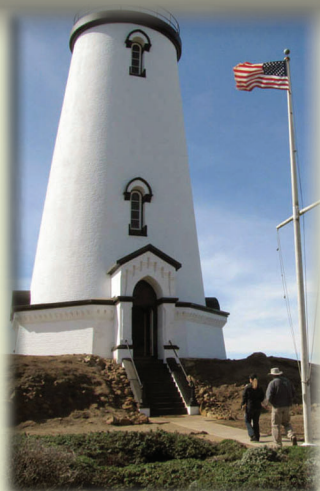
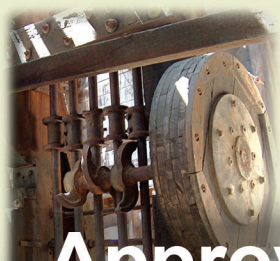


Bakersfield Field Office

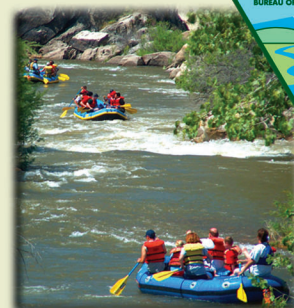
Record of Decision

&

Approved Resource Management Plan



December 2014
U.S. Department of the Interior
Bureau of Land Management
Bakersfield, California



Bakersfield Field Office



The BLM manages more land – 253 million acres – than any other federal agency. This land, known as the National System of Public Lands, is primarily located in 12 Western States, including Alaska. The Bureau, with a budget of about \$1 billion, also administers 700 million acres of subsurface mineral estate throughout the nation. The BLM’s multiple-use mission is to sustain the health and productivity of the public lands for the use and enjoyment of present and future generations. The Bureau accomplishes this by managing such activities as outdoor recreation, livestock grazing, mineral development, and energy production, and by conserving natural, historical, cultural, and other resources on public lands.

BLM/CA/PL-2015/005+1220+1617

**Record of Decision
And
Approved Resource Management Plan
For the
Bakersfield Field Office**

Prepared by

**U.S. Department of the Interior
Bureau of Land Management
Bakersfield Field Office
California**

December 2014

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Bakersfield Record of Decision And Approved Resource Management Plan

Lead Agency: US Department of the Interior (DOI), Bureau of Land Management (BLM)

Location: California

Contacts: *Requests for additional information regarding the Record of Decision and Approved Resource Management Plan:*
Gabriel Garcia, Field Manager, Bakersfield Field Office, 661-391-6000

Requests for copies of the document:

blm_ca_bakersfield_rmp@blm.gov or call 661-391-6022

Project Web site: www.blm.gov/ca/st/en/fo/bakersfield

Abstract: The Bakersfield Record of Decision and Approved Resource Management Plan (ROD/Approved RMP) is a project of BLM California that supports the BLM's Mission. The Approved RMP was prepared under the authority of and regulations implementing the Federal Land Policy and Management Act of 1976 (43 Code of Federal Regulations 1600). It includes broad land use plan decisions that provide the overall direction for managing resources and resource uses in the Bakersfield Decision Area. Land use plan decisions are expressed as goals and objectives (desired outcomes), allowable uses, and management actions anticipated to achieve desired outcomes. The Approved RMP also includes implementation-level decisions; future implementation of the ROD may require additional steps and analysis under the National Environmental Policy Act before on-the-ground activities can begin.

The Bakersfield Field Office is located in south-central California stretching from the coastal islands in the Pacific Ocean across the Central Valley to the crest of the Sierra Nevada; it falls within Kings, San Luis Obispo, Santa Barbara, Tulare, Ventura, Madera, eastern Fresno, and western Kern Counties. The Bakersfield Decision Area encompasses approximately 400,000 acres of BLM-administered public land and 1.2 million acres of Federal mineral estate.

The decisions outlined in this document will enable the BLM to manage and protect resources on public lands within the Bakersfield Decision Area to achieve desired future conditions and management objectives. Planning decisions in this document do not apply to state-, county- or privately-owned lands or other federal lands not managed by BLM.

Land use plan decisions identified in the Approved RMP are final and become effective upon the California State Director's signing of the ROD.

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**United States Department of the Interior
BUREAU OF LAND MANAGEMENT**

Bakersfield Field Office
3801 Pegasus Drive, Bakersfield, California 93308-6837



In reply refer to: 1610-5.G.1.4

December, 19, 2014

Dear Interested Party:

I am pleased to announce that, after several years of hard work and collaboration, the Bakersfield Field Office Resource Management Plan (Approved RMP) is complete. This document will provide guidance for the management of about 400,000 acres of public land and 1.2 million acres of Federal mineral estate administered by the Bureau of Land Management (BLM) located in an eight county region of southern-central California.

The attached Record of Decision (ROD) and Approved RMP have been prepared in accordance with the Federal Land Policy and Management Act and the National Environmental Policy Act. The document has been sent to members of the public who requested a copy and to pertinent local, State, Tribal, and Federal government entities. The ROD/Approved RMP finalizes the proposed decisions presented in the Proposed RMP/Final Environmental Impact Statement (FEIS) that was released on August 31, 2012 and subject to a 30-day protest period that ended on September 30, 2012. Twenty-one protest letters with standing were received. The protests were reviewed by the BLM Director in Washington, D.C. After careful consideration of all points raised in these protests, the Director concluded the responsible planning team and decision makers followed all applicable laws, regulations, policies, and pertinent resources considerations in developing the Proposed Plan. Minor adjustments or points of clarification are incorporated into the Approved RMP in response to issues raised in the protest process and final BLM review. These minor changes are discussed in the ROD under the section titled Clarifications and Modifications, but the protest review did not result in any significant changes from the Proposed RMP.

The approval of this ROD by the BLM California State Director serves as the final decision for all land use plan decisions described in the attached Approved RMP. The ROD also describes a set of "Key Implementation Decisions" that may be implemented based on the analysis contained with the Proposed RMP/FEIS. Principally, these decisions relate to the concurrent Travel Management Plan included as a part of the RMP; however, decisions relating to minimizing the introduction and spread of weed species; issuing commercial filming permits, establishing supplementary rules to implement and enforce the RMPs allocations, restrictions, and decisions, and establishing fees for various recreation sites are also included. An appeal opportunity for these decisions is being provided at this time. The process is described in the ROD and at 43 Code of Federal Regulations, Part 4, Subpart E. The appeal period will close 30 days from the date the Notice of Availability for the ROD/Approved RMP appears in the Federal Register.

Notification of the approval of this ROD/Approved RMP has been announced via local news releases and on the BLM website at: www.blm.gov/ca/bakersfield

CD-ROM versions of the ROD/Approved RMP may be obtained at the address above; by phone at (661) 391-6000; or by sending a request by email to blm_ca_bakersfield_rmp@blm.gov. The document is available to all parties through the "Planning" page of the BLM national or California website (<http://blm.gov>) or by mail upon request.

A limited number of hard copy documents will be available at a later date and may be requested from the same locations.

We are pleased to provide this copy of the Bakersfield Field Office ROD/Approved RMP for your reference. We greatly appreciate the efforts of all who contributed to the completion of this RMP, including many dedicated BLM employees past and present, the State of California, Kern County, tribal communities, and numerous Federal and State government agencies that worked with us to complete this important effort. We also appreciate the extensive public participation during this time by local communities, organizations, and individuals. Public input informed and improved this planning document. We look forward to continuing our work with our partners and citizens as we implement the decisions in the RMP.

Sincerely,


A handwritten signature in dark ink, appearing to read 'Gabriel Garcia', with a stylized, flowing script.

Gabriel Garcia
Field Manager, Bakersfield Field Office

Record of Decision
For the
Bakersfield Resource Management Plan

Prepared by

U.S. Department of the Interior
Bureau of Land Management
Bakersfield Field Office
California

 12/19/2014

Gabriel Garcia
Recommended
Bureau of Land Management
Field Manager, Bakersfield CA

 12/19/2014

Este Stifel
Concurred
Bureau of Land Management
District Manager, Central California

 12/22/2014

James G. Kenna
Approved
Bureau of Land Management
State Director, California

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Introduction

This Record of Decision (ROD) is an approval of the United States (US) Department of the Interior, Bureau of Land Management's (BLM) proposal to manage the BLM-administered lands in the Bakersfield Field Office (Bakersfield FO). This proposal is presented in the attached Approved Resource Management Plan (Approved RMP). This Approved RMP was described as Alternative B in the Bakersfield Proposed Resource Management Plan and Final Environmental Impact Statement (PRMP/FEIS), which was released on August 28, 2012.

The Bakersfield FO is located in southern-central California and encompasses about 17 million acres throughout Kings, San Luis Obispo, Santa Barbara, Tulare, Ventura, Madera, eastern Fresno, and western Kern Counties. Stretching from the coastal islands in the Pacific Ocean across the Central Valley to the crest of the Sierra Nevada Range, public lands are scattered across the Planning Area in numerous small parcels. The decisions in the Approved RMP apply only to the approximately 400,000 acres of BLM-administered public land and 1.2 million acres of Federal mineral estate (i.e., Bakersfield Decision Area). Planning decisions in this document do not apply to state-, county- or privately-owned lands or other federal lands not managed by BLM.

This ROD provides an overview of the alternatives considered, a summary of protests received and clarifications made in response, management considerations and rationale for the decisions, and an overview of public involvement in the planning process.

The Decision

The decision is hereby made to approve the attached RMP for the Bakersfield Field Office. The Approved RMP was prepared under the authority of and regulations implementing the Federal Land Policy and Management Act (FLPMA) of 1976 (43 Code of Federal Regulations [CFR], 1600). It includes broad land use plan decisions that provide the overall direction for managing resources and resource uses in the Bakersfield Decision Area and the Piedras Blancas Light Station Outstanding Natural Area. Land use plan decisions are expressed as goals and objectives (desired outcomes) and management actions anticipated to achieve desired outcomes. The **land use plan decisions** identified in the Approved RMP are final and effective upon signing of this ROD. The Approved RMP also includes **implementation level decisions** that may be appealed in accordance with Department of the Interior regulations at 43 CFR Part 4. These implementation level decisions are presented under the subheading "Key Implementation Decisions" for the following resources and resource uses: Biological Resources, Comprehensive Trail and Travel Management, Land Use Authorizations, and Recreation and Visitor Services.

The decisions in the Approved RMP apply only to BLM-administered surface and federal mineral estate. These decisions do not apply to private lands, State lands, tribal lands, and federal lands not administered by the BLM; they will not change existing rights or authority of private land owners or other surface management agencies.

The decisions included in this ROD and Approved RMP supersedes the 1997 Caliente RMP and its subsequent amendments, as well as the relevant portions of the 1984 Hollister RMP.

Protest Resolution

An environmental impact statement (EIS) was prepared for this Approved RMP, in compliance with the National Environmental Policy Act (NEPA) of 1969. The Approved RMP is nearly identical to the Proposed RMP set forth in the Bakersfield PRMP/FEIS, published August 2012.

Pursuant to BLM's planning regulations at 43 CFR 1610.5-2, any person who participated in the planning process for the Bakersfield RMP and has an interest that may be adversely affected by the planning decisions may protest proposed planning decisions within 30 days from the date the Notice of Availability of the PRMP/FEIS is published in the *Federal Register*. Twenty-one letters of protest, summarized below, were received by the BLM's Washington Office, the office responsible for resolving the protests on behalf of the BLM Director. All of the protesting parties were determined to have standing as participants in the planning process and are listed below:

- Dennis Huggins, Kern County Mineral Society
- Mesonika Piecuch, ORV Watch Kern County
- Joyce Miller
- Erik Melchiorre, Geology Department, California State University San Bernardino
- Richard and Susan Snedden, Landowners
- Kenneth and Rosemary Twisselman, Landowners
- Richard Pankey, American Lands Access Association, Inc.
- Shirley Leeson, American Lands Access Association, Inc.
- Robert E. Reynolds, Member, Society of Vertebrate Paleontology; President, Southern California Friends of Mineralogy
- L.W. Monroe, Tule Gem and Mineral Society
- Jack Caufield, Lodi Gem and Mineral Club, Fossils for Fun, Kern County Gem and Mineral Society, Quartzsite Roadrunners Gem and Mineral Society, Buena Vista Museum of Natural History
- Marshall Havner, American Lands Access Association; Tule Gem and Mineral Society
- Patrick Harrison, Tule Gem and Mineral Society
- George Silva, American Lands Access Association; Tule Gem and Mineral Society
- Charles Reed, Tule Gem and Mineral Society
- Tony Hart, Tule Gem and Mineral Society
- Bill Bingaman, Tule Gem and Mineral Society
- Don Viera, American Lands Access Association
- Brendan Cummings, Center for Biological Diversity
- Jeff Kuyper, Los Padres ForestWatch

The BLM has resolved each of these protests, the results of which are provided in the *Director's Protest Resolution Report, Bakersfield Resource Management Plan*, prepared by the Washington Office. This report is being distributed to each protestor and is available online at: http://www.blm.gov/wo/st/en/prog/planning/protest_resolution.html.

The Director dismissed the protests from ORV Watch Kern County and Joyce N. Miller because the comments in the protest letters were not germane to the planning level decisions. The Director denied the protests from the remaining protestors, except Los Padres ForestWatch, and provided responses to their protests in the *Director's Protest Resolution Report*.

One item protested by Los Padres ForestWatch resulted in a change to the Approved RMP. The BLM determined that a more thorough rationale for the proposal not to continue management of the Salinas River area as a designated Area of Critical Environmental Concern (ACEC) was necessary in the PRMP/FEIS, given that the area has been managed as an ACEC since 1997 and that the area continues to possess relevant and important values. Therefore, this protest was granted, in part, and the Salinas River area is designated an ACEC in the Approved RMP, as proposed and analyzed in Alternative C of the PRMP/FEIS.

In summary, the Director concluded that the BLM California State Director followed the applicable laws, regulations, and policies and considered all relevant resource information and public input in developing the Proposed RMP. The BLM Director resolved all protests, with the exception of the ACEC determination, without making significant changes to the Proposed RMP, though minor clarifications were made and have been explained in the following section.

Modifications & Clarifications

In its conversion from the PRMP in the FEIS to the Approved RMP, the presentation of decisions was reformatted to combine and organize planning decisions. As necessary, the text was revised to reflect these formatting changes as well as the now approved status of the land use plan decisions. In addition, as the result of continued internal review, the BLM made the following corrections, modifications, and clarifications between the PRMP/FEIS and the Approved RMP:

Designate 946 acres of public lands and 658 acres of Federal mineral estate, within a boundary of 2,383 acres, as the Salinas River ACEC administered with the following management:

- Identify as open to fluid mineral leasing, subject to moderate constraints (CSU-priority species, plant communities and habitats stipulation);
- Recommend proposal of the riparian zone (approximately 10 acres) for withdrawal from appropriation and entry under the General Mining Law;
- Identify as an exclusion area for rights-of-way related to utility scale renewable energy projects;
- Identify as unavailable for livestock grazing;
- Prohibit campfires and overnight camping;
- Prohibit cross country equestrian travel; and
- Prohibit the discharge of firearms, except the legal taking of game species.

The correct acreage figures for the Bitter Creek ACEC are 1,026 acres of public lands and 1,792 acres of Federal mineral estate for a total of 2,872 acres. The figures listed in the PRMP/FEIS, page 85 were in error.

The correct acreage figures for the Chico Martinez ACEC are 3,236 acres of public lands and 1,371 acres of Federal mineral estate for a total of 4,607 acres. During the update of GIS ownership data an 80 acre parcel of Federal mineral estate within the ACEC was discovered; however, during editing of the PRMP/FEIS these acres were inadvertently inconsistently updated.

The decision to designate the following 19 ACECs is based on the relevance and importance of public land values that range from populations or habitat for special status species to the occurrence of significant cultural resources. These values are threatened by various resource uses on or adjacent to public land, including oil and gas exploration, private property development, livestock grazing and recreational activities. These uses require special management attention to minimize the potential for

adverse impacts. This management attention, however, only applies to public lands and federal mineral estate administered by the BLM; therefore only decisions relating to management of federal mineral estate would apply where it lies beneath privately owned surface (split estate). The 19 ACECs are Ancient Lakeshores, Bitter Creek, Blue Ridge, Chico Martinez, Compensation Lands, Cypress Mountain, Cyrus Canyon, Erskine Creek, Hopper Mountain, Horse Canyon, Kaweah, Kettleman Hills, Lokern-Buena Vista, Los Osos, Piute Cypress, Point Sal, Salinas River, Tierra Redonda, and Upper Cuyama Valley.

The decision to not designate the following three ACECs that possessed relevant and important values is based on the following reasons:

Granite Cave is not designated as an ACEC because special management attention is not necessary to protect the relevant and important values. Management will be in accordance with BLM policy and guidelines for cave and karst resources. The cave itself has been determined significant and designated as Class III, meaning the cave is closed to public access and cave information is withheld from public requests; therefore, eliminating access and reducing the availability of information concerning its relevant resources.

Irish Hills is not designated as an ACEC because special management attention is not necessary to protect the relevant and important values. The unique plant communities occurring within the Irish Hills area are designated as priority species, plant communities and habitats for management and protection. This is achieved through the application of appropriate actions, limitations on, or closures to uses that may be detrimental to these species, plant communities and habitats wherever they occur in the Bakersfield Decision Area.

Rusty Peak is not designated as an ACEC because special management attention is not necessary to protect the relevant and important values. The unique plant communities occurring within the Irish Hills area are designated as priority species, plant communities and habitats for management and protection. This is achieved through the application of appropriate actions, limitations on, or closures to uses that may be detrimental to these species, plant communities and habitats wherever they occur in the Bakersfield Decision Area.

The BLM's Transportation System is a dynamic system that routinely grows and shrinks with the authorization, addition and decommissioning of routes. As such, route designations are continually evolving to represent the decisions made on the inventory of linear transportation features occurring on BLM-administered public lands or within easements granted to the BLM. Between the Proposed RMP and this, the Approved RMP, a number of changes have been made to the Transportation System to reflect new and/or modified route designations that have been authorized in the interim by project/site specific actions. In addition, the linear transportation features inventory continues to be improved as more field work is completed, and better, more recent, aerial photography reviewed. Improvements to this inventory have resulted in features previously mapped being removed where they do not occur on the ground and adjustments to the inventoried route alignments to reflect on-the-ground conditions – these modifications have affected both the mileage and number of route segments designated. Additionally several wilderness trails, which had been inadvertently omitted from the inventory, were added and county roads were modified to be designated for motorized use by street-legal vehicles. Furthermore, a number of routes previously designated as Transportation Linear Disturbances have been re-designated as Primitive Roads for motorized use by authorized users only as a result of discovery of an existing authorization for the route. Finally, the review of the GIS mapping of the Travel Management Areas resulted in minor modifications in their configuration and acreages. These changes

to the Transportation System are specifically discussed in the Travel Management Plan (Appendix 2) of the Approved RMP.

Public input received during preliminary planning for a Recreation Area Management Plan addressing Keysville Special Recreation Management Area (SRMA) revealed that some designated camping areas are likely desirable in the Dam Recreation Management Zone (RMZ) outside of Sandy Flat. The decision prohibiting overnight camping and use of campfires in the Dam RMZ except in limited designated areas on Sandy Flat was modified in the ARMP to provide the flexibility to consider designating limited camping areas as appropriate elsewhere in the RMZ during implementation level planning. The potential impacts of this change are within the scope of the analysis of the No Action alternative of the Bakersfield PRMP/FEIS.

The San Joaquin Valley Air Pollution Control District (SJVAPCD) reviewed the PRMP/FEIS and based on the emissions estimates and information finds that this project appears to be below de minimis and would meet the federal general conformity requirements. The SJVAPCD noted some items in the PRMP/FEIS that need clarification:

There is a slight increase in lands available for livestock grazing through the incorporation of previously unallocated lands and adjustments in availability of lands to livestock grazing. These newly available lands fall mainly in the San Joaquin Valley and would increase potential grazing opportunity by 6,000 AUMs over the existing permitted use levels; this increase is 2,550 AUMs larger than that expected under the No Action alternative. Potential emissions from the increase in grazing opportunity would be 1.36 tons/year (tpy) of VOC and 0.06 tpy of PM₁₀. The total emissions from BLM actions would be 8.14 tpy for VOC/ROG and 2.95 tpy for PM₁₀; these emissions would still be below de minimis threshold values.

The following are corrections to the designations and classifications for the SJVAPCD: "Maintenance area" for carbon monoxide (CO); and "Extreme Nonattainment area" for ozone with an attainment date of June 2024.

The SJVAPCD 2008 PM_{2.5} Plan was adopted by the District's Governing Board in April 2008, and EPA finalized its approval of this plan on November 9, 2011. The SJVAPCD adopted the 2012 PM_{2.5} Plan in December 2012; this plan sets out the strategy to attain the federal 2006 24-hour PM_{2.5} standard by 2019.

There is one error in the Fluid Mineral Leasing stipulations in the PRMP/FEIS Appendix G, page 894. In the description of the application of the Controlled Surface Use (CSU) -Chimineas Ranch stipulation should read: "Split estate land, where the surface is managed by the California Department of Fish and Wildlife, would be subject to the CSU-Existing Surface Use/Management stipulation." This has been corrected in the Approved RMP.

A mapping error was corrected regarding the Visual Resource Management classifications for Ancient Lakeshores, Cyrus Canyon, Kettleman Hills, Hopper Mountain, Upper Cuyama Valley ACECs. These ACECs will be managed as VRM Class III not VRM Class II.

Throughout the Approved RMP, other minor edits and modifications are made for clarification, to improve readability, or to correct grammatical mistakes.

Four appendices that were in the PRMP/FEIS have been brought forward and renumbered for the Approved RMP and an additional appendix for the Piedras Blancas Light Station ONA created, as follows:

- Appendix 1: Air Resource Management Plan
- Appendix 2: Travel Management Plan
- Appendix 3: Best Management Practices and Standard Operating Procedures
- Appendix 4: Biological Resources Conservation Strategy
- Appendix 5: Piedras Blancas Light Station ONA

Alternatives

NEPA requires the development and consideration of a reasonable range of management alternatives, including a No Action Alternative, to analyze impacts and guide decision makers in developing and selecting the Approved RMP. All alternatives must be viable and reasonable, must be responsive to issues identified by the public, stakeholders, and BLM specialists and managers during the scoping period, and must meet established planning criteria and applicable federal and state laws, regulations, and BLM policies.

Alternatives Considered, But Not Further Analyzed

The following alternatives and management options were considered as possible ways of resolving resource management issues and conflicts but were eliminated from detailed analysis because they were either unreasonable or not practical for technical, legal, or policy reasons.

Proactive Land Disposal

The recommendation was to proactively market or offer parcels outside of designated areas (ACECs, Special Recreation Management Areas, Wilderness, etc.) for sale on either an individual basis or by grouping a number of parcels and marketing them together. While the lands identified for sale would not have a special designation, they may have unique biological, cultural, and/or recreation values or be integral to landscape conservation strategies. In any case, a land tenure adjustment program will continue, however, a proactive land disposal program will not be pursued.

Prohibition of Oil and Gas Development

There was a recommendation to close the entire Decision Area to oil and gas development. Oil and gas development is an authorized use of BLM-administered lands and encouraged by national energy policy; therefore, it would be arbitrary and inconsistent with existing laws to analyze this proposed closure. Alternatives for placing greater restriction on oil and gas development were considered in the PRMP to protect sensitive and important resource values, but a closure of lands with little or no oil and gas development potential was deemed to be unnecessary.

Restrict Solid (Non-Energy) Leasable and Salable Mineral Development

A recommendation was to further restrict the lands available to solid leasable and salable mineral development beyond those necessary to protect sensitive resources. Mineral developments are an authorized use of BLM-administered lands. Therefore, it would be arbitrary and inconsistent with existing laws to analyze closing the entire Decision Area to development. Generally, the Decision Area

has limited potential for these mineral resources. The concept of placing greater restriction (i.e., more closed acres) was considered; however, closure of lands with little or no potential for development of these minerals was deemed to be unnecessary.

