such as noxious weed control. Additionally, ponds with suitable habitat may be augmented with game fish such as bluegill.

Augmentation of existing native species will also be considered where appropriate.

3.1.2.3 Vegetation Management

• Treat annually up to fifty acres of yellow starthistle, medusahead, Italian thistle, and Harding grass.

3.1.2.4 Riparian and Wetland Resources

See common decisions

3.1.2.5 Cultural and Historic Resources

- Prioritize archaeological inventory and site documentation for uninventoried portions of this
 area.
- Develop a regional overview for this area.

3.1.2.6 Lands and Realty

- Limit communication sites in the Cow Mountain management area to the following two existing sites: the North Cow and the Purdy Garden communication sites.
- No exclusion or avoidance areas.

3.1.2.7 Special Designations

• Designate the Lost Valley Meadow area as an ACEC by including 40 acres of BLM managed lands within the Miner's Ridge watershed of the Russian River Drainage system (see Figure 2). The primary features requiring special management considerations include the pristine meadow system with its unique assemblage on native vegetation. Populations of native bunch grasses abound within the proposed ACEC, including the following three bunchgrass species of special interest: California brome (*Bromus carinatus*), California oatgrass (*Danthonia californica americana*), and Lemmon's needlegrass (*Achnatherum lemmonii*). Special management will better protect these populations of California native bunchgrass species and their associated pristine meadow habitat. Off-highway vehicle roads to Lost Valley will be closed.

3.1.2.8 Forest Management

See common decisions

3.1.2.9 Livestock Grazing Management

No allotments available for grazing in Cow Mountain.

3.1.2.10 Fire Management

- Targets for average annual prescribed fire strategies (average annual acres): up to 1,000
- Targets for decadal prescribed fire strategies (decadal acres): up to 10,000
- Targets for mechanical treatment strategies (decadal acres): up to 1,000

3.1.2.11 Energy and Minerals

Available

3.1.2.12 Wind Energy

Available

3.1.2.13 Travel Management and Route Designation (Note: see tables in Appendix A for details)

North Cow Mountain

- Primarily allows non-motorized and mechanized recreation. All mechanized use will be limited to designated trails and roads.
- All vehicle use will be limited to street legal vehicle use only on the Mendo-Rock Road, Water Tank
 Spur, Willow Creek Road, Rifle Range Road, Radio Tower Road, Rifle Range Maintenance Spur, and
 Mayacmas Campground Road. In addition, the gate at the end of the Water Tank Spur will be
 opened during the general deer season (rifle) to allow street legal vehicle access to the following
 routes:
 - Firebreak #1
 - McClure Creek Ridge Spur
 - McClure Creek Spur
 - Sulphur Creek Spur
 - Sulphur Creek Ridge Spur
- Develop up to 40 miles of mechanized and non-motorized use trails.

South Cow Mountain

Allows motorized, non-motorized and mechanized recreation activities. All motorized and
mechanized use will be limited to designated trails and roads. Routes will be given new numbers to
fit a new numbering system. Although the area is open year round, there is a wet weather vehicle
closure policy based on rainfall (see Appendix O). This policy has been in effect for over a decade

with a formal policy implemented the winter of 2004-2005. This closure is subject to modification. Mountain bikers and hikers use the area during the seasonal closures.

 Continue to develop a loop trail system were feasible. BLM may develop up to 40 miles of trail for reroutes to protect erodible soils and sensitive resources and to expand recreational opportunities.

3.1.2.14 Recreation

See Figure 2 for Recreation Opportunity Spectrum zones.

North Cow Mountain - Facility Development

Potential facilities include but are not limited to the following:

- Backcountry:
 - Collaborate with individuals, groups and agencies to identify locations for minimally developed resting areas or primitive camping areas.
- Middlecountry:
 - Re-develop existing campground (Mayacmas).
 - Develop and maintain minimal trailhead facilities which may include parking area, non-potable water and kiosks.
- Frontcountry
 - Re-develop existing shooting range.
 - Install benches at the Mendo-Rock overlook.
 - Re-develop Glen Eden Trailhead.
- Rural Zone
 - Assess the development of a trailhead near Blue Lakes.
 - Assess the development of a trailhead along of Highway 20.
 - Assess the development of another trailhead along Scotts Valley Road.
 - Install viewing point along Highway 20.

South Cow Mountain - Facility Development

Potential facilities include but are not limited to the following:

- Backcountry
 - Camouflaged the pump for the well to blend in with the natural landscape (Lost Valley).
 - Designate primitive campsite locations (Lost Valley).
- Middlecountry
 - Add campsites to Buckhorn Campground.
 - Improve existing facilities at Buckhorn Campground.
 - Develop staging area with camping facilities along Highway 175 or Scotts Creek.
 - Designate primitive campsites in Eight Mile Valley area.
- Frontcountry
 - Expand Red Mountain Campground.
 - Assess potential of day use facilities at the Safety Course.
 - Re-develop Westside staging area to accommodate more vehicles (if possible).

North Cow Mountain Recreation - Allowable Uses

Allowable Uses	Backcountry	Middlecountry	Frontcountry
Non-motorized/non-mechanized	Y	Y	Y
Mechanized	Y	Y	Y
Motorized	N	${ m L}$	${ m L}$
Shooting	N	N	L

South Cow Mountain Recreation - Allowable Uses

Allowable Uses -	Backcountry	Middlecountry	Frontcountry
Non-motorized/non-mechanized	Y	Y	Y
Mechanized	Y	Y	Y
Motorized	N	${ m L}$	L
Shooting	N	${ m L}$	L
Notes:			

Y: Yes; motorized use is only allowed on designated routes.

N: No.

3.1.2.15 Interpretation and Education

See common decisions

3.1.2.16 Soil Resources

- Prioritize roads and trails for mitigation-based analysis of sediment production and apply appropriate mitigation measures based on sediment production analysis.
- Schedule all roads and trails for redesign, where necessary, to meet water quality standards.
- Perform soil studies to improve the implementation of the South Cow Mountain Rain Closure
 Policy. Develop and implement a closure policy related to rain that will prevent resource damage and
 protect human health and safety.

3.1.2.17 Water Resources

Complete the Eight Mile Valley Meadow Restoration Project.

3.1.2.18 Air Quality

See common decisions

L: Limited; motorized use is limited by the rain closure policy; shooting is limited to designated shooting areas, to be designated during plan implementation.

3.2 KNOXVILLE

3.2.1 Introduction

The Knoxville area is about 35,000 acres, including about 24,000 acres of public land. It is located just south of the Cache Creek watershed and north of Lake Berryessa.

3.2.2 Decision

The following decisions are specific to the Knoxville Management Area and are in addition to the decisions in Section 2:

3.2.2.1 Visual Resources Management

Middlecountry Zones: VRM Class II

Frontcountry Zones: VRM Class III

3.2.2.2 Wildlife and Fish

• Habitat: Minimize any disturbances to wildlife and fish habitat from proposed projects on public lands. Prescribed burning will focus on those burns that improve habitat conditions, as well as reduce fuels hazards (see Fire Management Section). Protection of priority habitats will include active measures such as increasing the amount of priority vegetative species in the riparian habitat on Hunting, Jericho, Hole, Cement, Cedar, and Pocock Creeks, as well as native oak habitats found along the boundaries with private lands. Specific measures such as brush conversion to native grasses and brush piling to benefit species such as quail may be considered where appropriate.

An expanded level of additional habitat development projects will benefit both game and non-game species. Noxious weed reduction and water developments for habitat improvement will be implemented in priority locations, such as the Cement Creek area and Adams Ridge, at an increased level.