Livestock Grazing

During public comment, alternatives were suggested to: exclude livestock grazing from all sensitive areas such as Wilderness, ACECs, cultural resources, and important wildlife habitat; reduce total acreage grazed from 80% of the resource area to 40% of the resource area; and/or reduce grazing levels. Livestock grazing is an authorized use of BLM-administered lands. In development of the alternatives a greater range of acres allocated as Available/Unavailable (besides total elimination of this use) was considered; however, additional restrictions (i.e., less Available acres) were deemed to be arbitrary and unnecessary as resource conflicts had not been documented or could be addressed through site-specific use of livestock exclusions and adjustments to the permit/lease terms and conditions. The development of all of the alternatives considered the impact of livestock grazing on all sensitive areas and where resource objectives could not be achieved under any level or management of livestock use, these areas were made Unavailable. In addition, less restriction of livestock grazing (i.e., more Available acres) was deemed to not adequately address the purpose and need and issues identified in the RMP as they relate to biological resources.

Alternatives Considered in Detail

The Proposed RMP/Final EIS, Chapter 2 presented the five alternatives considered in detail. These five alternatives represented five management directions that could be taken in resolving the issues identified through the scoping process. Each alternative was intended to be consistent with law, regulation, and policy while providing varying levels of compatible resource uses and development opportunities. The alternatives developed and analyzed during the planning process reflected a reasonable range of potential management actions. General overviews of each alternative are provided below.

Alternative A, No Action Alternative, continues current management under the existing 1997 Caliente RMP and 1984 Hollister RMP, as amended. Management of resources and sensitive habitats would remain at current levels but would not address emerging issues concerning public lands. This alternative also would not address the use of lands acquired after the signing of these RODs, including public lands at Atwell Island, Piedras Blancas Light Station, and portions of the San Joaquin River Gorge.

Alternative B (Proposed Plan) balances resource conservation and ecosystem health with the production of commodities and public use of the land. This alternative provides opportunities to produce commodities from natural resources and to use the land for public purposes on a sustainable basis while maintaining important ecological, cultural, and recreational values. This alternative includes changes made as a result of public comment and internal review on the Draft RMP/Draft EIS.

Alternative C emphasizes conserving cultural and natural resources, maintaining functioning natural systems, and restoring natural systems that are degraded. Management would focus on protecting sensitive resources through greater limitation of resource uses.

Alternative D mimics Alternative C in all aspects except livestock grazing. This alternative eliminates livestock grazing from all the public lands for the life of the plan where individual pastures or allotments

or entire allotments which lie primarily within the Bakersfield FO Planning Area and, therefore, the Bakersfield RMP provides administrative direction for the livestock grazing program.

Alternative E emphasizes the production of natural resources commodities and public use opportunities. Resource uses such as recreation, livestock grazing, mining, and oil/gas leasing, consistent with BLM guidance and constraints, would be emphasized. Potential impacts on sensitive resources would be mitigated on a case-by-case basis.

Environmentally Preferable Alternative

The BLM considers Alternative B to be the environmentally preferable alternative when taking into consideration the human (social and economic) environment as well as the natural environment. The US Council on Environmental Quality (CEQ) has defined the environmentally preferable alternative as the one that will promote the national environmental policy as expressed in Section 101 of the NEPA. This section lists six broad policy goals for all federal plans, programs, and policies as follows:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
- Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.
- Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences.
- Preserve important historic, cultural, and natural aspects of our National heritage, and maintain, whenever possible, an environment that supports diversity and variety of individual choice.
- Achieve a balance between populations and resource use that will permit high standards of living and a wide sharing of life's amenities.
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

In comparison with the other alternatives analyzed, Alternative B best meets these NEPA goals for the future management of the Bakersfield Decision Area. It provides long-term protection and resource conservation and balances current and potential resource uses and human influence with resource protection.

Alternative A does not address the changing ecological, social-economic, institutional, and regulatory conditions that have occurred since the approval of the Caliente RMP in 1997 or the Hollister RMP in 1984 as stated in the Purpose and Need of the FEIS. Alternative C would be more protective of natural and biological resources than the other alternatives. Alternative D would eliminate livestock grazing from the Bakersfield Decision Area and would contradict the NEPA goals listed above. Alternative E is the least environmentally preferable alternative because it offers the most intensive active management for uses of the Bakersfield Decision Area, while providing the fewest restrictions for protecting resources.

Land Use Plan and Implementation Decisions, and Administrative Actions

The Approved RMP provides overall direction for management of all resources on BLM-administered land in the Bakersfield Field Office outside of the Carrizo Plain and California Coastal National Monuments. Many land use plan decisions are implemented or become effective upon publication of

the ROD for the Approved RMP and may include desired future conditions, land use allocations (allowable uses) or designations, and special designations.

Land use plan decisions represent the desired outcomes and the actions needed to achieve them. Such decisions were attained using the planning process found in 43 CFR 1600 and guide future land management actions and subsequent site-specific implementation decisions. When presented to the public as proposed decisions, land use plan decisions can be protested to the BLM Director; however, they can be judicially challenged but cannot be appealed to the Interior Board of Land Appeals (IBLA).

Implementation decisions and management actions that require additional site-specific project planning, as funding becomes available, will require further environmental analysis. Administrative actions are not land use planning or implementation decisions but are a key component of the overall plan because they describe the BLM's day-to-day actions to help meet desired future conditions. The BLM will continue to involve and collaborate with the public during implementation of the Approved Plan. Brief descriptions of the types of decisions are presented below.

It should be noted the decisions generated by the RMP only apply to BLM-administered surface and mineral estate. No decisions generated by the RMP would change existing rights or authority of private land owners or other surface management agencies.

Land Use Plan Decisions

Desired Outcomes

Land use plans identify desired outcomes expressed in terms of specific goals and objectives. Goals and objectives direct the BLM's actions in most effectively meeting legal mandates, numerous regulatory responsibilities, national policy (including the DOI Strategic Plan goals), State Director guidance (43 CFR 1610.1-4[b]), and other resource or social needs. Goals are broad statements of desired outcomes that are usually not quantifiable. Objectives identify more specific desired outcomes for resources and might include a measurable component. Objectives are generally expected to achieve the stated goals. Land use plans are designed to most effectively meet these desired outcomes through special designations, allowable uses (land use allocations), and management actions.

Special Designations

Special designations are designated by Congress for special protection, such as Wild and Scenic Rivers. Such designations are not land use plan decisions, but recommendations for designation can be made to Congress at the land use plan level. Congress may then act on these recommendations at a later time.

BLM administrative designations, such as Areas of Critical Environmental Concern (ACECs), are also considered special designations and can be made in the land use plan (see the Approved RMP).

Allowable Uses (Land Use Allocations)

Land use plans must identify uses, or allocations, that are allowable, restricted, or prohibited on the public lands and mineral estate. These allocations identify surface lands or subsurface mineral interests where uses are allowed, including any restrictions that may be needed to meet goals and objectives. Land use plans also identify lands where specific uses are excluded to protect resource values. Certain lands may be open or closed to specific uses, based on legislative, regulatory, or policy requirements or criteria, to protect sensitive resource values. If land use plan decisions close areas of 100,000 acres or

greater in size to a principal or major use for two years or more, Congress must be notified of the closure upon its implementation, as prescribed in 43 CFR 1610.6.

Management Actions

Land use plans must identify the actions anticipated to achieve desired outcomes, including actions to maintain, restore, or improve land health. These actions include proactive measures, limitations, or criteria that will be applied to guide day-to-day activities on public land. Land use plans also establish administrative designations, such as ACECs, recommend proposed withdrawals and land tenure zones, and recommend or make findings of suitability for congressional designations (such as components of the National Wild and Scenic Rivers System).

Implementation Decisions

Implementation decisions are management actions tied to a specific location that implement land use plan decisions. Implementation decisions generally constitute the BLM's final approval, allowing on-the-ground actions to proceed, and require appropriate site-specific planning and NEPA analysis. Such decisions may be incorporated into implementation plans (activity or project plans) or may exist as stand-alone decisions.

The Approved RMP contains "Key Implementation" level decisions that would be implementable based on the level of analysis contained within the PRMP/FEIS. Principally, these decisions relate to the concurrent Travel Management Plan included as part of the RMP; however, other implementation level decisions are noted under the "Key Implementation Decisions" heading for Biological Resources, Land Use Authorizations, and Recreation and Visitor Services.

Unlike land use plan decisions, implementation decisions are not subject to protest under the planning regulations. Instead, implementation decisions are subject to various administrative remedies, particularly appeals to the IBLA (under 43 CFR 4.410). The implementation decisions made as part of this land use planning process are still subject to the appeals process or other administrative review, as prescribed by the specific resource program regulations after the BLM resolves the protests to land use plan decisions and decides to adopt the management plan. For example, the designation of a specific route is an implementation level decision, rather than a land use plan decision; consequently, individual route designations are subject to a separate appeals process.

Administrative Actions

Although the BLM's intent and commitment to accomplish administrative action is generally addressed in an EIS, such activities are not management decisions. Administrative actions are day-to-day activities conducted by the BLM, often required by FLPMA, but do not require NEPA analysis or a written decision by a responsible official. Examples of administrative actions are mapping, surveying, conducting inventory or monitoring, scientific research, other studies, partnering and collaborating with partners, developing educational materials, and working with local communities and interest groups.

Management Considerations in Selecting the Approved RMP

In developing the Approved RMP, BLM had the discretion to select an alternative in its entirety or to combine aspects of the various alternatives that were presented in the Draft RMP/Draft EIS or the Proposed RMP/Final EIS, including considering management approaches that were presented during the

comment period that do not result in significant changes from what the Draft RMP/Draft EIS considered. The NEPA handbook (H-1790-1) states, “various parts of separate alternatives that are analyzed in the draft can also be ‘mixed and matched’ to develop a complete alternative in the final” (see also 43 CFR 1503.4(a)).

Based on input received during the planning process there was both support and opposition to many components of the Proposed RMP. The BLM, however, did not receive comments from federal or state agencies or from tribal governments indicating the Proposed RMP was inconsistent with other existing plans or policies. Additionally, no inconsistencies with State plans, policies, or programs were identified during the governor’s consistency review of the Proposed RMP/Final EIS. The BLM considered all comments and protests received on the Proposed RMP/Final EIS and input from the Governor’s consistency review. This ROD serves as the final decision for the land use plan decisions for the Approved RMP, which will become effective on the date this ROD is signed.

Implementation of Oil and Gas Decisions

Oil and gas leasing and development on Federal mineral estate requires multiple stages of BLM environmental analysis and authorization. Environmental review under NEPA is required at each phase. The Bakersfield Approved RMP identifies areas as open or closed to fluid mineral leasing and specifies appropriate stipulations for those areas identified as open (see 2.14.1.1 of the ARMP). The environmental review for leasing parcels identifies which parcels should be offered for leasing and the conditions under which leasing and eventual development should occur. The environmental review for the development of leased parcels (including well stimulation techniques) is a site-specific analysis of potential impacts from the proposed project and includes specific conditions of approval to avoid, minimize, or mitigate impacts to sensitive resources.

Information Developed Since the Proposed RMP/Final EIS

Since the publication of the Proposed RMP/Final EIS, the BLM commissioned a review of the state of the knowledge of well stimulation technologies in California. This independent science assessment was published by the California Council on Science and Technology, and prepared by Lawrence Berkeley National Laboratory and the Pacific Institute. This review was peer reviewed by the Council, using its rigorous process, as well as by the US Geological Survey to provide the BLM and the public with the best available science on well stimulation technologies, such as hydraulic fracturing. Entitled “*An Independent Review of Scientific and Technical Information on Advanced Well Stimulation Technologies in California,*” the report was published on August 28, 2014.

The report compiles existing data and literature about the nature of well stimulation in California and arrives at 11 main conclusions. Key among them are:

- **Well stimulation in California is different than in other states.** Available data suggest that present-day well stimulation practices in California are different from other states such as Texas and North Dakota primarily due to differences in the geology of the petroleum reservoirs. Generally, hydraulic fracturing in California tends to be performed in shallower wells that are vertical as opposed to horizontal; requires much less water; but uses fluids with more concentrated chemicals than hydraulic fracturing in other states. Consequently, the experiences with hydraulic fracturing in other states do not necessarily apply to current hydraulic fracturing in California.

- **The most likely scenario for future oil recovery using hydraulic fracturing is expanded production in and near existing oil fields in the San Joaquin Basin in a manner quite similar to the production practices of today.** Existing and likely future production in California takes place in reservoirs that contain oil that has migrated from the rocks where it was formed ("source rocks") to relatively near surface reservoirs where it can be produced. Over 85% of all well stimulation applications in California take place in four fields of the San Joaquin Valley in reservoirs that rely on hydraulic fracturing to enable production. It is highly likely that expanded production in similar reservoirs in the San Joaquin Valley would also use this technology.
- **Recent reports from the Energy Information Agency (EIA) have indicated there may be a new class of very deep unconventional reservoirs in the source rocks themselves, especially in the Monterey Formation.** The 2011 EIA report suggested 15-billion barrels of recoverable oil in these source rocks but a subsequent 2014 correction by EIA reduced the estimate to 0.6 billion barrels. Recovering these resources would certainly require well stimulation. The study's review of the two resource projections from deep source rocks in the Monterey Formation developed by EIA concluded that both these estimates are highly uncertain.
- **Current hydraulic fracturing operations in California require a small fraction of statewide water use.** In California a hydraulic fracturing operation can consume between 130,000 to 210,000 gallons of water per well on average, compared to about 4 million gallons per well used on average in the Eagle Ford Formation in Texas. The study estimates that California operators conduct 100 to 150 well stimulations per month, which currently requires about 150 to 400 million gallons (450-1,200 acre-feet) of water per year. Even with the relatively low water use of California operations, hydraulic fracturing can contribute to local constraints on water availability given the extreme drought in the state.
- **There are no publicly reported instances of potable water contamination from subsurface releases in California.** More than half of the stimulated oil wells in California have shallow depth (less than 2,000 feet) and shallow hydraulic fracturing poses a potential risk for groundwater if usable aquifers are nearby. Some shallow hydraulic fracturing occurs where groundwater is highly saline, or non-existent; however, investigators could not determine the groundwater quality near many hydraulic fracturing operations and found that existing data was insufficient to evaluate the extent to which contamination may have occurred. The State of California needs to develop an accurate understanding about the location, depth and quality of groundwater in oil- and gas-producing regions in order to evaluate the risk of well stimulation to groundwater.
- **The toxicity of chemicals used in hydraulic fracturing fluids warrants further review now that SB 4 requires disclosure.** Based on the voluntary database FracFocus, most of the chemicals used in California well stimulations are not considered to be highly toxic. However, a few of these chemicals, especially the biocides and corrosion inhibitors, are acutely toxic to mammals. No information could be found about the toxicity of about a third of the chemicals and few of the chemicals have been evaluated to see if animals or plants would be harmed by chronic exposure. Mandatory disclosure should improve our understanding, as previous data acquired from FracFocus does not consistently disclose all chemicals and may not always be complete or accurate.
- **Some chemicals used for hydraulic fracturing may become incorporated in the water that is produced along with the oil ("produced water").** In some cases, operators dilute produced water with fresh water for use in agriculture and some produced water is pumped into unlined pits where it could seep into the groundwater. Current practice and testing requirements do not

necessarily protect against adding produced water contaminated with hydraulic fracturing fluid to water used in agriculture.

- **Well stimulation technologies, as currently practiced in California, do not result in a significant increase in seismic hazard.** The pressure increases from hydraulic fracturing are too small and too short in duration to be able to produce a felt, let alone damaging, earthquake. In California, only one minor, anomalous earthquake (which occurred in 1991) has been linked to hydraulic fracturing to date. In contrast, disposal of water produced from oil and gas operations into deep injection wells has caused felt seismic events in several states. Expanded oil production for any reason, including expanded use of hydraulic fracturing, would lead to increased volumes of produced water, which, if injected underground could increase seismic hazards.
- **Overall, in California, for industry practice of today, the direct environmental impacts of well stimulation practice appear to be relatively limited.** If these well stimulation technologies enable a significant increase in production in the future, the primary impacts on California's environment will likely be caused by the increase in production activities in general. Impacts of increased production will vary depending on whether this production occurs in existing production areas (both rural and urban), or in regions that have not previously been developed for oil and gas production - as well as on the nature of the ecosystems, geology, and groundwater in the vicinity.

The BLM has reviewed this report and determined that it does not warrant substantial changes to the Proposed Plan and does not represent significant new information for the planning decision.

- The report confirms the analysis in the PRMP/FEIS that the most likely scenario for future oil recovery is expanded production in and near existing oil fields in the San Joaquin Basin in a manner quite similar to the production practices of today, including well stimulation techniques; however, the report notes a substantial increase in production of oil due to the increased use of well stimulation techniques is highly uncertain (ISR 2014, pp. 166-168). Over the past 10 years 157 oil and gas leases were issued in the Bakersfield Field Office; of these leases, 21 have had at least one well drilled and put into production. Well stimulation technologies, specifically hydraulic fracturing, have been conducted on four of these leases on a total of seven wells.
- The report also supports the analysis in the PRMP/FEIS that expected emissions of criteria air pollutants and greenhouse gases from oil and gas production would be low in relation to the overall activity in the region (ISR 2014, pp. 238-251, 252-257). The Approved RMP includes an Air Resources Management Plan (Appendix 1) that provides specific requirements for managing air resources and authorizing activities that have the potential to adversely impact air resources including specific requirements for oil and gas development project proponents and mitigation measures for reducing air pollutant emissions, greenhouse gases, and fugitive dust.
- The report discusses the potential for well stimulation technologies to impact water resources (surface and ground water) supply and quality. While the report indicates a lack of information and knowledge regarding these potential impacts and the need for monitoring, data collection, and a more detailed assessment by the State of California (ISR 2014, pp. 184-187, 195-201, 208-209, 216-226, 234-237), the PRMP/FEIS acknowledges the State as the lead agency for groundwater protection and describes the application of Onshore Order Numbers 1, 2, and 7, as well as further engineering review and conditions of approval to minimize impacts to water resources prior to leasing and project approval when more site-specific information can be evaluated.
- The report notes that hydraulic fracturing, as currently practiced in California, does not present a risk for induced seismic events of significance. While the disposal of large volumes of produced

water in deep injection wells in other states have been linked to earthquakes, water disposal wells in California, to date, have been relatively shallow and volumes disposed per well relatively small; at present, the seismic hazard posed by wastewater injection is likely to be low (ISR 2014, pp. 282-283).

- The report concludes that the direct impacts of well stimulation technologies appear to be relatively limited for industry practice of today and will likely be limited in the future if proper management practices are followed (ISR 2014, pp. 290-296). The analysis in the PRMP/FEIS found that impacts from oil and gas development would occur at the local level and, in general, be located in existing oil fields; lease stipulations, best management practices, standard operation procedures, and conditions of approval to be applied to leases and project approvals are prescribed in order to avoid, minimize, and/or mitigate impacts to sensitive resources.

The Independent Science Review identifies a number of data gaps and uncertainties related to the effects of well stimulation technologies as practiced in California.

- New oil and gas production in regions removed from existing fields is more uncertain than increased production in existing oil and gas fields. The information and understanding necessary to develop a meaningful forecast, or even a suite of scenarios about possible recoverable unconventional oil in the Monterey shale source rocks, are not available. While major production increases from oil shale source rock are considered highly uncertain, they are not impossible.
- Toxicity information of the chemicals reported for well stimulation treatments is incomplete. More information is needed to determine the full extent of risk to the human environment. Such information will be available under provision of California Senate Bill 4. (See below, *Coordination with State Regulatory Agencies*)
- There is a lack of information and understanding about the location, depth, and quality of groundwater in oil and gas producing regions; these are needed to evaluate the risk of well stimulation to groundwater. The extent to which subsurface releases of contaminated fluids into potable groundwater may have occurred is difficult to evaluate due to lack of studies, consistent and transparent data collection, and reporting.
- A more detailed assessment of wastewater (well stimulation flowback and produced water) disposal practices is needed to determine their levels of risk to surface water, groundwater, and agriculture.

This Independent Science Review is appended to the Bakersfield RMP and will be used to inform future leasing and development decisions. The Bakersfield Field Office will continue to apply the best available and most current scientific information for leasing and development decisions as new information becomes available in the future. As noted in the Plan Maintenance (section 4.1) and Adaptive Management (section 5.3) sections of the ARMP, the BLM will continue to evaluate new science as it becomes available, monitor implementation of the plan, and may develop new best management practices as necessary.

Leasing

Parcels that are nominated for leasing must be reviewed and approved by the BLM prior to leases being sold at an auction. BLM's Instruction Memorandum No. 2010-117 describes the deliberate, interdisciplinary parcel review process that must occur before a lease sale is held. This review is conducted and documented in accordance with the NEPA. The purpose of lease parcel review by the

field office is to determine whether a parcel should be offered for leasing, and if so, the conditions under which leasing and eventual development should occur.

The Independent Science Review, and future information developed about oil and gas extraction and well stimulation technology in California, will be used at the leasing stage during the State Director review of parcels to offer for lease. During this review, the BLM will consider the likelihood that the parcels offered for sale will require the use of well stimulation technologies, and disclose the impacts and risks of well stimulation technology based on the best available information at the time, and how those risks can be avoided, minimized or mitigated through the application of Best Management Practices (BMPs) and Conditions of Approval (COAs). Upon completing this review, the State Director will determine whether to offer the parcel for lease, and if so, what stipulations, COAs, and BMPs to attach to the lease.

Development

Onshore Oil and Gas Order Number 1 requires Federal oil and gas operators to conduct operations to minimize impacts to surface and subsurface resources, prevent unnecessary surface disturbance, and conform to currently available technology and practice. Per Onshore Order Number 1, BLM may approve, defer, or deny an Application for Permit to Drill. Drilling and abandonment activities must adhere to the provisions and standards of Onshore Oil and Gas Order Number 2 to protect subsurface resources. Onshore Oil and Gas Order Number 7 provides the methods and approvals necessary to dispose of produced water associated with oil and gas operations.

Measures to avoid, minimize, or mitigate impacts, in addition to those identified in the Onshore Oil and Gas Orders and the regulations in 43 CFR 3160, are incorporated in the Approved RMP as Standard Operating Procedures (SOPs) and BMPs. Examples of these measures include: reducing the area of disturbance to the smallest practical area and using previously disturbed areas to the extent practicable; setting and cementing surface casings to sufficient depths to protect usable water bearing zones; using a closed-loop drilling system to reduce water usage; and placement of production facilities and equipment to maximize interim reclamation. In addition, every permit approval includes a list of COAs that are tailored to the specific location and type of activity being approved.

When the BLM receives applications to conduct activities on leases (e.g., applications for permits to drill or sundry notices of intent), additional NEPA analysis is required. During this site-specific, implementation-level analysis, the BLM may consider additional mitigation measures to address any anticipated impacts, including those from well stimulation techniques. The Independent Science Review, and future information developed about oil and gas extraction and well stimulation technologies in California, will be used at the development stage to assist the BLM in identifying new BMPs to address the impacts of advanced well stimulation technologies. BLM California will also implement additional policy requirements regarding Applications for Permit to Drill and Sundry Notices as discussed in Instruction Memorandum No. CA-2014-031. As technologies evolve and new information becomes available, the BLM will continue to identify new BMPs to prevent or mitigate the impacts of oil and gas development.

BLM's National Hydraulic Fracturing Rules

The BLM is currently in the process of revising the rules that regulate hydraulic fracturing for oil and gas on public and Indian trust lands. The rule is expected to modernize BLM's management of hydraulic fracturing operations and help to establish baseline environmental safeguards for these operations across all public and Indian lands. BLM will work with the State of California to develop a streamlined

process to ensure that operators comply with the provisions of both Senate Bill 4 (SB 4) (see *Coordination with State Regulatory Agencies* below) and the BLM regulations in the most efficient manner possible.

Coordination with State Regulatory Agencies

Since the publication of the Proposed Plan/Final EIS, the California State Legislature passed SB 4, which was signed into law in September 2013. SB 4 requires the State of California Department of Conservation to develop regulations on well stimulation. The State of California has implemented Interim Regulations and the Draft Final Regulations are due by July 1, 2015. The regulations have provisions for notification of potentially affected parties, disclosure of fluid components, approval of a ground water monitoring plan, and monitoring of groundwater subsequent to the completion of the stimulation process. BLM requires operators on Federal minerals to acquire all necessary Federal, state, and local permits prior to developing a lease, including meeting the requirements of SB 4, where applicable. Should any of the regulations promulgated by SB 4 be more stringent than the requirements of the Approved RMP and BLM's National Hydraulic Fracturing Rules, they will serve as additional safeguards.

Mitigation Measures

In developing the alternatives, BLM used a variety of management methods and tools, including the identification of allowable uses, temporal, spatial, and restrictions on uses, where specific uses will be prohibited, and specific actions needed to achieve desired outcomes. Restrictions on uses include seasonal closures, limitations on surface disturbance, application of BMPs, or the use of performance objectives. BMPs can include structural and nonstructural controls, specific operations, and maintenance procedures. BMPs are dynamic and are not one-size-fits-all solutions. BMPs are selected and adapted, as necessary, through interdisciplinary analysis to determine which management practices are necessary to ensure RMP goals and objectives are being met. The best practices and mitigation measures for a particular site are evaluated through a site-specific NEPA process and vary to accommodate unique, site-specific settings and local resource conditions. Additional BMPs may be identified during an interdisciplinary process when evaluating site-specific management actions. Implementation and effectiveness of BMPs will be monitored on a project-by-project basis to determine if they are achieving RMP goals and objectives.

Plan Monitoring and Evaluation

BLM planning regulations (43 CFR Part 1610.4-9) call for the monitoring of RMPs on a continual basis with a formal evaluation done at periodic intervals. Land use plan monitoring is the process of tracking the implementation of land use planning decisions (implementation monitoring) and collecting data necessary to evaluate the effectiveness of land use planning decisions (effectiveness monitoring). Monitoring is the process of following up on management actions and documenting the BLM's progress toward full implementation of the land use plan and the achievement of desired outcomes.

Evaluation is the process of reviewing the land use plan and any plan monitoring reports to determine whether the Bakersfield Approved RMP decisions and NEPA analysis are still valid and whether the plan is being implemented. The Bakersfield Approved RMP will be evaluated to determine the following:

- If decisions remain relevant to current issues
- If decisions are effective in achieving (or making progress toward achieving) desired outcomes

- If any decisions need to be revised
- If any decisions need to be dropped from further consideration
- If any areas require new decisions

The Bakersfield Approved RMP will be evaluated at periodic intervals; special or unscheduled evaluations may be required to review unexpected management actions or significant changes in the related plans of Native American tribes, other federal agencies, and State and local governments or to evaluate legislation or litigation that could trigger an RMP amendment or revision. Management actions arising from activity plan decisions will be evaluated to ensure consistency with RMP objectives.

Public Involvement

Public Scoping

The Notice of Intent for the Bakersfield (formerly known as the Caliente Resource Area) RMP was published in the *Federal Register* on March 4, 2008 (Vol. 73, No. 43, Pages 11661-11662). The opportunity to comment was also publicized through news releases, mail notification, and posting on BLM's web site. Seven public scoping meetings were held, and the public was invited to submit written comments. Overall, more than 140 comments were received during the scoping period. Following scoping, the BLM held additional public workshops within the Bakersfield Field Office to gather information on travel management planning and social and economic concerns. The Central California Resource Advisory Council has participated in this planning effort and receives regular updates on the progress at their meetings.

Public Review of and Comment on the Draft RMP/Draft EIS

The EPA published a Notice of Availability (NOA) of the Draft RMP/Draft EIS (DRMP/DEIS) on September 9, 2011. The NOA initiated the 90-day public comment period required for planning actions. In preparing the PRMP/FEIS, the BLM considered all comments received or postmarked during the public comment period. The DRMP/DEIS was made available for viewing, downloading, and commenting by a variety of methods including as a PDF on the BLM website, on CD, and as paper copies.

The BLM held seven public meetings throughout the Bakersfield Field Office in October 2011. Meeting locations were in Bakersfield, San Luis Obispo, Kern Valley, Three Rivers, Taft, and Prather. Over 100 people attended the public meetings.

The BLM received over 270 written comment letters from organizations, government agencies, industry representatives, and individuals during the comment period. Most of the written submissions contained multiple comments on different topics, and over 250 unique comments were made. Comments on the DRMP/DEIS pertained to a number of issues, including localized concerns on specific routes considered for travel management planning, designation of Areas of Critical Environmental Concern (ACECs), access for Rockhounding, locatable mineral exploration, and Wild and Scenic River suitability.

Public Review of and Protest on the PRMP/FEIS

A 30-day public protest period, beginning on August 31, 2012, was provided on the land use plan decisions contained in the PRMP/FEIS, in accordance with 43 CFR, Part 1610.5-2. The BLM received 21

protest letters that were subsequently resolved by the BLM Director, whose decision constitutes final agency action for the DOI. The issues raised in the protest letters covered a broad range of topics with differing opinions, sometimes completely opposite opinions, on how the protesting party felt that the BLM had erred in the planning process.

Agency Consultations (US Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), and State Historic Preservation Officer (SHPO))

In accordance with the requirements of Section 7 of the ESA, the BLM consulted with the USFWS and the NMFS to ensure that the BLM's proposed action would not jeopardize the continued existence of any listed threatened or endangered species or result in the destruction or adverse modification of critical habitat. The USFWS issued a "no jeopardy" Biological Opinion on October 23, 2014. The NMFS provided written concurrence that the BLM's proposed action was "not likely to adversely impact" listed species or critical habitat on May 13, 2014. See RMP Section 1.7, Consultation and Collaboration for additional details.

In accordance with the requirements of Section 106 of the National Historic Preservation Act, the BLM has consulted with the California SHPO concerning the content of this RMP. Copies of the DRMP/DEIS and PRMP/FEIS were provided to the SHPO for review, along with formal requests for comments. The SHPO responded to decline the opportunity to formally review, comment, or consult on both the DRMP/DEIS and the PRMP/FEIS.

Availability of the Plan

Copies of the ROD and the Bakersfield Approved RMP may be obtained by viewing or downloading the document from the BLM website at www.blm.gov/ca/bakersfield or by obtaining a hard copy or CD at the BLM Bakersfield Field Office at 3801 Pegasus Drive, Bakersfield, California, 93308.

Approved Resource Management Plan

For the

Bakersfield Field Office

Prepared by

U.S. Department of the Interior
Bureau of Land Management
Bakersfield Field Office
California

December 2014

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Acronyms and Abbreviations

| | |
|----------|---|
| < | less than |
| ACEC | Area of Critical Environmental Concern |
| AML | Abandoned Mine Land |
| APCD | Air Pollution Control District |
| APD | Application for Permit to Drill |
| ARPA | Archeological Resources Protection Act |
| ATV | All-Terrain Vehicle |
| AUM | animal unit month |
| BLM | US Department of the Interior, Bureau of Land Management |
| BMP | Best Management Practice |
| BOR | Bureau of Reclamation |
| CAA | Clean Air Act |
| CALIPC | California Invasive Plants Council |
| CAL FIRE | California Department of Forestry and Fire Protection |
| CARB | California Air Resources Board |
| CDFW | California Department of Fish and Wildlife |
| CDOGGR | California Division of Oil, Gas, and Geothermal Resources |
| CEQ | Council on Environmental Quality |
| CFR | Code of Federal Regulations |
| CNPS | California Native Plant Society |
| CIAA | cumulative impacts assessment area |
| COA | Conditions of Approval |
| CPNM | Carrizo Plain National Monument |
| CSU | Controlled Surface Use |
| CTTM | comprehensive trails and travel management |
| CWA | Clean Water Act |
| CWCG | California Wildfire Coordinating Group |
| DOD | US Department of Defense |
| DRECP | Desert Renewable Energy Conservation Plan |
| EA | environmental assessment |
| EIS | environmental impact statement |
| EO | Executive Order |
| EPA | US Environmental Protection Agency |
| ERMA | extensive recreation management area |
| ESA | Endangered Species Act of 1973 |
| ESR | emergency stabilization and rehabilitation |
| FLPMA | Federal Land Policy and Management Act |
| FMP | fire management plan |
| FMU | Fire Management Unit |
| FRCC | fire regime condition class |
| GIS | Geographic Information System |
| GPS | Global Positioning System |
| HCP | habitat conservation plan |
| KCAPCD | Kern County Air Pollution Control District |

| | |
|--------|--|
| < | less than |
| LWCF | Land and Water Conservation Fund |
| LUP | Land Use Plan |
| MIST | Minimum impact suppression tactics |
| MOA | Memorandum of Agreement |
| NAAQS | National Ambient Air Quality Standards |
| NCLWMA | National Cooperative Land and Wildlife Management Area |
| NEPA | National Environmental Policy Act of 1969 |
| NHL | National Historic Landmark |
| NHPA | National Historic Preservation Act |
| NCL | National Conservation Lands |
| NOA | Naturally Occurring Asbestos |
| NMFS | National Marine Fisheries Service |
| NPR | Naval Petroleum Reserve |
| NPS | US Department of the Interior, National Park Service |
| NRHP | National Register of Historic Places |
| NSO | No Surface Occupancy |
| NWSRS | National Wild and Scenic Rivers Systems |
| OHV | off-highway vehicle (previously ORV – Off-road vehicle) |
| ONA | Outstanding Natural Area |
| ORV | outstandingly remarkable value |
| PCNST | Pacific Crest National Scenic Trail |
| PFC | proper functioning condition |
| PFYC | Potential Fossil Yield Classification |
| PM2.5 | particulate matter smaller than 2.5 microns in diameter |
| PM10 | particulate matter smaller than 10 microns in diameter |
| RFD | reasonably foreseeable development |
| RMA | Recreation Management Area |
| RMIS | Recreation Management Information System |
| RMP | resource management plan |
| RMZ | recreation management zone |
| ROD | Record of Decision |
| ROW | right-of-way |
| SHPO | State Historic Preservation Officer |
| SIP | State Implementation Plan |
| SJRG | San Joaquin River Gorge |
| SMA | Special Management Area |
| SOP | Standard Operating Procedure |
| SRMA | Special Recreation Management Area |
| SRP | special recreation permit |
| TCP | traditional cultural practice |
| T&E | Threatened and Endangered |
| US | United States |
| USC | United States Code |
| USDA | United States Department of Agriculture |
| USDI | United States Department of the Interior |
| USFS | United States Department of Agriculture, Forest Service |
| USFWS | US Department of the Interior, Fish and Wildlife Service |

| | |
|-------------|----------------------------|
| < | less than |
| USGS | US Geological Survey |
| VRI | Visual Resource Inventory |
| VRM | visual resource management |
| WSA | wilderness study area |
| WSR | wild and scenic river |
| WUI | wildland urban interface |

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1 Chapter One – Introduction

1.1 Introduction

The Bureau of Land Management (BLM), Bakersfield Field Office (Bakersfield FO) has prepared the Bakersfield Resource Management Plan (RMP) to provide broad-scale direction for the future management of BLM-administered public lands and resources located in an eight county region of southern-central California. The RMP Planning Area encompasses about 17 million acres throughout Kings, San Luis Obispo, Santa Barbara, Tulare, Ventura, Madera, eastern Fresno, and western Kern Counties.

The BLM Bakersfield FO is directly responsible for the management of approximately 400,000 acres of public land and 1.2 million acres of Federal mineral estate (i.e., the Bakersfield Decision Area). Therefore, management decisions in the RMP apply only to the surface and subsurface estates administered by the BLM (described below) and recognize all valid existing rights.

The RMP was prepared in compliance with BLM's planning regulations title 43, Code of Federal Regulations (CFR), 1600, under the authority of the Federal Land Policy and Management Act (FLPMA) of 1976 (43 US Code [USC], 1701 et seq.) and the BLM's Land Use Planning Handbook, H-1601-1. An EIS is incorporated into this document that meets the requirements of the National Environmental Policy Act of 1969 (NEPA), Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 Code of Federal Regulations [CFR], 1500-1508) (CEQ 1978), and requirements of the BLM's NEPA Handbook, H-1790-1.

1.2 Purpose and Need for the Plan

The purpose of the RMP is to provide broad-scale direction for managing public lands under the administrative jurisdiction of the BLM's Bakersfield FO in accordance with principles of multiple use and sustained yield, as mandated by the provisions of the FLPMA. The RMP presents desired outcomes – expressed in terms of goals and objectives for resource conductions and uses, and establishes the allowable uses, management actions, and special designations that will enable the BLM to achieve the desired outcomes. The RMP guides the Bakersfield Field Office in the implementation of all its subsequent management actions and site-specific activities.

Before the current planning effort, public lands management within the Bakersfield Field Office was covered under four RMPs: Caliente RMP, Hollister RMP, California Coastal National Monument (CCNM) RMP, and the Carrizo Plain National Monument (CPNM) RMP. The Caliente RMP, completed in 1997, covers public lands in San Luis Obispo, Santa Barbara, Ventura, Kings, Tulare, and western Kern Counties. The Hollister RMP, completed in 1984 by the Hollister Field Office, covers lands in Madera and eastern Fresno Counties, which were administratively transferred to the Bakersfield FO in October 2000. The CCNM RMP, completed in 2005, encompasses rocks and islands along the 1,100 mile California coastline of which approximately 230 miles fall within the Bakersfield FO. The CPNM RMP, completed in 2010, encompasses approximately 206,000 acres of public lands within the Bakersfield FO.

BLM regulations require that existing land use plans be revised when necessary to address current resource conditions, evolving demands on resources, and new and revised national-level policy (43 CFR 1610.5-6). The need for revision of the 1997 Caliente Resource Management Plan (RMP) and outstanding portion of the 1984 Hollister RMP stems from several factors including: a) the recent completion of RMPs for the two National Monuments previously covered in the 1997 Caliente RMP, b) the transfer of some public lands from the Hollister Field Office to the Bakersfield Field Office that remained under management guidance provided by the 1984 Hollister RMP, and c) the acquisition of new lands, including Piedras Blancas Light Station, Naval Petroleum Reserve Number 2, and Atwell Island Land Retirement Project for which no specific management direction was provided in the Caliente RMP.

To address these issues, the Bakersfield RMP provides guidance for managing the use of BLM-administered lands and provides a framework for land management actions within the Planning Area. The RMP replaces the management guidance of the Caliente and Hollister RMPs and their three amendments. It does not, however, address public land management within the CCNM or the CPNM, except for livestock grazing management in a small portion of the CPNM.

1.3 Description of the Planning Area

Planning Area

The Bakersfield FO administrative boundary demarcates the Planning Area and encompasses about 17 million acres of mixed ownership throughout Kings, San Luis Obispo, Santa Barbara, Tulare, Ventura, Madera, eastern Fresno, and western Kern Counties, in central California (Map 1.1). Stretching from the coastal islands in the Pacific Ocean across the Central Valley to the crest of the Sierra Nevada, this is a region of diverse topography and landscapes, and extraordinary biodiversity. Elevations range from sea level to more than 14,500 feet at Mount Whitney. Other federal land managers are the US Air Force, US Army Corps of Engineers (ACOE), US Navy, National Park Service (NPS), US Fish and Wildlife Service (USFWS), US Forest Service (USFS), Bureau of Reclamation, and Bureau of Indian Affairs. In addition, State agencies may have specialized management responsibilities, such as the California Department of Fish and Wildlife (CDFW), which manages wildlife for the state in cooperation with BLM on public lands (43 CFR 24.4(d)).

Map 1.1 – Planning Area



Decision Area

While the Planning Area encompasses the entire area within the boundaries of the Bakersfield FO regardless of jurisdiction or ownership, the Bakersfield Decision Area encompasses about 400,000 acres of public lands surface and minerals, and 750,000 acres of mineral estate only. These public lands and mineral estate are scattered across the Planning Area in numerous parcels of various size. The larger blocks of public land lie adjacent to the CPNM, in the Three Rivers-Kaweah River region of Tulare County, and in the Lake Isabella-Chimney Peak-Walker Pass region of Kern and Tulare counties.

The Decision Area also includes subsurface minerals on approximately 550,000 acres of “split estate” (areas where the BLM manages federal subsurface minerals but the surface is owned by a non-federal entity) as well as subsurface minerals on approximately 200,000 acres where the surface is managed by other Federal agencies. These combined areas (about 1.2 million acres) constitute the area for which the BLM has authority and makes decisions (i.e. the Decision Area) under this plan revision (Map 1.2). Table 1.1, summarizes the Decision Area.

Table 1.1
Land Status within the Decision Area

| Land Status | Acres¹ | Percentage of Decision Area |
|--|--------------------------|------------------------------------|
| BLM Managed ² Surface Only | 11,405 | 0.9 |
| BLM Surface and Mineral Estate | 395,745 | 33.5 |
| | 393,179 | |
| BLM Mineral Estate with Other Federal Surface | 219,778 ³ | 18.7 |
| Split Estate (BLM Mineral Estate with Non-Federal Surface) | 548,117 | 46.7 |
| Total BLM Surface | 404,319 | - |
| Total BLM-Administered Mineral Estate | 1,161,075 | - |
| Total Decision Area | 1,172,480 | 100 |

Source: BLM 2012a

The Bakersfield Decision Area does not include the CPNM⁴ or the CCNM, which are managed by the Bakersfield FO under different, site-specific RMPs.

The decisions in the RMP apply only to BLM-administered surface and federal mineral estate. These decisions do not apply to private lands, State lands, tribal lands, and federal lands not administered by the BLM; they would not change existing rights or authority of private land owners or other surface management agencies.

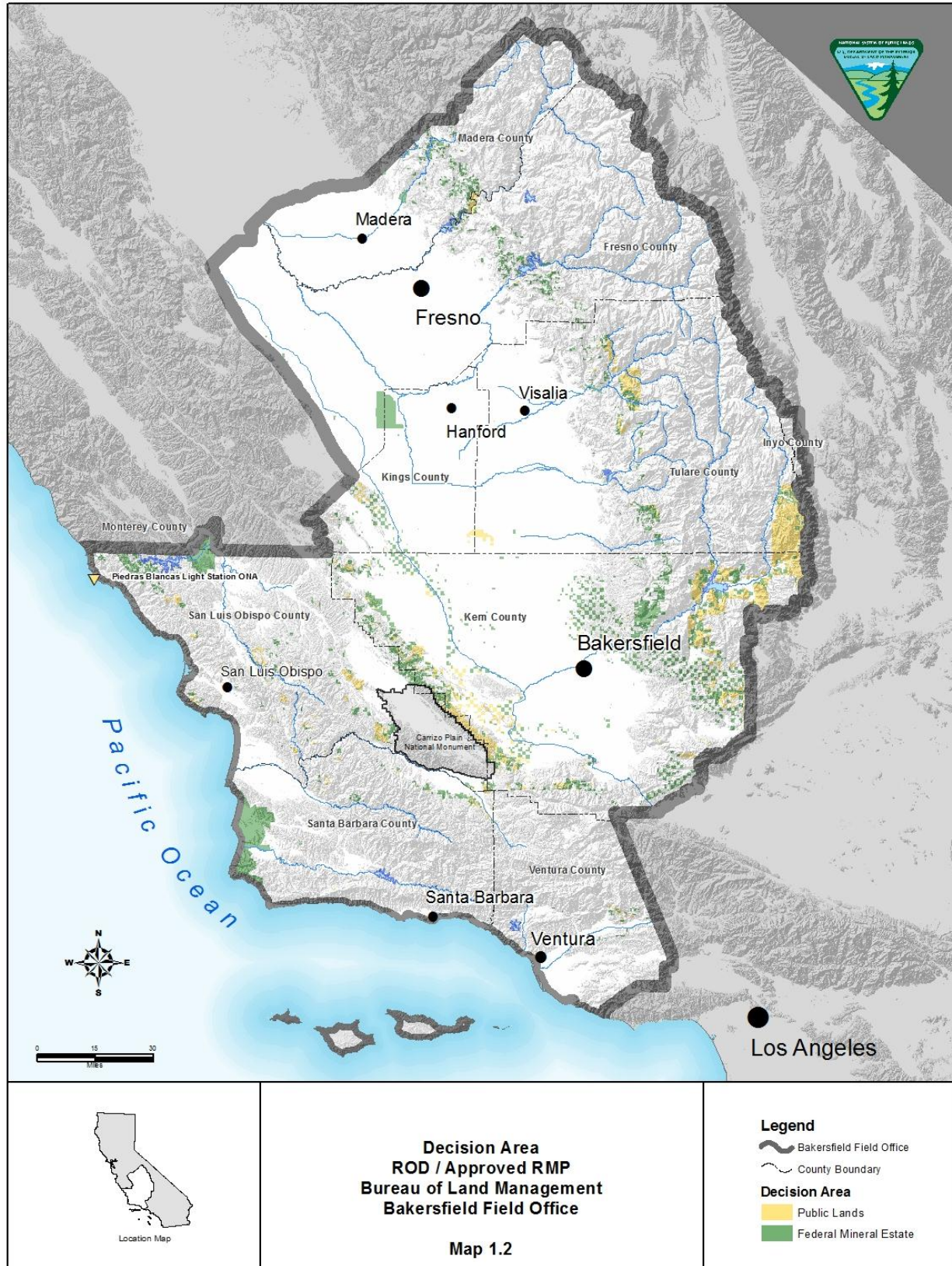
¹ Acreages reflect 2012 data and include the correction of mapping errors and new acquisitions occurring since publication of the Draft RMP/Draft EIS.

² Includes 254 acres owned by BOR, but managed by BLM through an MOU.

³ This acreage includes the mineral estate under DOD at San Nicholas Island which was not included in the Draft RMP/Draft EIS.

⁴ Except a small portion of the CPNM for which this RMP provides direction for livestock grazing management.

Map 1.2 – Decision Area



While the RMP decisions do not apply to lands not administered by the BLM, the RMP recognizes that lands, communities, resource values, and uses that are nearby or interspersed with BLM-managed public lands could be indirectly affected by BLM management actions; in turn, their use and values may affect BLM management of public lands. The RMP includes recommendations for the BLM to work with entities that manage areas or programs that are not under its jurisdiction, but that directly affect BLM's management (such as county governments, tourism information groups, and hunting organizations). Final decisions, however, regarding actions outside the Decision Area rest with the appropriate agency or community government, and are typically not decisions made by the BLM.

1.4 Scoping and Planning Issues

Scoping Issues

A Notice of Intent (NOI) to develop the Bakersfield RMP and associated EIS was published in the *Federal Register* on March 4, 2008 (Volume 73, Number 43, pages 11661-11662). This initiated the public scoping period. A news release was also submitted to local and regional media and posted on BLM's Web site.

The Bakersfield FO hosted several public scoping meetings. Agencies and the public were encouraged to submit oral and/or written comments regarding management of public lands in the Planning Area. One of the most important outcomes of the scoping process was the identification of significant issues to be addressed in the planning phase. Planning issues are disputes or controversies about existing and potential land and resource allocations, levels of resource use, production, and related management practices. Usually, the causal relationship between the activity or use and undesirable results are well defined or can be documented, and the level of controversy is high enough to merit further analysis. Statement of the planning issues orients the planning process so that interdisciplinary thought, analysis, and documentation is directed toward resolving the planning issues during preparation of the RMP.

Issues Addressed

Public scoping comment analysis in combination with bureau policy, directives and guidance resulted in the identification of six planning issues that were addressed during development of alternatives. All six issues center on balancing resource use and human activity with the mandated level of resource protection.