Baseline fisheries surveys will be completed for species inventory and habitat condition in Hunting Creek, Jericho Creek, and Hole Creek. Avoid and minimize adverse impacts on fisheries when conducting any project work, including habitat restoration activities.

 Reintroductions and Augmentations: Only wildlife introductions of native species historically occurring on lands within the Knoxville geographic zone will be considered if appropriate. An exception can be made for insects, plant pathogens, or other bio-control agents used to complete a specific resource objective such as reducing noxious weeds.

Augmentation of existing native species will also be considered where appropriate.

3.2.2.3 Vegetation Management

• Treat annually up to fifty acres of yellow starthistle, medusahead, tamarisk, and barb goatgrass.

3.2.2.4 Riparian and Wetland Resources

See common decisions

3.2.2.5 Cultural and Historic Resources

- Prioritize archaeological inventory and site documentation for uninventoried portions of this
 area.
- Develop a regional overview for this area.

3.2.2.6 Lands and Realty

No exclusion or avoidance areas.

3.2.2.7 Special Designations

Designate a Knoxville ACEC of 5,236 acres (see Figure 3). This ACEC is based on a proposal submitted by the public, including faculty at the University of California Davis (UC Davis), in August of 2000. This area has been used by UC Davis for botanical studies and research, and is considered a "hot spot" for plant evolution. The designation is based on two known delineated areas with resource characteristics which support an ACEC status. The Knoxville ACEC incorporates an area sometimes referred to as "Research Hill," at the northern end of the Knoxville management area. The primary values include: 1) a geologically and botanically unique ecosystem, supporting more rare or unusual species restricted to serpentine soils than are known from any area of protected public lands in California or the United States; 2) the existence of an especially unusual and fragile habitat type termed "serpentine wet areas;" and 3) the area possesses a high level of past, present, and planned future activity in scientific research and environmental education. The second unit is approximately 3,480 acres, and located in the southwestern area of the Knoxville management area, from the eastern ridgeline of Hunting Creek Canyon and to the west. The additional resource values in this area include cultural resources, the Hunting Creek Canyon lands, the Knoxville Cedars, and serpentine wet areas along the western side of the Knoxville management area. No new OHV trails will be developed in the ACEC.

3.2.2.8 Forest Management

See common decisions

3.2.2.9 Livestock Grazing Management

Cement Creek and Jericho Valley allotments will be available for livestock grazing.

3.2.2.10 Fire Management

- Targets for average annual prescribed fire strategies (average annual acres): up to 400
- Targets for decadal prescribed fire strategies (decadal acres): up to 4,000
- Targets for mechanical treatment strategies (decadal acres): up to 250

3.2.2.11 Energy and Minerals

Available

3.2.2.12 Wind Energy

Available

3.2.2.13 Travel Management and Route Designation (Note: see tables in Appendix A for details)

- Allows motorized, non-motorized and mechanized recreation. All motorized and mechanized use
 will be limited to designated trails and roads. Continue to create a loop trail system by constructing
 trails to connect "dead end trails" or "out and back" routes. This is an effort to prevent trespass and
 impacts to sensitive areas.
- Devilhead Road is a county road currently limited to street legal vehicle use only.
- BLM may develop up to 30 miles of trail for trail connectors and re-routes. No new trail development in ACEC.
- See Appendix A for designated route network.

3.2.2.14 Recreation

See Figure 3 for ROS zones

• Allowable Uses:

Allowable Uses	Middlecountry	Frontcountry
Non-motorized/non-mechanized	Y	Y
Mechanized	Y	Y
Motorized	Y	Y
Shooting	L	${ m L}$
Notes:		
37.37 . 1 1 11	1 1 1 1 1 1	

Y: Yes; motorized use is only allowed on designated routes.

N: No

L: Shooting is limited to designated shooting areas, to be designated during plan implementation.

• *Physical Setting*/Facilities: As much as possible, maintain a naturally appearing landscape, with any new development. The works and impacts of humans are minimal in extent and transitory in nature.

 Social Setting: Interaction with others is frequent and expected. There is an increase in contacts on holiday weekends. During the fall, winter and spring, Knoxville is used by small groups and individuals.

Management Presence: Management presence on-site is on a weekly basis by Napa County Sheriff's Deputies, BLM staff, or BLM LE rangers.

Special Recreation Permits. If applications are received, they will be reviewed on a case-by-case basis.

• Facility Development: There are campgrounds, staging areas, and a designated shooting area.

Signage: There are several signs at the entrances, staging areas, and road junctions. Maintain minimal directional signage necessary for guiding public to the public lands and resource monitoring. Continue coordination with Napa County Sheriff's Deputies, Homestake Mining Company, McLaughlin Reserve managers, and private landowners regarding issues that arise in the area.

• *Monitoring:* Monitor the use of the public to determine impacts from recreational use on natural and cultural resources. This monitoring program includes the following components:

Photo collection of resource impact on vegetation, soils, etc. as well as identifying resource problems like sanitation, litter, etc.

3.2.2.15 Interpretation and Education

See common decisions

3.2.2.16 Soil Resources

• Evaluate existing trails and roads for sediment production and analyze drainage patterns. Upon completion of analyses, develop and prioritize projects to minimize soil loss and erosion of sediment into streams (i.e., rolling dips and outsloping).

3.2.2.17 Water Resources

See common decisions

3.2.2.18 Air Quality

See common decisions

3.3 INDIAN VALLEY

3.3.1 Introduction

The Indian Valley area is about 51,000 acres, including about 44,000 acres of public land. The area also includes Walker Ridge. It is bounded by Indian Valley and Bear Valley on the east and north, Long Valley and the Mendocino National Forest to the west, and Highway 20 to the south. Indian Valley Reservoir is the center of the area. There is interspersed private land especially at the south and southeast. The reservoir shoreline is mostly under the jurisdiction of the California Department of Fish and Game (CDFG).

3.3.2 Decision

The following decisions are specific to the Indian Valley Management Area and are in addition to decisions in Section 2:

3.3.2.1 Visual Resources Management

- Middlecountry Zones: VRM Class II
- Frontcountry Zones: VRM Class IV, for interior observation points. Areas visible from exterior
 identified KTRs and KOPs, will be managed as VRM Class IV for interior observation points and
 VRM Class II for exterior observation point views north, west, and southwest from the reservoir,
 and VRM Class IV for exterior observation point views east and southeast from the reservoir.

3.3.2.2 Wildlife and Fish

- Threatened and Endangered Species: Enhance habitat conditions if bald eagle nesting is documented in
 the vicinity of the reservoir; Protect suitable nesting and perching trees in potential habitat; Ensure
 that energy development has adequate measures to protect bald eagle habitat and flight routes. All
 Best Management Practices (BMPs) to protect bald eagles from adverse impacts of energy
 development will be required. Additionally the USFWS will be consulted regarding impacts to bald
 eagles at Indian Valley Reservoir.
- Habitat: Minimize any disturbances to habitat from proposed projects on public lands. Prescribed burning will focus on those burns that improve habitat conditions in the chamise chaparral habitats on both sides of Indian Valley Reservoir. Protection of priority habitats will include active measures such as increasing the amount of priority vegetative species such as willows and cottonwoods in the riparian areas previously mentioned, as well as native oak habitats scattered throughout the geographic zone. Specific measures such as brush conversion to native grasses and brush piling to benefit species such as quail may be considered in suitable areas along Walker Ridge and others where quail will benefit.

An expanded level of habitat development will benefit both game and non-game species. Prescribed burning, noxious weed reduction, brush piling, and water developments for habitat improvement will be implemented in priority locations such as Walker Ridge and the west side of Indian Valley Reservoir at an increased level.

Baseline fisheries surveys will be completed for species inventory and habitat condition in North Fork Cache Creek above and below the reservoir, and Bartlett Creek. Avoid and minimize adverse impacts on fisheries when conducting any project work, including habitat restoration activities.