Issue 1: *Adequately address the need for access to and continued availability of, public lands for multiple recreational uses and open spaces.*

The enormous increase in population in the Planning Area has intensified the demand for open space and recreation opportunities on public land. Not only has demand increased, but the kinds of recreation taking place on public lands have also increased, and conflicts are developing including impacts from unauthorized activities. Coupled with this is the scattered nature of much of the public land parcels, many of which lack legal access.

Issue 2: *Establish a balance between the extent of the travel network and the protection of natural and cultural resources, including an appropriate allocation of routes to the various modes of transport.*

The BLM travel network is used by a wide range of users including commercial, domestic, and recreation users. There is some demand for new trail systems, especially from the OHV interest groups within the community (to increase opportunities for different skill levels and modes of travel); however, the ongoing proliferation of illegal routes has resulted in the damage to natural and cultural resources, and conflicts between the various user groups. BLM needs to coordinate with other managers of travel networks, such as private interests, the State, and other federal agencies and contribute toward a regional solution to the issue.

Issue 3: *Ensure appropriate protection for Threatened and Endangered species, critical habitat, other biological resources, and cultural and paleontological resources in a multiple-use environment.*

The diverse landscapes and the extraordinary biodiversity present within the Planning Area present a unique challenge in managing public lands and resources in a rapidly growing region with a diversity of public demands. Since the 1997 Caliente RMP was completed, the USFWS has listed as threatened or endangered at least an additional 11 plants and animals potentially found on public lands within the Bakersfield FO for a total of 86 federally listed species. Loss and degradation of natural habitat continues as California's population grows, increasing the importance of BLM lands for conservation goals. The balance between the conservation of biological, cultural, and paleontological resources with the demand for other land uses is an ongoing issue.

Issue 4: *Continue to appropriately manage livestock grazing to provide for economic benefit, rural lifestyles and vegetation management while protecting other resources.*

Livestock grazing plays an important role on the landscape in terms of rural lifestyles, local economies, and maintaining the legacy of the "West." Management of livestock grazing into the future needs to incorporate the best science and adaptive management methods to ensure protection of other resources. In addition, explore the utilization of livestock grazing as a vegetation management tool to meet resource objectives (such as wildlife habitat and fire management).

Issue 5: *Balance the demand for energy development (including oil and gas, wind, and solar energy) and other land use authorizations (such as road and transmission corridor rights-of-way) with other resource values.*

Implementing the multiple-use mandate from FLPMA includes balancing the economic use of public resources, while providing for appropriate stewardship of public lands and the protection of natural and cultural resources. The economic uses involve both renewable and nonrenewable resources and include energy development (primarily oil and gas, wind, and solar), other mineral extraction, and land use authorizations such as road and transmission corridor rights-of-way. With the increasing demand for sources of domestic energy from public lands, the ability to balance these immediate goals with the protection of public lands for the use and enjoyment of future generations becomes more challenging.

Issue 6: *Address the impacts of climate change on the management of public lands, including strategies that will reduce impacts and incorporate appropriate monitoring.*

The temperature of the planet's atmosphere is regulated by a balance of radiation received from the sun and the amount of that radiation absorbed by the earth and atmosphere. Greenhouse gases (e.g. carbon dioxide and methane), as well as water vapor and particulate matter in the atmosphere keep the planet's temperature warmer than it would be otherwise, allowing the planet to sustain life. While these gasses and particles have occurred naturally for millennia, there has been a marked increase in their

atmospheric concentration since the start of the industrial age, contributing to the observed climatic variability beyond the historic norm. As appropriate, this plan describes (1) the effects that a changing climate may have on the resources in the Planning Area, and (2) how the reasonably foreseeable activities under each alternative would affect climate change (discussed as part of *Air and Atmospheric Values* in Chapters 3 and 4).

Issues Considered but Not Further Analyzed

The issues identified during public scoping (discussed above) shaped the alternatives carried forward in the RMP process. Several concerns/issues identified during public scoping were also considered but were not analyzed further in the planning process because they fell outside of BLM jurisdiction or were beyond the scope of the RMP planning effort. Other comments represented questions on how the BLM would go about conducting the planning process and implementation of land use plan decisions. Comments on these items are valuable and appreciated, even though they are outside the scope of an RMP. These comments will be considered when decisions are made on implementation plans, proposed projects, or day-to-day management.

Three concerns were commonly expressed:

- The need for adequate law enforcement personnel and patrols throughout the Bakersfield Field Office – Some members of the public expressed the desire for a resident law enforcement ranger or park ranger in their local area. Staffing issues are not typically addressed in land use plans; they are more appropriately addressed administratively.
- Increasing the use of volunteers and partnerships to assist in managing public lands and resources – Recruitment and opportunities for volunteers and partnerships are ongoing BLM activities that are a means of implementing an RMP. The RMP, however, is not the appropriate mechanism to establish these opportunities.
- The adequacy of budget and staffing to ensure implementation of the RMP – The RMP alternatives will be based on an optimal but reasonable assessment of the level of management needed. However, the RMP is not a budget document and alternative development is not based on specific funding projections.

1.5 Planning Criteria and Legislative Constraints

Planning Criteria

Planning criteria are the standards, rules, and guidelines that help to guide the RMP/EIS process, to ensure it is tailored to the identified issues, and to deter unnecessary data collection and analysis. The BLM developed planning criteria principally from FLPMA and other applicable laws and regulations, agency guidance, and consultation and coordination with the public, other federal, state, and local agencies, and Native American tribes. The planning criteria were provided to the public for review during the scoping process and were included in the scoping report. The following general planning criteria were developed to guide planning, development of management alternatives, impacts analysis, and the eventual selection of the Bakersfield RMP:

- The plan will establish new guidance and identify existing guidance for the BLM in managing public lands within the Bakersfield FO;
- The plan will be completed in compliance with FLPMA and all other applicable laws;
- The planning process will include an environmental impact statement that will comply with NEPA;
- The RMP/EIS will incorporate by reference the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing Management;
- The RMP/EIS will incorporate by reference all prior Wilderness designations and Wilderness Study Area findings that affect public lands in the Planning Area;
- The plan will provide determinations as required by special program and resource-specific guidance detailed in Appendix C of the BLM's Planning Handbook;
- Decisions in the plan will strive to be compatible with the existing plans and policies of adjacent local, state, tribal, and federal agencies, as long as the decisions are in conformance with BLM policies on management of public lands;
- The scope of analysis will be consistent with the level of analysis in approved plans and in accordance with BLM-wide standards and program guidance;
- Resource allocations must be reasonable and achievable within available technological and budgetary constraints;
- The lifestyles and concerns of area residents will be recognized in the plan;
- All lands within the CCNM and the CPNM—both of which are addressed under separate RMPs, will not be included in the Bakersfield RMP, except for livestock grazing management in a small portion of the CPNM;
- The plan will include Piedras Blancas Light Station Outstanding Natural Area and identify goals, standards, and objectives for this area.
- Decisions and management actions within the existing plans will be evaluated; those that are determined to still be valid will be carried forward into this revised RMP; and
- Geospatial data within a geographic information system (GIS) will be used to facilitate discussions of the affected environment, alternative formulation, analysis of environmental consequences, and display of the results.

Legislative Constraints

The BLM administers public lands within a framework of numerous laws. The most comprehensive of these is the FLPMA. All BLM policies, procedures, and management actions must be consistent with FLPMA and the other laws that govern use of the public lands. In FLPMA, Congress established the principle of “multiple-use” management; defined, in part, as “management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people.” The planning process is intended to develop RMP decisions that resolve conflicts between program priorities, policies and guidelines and that meet the multiple use and sustained yield mandate of the FLPMA.

1.6 Planning Process

As provided by FLPMA, the BLM is responsible for planning for and managing public lands. The Bakersfield RMP was initiated under the authority of Section 202(f) of FLPMA and guided by BLM planning regulations in 43 CFR 1600. Additionally, the EIS is subject to Section 202(c) of NEPA and guided by the Council on Environmental Quality (CEQ) regulations in 40 CFR 1500.

The BLM uses a multistep planning process when developing RMPs, as required by 43 CFR, Part 1600, and illustrated in the BLM's Land Use Planning Handbook. The planning process is designed to help the BLM identify the uses of BLM-administered lands desired by the public. The process considers these uses to the extent they are consistent with the laws established by Congress and the policies of the executive branch of the federal government. The planning process is issue-driven. The BLM used the public scoping process to identify planning issues (noted above) to direct the development of the Bakersfield RMP. The scoping process also was used to introduce the public to planning criteria.

Title II, Section 202, of FLPMA directs the BLM to coordinate planning efforts with Native American tribes, other federal departments, and agencies of the state and local governments as part of its planning process. The BLM is also directed to integrate NEPA requirements with other environmental review and consultation requirements to reduce paperwork and delays (40 CFR, Part 1500.4-5). The BLM coordinated with Native American tribes and other agencies and was consistent with other plans through ongoing communications, meetings, and collaboration with an interdisciplinary team.

Relationship to BLM Policy, Plans and Programs

The BLM has three principal levels of land use planning decisions: 1) the RMP level; 2) the activity level; and 3) the site-specific level. RMP focuses on establishing broad resource objectives and direction while, at the same time, providing some activity-level guidance and site-specific decisions. Site-specific decisions are usually tied to a specific location, resource, or activity and generally require their own NEPA. Where this RMP makes these site-specific decisions (e.g., route designations) this EIS fulfills the NEPA requirement.

The Bakersfield RMP has been prepared to reflect and be consistent with current federal laws, regulations, plans, and guidance, as well as with local government plans and policies to the extent feasible. The decisions in the 1997 Caliente RMP and the relevant portions of the 1984 Hollister RMP and subsequent amendments, as well as other more recent BLM plans, were reevaluated to determine if they should be carried forward in the RMP. Since 1997, some of these documents that were considered during the planning process are identified in Table 1.2.

Table 1.2
Associated BLM Management Plans

| Document | Year |
|--|------|
| Bakersfield Field Office Fire Management Plan | 2008 |
| Carrizo Plain National Monument ROD/ARMP | 2010 |
| California Coastal National Monument ROD/ARMP | 2005 |
| Piedras Blancas Light Station ONA Interpretive Plan | 2008 |
| Piedras Blancas Light Station ONA Management Plan | 2007 |
| Southern Sierra (Westside) Management Plan [Wilderness] | 1999 |

In addition to existing plans, a number of policies, national programmatic EISs, and program guidance documents (BLM Handbooks and Manual sections) were reviewed for consistency during the development of the RMP. These policies and guidance are referenced throughout the document.

Air Quality MOU: Through the *Memorandum of Understanding Among the U.S. Department of Agriculture, U.S. Department of the Interior, and U.S. Environmental Protection Agency, Regarding Air Quality Analyses and Mitigation For Federal Oil and Gas Decisions Through the National Environmental Policy Act Process* (effective June 23, 2011), signatories commit to a clearly defined approach to compliance with NEPA regarding air quality in connection with oil and gas development on Federal lands. This MOU applies to all NEPA analyses commencing after the effective date, June 23, 2011. The NEPA analysis for the Bakersfield RMP began in 2008; therefore, the provisions of the MOU are not directly applicable to this NEPA analysis. However, the BLM believes the air quality analysis in the EIS meets the intent of the MOU; air resource program goals and objectives illustrate the Bakersfield FO's commitment to protect air quality, particularly as it relates to oil and gas development on Federal lands. In lieu of implementing the MOU at this stage and in response to comment from the Environmental Protection Agency Region 9, the BLM developed an Air Resources Management Plan (included as Appendix 1) that outlines the specific requirements for managing air resources and authorizing activities that have the potential to adversely impact air resources in the Bakersfield Field Office and includes modeling, monitoring, and mitigation requirements. The BLM and other participating agencies have developed a Joint Agency Implementation Team. The BLM completed its agency-specific implementation plan in 2011 and is administering training to implement the MOU for future analyses that pertain to federal oil and gas development.

Desert Renewable Energy Conservation Plan (DRECP): The DRECP, a joint planning process between the BLM, USFWS, California Energy Commission and CDFW, will address natural resources conservation and renewable energy development on both public and private lands within the California Desert, including a small portion (197,000 acres) of the Bakersfield FO Planning Area including approximately 22,000 acres of public lands. The plan, still in development, will identify appropriate locations for renewable energy development taking into account impacts to species and natural communities and provide for long-term conservation and management, other equivalent protection measures, for these species and natural communities, giving consideration to other resources and resources uses. The Bakersfield FO has, and will continue to, coordinate with the DRECP planning team to ensure resources within the Decision Area are adequately addressed in the DRECP. Although the Bakersfield RMP provides guidance for utility scale renewable energy development in a portion of the area being considered by the DRECP, this allocation is interim management direction pending the completion of the DRECP.

1.7 Consultation and Collaboration

The Bakersfield FO conducts many activities that require coordination with tribes, the State, other agencies, and interested public. Coordination has been ongoing throughout this planning effort. Coordination is accomplished as a matter of course when implementing land use plan decisions through project development and site-specific activities. Key coordination efforts include those described below. Additional details about the public and agency involvement process are presented in Chapter 5 – Consultation and Coordination.

Intergovernmental, Interagency and Tribal Relationships

The formal process by which the BLM engages other governmental entities (other federal agencies, state agencies and local governments) in the planning process is through Cooperating Agency status. Cooperating agency status provides a formal framework for governmental agencies to engage in active collaboration with a Federal agency to implement the requirements of the NEPA. Federal and state agencies and local and tribal governments may qualify as cooperating agencies because of “jurisdiction by law or special expertise” (40 CFR 1501.6 and 1508.5).

In accordance with these provisions, the BLM initially informed other federal state, local, and tribal officials of its intent to prepare a new RMP, as detailed in the Scoping Report. Collaboration with these agencies continued throughout the planning and EIS process. The BLM gathered issues, ideas, and concerns and discussed the role of agencies in the process. A full listing of the agencies that the BLM coordinated with can be found in the Proposed RMP/Final EIS.

A letter introducing the RMP/EIS and offering agencies the opportunity to become cooperating agencies in the planning was sent to 15 agencies. Two of the agencies, National Park Service and California Department of Fish and Wildlife, expressed their desire to be involved in the planning process, but without becoming a cooperating agency. The remainder of the invitees wished to remain abreast of the planning process, but declined formal cooperating agency status.

Tribal Government-to-Government Consultation

Native American tribes are formally engaged in the planning process, as with many other federal actions, through a process of consultation. Legislation, policy and guidance require the BLM to consult with federally recognized Native American tribes regarding any actions conducted by the agency which have the potential to affect places of traditional or religious importance to them. As such, the Bakersfield FO initiated contact on April 4, 2008, in conjunction with the public scoping process, with both federally and non-federally recognized tribes whose traditional territories are known to lie within the Planning Area.

The federally recognized Native American tribes listed below were contacted again via certified letter in April 2011 and invited to participate in government-to-government consultation prior to the release of the Draft RMP/Draft EIS. Upon its release, copies were sent to each federally recognized Native American tribe and several non-recognized Native American tribes, groups, and individuals along with a package of supplemental information and maps. Follow up letters, phone calls, and emails offered to schedule one-on-one presentations, and again, extended the invitation to initiate formal government-to-government consultation to the federally recognized tribes and informal coordination and consultation with the non-recognized tribes. Informational meetings and presentations were conducted with four of the federally recognized Native American tribes and six non-recognized Native American tribes and groups. Subsequent to the end of the public review and comment period on the Draft RMP/Draft EIS, one of these groups, the Tejon Indian Tribe, became federally recognized (January 1, 2012). Prior to their formal recognition, BLM coordinated with the Tejon Indian Tribe by providing them with information, maps and guidance regarding review of the Draft RMP/Draft EIS. In addition, a formal presentation was provided for the attending members at a Tribal Council meeting. None of the federally or non-federally recognized Native American tribes chose to conduct formal government-to-government or informal consultation.

Upon the release of the Proposed RMP/Final EIS these federally recognized Native American tribes and several non-recognized Native American tribes, groups, and individuals were provided with copies of the document and received follow up contacts.

- Big Sandy Rancheria
- Cold Springs Rancheria
- North Fork Rancheria of Mono Indians
- Picayune Rancheria of Chukchansi Indians
- Santa Ynez Band of Chumash Indians
- Table Mountain Rancheria
- Tachi Yokut Tribe of the Santa Rosa Rancheria
- Tejon Indian Tribe
- Tule River Reservation

Endangered Species Act (ESA) Section 7 Consultation

In accordance with Section 7 of the ESA, the BLM consulted with the USFWS and the NMFS to ensure that the BLM's proposed action would not jeopardize the continued existence of any listed threatened or endangered species, or result in the destruction or adverse modification of critical habitat.

The BLM initiated formal consultation with the USFWS on September 7, 2012. As part of the consultation, BLM wrote a biological assessment (BA) and held meetings with the USFWS to explain the proposed action and the effects determination. The BA discussed the effects on 75 listed species (39 plants, 36 animal) and 37 critical habitats (16 plants, 21 animals) in the Bakersfield FO from the Proposed RMP (Alternative B in the Proposed RMP/Final EIS). Appendix 4 contains a list of the species and critical habitats discussed in the BA. During the consultation period, USFWS and the BLM held additional discussions and exchanged additional information. The USFWS considered the Proposed RMP, the BA and additional information and developed a biological opinion (BO). The October 23, 2014 BO (08ESMF00-2012-F-0682) concluded that the Proposed RMP was not likely to jeopardize the continued existence of a listed species, or result in the destruction or adverse modification of designated critical habitat.

The BLM initiated formal consultation with the NMFS on November 7, 2012. As part of the consultation, the BLM wrote a biological assessment and held a meeting with the NMFS to explain the proposed action and the effects determination. During the January 31, 2013 meeting, the NMFS advised the BLM to develop BMPs that would eliminate or reduce impacts to NMFS species and critical habitat. After reviewing the BMPs, the NMFS advised the BLM that with inclusion of the BMPs, the Proposed RMP was "not likely to adversely affect" listed species or critical habitat. The BLM requested written concurrence on December 20, 2013. On May 13, 2014, the NMFS issued a letter concurring that the BLM's proposed action was not likely to adversely affect South-Central California Coast (SCCC) Distinct Population Segment (DPS) steelhead, Southern California (SC) DPS steelhead, black abalone, Guadalupe fur seal, fin whale, blue whale, or humpback whale, or critical habitat for SCCC steelhead, SC steelhead, or black abalone. The BMPs approved by the NMFS have been incorporated into Appendix 3.

National Historic Preservation Act (NHPA), Section 106 Consultation

In accordance with the requirements of Section 106 of the NHPA, the BLM coordinated with and solicited input from the California State Historic Preservation Officer (SHPO) at the initiation of the planning process. The SHPO was also invited to review and formally consult regarding the Bakersfield Draft RMP/Draft EIS. The SHPO declined to review, comment, or consult on the Draft RMP/Draft EIS. An additional opportunity for review and consultation was afforded during the Governor's Consistency review of the Proposed RMP/Final EIS. The SHPO declined to review, comment, or consult on the PRMP/FEIS.

Other Stakeholder Relationships

Throughout the planning process the Bakersfield FO continued to be engaged with numerous user groups, public land stakeholders, and interested individuals. These efforts include travel management oriented public meetings, recreation-focused listening sessions, Social and economic workshops, and various briefings, presentations, and personal communications. These stakeholder groups include representatives for environmental advocacy groups, commercial enterprises, community groups, and groups representing recreational users. In addition, regular briefings have been presented to the Central California Resource Advisory Council and updates provided to its various subcommittees.

1.8 Related Plans

BLM land use planning regulations (43 CFR, 1610.3), FLPMA (43 USC, 1712), and regulations for implementing NEPA (40 CFR, 1501.6 and 1506.2) guide the BLM in coordinating and cooperating with other federal and state agencies, local governments, and Native American tribes during the land use planning process. This collective guidance instructs the BLM, to the extent practicable, to keep informed of state, local, and tribal plans; assure that consideration is given to such plans; and to assist in resolving inconsistencies between such plans and federal planning. While the State is authorized to furnish advice regarding revision of land use plans for the public lands, the Secretary of the Interior is directed to develop land use plans consistent with State and local plans to the maximum extent found consistent with Federal law and the purposes of FLPMA. 43 U.S.C. 1712 (c)(9).

In keeping with these provisions and regulations, other Federal and State agencies, local, and tribal officials were made aware of the planning process as described above.

Other Federal Agency Plans

Other federal agencies manage lands and resources in and next to the Bakersfield FO Planning Area. The RMP strives for consistency with plans pertaining to these lands, including the following:

- Final Environmental Impact Statement and Record of Decision for Oil and Gas Leasing, Los Padres National Forest, July 2005;
- Sequoia National Forest Motorized Travel Management Final Environmental Impact Statement and Record of Decision, December 2009;

- USFWS recovery plans for endangered species—Recovery Plan for the California condor (USFWS 1996), Recovery Plan for Upland Species for the San Joaquin Valley (USFWS 1998), Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon (USFWS 2005); and the Recovery Plan for the Kern Primrose Sphinx Moth (USFWS 1984).
- National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR, 300) (1994, revised 2007);
- Forest Land and Resource Management Plans (Los Padres, Sequoia, Sierra National Forests).

State Agency Plans

The complex land ownership pattern within the Planning Area influences BLM coordination with agencies administering California State lands and resources. Several agreements exist between state agencies and the BLM that to promote interagency cooperation to enhance natural resource management. For example, two large areas have been managed cooperatively with the CDFW as National Cooperative Land and Wildlife Management Areas (Temblor and Monache-Walker Pass) to benefit wildlife resources and recreation opportunities. The BLM and CDFW also coordinate in managing State ecological reserves within the Planning Area. The BLM and California State Parks coordinate management of their lands to ensure consistency for adjoining parcels.

County Plans

The BLM routinely coordinates management activities across its scattered land pattern within the eight counties in which there is BLM surface or mineral ownership. County supervisors, planners, fire personnel, and local law enforcement are the primary points of coordination. While specific planning efforts for the RMP and the county general plan provide an opportunity to evaluate consistency, the process of coordination and consistency review is ongoing.

1.9 Policy

This plan is consistent with and incorporates requirements identified in various laws, regulations and policies. These include Executive Orders, legislative designations, proclamations and court settlements/rulings. The policies and decisions that existed prior to this plan being written are outside the scope of the plan but have influenced the decisions, constrained the alternatives, and are needed to understand management of the area.

2 Chapter Two – Management Decisions

Introduction

This chapter describes the decisions approved in the ROD for the Bakersfield RMP, otherwise known as the Approved RMP. It presents the Desired Future Conditions (Goals and Objectives), Land Use Allocations and Management Actions (Decisions) established for BLM-administered public lands in the Bakersfield FO that will be implemented over the life of the RMP. Most of the desired future conditions are long range and are assumed to require a period of time to achieve. These management decisions are presented by program area. Not all types of decisions were identified for each program.

Goals and objectives direct BLM actions to most effectively meet legal mandates, regulations, and agency policy, as well as local and regional resource needs. Goals are broad statements of desired outcomes that are usually not quantifiable. Objectives identify more specific desired outcomes for resources and might include a measurable component. Objectives are generally expected to achieve the stated goals.

Allowable uses identify uses that are allowed, restricted, or excluded on BLM-administered surface lands and federal mineral estate. These allocations identify the surface lands or subsurface mineral interests where uses are allowed, including any restrictions that may be needed to meet goals and objectives.

Management actions are proactive measures or limitations intended to guide BLM activities in the Planning Area to achieve desired outcomes, including actions to maintain, restore, or improve land health.

Special designations are designated by Congress for special protection, such as Wild and Scenic Rivers. Such designations are not land use plan decisions, but recommendations for designation can be made to Congress at the land use plan level. Congress may then act on these recommendations at a later time. Additionally, BLM administrative designations, such as Areas of Critical Environmental Concern (ACECs), are also considered special designations and can be made in the land use plan.

Implementation decisions are management actions tied to a specific location that implement land use plan decisions. Implementation decisions generally constitute the BLM's final approval, allowing on-the-ground actions to proceed and require appropriate site-specific planning and NEPA analysis. Such decisions may be incorporated into implementation plans (activity or project plans) or may exist as stand-alone decisions.

The RMP contains "Key Implementation" level decisions that would be implementable based on the level of analysis contained within the EIS. Principally, these decisions relate to the concurrent Travel Management Plan included as Appendix 2 of the RMP; however, other implementation level decisions are noted under the "Key Implementation Decisions" heading for Biological Resources and Livestock Grazing. It should be noted that implementation level decisions are subject to appeal to the Interior Board of Land Appeals under 43 CFR, 4.410.

Administrative actions are day-to-day activities conducted by the BLM, often required by FLPMA, but may or may not require specific evaluation under NEPA and do not require a written decision by a

responsible official to be accomplished. Examples of administrative actions include, but are not limited to, mapping, surveying, conducting inventory or monitoring, scientific research, other studies, partnering and collaborating with partners, developing educational materials, and working with local communities and interest groups.

Standard Operating Procedures (SOPs) and Best Management Practices (BMPs) guide the day-to-day operations and business practices of the BLM. The SOPs and BMPs are the combined product of procedures developed to comply with laws, regulations, policies, and other guidance and are often institutionalized in manuals and handbooks. The SOPs and BMPs are described in detail (although not all inclusive) by program in Appendix 3. Best Management Practices and Standard Operating Procedures.

It should be noted the decisions generated by the RMP only apply to BLM-administered surface and mineral estate. No decisions generated by the RMP would change existing rights or authority of private land owners or other surface management agencies.

Resources

2.1 Air and Atmospheric Values

Goal

[AAV-G-1] Contribute to the achievement of good air quality.

Objectives

[AAV-O-1] Contribute to the attainment of National Ambient Air Quality Standards (NAAQS).

[AAV-O-2] Reduce emissions and the particulate level impacts from BLM management activities and BLM authorized actions in accordance with State Implementation Plans (SIPs).

Decisions

[AAV-D-1] Design BLM program and management activities and authorize projects to meet air quality standards in conformance with State Implementation Plans. Reduce emissions resulting from such actions by implementing BMPs listed in the Air Resources Management Plan (Appendix 1) and other control measures.

[AAV-D-2] Prevent BLM actions from degrading Federal Class I areas including Domeland Wilderness, San Raphael Wilderness, and Sequoia and Kings Canyon National Parks.

2.2 Biological Resources

Goals

[BR-G-1] Contribute to maintaining the biotic diversity within the Planning Area. Ensure public lands provide for a diversity of native species, ecosystems, and ecosystem processes.

[BR-G-2] Promote the recovery of state and federally listed species. Promote conservation of other plant and animal species to prevent future listings (see Appendix 4).

[BR-G-3] Promote the success of recovery plans, conservation plans, wildlife management plans, vegetation and weed management plans, and other regional conservation strategies (see Appendix 4).

Objectives

[BR-O-1] Maintain or improve the quality and diversity of biological resources through the maintenance, enhancement, and restoration of habitats. Manage public lands to meet or exceed the Standards for Rangeland Health (see LG-D-5).

[BR-O-2] Meet or exceed proper functioning condition of wetland or riparian habitats, maintain the hydrologic regime of vernal pools, and provide for riparian-dependent native species through habitat maintenance, restoration and enhancement.

[BR-O-3] Restore, as appropriate, native plants and animals whose populations have been depleted or extirpated from the local area.

[BR-O-4] Conserve and recover state and federally listed species through the maintenance, enhancement and restoration of their habitats.

[BR-O-5] Design BLM actions and authorization to minimize impacts on biological resources, regional conservation strategies and essential habitat linkages.

[BR-O-6] Reduce the impact that the urban interface, recreation activities, and other public uses have on listed species recovery, natural community and species conservation by coordination and collaboration with other agencies, local communities, and user groups.

[BR-O-7] Protect additional ecologically important areas, important linkages, and scarce limited habitats through land tenure adjustments and partnerships with other agencies and organizations.

[BR-O-8] Retain in public ownership lands that are important for species recovery or conservation, that contain ecologically important areas or scarce limited habitats, or contribute to regional conservation strategies or habitat linkages.

[BR-O-9] Manage lands, interest in lands, or funds acquired through compensation consistent with any applicable compensation document and to promote recovery of the target species to the extent consistent with federal law.

[BR-O-10] Control, decrease, or eradicate known populations of invasive nonnative plants and prevent new populations from becoming established. Control the spread of noxious weeds as identified by the California Department of Food and Agriculture and the California Invasive Plants Council (Cal-IPC, 2009).

[BR-O-11] Address at a landscape level, widespread nonnative species that displace and compete with the native flora through collaboration with weed management area members, state agencies, federal agencies, conservation organizations, and other interested parties.

[BR-O-12] Reduce the impacts, including disease transmissions, harassment, and competition, and limit the spread of nonnative animals.

Decisions

[BR-D-1] Designate the following species as priority species for management and protection:

- (a) Special Status Species;
- (b) Species of interest to CDFW, USFWS and NMFS (such as game species, furbearers, migratory birds, marine mammals, raptors);
- (c) Species that are rare;
- (d) Species with declining populations or with limited distributions; or
- (e) Species with high ecological importance (such as keystone, pollinator or host species)

[BR-D-2] Designate as priority plant communities and habitats (Desired Plant Communities); examples of which include alkali sink, Bishop pine forest, California bay forest, central maritime chaparral, coastal scrub, cypress woodlands, giant sequoia forest, oak woodland, riparian communities, serpentine chaparral, wetland and vernal pool communities, based on the following criteria:

- (a) Designated critical habitat;
- (b) Rarity,
- (c) Limited geographic distribution;
- (d) High ecological importance;
- (e) Unique species assemblages; or

- (f) At risk from climate change, pathogens, or other factors.

[BR-D-3] Implement the following specific management as appropriate in areas of ecological importance, ACECs, and where priority communities, habitats and species occur;

- (a) Closure to mineral material disposal;
- (b) Limitations on modes of travel and travel routes;
- (c) Restrictions on fluid mineral leasing (CSU, NSO, Closure);
- (d) Restrictions on livestock grazing;
- (e) Restrictions on recreational opportunities (camping, campfires, hunting, shooting sports, seasonal closures);
- (f) Recommend proposal for withdrawal from all or a portion of the mining laws; and/or
- (g) Prohibition of the casual collection of plants or their parts without prior BLM authorization.

[BR-D-4] Administratively delineate (Map 2.1) and manage Atwell Island for protection of sensitive biological resources and to restore retired farmlands to native habitat, including wetlands.

- (a) Identify as available for livestock grazing but only for the purpose of vegetation management to meet resource objectives other than the production of livestock forage;
- (b) Prohibit campfires;
- (c) Prohibit overnight camping and use except for; future specific areas identified for nocturnal visitation for wildlife viewing and stargazing;
- (d) Prohibit cross country equestrian travel;
- (e) Seasonally prohibit access to wetland areas, as needed to support restoration objectives;
- (f) Coordinate with CDFW to prohibit hunting except as allowed by Special Recreation Permit and/or specially organized hunt activity;
- (g) Prohibit air-soft and paintball activities, including organized games and casual use of these types of equipment unless authorized through a Special Recreation Permit;
- (h) Prohibit pets and other domesticated animals (not including authorized livestock) from wetland areas;
- (i) Require all pets and domestic animals (not including authorized livestock) to be on a leash. Special Recreation Permits may be issued for activities allowing off-leash activity, such as, dog trial events; and
- (j) Prohibit the casual collection of plants or their parts without BLM authorization.

[BR-D-5] Administratively delineate (Map 2.2) and manage Caliente Creek: for protection of the riparian ecosystem and conservation of habitat for Tehachapi slender salamander, Yellow-blotched salamander, and Bakersfield cactus.

- (a) Identify as available for Livestock Grazing. Livestock grazing authorizations may have specific livestock management guidelines applied to ensure grazing use is compatible with the objectives for special status species and riparian resources;
- (b) Seek to acquire within the Caliente Creek area of ecological importance, lands with Tehachapi slender salamander and Bakersfield cactus; and
- (c) Allow for the expansion of the Caliente Creek area of ecological importance to include additional public lands containing newly discovered populations of Tehachapi slender salamander, Yellow-blotched salamander or Bakersfield cactus.

[BR-D-6] Administratively delineate (Map 2.3) and manage Conserved Lands for protection and to promote the recovery of federally listed species on public lands identified as reserves or corridors in collaboration and coordination with the USFWS and CDFW (see Appendix 4).

- (a) Manage public lands within reserves or corridors as conserved land to promote consistency with the direction established by the USFWS and CDFW through the *Recovery Plan for Upland Species of the San Joaquin Valley* and other pertinent recovery or conservation plans, subject to and consistent with underlying statutory authority (FLPMA);
- (b) Manage reserves to restrict surface disturbance on public lands in reserves to not exceed 10 percent of any 640-acre section, aliquot section, or aggregate of adjacent aliquot sections;
- (c) Manage corridors to restrict surface disturbance on public lands in corridors to not exceed 25 percent of any 640-acre section, aliquot section, or aggregate of adjacent aliquot sections;
- (d) Allow certain areas of high intensity oil and gas development within reserves and corridors to be identified and managed separately from the reserve and corridor system. These areas will not be subject to the 10 percent and 25 percent surface disturbance limit; and
- (e) Include certain areas outside the reserve and corridor system to be managed as corridors including the application of corridor disturbance restrictions.

[BR-D-7] Administratively delineate (Map 2.4) and manage Deer Spring: for protection of riparian resources and deer habitat.

- (a) Identify as closed to fluid mineral leasing;
- (b) Establish, in accordance with 43 CFR 3809.31, the area of ecological importance as an area requiring a 15 day notification be given to the BLM prior to beginning any activity under the mining laws including; Casual Use, to allow the BLM to determine whether a notice or plan of operations must be submitted; and
- (c) Identify as unavailable for livestock grazing.

[BR-D-8] Administratively delineate (Map 2.5) and manage Frog Pond: for protection of riparian ecosystems including California bay forest.

- (a) Identify as open for fluid mineral leasing, subject to major constraints (CSU-Priority Species, Plant Communities and Habitats stipulations);
- (b) Establish, in accordance with 43 CFR 3809.31, Frog Pond as a special area requiring a 15 day notification be given to the BLM prior to beginning any activity under the mining laws including; Casual Use, to allow the BLM to determine whether a notice or plan of operations must be submitted.
- (c) Identify as closed to mineral materials disposals;
- (d) Identify as unavailable for livestock grazing;
- (e) Prohibit campfires and overnight camping;
- (f) Prohibit equestrian use;
- (g) Prohibit the casual collection of plants or their parts without BLM authorization; and
- (h) Manage water resources to maintain, improve, or benefit hydrologic processes, such as in-stream flow requirements, needed for the riparian ecosystem.

[BR-D-9] Administratively delineate (Map 2.6) and manage Irish Hills: for protection of diverse coastal plant communities, including Bishop pine forest, rare plant habitat, and notably large oaks and manzanita.

- (a) Identify as open to fluid mineral leasing, subject to moderate constraints (CSU – Priority Species, Plant Communities and Habitats stipulation);
- (b) Identify as unavailable for livestock grazing;
- (c) Prohibit campfires;
- (d) Prohibit overnight camping, except in any future developed recreation sites developed in partnership with California Department of Parks and Recreation or other adjacent land owners;
- (e) Prohibit cross country equestrian travel; and
- (f) Prohibit the casual collection of plants or their parts without BLM authorization.

[BR-D-10] Administratively delineate (Map 2.7) and manage the National Cooperative Land and Wildlife Management Areas (NCLWMAs): Caliente, Monache-Walker Pass, and Temblor: for improvement and maintenance of diverse assemblage of vegetative communities to benefit wildlife species, including raptors and game species, such as, deer, quail and chukar.

- (a) Continue the withdrawal from application under the non-mineral public land laws and from disposition under the homestead, desert land entry, and script selection laws; and
- (b) Identify as open for fluid mineral leasing, subject to moderate constraints (CSU-Raptor stipulations)

[BR-D-11] Administratively delineate (Map 2.8) and manage Rusty Peak: for protection of serpentine chaparral, coastal live oak woodland, perennial grassland, San Luis serpentine dudleya, and other sensitive plant species.

- (a) Identify as open for fluid mineral leasing, subject to moderate constraints (CSU- Priority Species, Plant Communities and Habitats stipulation);
- (b) Identify as unavailable for livestock grazing; and
- (c) Prohibit the casual collection of plants or their parts without BLM authorization.

[BR-D-12] Administratively delineate (Map 2.9) and manage the South Fork of the Kern River: for protection of the riparian forest and critical habitat for the southwestern willow flycatcher; promote nesting habitat for both the southwestern willow flycatcher and the California yellow-billed cuckoo.

- (a) Identify southwestern willow flycatcher critical habitat as unavailable for livestock grazing.

[BR-D-13] Administratively delineate (Map 2.10) and manage the Table Mountain and Kennedy Table: for protection of vernal pools, listed vernal pool species and critical habitat for vernal pool species.

[BR-D-14] Administratively delineate (Map 2.11) and manage the Tehachapi Linkage: for the preservation of the ecological connection between the southern Sierra Nevada Mountains and foothills, and the transverse ranges.

- (a) Identify as an avoidance area for utility scale renewable energy rights-of-way; and
- (b) Retain all lands and interests in lands in federal ownership unless it is deemed that the lands do not contribute to a regional conservation strategy or linkage.

[BR-D-15] Manage the following areas as Areas of Critical Environmental Concern (ACECs) based on their significant biological resource values; Ancient Lakeshores ACEC; Bitter Creek ACEC; Blue Ridge ACEC;

Chico Martinez ACEC; Compensation Lands ACEC; Cypress Mountain ACEC; Cyrus Canyon ACEC; Erskine Creek ACEC; Hopper Mountain ACEC; Kaweah ACEC; Kettleman Hills ACEC; Lokern-Buena Vista ACEC; Los Osos ACEC; Piute Cypress ACEC; Pt. Sal ACEC; Salinas River ACEC, Tierra Redonda ACEC; and Upper Cuyama Valley ACEC.

[BR-D-16] Apply SOPs, as appropriate to new BLM actions and authorizations (see Appendix 3).

[BR-D-17] Allow removal of dead and downed woody materials from public lands only with administrative approval. Except in developed recreation sites and areas, or where prohibited and posted (43 CFR 8365.1-5), collection of fire wood from dead and down woody material for on-site campfires is permissible provided woody material is less than four inches in diameter.

[BR-D-18] Identify lands within the range of federally proposed and listed species as open to fluid mineral leasing unless otherwise closed, subject to major constraints including project relocation or exclusion, seasonal activity restriction, and extended application processing time as described in the Controlled Surface Use- Protected Species stipulation.

[BR-D-19] Identify lands within the range of federal candidate, state listed or bureau sensitive species as open to fluid mineral leasing unless otherwise closed, subject to moderate constraints as described in the Controlled Surface Use- Sensitive Species stipulation.

[BR-D-20] Identify designated or proposed critical habitat as open to fluid mineral leasing unless otherwise closed, subject to major constraints as described in the Controlled Surface Use- Critical Habitat stipulation.

[BR-D-21] Identify important foraging, wintering or nesting habitat for raptors as open to fluid mineral leasing unless otherwise closed, subject to major constraints as described in the Controlled Surface Use- Raptor stipulation, such areas include, but are not limited to: Hopper Mountain, Kaweah, San Joaquin River Gorge, Kettleman Hills, Chico Martinez, and the Temblor and Caliente NCLWMAs.

[BR-D-22] Identify split estate with surface managed as compensation for biological resources as open to fluid mineral leasing subject to major constraint (CSU – Compensation Lands).

[BR-D-23] Identify the Compensation Lands ACEC as open to fluid mineral leasing subject to major constraints (NSO – Compensation Lands ACEC), if leasing is consistent with the document that established the compensation land.

[BR-D-24] Identify public lands with mineral estate adjacent to or within the boundary of the State of California's Chimineas Unit of the Carrizo Plain Ecological Reserve as open to fluid mineral leasing subject to major constraint (CSU-Chimineas Ranch).

[BR-D-25] Identify split estate with federal mineral estate within the boundary of the State of California's Chimineas Unit of the Carrizo Plain Ecological Reserve as open to fluid mineral leasing subject to major constraint (CSU-Existing Surface Use/Management).

[BR-D-26] Eliminate, relocate, or redesign uses, after site specific NEPA analysis, that may result or have resulted in unacceptable impacts on important biological resources, through actions such as, making seasonal closures, modifying grazing prescriptions, installing bat compatible closures, restricting equestrian access, relocating camping areas, and closing or realigning travel routes.

[BR-D-27] Implement a variety of measures (such as controlling weeds, seeding native species, performing prescribed burns, applying mechanical and chemical vegetation treatments, improving water availability, prescribed grazing, reducing raven nesting structures and the installing artificial dens or structures) to enhance or restore habitat conditions.

[BR-D-28] Strive to implement actions and recommendations from recovery plans for ESA listed species, including those to reduce mortality, provide information and education, and restore habitat to maintain, enhance and restore listed species habitats.

[BR-D-29] Allow transplants, augmentation, and reestablishment of native species populations in coordination and collaboration with CDFW or USFWS.

[BR-D-30] Complete land tenure adjustments (disposal) of designated critical habitat and essential habitat only in accordance with written concurrence or biological opinions issued by USFWS or NMFS.

[BR-D-31] Complete land tenure adjustments (repositioning) of compensation lands only after collaboration and consultation with USFWS and coordination with CDFW.

[BR-D-32] Seek and accept acquisition of biologically important lands and interest in lands including compensation lands to the extent consistent with federal law.

[BR-D-33] Manage lands acquired⁵ specifically for the protection of biological resources in a manner consistent with the terms of acquisition to the extent consistent with federal law.

[BR-D-34] Propose all existing parcels of compensation land (including lands not specifically used for or credited as compensation acres within the parcel) for inclusion in the Compensation Lands ACEC (see Section 2.17).

[BR-D-35] Recommend any future parcels of compensation land (including lands not specifically used for or credited as compensation acres within the parcel) for ACEC consideration if there is evidence that the lands meet the relevance and importance criteria. Upon completion of NEPA, public review, and a plan amendment, such lands would become part of the Compensation Lands ACEC and be provided special management attention.

[BR-D-36] In consistent with federal law, preclude the issuance of an opening order to locatable mineral exploration and development in compensation lands where both surface and mineral estate are acquired.

[BR-D-37] Implement a variety of measures (such as fencing, planting native riparian vegetation to stabilize channels, installing in-stream structures, removing or redesigning spring alterations, removing weeds and seeding or planting appropriate native species) to restore degraded riparian areas and protect healthy riparian areas.

[BR-D-38] Manage naturally occurring waters on public lands, including public water reserves, to maintain, improve, or benefit hydrologic processes, such as in-stream flow requirements, needed for riparian systems.

⁵ Acquisition is subject to conformance with underlying statutory authority and DOJ title standards.

[BR-D-39] Control and eliminate, when necessary and possible, nonnative animals, such as bullfrogs, feral cats, wild pigs, and wild honeybees that have negative impacts on habitats or native species.

[BR-D-40] Prohibit the release of un-retrievable nonnative animals, except for the use of approved bio control agents, authorized livestock, or the augmentation of naturalized species in collaboration and coordination with CDFW.

[BR-D-41] Implement a variety of measures (such as removal, restriction, exclusion and education) if pets from public land users or private lands are causing wildlife depredation or other ecological damage.

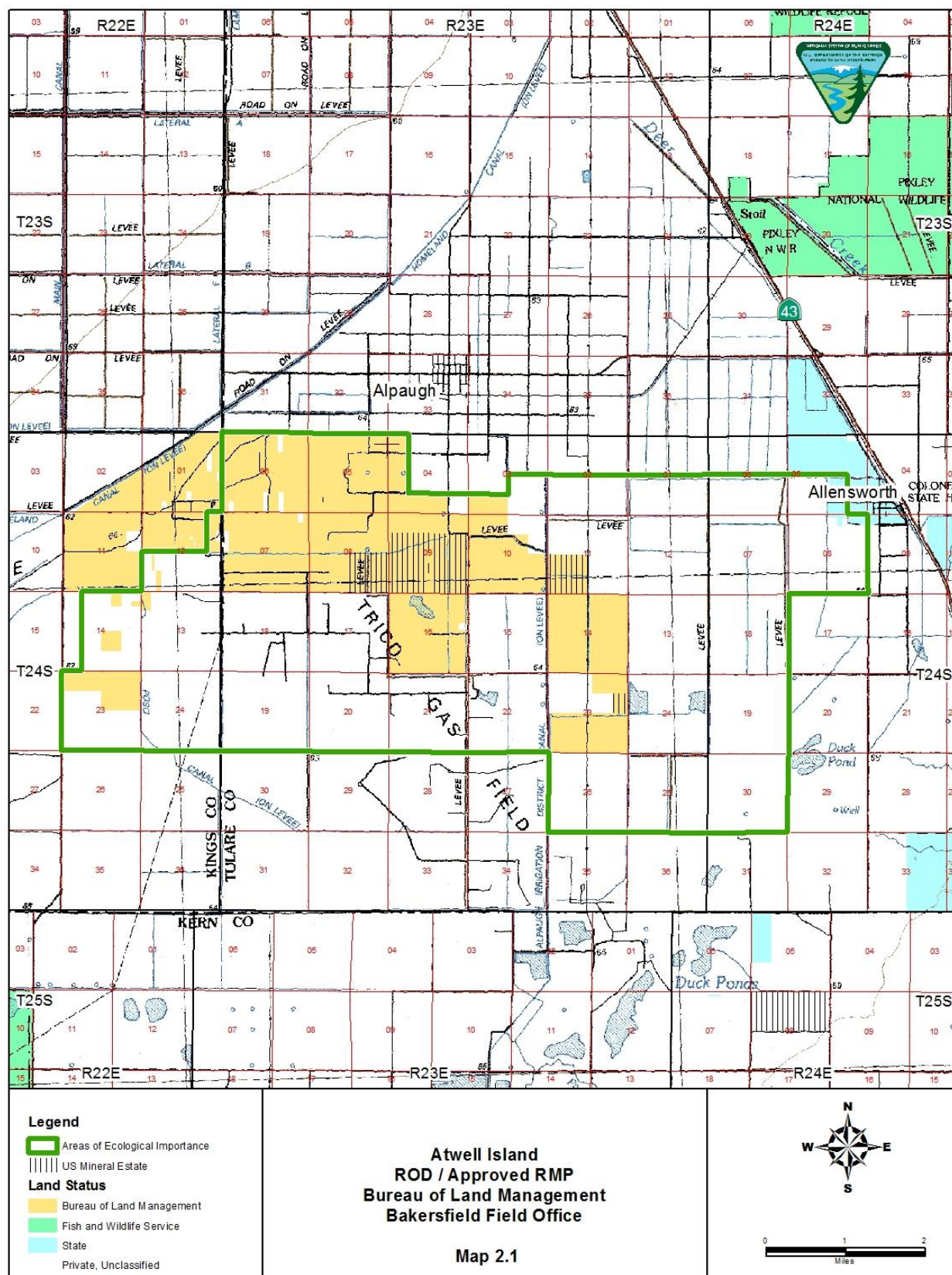
Key Implementation Decisions

[BR-I-1] Minimize the introduction and spread of weeds by BLM employees and public land users. For example, promote weed education, monitor corrals, promote or require weed-free hay, wash vehicles and equipment coming from other areas, and prohibit livestock and horse trailers from being cleaned on public lands.