 Reintroductions and Augmentations: Only wildlife introductions of native species historically occurring on lands within the Indian Valley geographic unit will be considered if appropriate. An exception can be made for insects, plant pathogens, or other bio-control agents used to complete a specific resource objective such as reducing noxious weeds.

Augmentation of existing native species will also be considered where appropriate.

3.3.2.3 Vegetation Management

Treat annually up to twenty acres of yellow starthistle, medusahead, arundo, and tamarisk.

3.3.2.4 Riparian and Wetland Resources

See common decisions

3.3.2.5 Cultural and Historic Resources

See common decisions

3.3.2.6 Lands and Realty

- Limit communication sites in the Indian Valley management area to the following sites: the Colusa County / California Department of Forestry and Fire Prevention (CDF) site and the North Walker Ridge Site.
- No exclusion or avoidance areas.

3.3.2.7 Special Designations

- Designate the Walker Ridge ACEC to include approximately 3,685 acres of BLM managed lands in
 eastern Lake County (see Figure 4). Special management is needed to protect serpentine ecosystems
 and associated sensitive plant species. Like Knoxville, Walker Ridge is well known for its serpentine
 endemic plant associations and is also considered by botanists as a "hot spot" for plant evolution.
 Inventory of sensitive resources will be completed before any new trails will be developed.
- Expand the Indian Valley Brodiaea Research Natural Area ACEC to 100 acres by adding another 60 acres of Brodiaea habitat along Stanton Creek (see Figure 4).

3.3.2.8 Forest Management

See common decisions

3.3.2.9 Livestock Grazing Management

Due to manageability, the Salt Lick Canyon allotment will only be available for livestock use as a tool
for weed control and/or hazardous fuels reduction upon sale of the base property. Upon sale of the
base property, the grazing preference will not be transferred.

3.3.2.10 Fire Management

- Targets for average annual prescribed fire strategies (average annual acres): up to 600
- Targets for decadal prescribed fire strategies (decadal acres): up to 6,000
- Targets for mechanical treatment strategies (decadal acres): up to 300

3.3.2.11 Energy and Minerals

Available

3.3.2.12 Wind Energy

Available

3.3.2.13 Travel Management and Route Designation (Note: see tables in Appendix A for details)

- Motorized use is limited to the approximately 22 miles of inventoried existing routes (see Figure 4).
- Within three years, BLM will design a manageable and sustainable multiple use trail network. In
 general, these routes will be open for motorized, non-motorized and mechanized recreation. BLM
 will work in conjunction with adjacent land managers (Mendocino National Forest, CDFG, and Yolo
 County Flood Control) to create the trail network. New trail segments may need to be constructed
 to connect existing trail segments and/or re-route to avoid highly erosive trail segments.

3.3.2.14 Recreation

See Figure 4 for ROS zones.

Allowable Uses:

ALLOWABLE USES	MIDDLECOUNTRY	FRONTCOUNTRY
Non-motorized/non-mechanized	Y	Y
Mechanized	Y	Y
Motorized	Y	Y
Shooting	Y	Y
Notes:		

Y: Yes; motorized use is only allowed on designated routes.

N: No.

Middlecountry - Facility Development

Potential facilities include but are not limited to the following:

- Collaborate with agencies, private landowners, individuals and organizations to identify locations for
 access and trailhead facilities. This could be accomplished on BLM acquired lands, partnership or an
 easement situation.
- Develop and maintain trailhead facilities which may include parking area, restrooms, and kiosks.

Frontcountry - Facility Development

Potential facilities include but are not limited to the following:

- Collaborate with agencies, private landowners, wind energy companies, individuals and groups to
 identify locations for access and trailhead facilities. This could be accomplished on BLM acquired
 lands, partnership or an easement situation.
- Develop and maintain trailhead facilities which may include parking area, restrooms, and kiosks.

3.3.2.15 Interpretation and Education

See common decisions

3.3.2.16 Soil Resources

 Participate with the State of California, U.S. Environmental Protection Agency (EPA), local Native American tribes, and other interested parties, in methyl-mercury assessments and development of a recovery plan.

3.3.2.17 Water Resources

See common decisions

3.3.2.18 Air Quality

See common decisions

3.4 CACHE CREEK

3.4.1 Introduction

The Cache Creek area encompasses approximately 124,000 acres, including about 70,000 acres of public land. It also includes the BLM managed Cache Creek Natural Area and the Rocky Creek / Cache Creek wilderness study area. It trends NW/SE, and is generally bounded on the north by Highway 20 and the North Fork of Cache Creek, on the west by Highway 53, on the south by Morgan Valley and the Berryessa-Knoxville Road, and on the east by Blue Ridge.

3.4.2 Decision

The following decisions are specific to the Cache Creek Management Area: Appendix N contains decisions adopted from the Cache Creek Coordinated Resource Management Plan (2004).

3.4.2.1 Visual Resources Management

- Backcountry Zones: VRM Class I
- Middlecountry Zones: VRM Class III, for interior observation points. Areas visible from Cache Creek, a KTR, will be managed as VRM Class II.
- Frontcountry Zones: VRM Class III, for interior observation points. Areas visible from Cache
 Creek, a KTR, will be managed as VRM Class II. North of Highway 20 will be managed as VRM
 Class IV.

3.4.2.2 Wildlife and Fish

• Threatened and Endangered Species: Monitor bald eagle populations according to the management prescriptions of the Cache Creek Coordinated Resource Management Plan (BLM 2004).

Beginning in 2005, a seasonal closure to terrestrial public use will be implemented to protect any documented nesting bald eagles, including the nest site in the Wilson Valley area. This closure will last throughout the breeding season, from February 1 through June 30. A ½ mile buffer around the nest site will be posted as seasonally closed to all public use. If necessary, the closed area may be enlarged if certain activities such as gunfire or other impacts from too many visitors in too close proximity to the nest site cause unexpected disturbance. The closure may be expanded to include boaters if disturbance is observed. Additionally, if all bald eagle breeding activity is absent from area nest site for three consecutive years, this closure will be lifted until future evidence of breeding activity is documented through annual monitoring.

Ensure that any energy development has adequate measures to protect bald eagle habitat and flight routes. All BMPs to protect bald eagles from any adverse impacts of energy development will be required. Additionally, the USFWS will be consulted regarding impacts to bald eagles within the Cache Creek Natural Area.

• Migratory Birds: See common decisions

Habitat: Manage wildlife and fish species, and their habitats within Cache Creek according to the
management prescriptions included within the Cache Creek Coordinated Resource Management Plan
(2004). See Appendix N for these decisions.

Focus habitat improvement on implementing prescribed burns (see Fire Management Section), noxious weed reduction in key habitats, water developments, revegetation with native species, and brush piling. Additional projects such as brush piling for quail habitat will be considered where appropriate. Cooperative projects with CDFG and organizations including the Rocky Mountain Elk Foundation (RMEF), National Wild Turkey Federation (NWTF), and Quail Unlimited (QU) to improve habitat conditions will continue to be implemented as funding permits. Priorities for these projects include high quality habitats found on Cache, North Fork Cache, and Bear Creeks, as well as on recent acquisitions. This level of habitat development will be aimed at increasing current wildlife and fish population levels.

Minimize any disturbances to wildlife and fish habitat from proposed projects on public lands. Avoid and minimize adverse impacts on migratory birds when conducting any project work, including habitat restoration activities within riparian and native oak habitats. Restore and enhance habitat for migratory birds in riparian and native oak habitats. Design a monitoring plan to provide long term data regarding bird populations and their habitats. Components of this plan will include the use of bird point counts or area searches with the intent of gathering statistically valid samples to assess the long-term effectiveness of management activities. Collaboration with other entities such as Partners in Flight, Audubon Society, or graduate students will be encouraged for this monitoring effort.

Continue the current level of habitat developments that benefit game species and fisheries, including: prescribed burning, noxious plant reduction, native plant re-establishment, and water developments for habitat improvement will continue. Restore and enhance fisheries habitat on Cache, North Fork Cache, and Bear creeks as opportunities arise. The potential exists for expanding game fish populations in suitable wildlife ponds scattered throughout the Payne Ranch acquisition. Remove the invasive plants along Cache Creek, North Fork Cache Creek, and Bear Creek, such as salt cedar and arundo, to improve fisheries habitat conditions. Avoid and minimize adverse impacts on fisheries when conducting any project work, including habitat restoration activities.

• Reintroductions and Augmentations: Continue augmentation of tule elk from herds throughout the state which have exceeded their carrying capacities. The Payne Ranch area contains more than 10,000 acres of suitable elk habitat and is a suitable site to accommodate excess elk from other locations. The Payne Ranch area has sufficient habitat to support as many as 200 elk.

Suitable ponds on the Payne Ranch acquisition may be augmented with species of game fish already present, including bass and bluegill, as appropriate.

3.4.2.3 Vegetation Management

• Treat annually up to 2,000 acres of yellow starthistle, medusahead, barb goatgrass, Italian thistle, arundo, perennial pepperweed, and tamarisk.

3.4.2.4 Riparian and Wetland Resources

See common decisions

3.4.2.5 Cultural and Historic Resources

Prioritize archaeological inventory and site documentation for newly acquired lands in this area.

3.4.2.6 Lands and Realty

- Limit communications sites to the existing Yolo County Site (north of Highway 20) in the Cache Creek management area.
- Cache Creek south of Highway 20 will be an exclusion area.

3.4.2.7 Special Designations

- Continue designation and management of the 11,228-acre Cache Creek ACEC (see Figure 5b) to
 protect the special resource values including riparian values along the creek, primitive recreation
 values, the bald eagle population, the Cache Creek tule elk herd, and cultural resource values.
- Continue designation and management of the 11,206-acre Northern California Chaparral Research Natural Area (see Figure 5b) to protect botanical values found in an undisturbed block of chaparral habitat.
- Manage the 33,582 acres of Cache Creek WSA identified in the 1979 Wilderness Final Intensive Inventory (see Figure 5a) under BLM Interim Management Policy (IMP) for Lands under Wilderness Review (H-8550-1), until Congressional designation as Wilderness or release from WSA status.
- Manage 4,913 acres (see Figure 5a) immediately adjacent to the Cache Creek WSA (Wilderness Characteristic Assessment Units 1a, 1b, 2, 4, 5a, 8b, 8c, 10a, 10b, 10c, 11b, and 12b) for their wilderness characteristics (See Appendix C for management guidance). All of these lands were acquired since designation of the WSA in 1979. This includes assessment units acquired since 1979 that meet the qualifications of wilderness characteristics and complement the values of the existing WSA.
- Manage 9,235 acres (portions of Wilderness Characteristic Assessment Units 13A (22 acres), 13B (8,475 acres, and 6B (738)), known as Blue Ridge (see Figure 5a), for their wilderness characteristics (See Appendix C for management guidance). This area includes lands acquired since 1979 that created a contiguous block of public land that has wilderness characteristics.
- The following river segments (see Figure 5a) are recommended as suitable for inclusion in the NWSRS and are subject to the Protective Management described in Section 2:

- Cache Creek - Segment A - North Fork Cache Creek: 3.9 miles - Wild

- Cache Creek - Segment B - South Fork Cache Creek: 3.6 miles - Scenic

Cache Creek – Segment C – Main Stem Cache Creek:
 8.6 miles - Wild

- Cache Creek - Segment D - Main Stem Cache Creek:

3.5 miles - Recreation

3.4.2.8 Forest Management

See common decisions

3.4.2.9 Livestock Grazing Management

• No allotments available for grazing in Cache Creek. Livestock facilities will be limited and temporary to maintain the natural character of the area. This is the current level on management and is in conformance with the Cache Creek CRMP (2004).

3.4.2.10 Fire Management

- Targets for average annual prescribed fire strategies (average annual acres): up to 1,000
- Targets for decadal prescribed fire strategies (decadal acres): up to 10,000
- Targets for mechanical treatment strategies (decadal acres): up to 500

3.4.2.11 Energy and Minerals

- The Cache Creek management area is proposed for withdrawal under the mining laws. It is recommended for closure to locatable mineral exploration and development. It is also closed to locatable mineral activities that require reclamation. These lands are also closed to mineral material disposal.
- The Cache Creek management area is closed to fluid mineral leasing.

3.4.2.12 Wind Energy

• Cache Creek south of Highway 20 is an exclusion areas for wind energy applications.

3.4.2.13 Travel Management and Route Designation (Note: see tables in Appendix A for details)

- Currently, there is access to the exterior along Highway 20 and Highway 16 with limited vehicle access to the interior via Yolo County Road 40, Langs Peak Road, and Fiske Lake Road.
- A trails plan will be completed within five years for Cache Creek that will adequately help disperse
 users, minimize contact between users and offer multiple use recreation opportunities as much as
 possible. The existing trails will be integrated into the trails plan as much as possible. BLM may
 develop up to 50 miles of new trail.

3.4.2.14 Recreation

See Figure 5a for ROS zones

Allowable Uses

ALLOWABLE USES	BACKCOUNTRY	MIDDLECOUNTRY	FRONTCOUNTRY
----------------	-------------	---------------	--------------

Non-motorized/non-mechanized	Y	Y	Y
Mechanized	Y	Y	Y
Motorized	N	N	L
Shooting	N	N	N
Notes:			

Y: Yes; motorized use is only allowed on designated routes.

N: No.

L: Limited; OHV use limited by season as shown in Travel Management and Route Designation section.

Backcountry - Facility Development

Potential facilities include but are not limited to the following:

Benches in several locations along trails for resting and experiencing the viewshed (ridge line, ponds, etc.).

Middlecountry - Facility Development

Potential facilities include but are not limited to the following:

- Expand and maintain an overflow area for Blue Oak Campground.
- Additional parking areas and/or trailheads along Highway 20, as lands and safety issues allow.

Frontcountry - Facility Development

Potential facilities include but are not limited to the following:

- Collaborate with private landowners, groups and organizations to identify locations for access and trailhead facilities along Reiff-Rayhouse Road. This could be accomplished on BLM acquired lands, partnerships or an easement acquisition.
- Develop a new trailhead for the Perkins Creek Ridge Trail.
- Continue development of Cowboy Camp Trailhead as a multi-use public access.
- Develop additional access site for year round equestrian access and camping.
- Develop minimal facilities at Fiske Lake for camping use.
- Develop an alternate parking area for access off Highway 53 for non-motorized public use which will tie into Perkins Creek Ridge Trail.
- Develop a parking area for access off Highway 53 that connects with the local county and city park system, and the BLM lands.
- Develop wheelchair accessible overlooks for viewing of the landscape.
- Develop informational, interpretive and educational kiosks.

3.4.2.15 Interpretation and Education

See common decisions

3.4.2.16 Soil Resources

See common decisions

3.4.2.17 Water Resources

- Stabilize headcuts in Cache Creek watershed.
- Continue to collaborate with watershed groups, educational institutions and resource conservation districts on watershed assessments and improvement projects.

3.4.2.18 Air Quality

See common decisions

3.5 CEDAR ROUGHS

3.5.1 Introduction

The Cedar Roughs area is about 12,000 acres, including about 6,700 acres of public land on the southwest side of Lake Berryessa south of Pope Creek. The area contains the Cedar Roughs wilderness study area (WSA). Hardin Creek and Baldy Mountain are to the southwest of the WSA, and the WSA extends to Iron Mountain on the southeast.