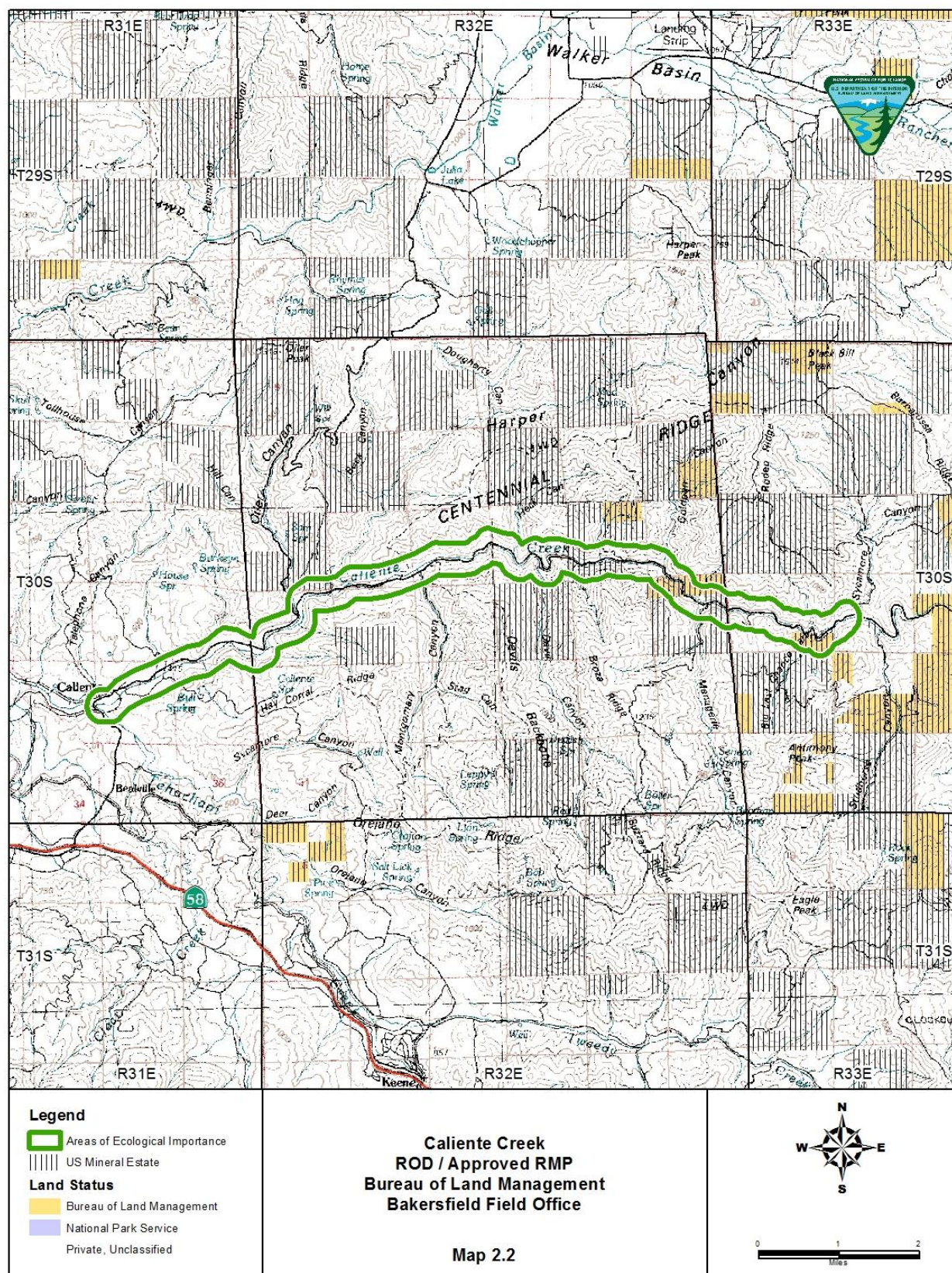
Administrative Actions

- Partner with other agencies, institutions, organizations, and individuals to improve knowledge of the species within the Bakersfield FO and their understanding of the natural and ecological processes that influence local ecosystems. With partner agencies, coordinate monitoring of special status species for changes in population size, distribution, habitat use, and potential and existing threats.
- Inventory species that are not well studied or understood, such as insects and other invertebrates, fungi, lichens, and bryophytes (such as, mosses and liverworts). Continue to improve inventories of other species.
- Support inventories, monitoring, and research that identifies and defines factors that influence species population trends, especially listed and special status species. Support other research on the biology of species found in the Bakersfield FO.
- Establish partnerships and collaborate with adjacent landowners, interested publics, stakeholders, conservation organizations, and other agencies to coordinate management and protect areas of ecological importance, habitat linkages, and ACECs.
- Collaborate with weed management area members, state agencies, federal agencies, conservation organizations, and other interested parties to control and eliminate weeds.
- Treat weed populations following integrated pest management principles (BLM 1992). Monitor to determine effectiveness of control measures and to ensure that known target weed populations are stable or diminishing.
- Eliminate founder invasive nonnative weed populations before they can spread subject to site-specific NEPA. Survey to detect new nonnative populations and begin treatment of newly discovered populations within five years of discovery.