3.5.2 Decision

The following decisions are specific to the Cedar Roughs Management Area and are in addition to decisions in Section 2:

3.5.2.1 Visual Resources Management

- Primitive Zones: VRM Class I
- Backcountry Zones: VRM Class I
- Frontcountry Zones: VRM Class III, for interior observation points. Areas visible from exterior identified KTRs and KOPs, will be managed as VRM Class III for interior observation points and VRM Class II for exterior observation points.

3.5.2.2 Wildlife and Fish

• *Habitat:* Focus habitat management on passive activities and on maintaining the current level of wildlife and fish populations by preventing any impacts from user-related causes.

Due to the dominance of the Sargent cypress (*Cupressus sargentii*) stand and a lack of high quality wildlife habitats within the Cedar Roughs geographic zone, there have been no recent prescribed burns completed in this area and none are proposed under this alternative. No other habitat enhancement projects have been implemented and none are proposed.

Focus the protection of priority wildlife habitats on the limited riparian habitat found along Trout, Pope, Maxwell, and Hardin creeks, as well as native oak habitats found along the southwestern boundary with private lands. Protect the Sargent cypress stand in this location from any development, including trails.

3.5.2.3 Vegetation Management

• Treat annually up to thirty acres of tamarisk, yellow starthistle, and medusahead.

3.5.2.4 Riparian and Wetland Resources

See common decisions

3.5.2.5 Cultural and Historic Resources

See common decisions

3.5.2.6 Lands and Realty

- No communications sites will be allowed in the Cedar Roughs management area.
- Cedar Roughs is an avoidance area.

3.5.2.7 Special Designations

- Manage the 5,597 acres of Cedar Roughs WSA (see Figure 6) identified in the 1979 Wilderness
 Final Intensive Inventory under BLM *Interim Management Policy (IMP) for Lands under Wilderness*Review (H-8550-1), until Congressional designation as Wilderness or release from WSA status.
- Expand the Cedar Roughs Research Natural Area ACEC to 6,350 acres (see Figure 6) by adding 753 acres to the existing ACEC, thereby encompassing the entire acreage of BLM lands within Cedar Roughs area. When the Cedar Roughs ACEC was established, the 753 acres of public lands north and west of the original Cedar Roughs area were not contiguous. The CDFG has now acquired property which joins the two pieces of public lands. Expansion of the Cedar Roughs ACEC will include additional acreage of the Sargent cypress (Cupressus sargentii) habitat.

3.5.2.8 Forest Management

See common decisions

3.5.2.9 Livestock Grazing Management

Due to manageability, the Maxwell Creek allotment will only be available for livestock use as a tool
for weed control and/or hazardous fuels reduction upon sale of the base property. Upon sale of the
base property, the grazing preference will not be transferred.

3.5.2.10 Fire Management

- Targets for average annual prescribed fire strategies (average annual acres): up to 100
- Targets for decadal prescribed fire strategies (decadal acres): up to 1,000
- Targets for mechanical treatment strategies (decadal acres): up to 100

3.5.2.11 Energy and Minerals

- The Cedar Roughs management area is closed to mineral material disposal and closed to locatable mineral activities that require reclamation.
- The management area ia closed to fluid mineral leasing.

3.5.2.12 Wind Energy

Cedar Roughs is an exclusion areas for wind energy applications.

3.5.2.13 Travel Management and Route Designation (Note: see tables in Appendix A for details)

- Currently, there is legal foot access via Pope Canyon Road, parking in a pullout on Bureau of Reclamation (BOR) property. To access the BLM managed lands, visitors must cross either CDFG or BOR lands. Additionally, there is boat-in access via Pope Creek from the main body of Lake Berryessa. There is no legal vehicle access into the area. The existing abandoned jeep trail that provides access to the main block of public lands is on CDFG land. There are old jeep roads in the southern portion that are most likely used by adjacent private land owners for access and hunting.
- If BLM acquires land adjacent to Cedar Roughs (to the east of Trout Ridge), additional access and trailhead facilities will be developed to promote non-motorized access.

3.5.2.14 Recreation

See Figure 6 for ROS zones.

Allowable Uses

ALLOWABLE USES	PRIMITIVE	BACKCOUNTRY	FRONTCOUNTRY
Non-motorized/non-	Y	Y	Y
mechanized			
Mechanized	N	N	Y
Motorized	N	N	Y
Shooting	N	N	Y

Notes: Y: Yes; motorized use is only allowed on designated routes.

N: No.

Frontcountry - Facility Development

The overall goal of facilities will be to serve as basic staging areas and access corridors.

Potential facilities include but are not limited to the following:

- Collaborate with individuals and organizations to identify locations on along the Knoxville -Berryessa Road for parking facilities. This could be accomplished on BLM acquired lands, partnership or an easement situation.
- Develop and maintain trailhead facilities (if feasible) along Berryessa Road. Services may include parking area, restrooms, and kiosks.

3.5.2.15 Interpretation and Education

See common decisions

3.5.2.16 Soil Resources

• Manage Cedar Roughs to insure integrity of the serpentine soils.

3.5.2.17 Water Resources

See common decisions

3.5.2.18 *Air Quality*

See common decisions

3.6 BERRYESSA

3.6.1 Introduction

The Berryessa management area covers about 56,000 acres, including about 15,000 acres of public land around Berryessa peak, east of Lake Berryessa. The area is on a mountain ridge and is generally inaccessible to the public. The southern portion of Blue Ridge is included in this management area and is publicly accessible.

3.6.2 Decision

The following decisions are specific to the Berryessa Management Area and are in addition to decisions in Section 2:

3.6.2.1 Visual Resources Management

- Frontcountry Zone: VRM Class III; exception: if wind energy is developed, the area will be managed to VRM Class IV.
- Backcountry Zones: VRM Class II

3.6.2.2 Wildlife and Fish

• *Habitat:* Focus habitat management on passive activities and on maintaining the current level of wildlife and fish populations by preventing any impacts from user-related causes.

No recent prescribed burns have occurred and none will be implemented under this alternative. Additionally, no other habitat enhancement projects have been implemented and none are proposed.

Protection of priority wildlife habitats will focus on the limited riparian habitat found in Gosling Canyon and other canyons leading from Blue Ridge to Lake Berryessa, as well as native oak habitats occurring along the boundary with private lands.

3.6.2.3 Vegetation Management

• If future populations of noxious weeds are inventoried, any effective treatment will be allowed.

3.6.2.4 Riparian and Wetland Resources

See common decisions

3.6.2.5 Cultural and Historic Resources

See common decisions

3.6.2.6 Lands and Realty

- Limit communication sites to the existing site on Berryessa Peak.
- Blue Ridge is an exclusion area.

3.6.2.7 Special Designations

Manage 9,235 acres (portions of Wilderness Characteristic Assessment Units 13A (22 acres), 13B (8,475 acres, and 6B (738)), known as Blue Ridge (see Figure 7), for their wilderness characteristics (see Appendix C for management guidance). This area includes lands acquired since 1979 that created a contiguous block of public land that has wilderness characteristics.

3.6.2.8 Forest Management

See common decisions

3.6.2.9 Livestock Grazing Management

- Rocky Ridge allotment is available for livestock grazing.
- The Portuguese Canyon allotment will only be available for livestock use as a tool for weed control
 and/or hazardous fuels reduction upon sale of the base property. Upon sale of the base property,
 the grazing preference will not be transferred.

3.6.2.10 Fire Management

- Targets for average annual prescribed fire strategies (average annual acres): up to 250
- Targets for decadal prescribed fire strategies (decadal acres): up to 2,500
- Targets for mechanical treatment strategies (decadal acres): up to 250

3.6.2.11 Energy and Minerals

- Blue Ridge is closed to mineral material disposal and closed to locatable mineral activities that require reclamation.
- Blue Ridge ia closed to fluid mineral leasing.

3.6.2.12 Wind Energy

 Blue Ridge is am exclusion areas for wind energy applications. The remainder of the Berryessa management area is an avoidance area for wind energy applications.

3.6.2.13 Travel Management and Route Designation (Note: see tables in Appendix A for details)

- Currently, there is no legal public access to this area except for the adjacent landowners. BLM holds an easement for official use only.
- There are existing roads on the BLM lands that are used for access to the radio communication vault
 and fire breaks along the ridge lines. Routes are being used by staff to operate the radio tower and by
 adjacent landowners, most likely during the hunting season. BLM will monitor existing routes and
 may develop reroutes as necessary to protect resources.

3.6.2.14 Recreation

See Figure 7 for ROS zones

Allowable Uses

ALLOWABLE USES	FRONTCOUNTRY	BACKCOUNTRY
Non-motorized/non-mechanized	Y	Y
Mechanized	Y	Y
Motorized	Y	N
Shooting	Y	Y
Notes: V. Ves: motorized use is only allow	red on designated routes	

Notes: Y: Yes; motorized use is only allowed on designated routes.

N: No.

• *Physical Setting/Facilities:* As much as possible, maintain a naturally appearing landscape. The works and impacts of humans are minimal in number.

Maintain the existing network of roads, directional signing, and minimal communication site facilities. There are currently no recreational facilities in the area.

- Social Setting: Interaction with others is not likely as there is no legal public access.
- *Management Presence*: Management presence on-site is infrequent.
- *Allowable Uses:* See above.
 - Vehicle access is required for the radio communication site operations such as maintenance, coordination of road maintenance with private landowners, and resource monitoring. An activity level plan will be developed if legal public access is available.
- Facility *Development:* No new recreational facilities will be developed on Berryessa peak unless legal public access is available.
- *Monitoring:* Monitor use to determine impacts from recreational use on natural and cultural resources. This monitoring program includes the following components:
 - Photo collection of resource impact at natural meadow type areas normally used for spike camps during hunting season and road conditions. Impacts on vegetation, soils, etc. as well as identifying resource problems like sanitation, litter, proliferation of fire rings, etc.

3.6.2.15 Interpretation and Education

No new interpretive facilities will be constructed (for the purpose of this plan, interpretive facilities is
defined as signs, exhibits, waysides, kiosks, brochure distribution boxes, etc.).

3.6.2.16 Soil Resources

See common decisions

3.6.2.17 Water Resources

See common decisions

3.6.2.18 *Air Quality*

See common decisions

3.7 STORNETTA

3.7.1 Introduction

The Stornetta Public Lands are a recent acquisition. Donated from the Nature Conservancy to the BLM on July 1, 2004, the Stornetta Public Lands consist of 1,132 acres of coastline property along the southern Mendocino Coast. The property has over two miles of Pacific coastline, two miles of the Garcia River, the Garcia River estuary, ½ mile of beach adjacent to Manchester State Park, and a five-acre island called Sea Lion Rocks. Several state and federal agencies recognize the property for its significant natural and cultural resources, including important wildlife habitat, several riparian corridors, extensive wetlands, ponds and other water sources, cypress groves, meadows, and sand dunes. The Stornetta Public Lands also serve as a gateway to the recently established California Coastal National Monument (CCNM). Sea Lion Rocks is now a part of the CCNM. The CCNM, under the jurisdiction of the BLM, is approximately 1000 acres of rocks and islands which stand above mean high tide and extend 12 nautical miles into the Pacific.

3.7.2 Decision

The following decisions are specific to the Stornetta Management Area and are in addition to decisions in Section 2:

3.7.2.1 Visual Resources Management

- Middlecountry Zones: VRM Class II
- Frontcountry Zones: VRM Class III

3.7.2.2 Wildlife and Fish

• Threatened and Endangered Species:

<u>Terrestrial Species:</u> Follow management prescriptions as described in the recovery plans for listed species known to occur in the management area.

Three draft recovery plans have been prepared by the USFWS for species known to exist on the Stornetta public lands. The *Draft Recovery Plan for Behren's Silverspot Butterfly (Speyeria zerene behrensii)* was completed in November 2003, the *Draft Recovery Plan for the Point Arena Mountain Beaver (Aplodontia rufa nigra (Rafinesque))* was completed in June 1998, and the *Western Snony Plover Draft Recovery Plan* was completed in May 2001.

- (1) Actions needed for recovery of the Behren's silverspot butterfly as listed in the recovery plan include:
 - Protect existing habitat.
 - Determine ecological requirements, populations, constraints, and management needs.
 - Reduce take and sources of mortality.
 - Undertake public information and outreach program.

In addition, the following measures will be taken for the Behren's silverspot butterfly:

- Habitat inventory and monitoring will be conducted in cooperation with USFWS.
- Habitat improvements such as those to improve forage species populations for the Behren's silverspot butterfly will be done in cooperation with the USFWS to ensure population viability and/or recovery.
- Herbicides or pesticides will not be used in occupied or potential habitat (defined by presence of *Viola* sp. and primary nectar plants) of the butterfly, unless it can be shown to improve the habitat and the species. BLM would consult with the Service on each of these projects.
- In known or potential butterfly habitat, only mowing and/or prescribed burn projects specifically designed to enhance and maintain violets and/or nectar plants would be proposed and BLM will consult with the Service on each of these projects.
- As a part of BLM's commitment to work with the Service to determine ecological requirements, populations, constraints, and management needs for the butterfly, BLM will work with partners, such as the Service, other Federal agencies, State agencies, and researchers, to study the relationship between livestock grazing and species habitat and will use information garnered to help manage livestock grazing to meet the habitat needs of the butterfly.
- Any new trails will be constructed in such a way as to minimize adverse effects to known and potential butterfly habitat. Before trail locations are proposed, basic butterfly distribution data will be determined. BLM would consult with the Service on each proposed trail.
- If it is determined that public use may adversely affect the butterfly or its habitat, these areas will be closed, either permanently, seasonally, or temporarily, as needed, and signed to assure the butterfly is protected.
- (2) Actions needed for recovery of the Point Arena Mountain Beaver as listed in the recovery plan include:
 - Protect known populations.
 - Protect suitable habitat, buffers and corridors.
 - Develop management plans and guidelines.
 - Gather biological and ecological data necessary for conservation of the subspecies.
 - Determine feasibility of, and the need for, relocation.
 - Establish an outreach program.

Known Mountain beaver habitat will be protected from livestock grazing with fencing.

Occasional sightings of the Western snowy plover (*Charadrius alexandrinus nivosus*) have been noted on the wave front north of the Garcia River. No nesting has been documented on the Stornetta public lands. This could be due in part to habitat degradation caused by the establishment of European beachgrass for dune stabilization. However, a nesting population has been identified on the adjacent Manchester Beach State Park lands at Brush Creek 1½ miles to the north. With habitat improvement and/or reclamation of dune areas, plover use of the area for nesting might be reestablished.

The Western Snowy Plover Draft Recovery Plan (May 2001) recommended the following conservation measures:

- Exclosures, symbolic fencing and signs
- Law enforcement
- Predator control
- European beachgrass control
- Off-highway restrictions and management
- Population monitoring
- Salt pond management
- Habitat acquisition

Habitat improvement for Western snowy plover will include the leveling removal of European beach grass for up to 40 acres adjoining the wave front. This will improve western snowy plover habitat while maintaining a buffer of stabilized dunes to protect the Stornetta ranch private properties from sand movement and inundation. Habitat improvement projects will be coordinated with Manchester Beach State Park to the north.