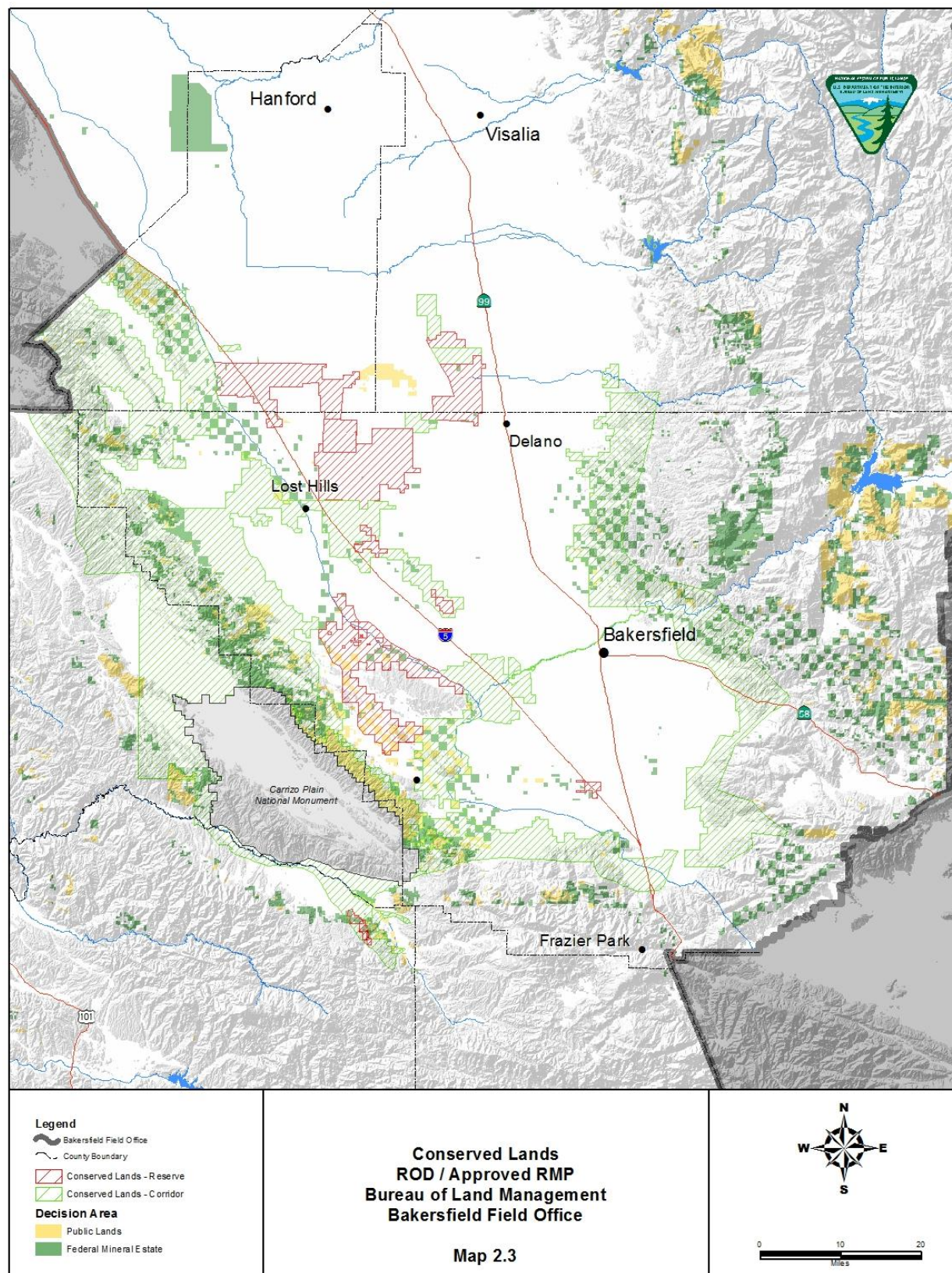
Map 2.1 – Atwell Island



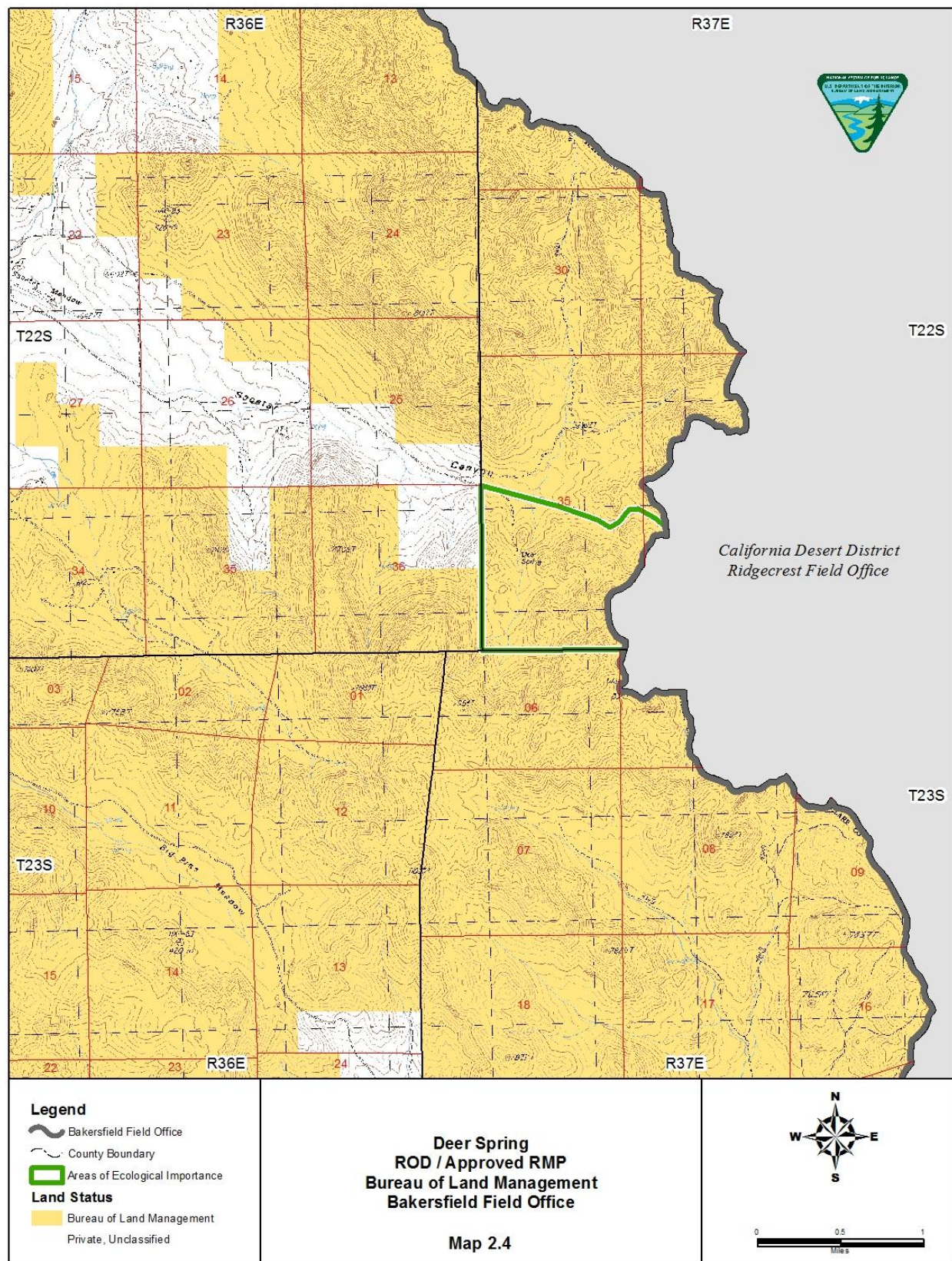
Map 2.2 – Caliente Creek



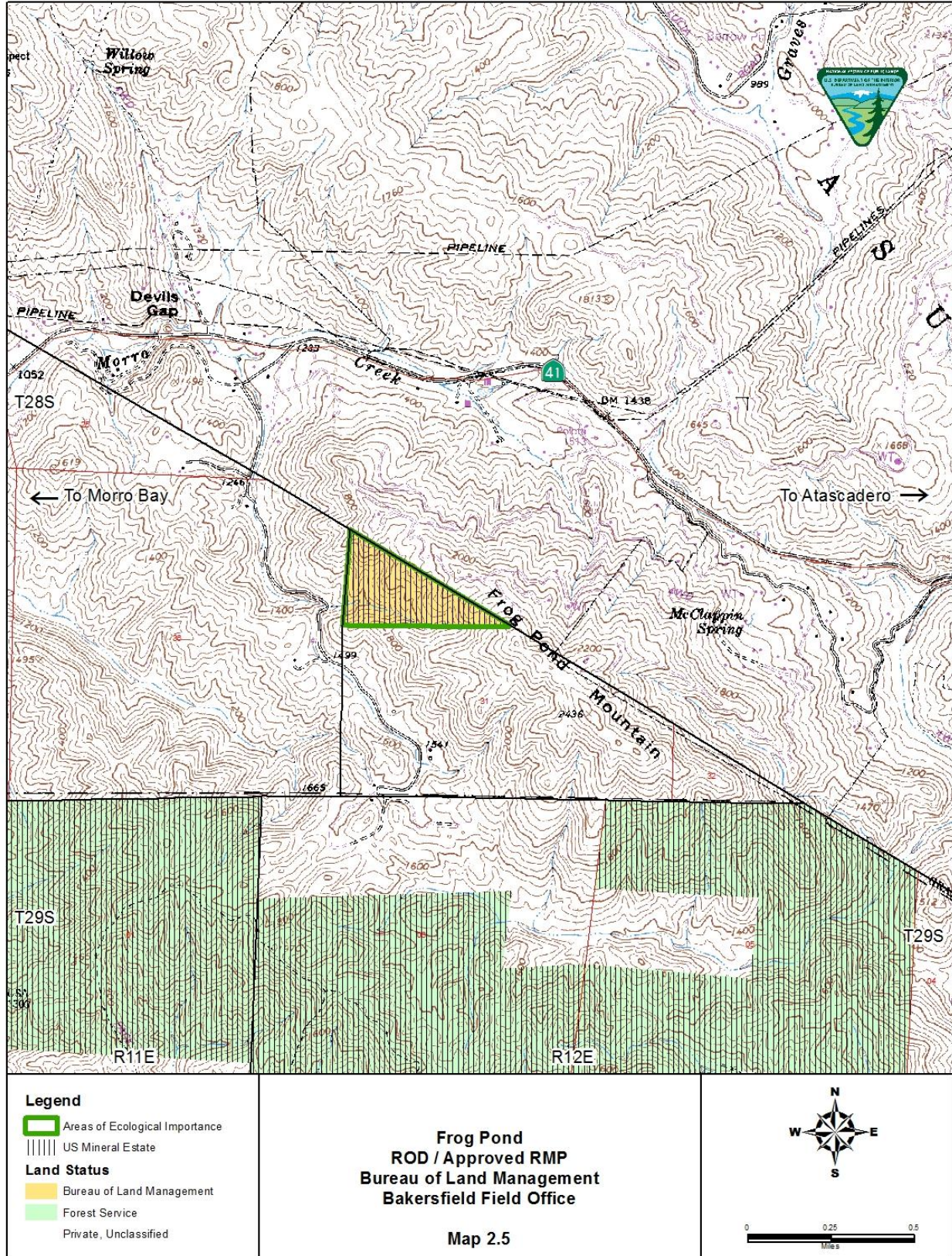
Map 2.3 – Conserved Lands



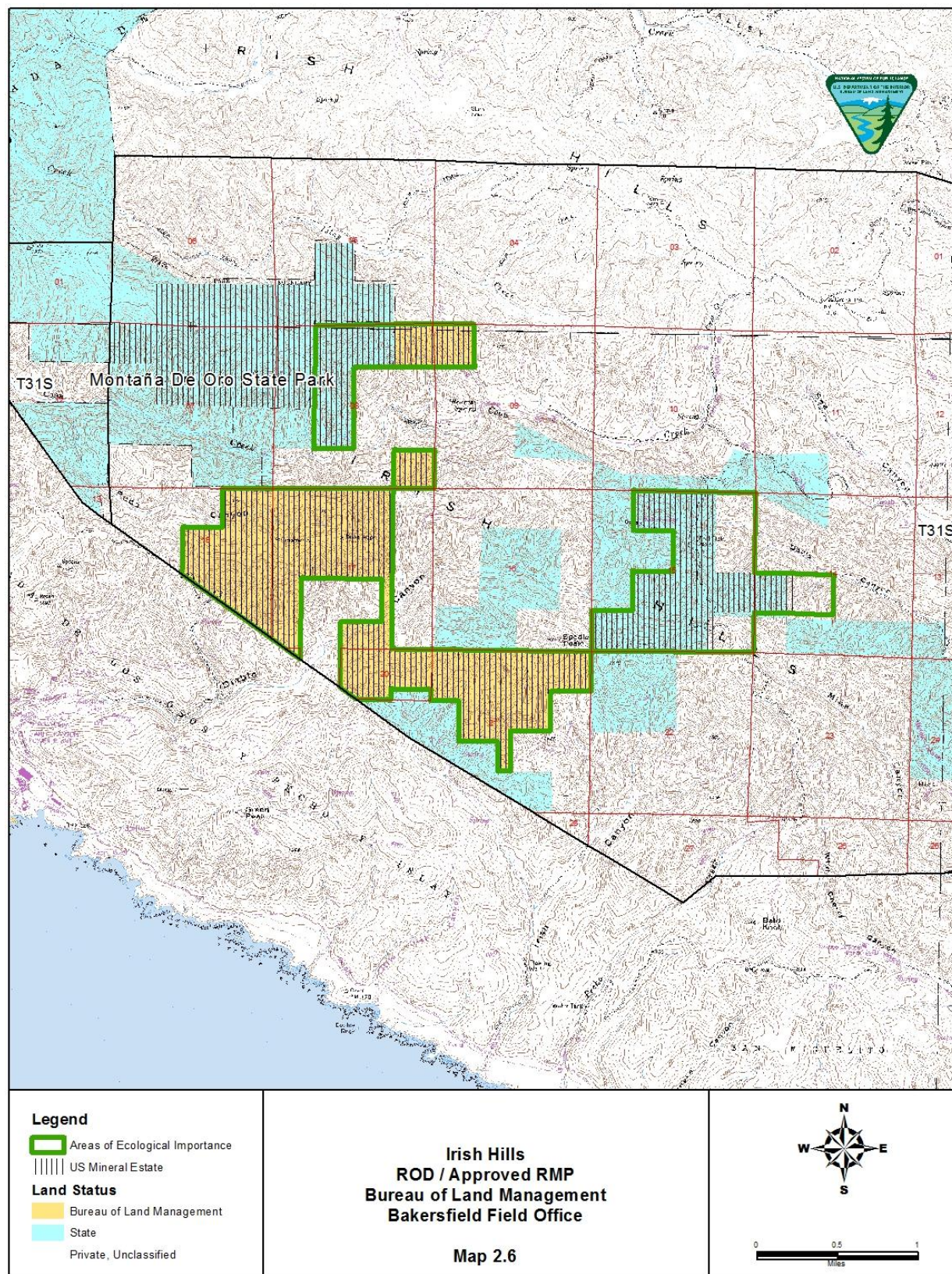
Map 2.4 – Deer Spring



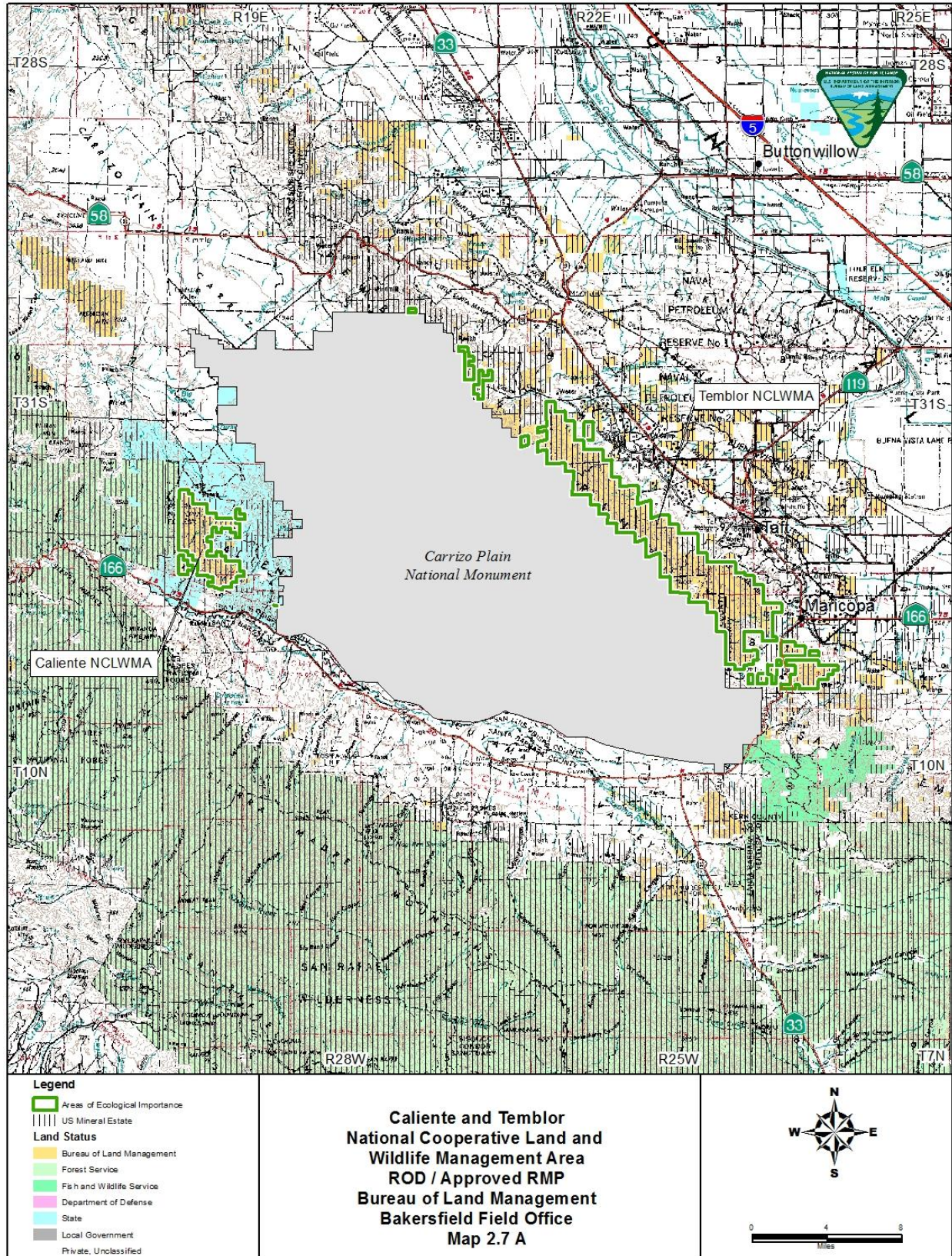
Map 2.5 – Frog Pond

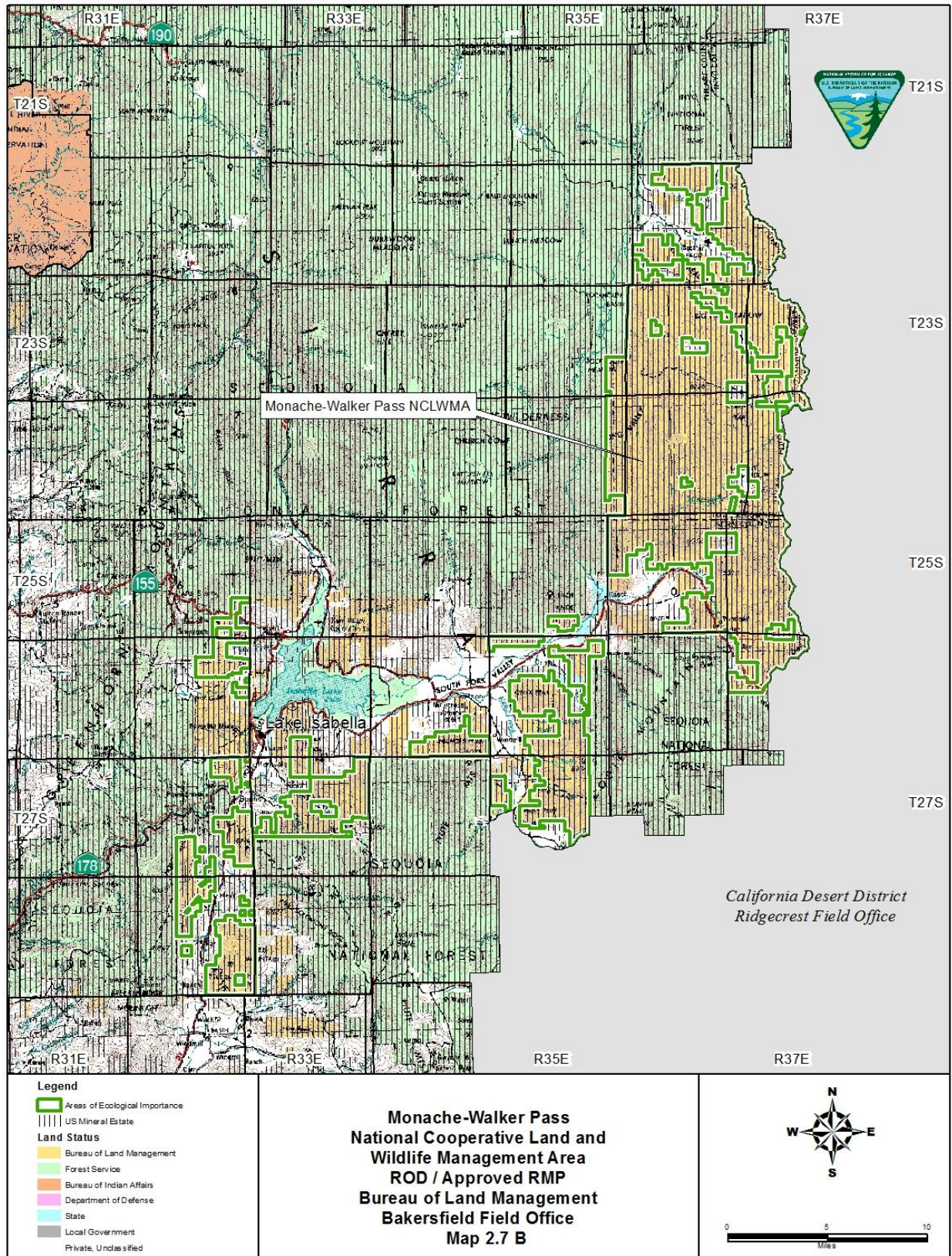


Map 2.6 – Irish Hills

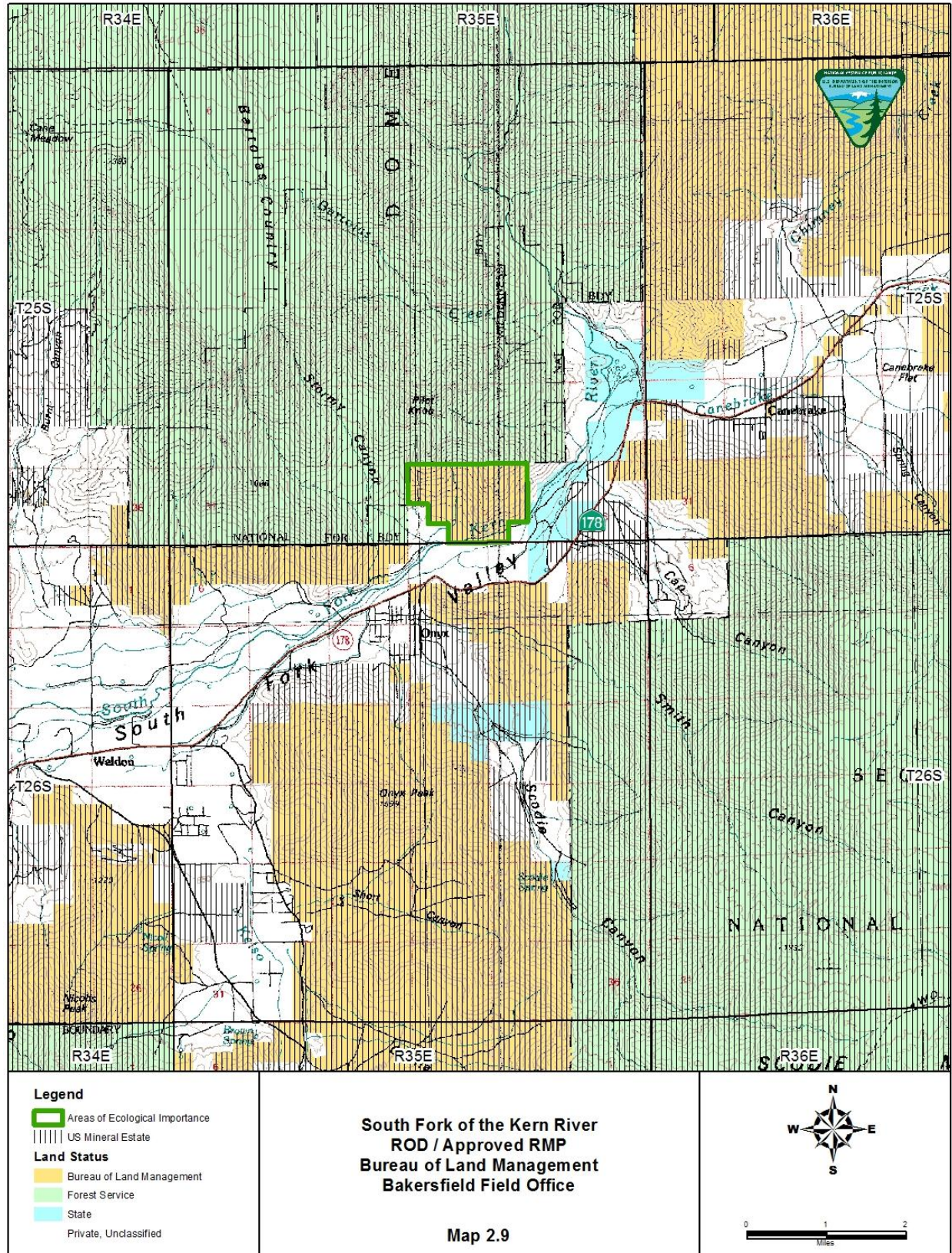


Map 2.7 – NCLWMAs (Caliente, Monache, Temblor)

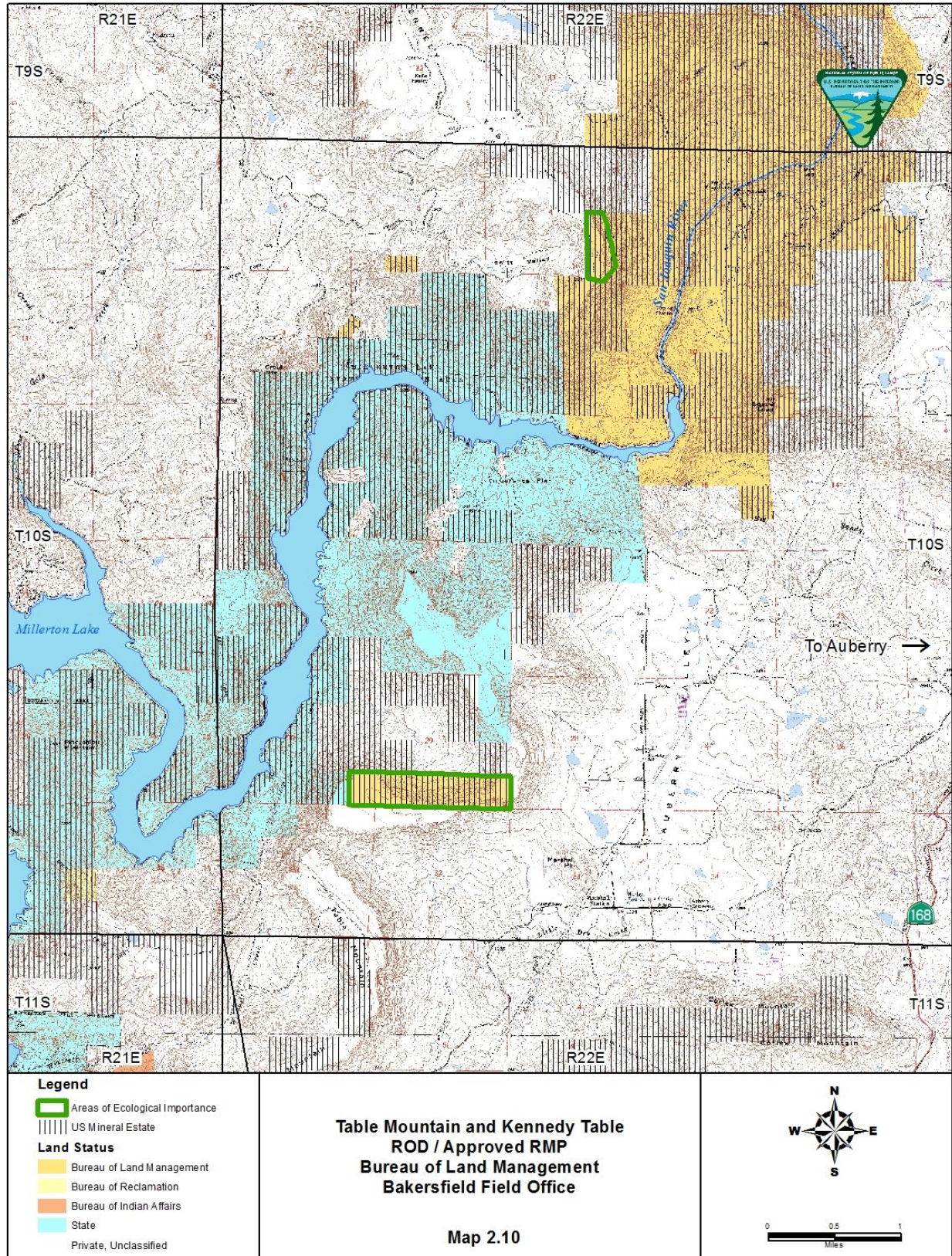




Map 2.9 – South Fork of the Kern River



Map 2.10 – Table Mountain and Kennedy Table



Legend

- Areas of Ecological Importance
- US Mineral Estate
- Land Status**
 - Bureau of Land Management
 - Forest Service
 - National Park Service
 - Department of Defense
 - State
 - Local Government
 - Private, Unclassified

**Tehachapi Linkage
ROD / Approved RMP
Bureau of Land Management
Bakersfield Field Office**

Map 2.11

0 5 10
Miles

2.3 Caves and Karst Resource

Goal

[CK-G-1] To secure, protect, and preserve significant caves and their associated cave resources on public lands for the perpetual use, enjoyment, and benefit of all people and to foster increased cooperation and exchange of information between the Bakersfield Field Office and those who utilize caves for scientific, education, or recreational purposes, in accordance with the Federal Cave Resources Protection Act of 1988.

Objectives

[CK-O-1] Through a designation of significance by the authorized officer and determination within the RMP, protect those known caves that possess significant cave resources, in accordance with 43 CFR 37.11(c).

[CK-O-2] Provide a management framework to protect significant cave and karst resources, in accordance with BLM policy and guidelines.

Decisions

[CK-D-1] All newly discovered caves or sections of caves within the RMP decision area will be studied and inventoried for significant values. On determination of significance, the cave will be classified as Class I (open), Class II (restricted) or Class III (closed), described below. Interim management (until the determination of significance is made) shall be as Class II to protect cave resources and may be restricted to permitted/authorized users.

Class I: These caves possess few or no sensitive features, their locations are generally widely known, and interpretive information may be available. These caves require no permit or notice to enter, but entry is recommended only for skilled and experienced cave users.

Class II: These caves may possess sensitive features, including cultural resources, pristine examples of geological formations, and sensitive biological resources. Restricted caves may be closed or further restricted to permitted and approved entry for a variety of reasons, including but not limited to: seasonal closures for the protection of sensitive biological resources, closures during periods of extreme public safety concerns (e.g., flooding), or restriction to permitted/authorized users only for scientific study, educational purpose and/or organized recreational experiences.

Class III: These caves are closed to protect sensitive cave resources. Entry requires specific authorization and may be provided only for scientific research or education.

[CK-D-2] Designate Granite Cave as a significant cave, based on its important and significant cave resources, which include both cultural and biotic resources, that are within and dependent on the cave. This cave will be managed as Class III to fully protect the cultural integrity of the area and its associated cave resources.

[CK-D-3] Designate Millerton Cave as a significant cave, based on its important and significant cave resources, including geological formations, resources of known cultural importance, biotic resources, and the potential for resource-based recreation. This cave will be managed as Class I to allow casual

recreational use; but it shall not be interpreted or otherwise advertised, other than through general area and/or geological interpretation.

[CK-D-4] All caves within ACECs whose importance and significance speaks directly to the protection of known or potential cave and karst resources shall be determined significant, in accordance with 43 CFR 37.11(e). The ACECs whose designation relates to cave and karst resources are Erskine Creek and Kaweah. Further investigation and study of these cave and karst resources may be required to assign management objectives and prescriptions. Interim management shall be as Class II to protect cave resources.

2.4 Cultural Resources

Goals

[CR-G-1] Identify, preserve, and protect significant cultural resources and ensure that they are available for appropriate uses by present and future generations (FLPMA, Section 103 (c), 201(a) and (c); National Historic Preservation Act, Section 110(a); Archaeological Resources Protection Act, Section 14(a).

[CR-G-2] Seek to reduce imminent threats and resolve potential conflicts from natural or human-caused deterioration, or potential conflict with other resource uses (FLPMA Sec. 103(c), NHPA 106, 110 (a) (2)) by ensuring that all authorizations for land use and resource use will comply with the NHPA Section 106.

[CR-G-3] Continue to provide Native Americans' access to public lands to conduct traditional cultural and religious practices.

Objectives

[CR-O-1] Manage evaluated cultural resources and those projected to occur within the decision area within one of six cultural use allocations: scientific use; conserve for future use; traditional use; public use; experimental use; or discharged from use, according to current BLM guidance (e.g., regulations, BLM policy, Manual sections 8100, and National and State Agreements).

[CR-O-2] Design BLM actions and authorizations to minimize impacts on cultural resources including places of traditional cultural and religious importance to Native Americans.

[CR-O-3] Identify places of religious and cultural importance to Native Americans and facilitate access to these locations for traditional use.

Decisions

[CR-D-1] Allocate evaluated cultural resources within the decision area as "scientific use" for study, determination of eligibility and appropriate recordation, pending assignment to another use category, with the exception of the following:

- (a) Allocate the Huasna Peak as Traditional Use.
- (b) Allocate the Keysville historic sites of Walker Cabin, Keyes Mine, and Keyes Cemetery as Conserve for Future Use, until such time as stabilization and restoration work allows for public use.
- (c) Allocate the Piedras Blancas Light Station ONA as Public Use.
- (d) Allocate all rock art sites, known and projected to occur, as Conserve for Future Use.
- (e) Allocate the Walker Pass NHL as Public Use.

[CR-D-2] Eliminate, relocate, or redesign uses following site specific NEPA that may result or have resulted in impacts on significant cultural resources including places of traditional cultural and religious importance to Native Americans.

[CR-D-3] Restore or stabilize cultural resources when they are damaged or deteriorating to the extent possible.

[CR-D-4] Identify lands containing significant cultural resources as open to fluid mineral leasing unless otherwise closed, subject to major constraints as described in the Controlled Surface Use (CSU) – Known Cultural Resources stipulation (see MM-D-1.1.14).

[CR-D-5] Establish, in accordance with 43 CFR 3809.31, the following Cultural Resource sites (1,170 acres) as special areas requiring a 15 day notification be given to the BLM prior to beginning any activity under the mining laws including; Casual Use, to allow the BLM to determine whether a notice or plan of operations must be submitted; Granite Cave, Huasna Peak, and South Lake Cultural Area.

Administrative Actions

State Historic Preservation Office/NHPA

- Continue to regularly communicate with the SHPO to share information and obtain technical advice on issues related to compliance with Sections 106 and 110 of the NHPA, in accordance with the BLM California State Protocol.

Tribal Consultation and Concerns

- Continue to consult with the Picayune Rancheria of the Chukchansi Indians, North Fork Rancheria of Mono Indians, Tule River Reservation, Cold Springs Rancheria, Big Sandy Rancheria, Table Mountain Rancheria, Santa Ynez Band of Chumash Indians, Tejon Indian Tribe, and the Tachi-Yokuts of the Santa Rosa Rancheria, and other interested Native American tribes to identify places of traditional importance and associated access needs. Develop measures for management and protection of such places that may be identified by tribes during the life of the RMP.
- Identify sacred areas in consultation with Native American tribes and, where practicable, limit land uses to those that do not conflict with ascribed values.
- Honor tribal requests to protect the confidentiality of sensitive information to the extent permitted by law.
- Provide opportunities for participation by Native American tribes in research and interpretation.
- Specific management prescriptions for sites allocated to the Traditional Use category will be developed in consultation with the Native American tribes to which they are culturally important.
- Restrict public information about the locations of sites that area not allocated to public use as allowed by law and regulation.

Interpretation and Education

- Seek out cooperative agreements with Native American tribes, museums, educational institutions, or volunteers to serve in such roles as tour guides to ensure that BLM interpretive programs provide accurate information on tours, signs, and brochures.

Travel Management Plan Monitoring and Maintenance

- Develop a cultural resources adaptive management monitoring strategy according to standards and process based upon intensity and type of OHV use, the density and sensitivity of cultural resources in the area and the potential for adverse indirect and cumulative impacts, including route proliferation.
- Through implementation of the Section 106 process, take measures to avoid, minimize, and mitigate adverse effects to sites from route usage. This may include data recovery, rerouting, reconstruction, new construction, limitations on vehicle type and time of season of travel, or closure.
- In order to more effectively manage route locations where intensive Class III inventory has not occurred, make efforts to develop historic property identification in accordance with best available methodologies, including Geographic Information System predictive modeling, systematic sampling inventories, and landscape level sensitivity analysis.

2.5 Lands with Wilderness Characteristics

Goal

[LWC-G-1] Ensure that adequate consideration and protection, where appropriate, is given to lands with wilderness characteristics outside of designated Wilderness and Wilderness Study Areas and that these areas are managed so as not to impair these characteristics.

Objective

[LWC-O-1] Provide a management framework to protect wilderness characteristics as an integral component of multiple use management of Planning Area BLM lands when it is consistent with other goals and objectives of the RMP.

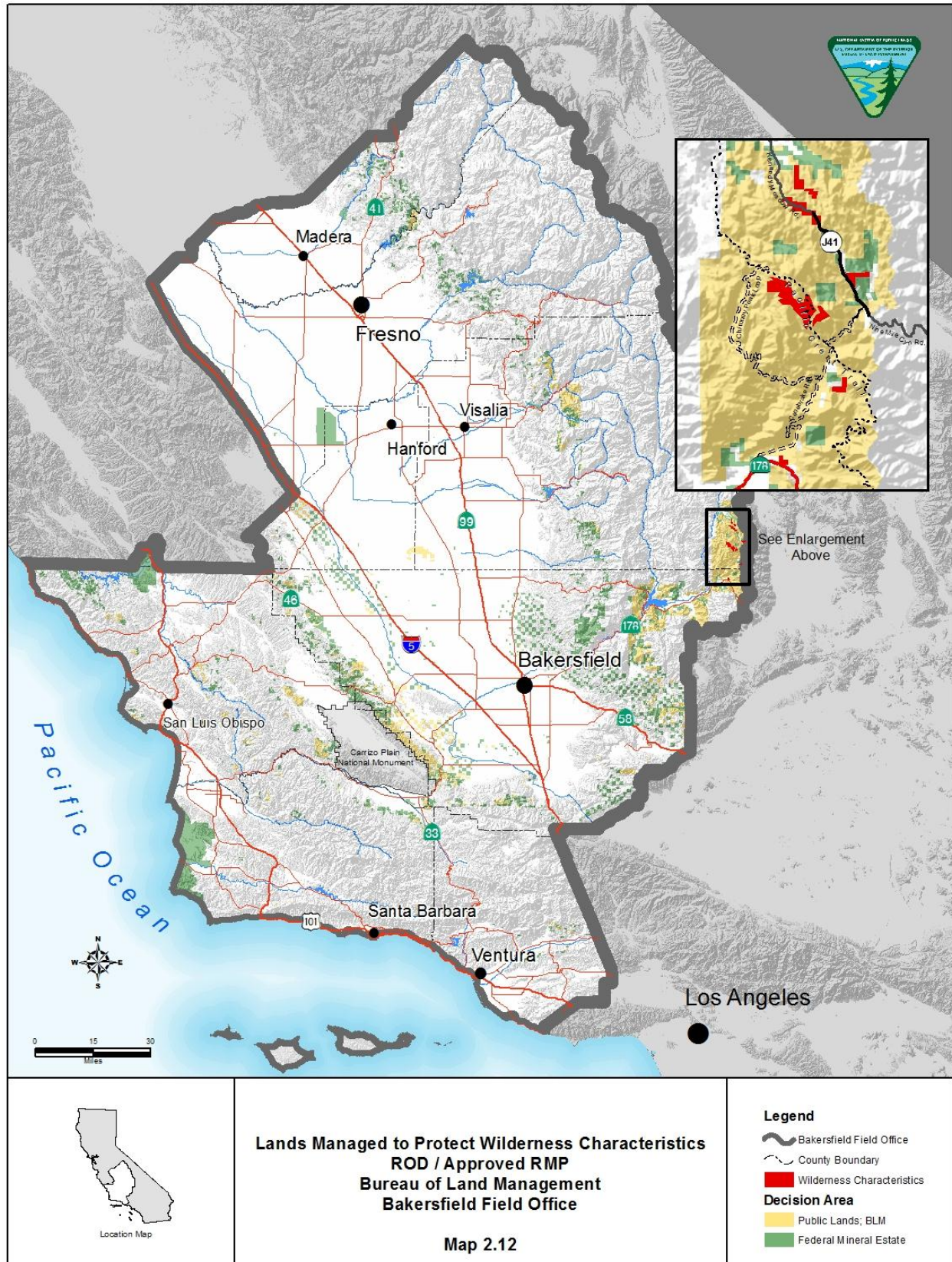
Decisions

[LWC-D-1] Manage the following areas (3,470 acres as shown on (Map 2.12) for the protection of wilderness characteristics: Bear Mountain, Big Pine Meadow, Chappell D Parcel, Edgar Ranch West, Lamont Meadow Parcels, and Roszewska Property.