The brown pelican (*Pelecanus occidentalis*) was listed on June 2, 1970 and the Recovery Plan was final on February 2, 1983. The brown pelican is common spring through fall and rare during the winter on the Mendocino Coast. Nesting occurs on small coastal islands throughout California. No nesting has been documented on Sea Lion Rocks. Brown pelicans use sand spits and offshore sandbars for loafing and nocturnal roosting areas. No man made structures (i.e., piers, pilings, or breakwaters) are associated with the Stornetta public lands that the pelicans could roost on. Roosting could occur on Sea Lion Rocks, the island in the Garcia Estuary or on the northern wave front.

Fish Species

- In coordination and cooperation with CDFG and NOAA, complete restoration and rehabilitation activities that become necessary or ecologically desirable in the Garcia River estuary and Hathaway Creek for salmonid species.
- Hathaway Creek will not be available for livestock grazing (see Livestock Grazing Management section).
- Hathaway Creek will be fenced with a 100 foot buffer to prevent livestock use in the riparian area.
- Conduct surveys to determine if the tidewater goby (Eucyclogobius newberry) are present in the Garcia River Estuary and if the habitat is suitable. If the species or suitable habitat is present, follow management prescriptions as described in the recovery plan (Draft Recovery Plan completed October 2004).
- Habitat: Prioritize projects on the reduction of invasive plant populations, such as encroaching beach
 pines, sweet vernal, and velvet grass, for the improvement toward a native coastal prairie using such
 tools as prescribed burning, pesticide application, and re-vegetation of native species.

3.7.2.3 Vegetation Management

- Treat up to fifty acres annually.
- Conduct surveys to determine if Contra Costa goldfields (Lasthenia conjugens) are present and if the
 habitat is suitable. If the species or suitable habitat is present, follow management prescriptions as
 described in the recovery plan.

3.7.2.4 Riparian and Wetland Resources

- In areas where grazing is taking place, the BLM in cooperation with the grazing lessee(s) will take
 necessary steps to protect streams, waterways, and sloughs which are not in properly functioning
 condition.
- Determine riparian/wetland conditions at Stornetta, and classify in one of the following conditions: PFC, Functional-At Risk (FAR), Nonfunctional, and Unknown.
- Advance riparian/wetland areas into Proper Functioning Condition.

3.7.2.5 Cultural and Historic Resources

- Prioritize archaeological inventory and site documentation for newly acquired lands in this area.
- Develop a regional overview for this area.

3.7.2.6 Lands and Realty

- No communications sites are allowed in the Stornetta area.
- Stornetta is an avoidance area.

3.7.2.7 Special Designations

- Designate the Stornetta ACEC (see Figure 8) to include 887 acres of BLM managed lands, from Hathaway Creek, west to the Pacific Ocean, and south of the Garcia River. The primary features receiving special management by this designation include areas identified as threatened habitat for the Point Arena mountain beaver (*Aplodontia rufa nigra*), Behren's silverspot butterfly (*Speyeria zerene behrensii*), populations of the Coast lily (*Lilium maritimum*), and three anadromous populations of salmon.
- The following river segment (see Figure 8) is recommended as suitable for inclusion in the NWSRS and is subject to the Protective Management described in Section 2:
 - Garcia River: 1.41 miles Scenic

3.7.2.8 Forest Management

See common decisions

3.7.2.9 Livestock Grazing Management

- The Stornetta management area is available for livestock grazing until June 29, 2014. Hathaway Creek riparian area is not available for livestock grazing.
- At the termination or expiration of the existing lease, BLM will complete an assessment to determine
 at what level livestock grazing will be allowed. Until completion of this assessment, the area will be
 considered for livestock grazing, subject to regulation and policy after consultation and cooperation
 with affected agencies and the public.
- Construction of facilities will be limited to protect natural and cultural resources and the scenic character of the Point Arena area.

3.7.2.10 Fire Management

- Targets for average annual prescribed fire strategies (average annual acres): up to 10
- Targets for decadal prescribed fire strategies (decadal acres): up to 100
- Targets for mechanical treatment strategies (decadal acres): up to 25

3.7.2.11 Energy and Minerals

- The Stornetta management area is proposed for withdrawal under the mining laws. It is
 recommended for closure to locatable mineral exploration and development. It is also closed to
 locatable mineral activities that require reclamation. These lands are also closed to mineral material
 disposal.
- The Stornetta management area ia closed to fluid mineral leasing.

3.7.2.12 Wind Energy

• Stornetta is an exclusion areas for wind energy applications.

3.7.2.13 Travel Management and Route Designation (Note: see tables in Appendix A for details)

 Create a trail system utilizing the existing routes for non-motorized and mechanized recreation as much as feasible. BLM may develop up to 12 miles of new trail.

3.7.2.14 Recreation

See Figure 8 for ROS zones.

Allowable Uses

N: No.

ALLOWABLE USES	MIDDLECOUNTRY	FRONTCOUNTRY
Non-motorized/non-mechanized	Y	Y
Mechanized	Y	Y
Motorized	N	N
Shooting	N	N
Notes: Y: Yes: mechanized use here does	not include hang gliding or rock clim	nbing.

Stornetta and Point Arena is identified as a gateway to the California Coastal National Monument.

Middlecountry - Facility Development

Potential facilities include but are not limited to the following:

- Install sitting benches near the coast or Garcia River.
- Install water crossing structure over the Garcia River to access the Frontcountry Zone.

Frontcountry - Facility Development

• Identify the minimum necessary locations for parking/facilities along Lighthouse Road, Highway 1, and Miner's Hole Road.

3.7.2.15 Interpretation and Education

See common decisions

3.7.2.16 Soil Resources

- Monitor the affects on soil health of grazing and all other public activities. Monitoring results may
 result in changes in allowable use or the development of projects to mitigate negative impacts.
- Monitor and record data on known sinkholes and blowholes to track changes in geology.
- Determine affects of geological activity on soils in the area.

3.7.2.17 Water Resources

See common decisions

3.7.2.18 Air Quality

See common decisions

3.8 THE GEYSERS

3.8.1 Introduction

The Geysers area straddles the Lake County/Sonoma County line. The Geysers area is comprised of approximately 37,000 acres, of which about 7,100 acres are public land.

3.8.2 Decision

The following decisions are specific to the Geysers Management Area and are in addition to decisions in Section 2:

3.8.2.1 Visual Resources Management

- Middlecountry Zones: VRM Class III
- Rural Zones: VRM Class IV

3.8.2.2 Wildlife and Fish

- Habitat: Habitat management will primarily be passive and will focus on maintaining the current level
 of wildlife and fish populations by preventing adverse impacts from geothermal development. There
 have been no recent prescribed burns and there will be none implemented under this alternative. No
 other habitat enhancement projects have been implemented and none are proposed. Protection of
 priority wildlife habitats will focus on riparian and native oak habitats.
- Migratory Birds: Ensure that any energy development has adequate measures to protect migratory bird habitat and flight routes.
- Reintroductions and Augmentations: Augmentation of existing naturalized species will be considered where appropriate.

3.8.2.3 Vegetation Management

If future populations of noxious weeds are inventoried, any effective treatment will be allowed.

3.8.2.4 Riparian and Wetland Resources

See common decisions

3.8.2.5 Cultural and Historic Resources

See common decisions

3.8.2.6 Lands and Realty

No exclusion or avoidance areas.

3.8.2.7 Special Designations

See common decisions

3.8.2.8 Forest Management

See common decisions

3.8.2.9 Livestock Grazing Management

• No allotments available for grazing in the Geysers management area.

3.8.2.10 Fire Management

- Targets for average annual prescribed fire strategies (average annual acres): up to 100
- Targets for decadal prescribed fire strategies (decadal acres): up to 1,000
- Targets for mechanical treatment strategies (decadal acres): up to 500

3.8.2.11 Energy and Minerals

See common decisions

3.8.2.12 Wind Energy

See common decisions

3.8.2.13 Travel Management and Route Designation (Note: see tables in Appendix A for details)

- Allow year round public vehicle access using designated routes.
- BLM may develop up to 20 miles of new trail for motorized, non-motorized and mechanized recreation.

3.8.2.14 Recreation

See Figure 9 for ROS zones.

Allowable Uses

ALLOWABLE USES	MIDDLECOUNTRY	RURAL
Non-motorized/non-mechanized	Y	Y
Mechanized	Y	Y
Motorized	N	Y
Shooting	Y	N

Notes: Y: Yes; motorized use is only allowed on designated routes.

N: No.

Middlecountry - Facility Development

Potential facilities include but are not limited to the following:

- Collaborate with geothermal companies, private landowners, groups, individuals and agencies to
 identify locations for access and trailhead facilities. This could be accomplished on BLM acquired
 lands, partnership or an easement.
- Develop and maintain trailhead facilities which may include parking area, restrooms, and kiosks.

Rural Zone - Facility Development

Potential facilities include but are not limited to the following:

- Collaborate with geothermal companies, private landowners, agencies, groups and individuals to
 identify locations for access and trailhead facilities. This could be accomplished on BLM acquired
 lands, partnership or an easement.
- Develop and maintain trailhead facilities which may include parking area, restrooms, and kiosks.

3.8.2.15 Interpretation and Education

See common decisions

3.8.2.16 Soil Resources

- Evaluate current power plant and drilling pad locations, roads, pipelines transmission lines, rights-ofways, and other facilities locations for sediment production. If sediment production is unacceptable, implement appropriate mitigation measures.
- Evaluate all new proposed power plants and implement mitigation measures, as necessary, to minimize the production of sediment during construction and operation of the plant.

3.8.2.17 Water Resources

See common decisions

3.8.2.18 Air Quality

See common decisions

3.9 SCATTERED TRACTS

3.9.1 Introduction

The Scattered Tracts management unit comprises the public lands in the planning area that are not part of any of the other management areas. These tracts are mostly small parcels of public land surrounded by private property, which makes them inaccessible to the public. BLM-managed Scattered Tracts total approximately 47,000 acres.

3.9.2 Decision

The following decisions are specific to the Scattered Tracts Management Area:

3.9.2.1 Visual Resources Management

 Middlecountry and Frontcountry Zones: VRM Class III, except as follows: The Cedars and lands adjacent to Montgomery Woods State Park: VRM Class II Black Forest: VRM Class II

3.9.2.2 Wildlife and Fish

Habitat: Habitat management will primarily be passive and will focus on eliminating unauthorized
uses affecting habitat for wildlife and fish populations. No other habitat enhancement projects have
been implemented and none are proposed.

3.9.2.3 Vegetation Management

• Treat up to ten acres of noxious weeds annually.

3.9.2.4 Riparian and Wetland Resources

See common decisions

3.9.2.5 Cultural and Historic Resources

See common decisions

3.9.2.6 Lands and Realty

• Black Forest is an avoidance area.

3.9.2.7 Special Designations

• Designate the BLM public lands known as "The Cedars of Sonoma County" as an ACEC (see Figure 10). The total acreage of this unique environment is approximately 1,500 acres, and is located 4 miles north of the town of Cazadero, California and 2 miles northeast of the Austin Creek State Recreation Area. The Cedars ACEC includes all BLM (surface) managed lands in the area identified on the Cazadero U.S. Geological Survey (USGS) Quadrangle as the "The Cedars" in the upper reaches of the Austin Creek Drainage. The primary features protected in the Cedars ACEC are the unique

association of vegetation and picturesque terrain. The area is extremely steep and rugged, bisected by canyon lands. The area is dominated by serpentine chaparral, Sargent cypress (Cupressus sargentii) woodlands, and serpentine barrens. Numerous sensitive species are found in the area with manzanita (Arctostaphylos bakeri sublaevis) found on the BLM lands. The area has been designated as a unique feature/biotic area by the Sonoma County Planning Department. Currently, this area has no public access, but tours are conducted by the California Native Plants Society.

 Designate the Black Forest ACEC to include approximately 247 acres of BLM managed lands on Mount Konocti (see Figure 10). The primary values protected by this designation are the rocky cliffs which support Peregrine falcon (Falco peregrinus) habitat, the unique geologic boulders found throughout the area, and the mid-elevation old-growth Douglas fir (Pseudotsuga menziesii) forest.

3.9.2.8 Forest Management

See common decisions

3.9.2.9 Livestock Grazing Management

 Rail Canyon and Salt Creek allotments are available for livestock grazing (Salt Creek is currently available for disposal).

3.9.2.10 Fire Management

- Targets for average annual prescribed fire strategies (average annual acres): up to 250
- Targets for decadal prescribed fire strategies (decadal acres): up to 2,500
- Targets for mechanical treatment strategies (decadal acres): up to 1,000

3.9.2.11 Energy and Minerals

- Black Forest ACEC is closed to mineral material disposal and closed to locatable mineral activities that require reclamation.
- The Black Forest ACEC and the Cedars ACEC are closed to fluid mineral leasing.

3.9.2.12 Wind Energy

• Black Forest is an exclusion area for wind energy applications.

3.9.2.13 Travel Management and Route Designation (Note: see tables in Appendix A for details)

- Investigate legal public access opportunities, develop vehicle access and use any existing routes for
 motorized, non-motorized and mechanized recreation. Any rehabilitation or development work will
 need to be coordinated with the adjacent landowners and in conjunction with partnerships for access.
- BLM may develop up to 25 miles of new trail in an effort to connect fragmented lands.
- For the newly acquired Black Forest, develop trailhead (parking facilities) and up to 20 miles of trails for mechanized and non-motorized recreation.

3.9.2.14 Recreation

See Figure 10 for ROS zones

Allowable Uses

ALLOWABLE USES	MIDDLECOUNTRY	FRONTCOUNTRY
Non-motorized/non-mechanized	Y	Y
Mechanized	Y	Y
Motorized	L	L
Shooting	N	N
Notes: Y: Yes; motorized use is only allow	ved on designated routes.	
N: No.	_	

L: Limited; no motorized use allowed in the Black Forest ACEC or the Cedars ACEC.

Middlecountry - Facility Development

Potential facilities include but are not limited to the following:

- Collaborate with agencies, groups, private landowners, and other individuals to identify locations for
 access and trailhead facilities. This could be accomplished on BLM acquired lands, partnerships or
 an easement acquisition.
- Develop and maintain minimal trailhead facilities which may include parking area, restrooms, and kiosks.

Frontcountry - Facility Development

For the Black Forest, BLM will collaborate with individuals, groups and agencies to improve existing trailhead/parking area to accommodate multiple uses. The initial improved development will be minimal (parking and informational kiosk) unless visitation requires additional services.

3.9.2.15 Interpretation and Education

See common decisions

3.9.2.16 Soil Resources

For the Black Forest area:

- Collect baseline data of soil health, productivity, growing medium for native vegetation onsite, site stability, and upland hydrologic function.
- Locate and assess roads and trails that were in use before property acquisition.
- Use data and an associated analysis for project planning and prioritizing of activities.
- Information will also provide the guidance to make determinations on future road decommissioning or rehabilitation.

3.9.2.17 Water Resources

See common decisions

3.9.2.18 Air Quality

See common decisions