[LWC-D-2] Establish prescriptive management for the protection of wilderness characteristics as follows:

- (a) Identify as closed to mineral leasing;
- (b) Identify as closed to mineral material sales;
- (c) Identify as Rights-of Way avoidance areas for all ROWs;
- (d) Designate as OHV Closed areas;
- (e) Designate as VRM Class II, unless a more stringent overlapping designation (e.g., WSR or PCNST Corridor) exists.
- (f) Livestock grazing and the activities and facilities that support a grazing program may be permitted to continue at the same level and degree after initial authorization;
- (g) Prohibit new structures unrelated to preserving wilderness characteristics; and
- (h) Retain in Federal ownership.

Map 2.12 – Lands Managed to Protect Wilderness Characteristics



2.6 *Paleontological Resources*

Goal

[PR-G-1] Identify, manage, and protect paleontological resources for scientific research, educational purposes, and public use.

Objective

[PR-O-1] Identify, manage, and protect important paleontological resources.

[PR-O-2] Foster public awareness and appreciation of paleontological resources through educational outreach programs.

Decisions

[PR-D-1] Implement measures to protect paleontological resources from inadvertent damage or destruction through:

- (a) Avoidance,
- (b) Fencing,
- (c) Stabilization,
- (d) Collection or excavation and deposit in a museum repository,
- (e) Interpretation, or
- (f) Administrative closure.

[PR-D-2] Identify areas at risk of damage from illegal activities and implement management to discourage those activities.

[PR-D-3] Ensure that site-specific NEPA (which may include a field inventory and fossil specimen recovery) implements the PFYC as a standard part of review for all surface-disturbing projects throughout the Decision Area.

[PR-D-4] Minimize or prevent human-caused damage to paleontological resources through educational and interpretive outreach programs focusing use on common invertebrate and plant fossils.

[PR-D-5] Accommodate permit requests for scientific research by qualified individuals or institutions.

2.7 *Soil Resources*

Goal

[SR-G-1] Soils exhibit functional biological and physical characteristics that are appropriate to soil type, climate, and land form.

Objective

[SR-O-1] Manage soils to meet or exceed the Soil Standard of Rangeland Health (**LG-D-5**), as indicated by ground or plant cover, diversity of plant species, minimal evidence of accelerated wind and water erosion and the presence of the biological soil crusts where appropriate.

Decisions

[SR-D-1] Design BLM programs and management activities and authorize projects to minimize impacts on soil productivity by implementing BMPs (Appendix 3). Specifically minimize disturbance of the following soils types:

- (a) Serpentine Soils;
- (b) Soils supporting “Biological Crusts” – hosting communities of cyanobacteria, mosses, lichens and liverworts;
- (c) Soils highly susceptible to erosion or compaction; and
- (d) Soils hosting high levels of Valley Fever spores.

2.8 Visual Resources

Goal

[VR-G-1] Public lands demonstrate a range of visual resource values that allow for development and provide opportunities for scenic appreciation.

Objective

[VR-O-1] Utilize visual resource management classes for all public lands within the decision area to preserve and enhance scenic quality for present and future generations.

[VR-O-2] Ensure that projects outside the CPNM boundary but within its viewshed comply with the visual resource management objectives as described in the CPNM RMP (BLM 2010b).

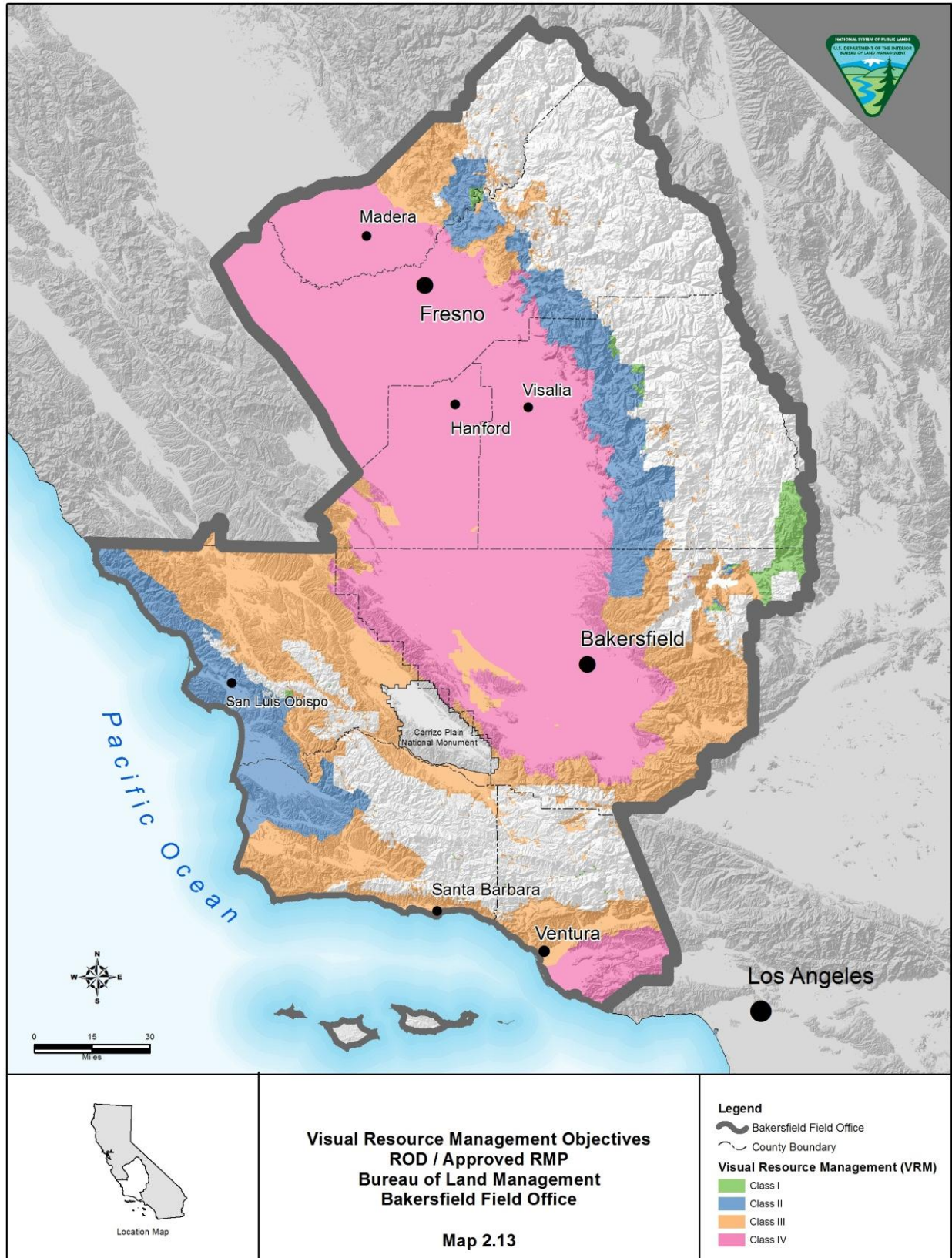
Decisions

[VR-D-1] Designate VRM classes for the Decision area as shown on Map 2.13 and summarized by the following;

- (a) Class I: 175,340 acres
- (b) Class II: 175,132 acres
- (c) Class III: 575,738 acres
- (d) Class IV: 238,840 acres

Administrative Actions

- For all surface-disturbing projects or activities, regardless of size of potential impact, incorporate visual design considerations, consistent with the Visual Resource Contrast Rating Manual H-8431-1, to meet VRM class objectives of the area.

Map 2.13 – Visual Resource Management Objectives

2.9 Water Resources

Goal

[WR-G-1] Federal actions promulgate the objectives of the Clean Water Act, Safe Drinking Water Act, and all other applicable water quality requirements.

Objectives

[WR-O-1] Manage water resources to meet or exceed the Standards for Rangeland Health (LG-D-5) by maintaining the existing quality and beneficial uses of water, protecting them where they are threatened, and restoring them where they are currently degraded.

[WR-O-2] Manage riparian/wetland vegetation, structure, and diversity and stream channels and floodplains so that they are functional and achieving physical and biological objectives.

Decisions

[WR-D-1] Design BLM program and management activities and authorize projects to meet water quality standards and maintain beneficial uses by implementing such measures as State approved BMPs (Management Measures for Polluted Runoff, see Appendix 3) within the Central Coast, South Coast and Tulare basins.

[WR-D-2] Implement management actions to reduce non-point source pollution contributing to impaired water quality in any basin or segment listed as impaired in accordance with Section 303(d) of the Clean Water Act (e.g., a segment of Salinas River).

[WR-D-3] Implement BMPs for riparian/wetland health for maintenance of vegetation cover and diversity, and the physical stability of stream banks (Appendix 3).

[WR-D-4] Applications for water developments or diversions on public lands would be approved only if resource objectives including wildlife, riparian, and livestock grazing needs, have been met.

[WR-D-5] Complete State water rights reporting requirements to maintain existing licenses and continue water diversion and use authorizations. Apply for new licenses and use authorizations as appropriate.

2.10 Wildland Fire Ecology and Management

Goals

[WF-G-1] Firefighter and public safety is the single, overriding priority in every fire management activity.

[WF-G-2] Minimize suppression costs while considering firefighter and public safety, benefits, and human and resource values to be protected.

[WF-G-3] Recognize fire as an essential ecological process and use wildland fire (both planned and unplanned ignitions) to restore or sustain ecosystem health, where appropriate.

Objectives

[WF-O-1] Maintain areas in all Fire Management Units (FMUs) that are currently in Fire Regime Condition Class 1 and manage to improve conditions in Class 2 and Class 3 areas.

[WF-O-2] Prevent, to the extent possible, the movement of wildfires from the wildlands into the Wildland Urban Interface (WUI) area, and out the WUI area into the wildlands.

Decisions

[WF-D-1] Conduct fire management planning, preparedness, prevention, suppression, fire use, restoration and rehabilitation, monitoring and education on an interagency basis with the involvement of cooperators and partners.

[WF-D-2] Identify the following three geographic areas as suitable for the use of wildland fire for resource benefit (see Map 2.14):

- (a) South Sierra Fire Management Unit
- (b) Domeland Fire Management Unit
- (c) Portion of the Three Rivers Fire Management Unit protected by the National Park Service

[WF-D-3] Take suppression actions in the remainder of the Decision Area, commensurate with human and natural resource values at risk. Where possible, use existing natural and human-made fire control barriers, such as roads, trails, fuelbreaks and rock outcroppings rather than constructing new firelines.

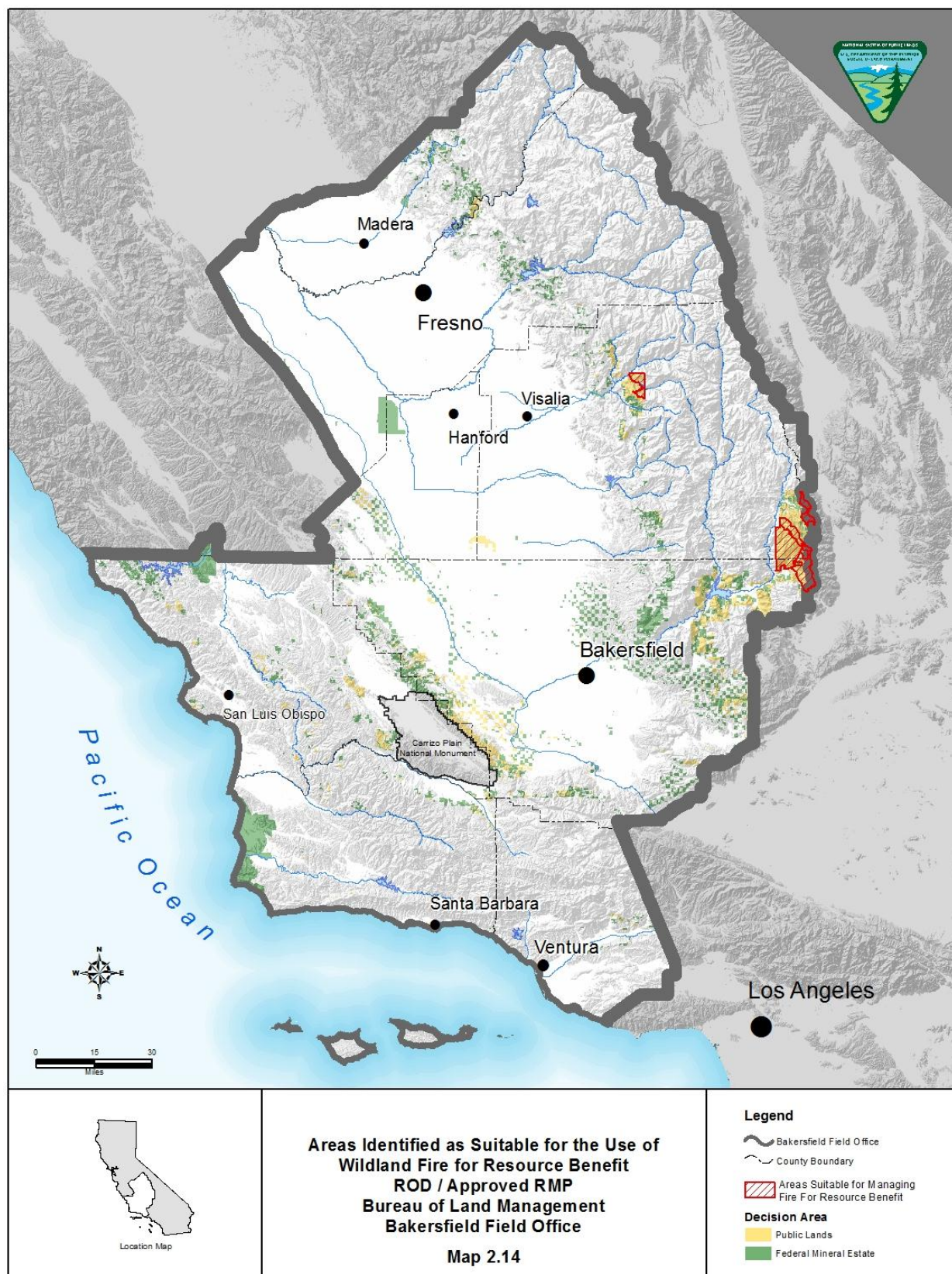
[WF-D-4] Use a decision support process to analyze and document fire suppression strategies and tactics. Suppression actions may not necessarily be limited to those that result in the fewest number of acres burned, after consideration of firefighter and public safety, values at risk, resource protection needs and current and expected conditions at the time of the fire.

[WF-D-5] Use Minimum Impact Suppression Tactics (MIST) or other modified suppression techniques when suppressing fires in sensitive areas, including but not limited to: Wilderness, Wilderness Study Areas, lands managed for wilderness characteristics, culturally significant areas and ACECs. Fire managers will consult a resource advisor or archaeologist to ensure resource protection needs are addressed.

[WF-D-6] Assess all wildland fire areas for post-fire Emergency Stabilization and Rehabilitation (ESR) needs and submit ESR plans for funding. Implement approved activities in a timely manner.

[WF-D-7] Participate in local Fire Safe Councils or other community organizations to develop and implement collaborative fire mitigation and prevention strategies with communities at risk, and coordinate on the preparation of Community Wildfire Protection Plans.

[WF-D-8] Implement, as appropriate, the full range of wildland fire and fuels management practices, including prescribed fire, mechanical, chemical, biological, and cultural treatments that will support hazardous fuels reduction in coordination with vegetation and habitat management objectives and resource protection needs.

Map 2.14 – Areas Identified as Suitable for the Use of Wildland Fire for Resource Benefit

Resource Uses

2.11 Comprehensive Trail and Travel Management

Goal

[CTTM-G-1] Improve access to, and recreational opportunities on, public lands that complement the character of each geographic zone and the surrounding regions.

Objectives

[CTTM-O-1] Provide reasonable, safe, and environmentally sound access to visitors, local residents, licensed and permitted activities, and property owners through coordination and collaboration on travel systems with other agencies, state and local governments and interested stakeholders.

[CTTM-O-2] Reduce or halt proliferation of motorized and non-motorized routes.

[CTTM-O-3] Maintain an accurate route inventory for management purposes, and for the production of both general and recreation specific Transportation Management Network maps.

[CTTM-O-4] Manage OHV use to protect environmental resources, promote public safety, and provide OHV use opportunities where appropriate. Administratively designate the specific areas on public lands on which the use of OHVs is, and is not permitted.

Decisions

[CTTM-D-1] Delineate Travel Management Areas (TMAs) and associated modes of access and travel, as follows;

- (a) **Primitive TMA** (approximately 139,030 acres): Primarily recreational traffic, access essentially cross country, with few designated and maintained trails. Area is entirely restricted to non-motorized and non-mechanized modes of transport. Aircraft take-off and landing, except emergency, is prohibited.
- (b) **Keyville TMA** (approximately 10,880 acres): Primarily recreational traffic, no area-wide mode of transport restrictions, motorized and mechanized use is limited to routes designated for these uses. Over time specific routes may be redesignated to limit to specific modes of transport in order to maintain recreational opportunity and experience.
- (c) **Temblor TMA** (approximately 22,870 acres): Primarily recreational traffic, no area-wide mode of transport restrictions, motorized and mechanized use is limited to routes designated for these uses. Permits for motorized and mechanized competitive events will not be issued. Over time specific routes may be redesignated to limit to specific modes of transport in order to maintain recreational opportunity and experience.
- (d) **Intensive TMA** (approximately 40,030 acres): Primarily industrial/commercial traffic, all travel on designated routes. No area-wide mode of transport restrictions. Implement a program of route reduction addressing route construction, use, and abandonment (including restoration) based on a balance between industrial needs and environmental concerns.
- (e) **Extensive TMA** (approximately 195,740 acres): General traffic from multiple uses, motorized and mechanized use limited to routes designated for these uses. No area-wide mode of transport restrictions.

[CTTM-D-2] Designate all public lands in accordance with 43 CFR 8342 as either open, limited, or closed to off-road vehicles, as defined in 43 CFR 8340.0-5(f), (g), and (h) and shown on Map 2.15, the following OHV areas:

- (a) Open: 0 acres
- (b) Closed: 142,940 acres
- (c) Limited: 261,140 acres

All designations are based on the protection of the resources of the public lands, the promotion of the safety of all the users of the public lands, and the minimization of conflicts among various uses of the public lands; and in accordance with the criteria listed in CTTM-D-5.

[CTTM-D-3] Close areas where off-highway vehicles are causing or will cause unacceptable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources to the type(s) of vehicle causing the adverse effect until the adverse effects are eliminated and measures implemented to prevent recurrence.

[CTTM-D-4] Define primary route designations and limitations as follows:

- (a) **Motorized:** a route allowing all modes of transport, motorized vehicles including, standard (street legal) passenger vehicles and OHVs (motorcycles, ATVs, jeeps, and specialized vehicles etc.). All other modes of transport may use these routes unless restricted by a secondary designation.
- (b) **Non-motorized:** a route allowing modes of transport that are not motor driven (regardless of motor type e.g., gas, diesel, electric). Allowable modes of transport include, moving by foot, stock or pack animal, non-motorized boat (kayak, raft etc.), or mechanical vehicle such as a bicycle.
- (c) **Non-mechanized:** a route allowing only travel by natural means, such as by foot, stock or pack animal, except for approved, non-motorized access devices covered under the Americans with Disabilities Act.
- (d) **Transportation Linear Disturbance:** prohibiting all types and modes of transport (including all public, authorized and administrative uses); these linear travel features can be decommissioned and restored. This does not impact some modes of transport's ability to legally travel cross-country.

[CTTM-D-5] Apply and document the application of the following criteria in route designation including the criteria defined in 43 CFR 8342.1;

- (a) [Designated] trails shall be located in a manner to minimize impacts to physical resources (soils, watershed, vegetation, air, and other resources) and to prevent impairment of wilderness suitability;
- (b) [Designated] trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats; and
- (c) [Designated] trails shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreation uses.

- (d) [Designated] areas and trails shall not be located in officially designated wilderness areas or primitive areas. Areas and trails shall be located in natural areas only if the authorized officer determines that off-road vehicle use in such locations will not adversely affect their natural, aesthetic, scenic or other values for which the areas are established.

[CTTM-D-6] Consider, and document the application of, in addition to the previously identified criteria, the following in all route designations (including re-designations);

- (a) Environmental conditions, such as: soil stability, important wildlife habitat, special status species habitat, proximity to riparian areas or 303(d) streams, and visual resources.
- (b) User conflicts, such as: motorized versus non-motorized and motorized or mechanized versus non-mechanized. Such conflicts must be actual conflicts, rather than perceived conflicts, and appropriately documented.
- (c) Administrative purposes, such as: wildland fire suppression activities, safety, and resource management and permitted activities.
- (d) Public purposes, such as: accessing public or private land, destinations for specific activities, and types of desired use (motorized, mechanized, non-motorized, or non-mechanized).
- (e) Route, mode-of-transport and size limitations, such as: > 50-inch wheel base (full size vehicles), < 50-inch wheel base (all-terrain vehicles), single-track vehicles (motorcycles or mountain bikes), and equestrian or pedestrian only trails.

[CTTM-D-7] Apply and document the application of the following principles when making route designation modifications:

- (a) Require the opportunity for public involvement throughout the travel management process ;
- (b) Coordinate route designations with individual stakeholders, user groups, tribes, agencies and local governments;
- (c) Document and record route designation changes appropriately; and
- (d) Provide opportunity for public review and comment on route designation changes.

[CTTM-D-8] Implement the following guidelines for management and maintenance of the travel network:

- (a) Designate routes within newly acquired properties, rights-of-way, and easements at the time of, and in conjunction with, the acquisition;
- (b) Provide designations for newly constructed, modified, or realigned routes and routes missed by the 2009 Digital Inventory.
- (c) Designate routes associated with new authorizations in conjunction with the normal application process and approval. As existing authorizations are renewed, their designation may be altered accordingly. These redesignations would be documented in the associated NEPA documentation, and amended in the route database and GIS. Information on new and redesignations will be available to the public;
- (d) Address route redesignations as physical route conditions change (erosion, washout, etc.);
- (e) Allow for the redesignation of routes as a result of specific requests, subject to site specific analysis (NEPA) and appropriate public involvement; and

- (f) Encourage authorized users to evaluate their transportation network needs and submit a transportation plan to address those needs at an appropriate scale (e.g. Oil Field, lease, portion of lease, etc.).

[CTTM-D-9] Establish protocols to effectively monitor and gather data on route usage, route condition, and noncompliance with designations. These protocols include:

- (a) Identification of high traffic routes and areas;
- (b) Annual monitoring of a random selection of routes to gauge effectiveness of travel management decisions and identify resource conflicts; and
- (c) Annual review of a minimum of 10% of designated routes, and appropriate updates to the existing route inventory.

Key Implementation Decisions

[CTTM-I-1] Define secondary route designations as the following (note additional secondary route designations may be implemented by various activity level plans and site specific actions):

- (a) **Authorized Use:** a route restricted to use by authorized users including: permittees, lessees, and any other form of authorization from the BLM for a specific route. Mode of travel restrictions may be applied in the specific BLM authorization.
- (b) **Street Legal Vehicles:** a route restricted to use by vehicles licensed (by any state) for use on any highway.
- (c) **Pedestrian:** a route restricted to use by pedestrians (walking/hiking) only.

[CTTM-I-2] Designate roads and/or trails as identified on Travel Management Network Maps (Map 2.16) and described in the Route Designation Table (Table 6 in Appendix 2), as summarized by the following mileages:

- (a) Motorized: 1,350 miles
- (b) Motorized - Street Legal Only: 77 miles
- (c) Motorized – Authorized: 183 miles
- (d) Non-motorized: 35 miles
- (e) Non-mechanized: 41 miles
- (f) Non-Mechanized- Pedestrian Only: 4 miles
- (g) Transportation Linear Disturbances: 285 miles

[CTTM-I-3] Ensure existing use of public lands in the Temblor area does not result from inappropriate travel across private property through the acquisition of legal public access routes to the Temblor area. These routes should be numerous enough to allow for reasonable access from the local communities while still facilitating management of visitors through a few key access points. Furthermore, access routes should give consideration to both licensed and “green sticker” vehicles.

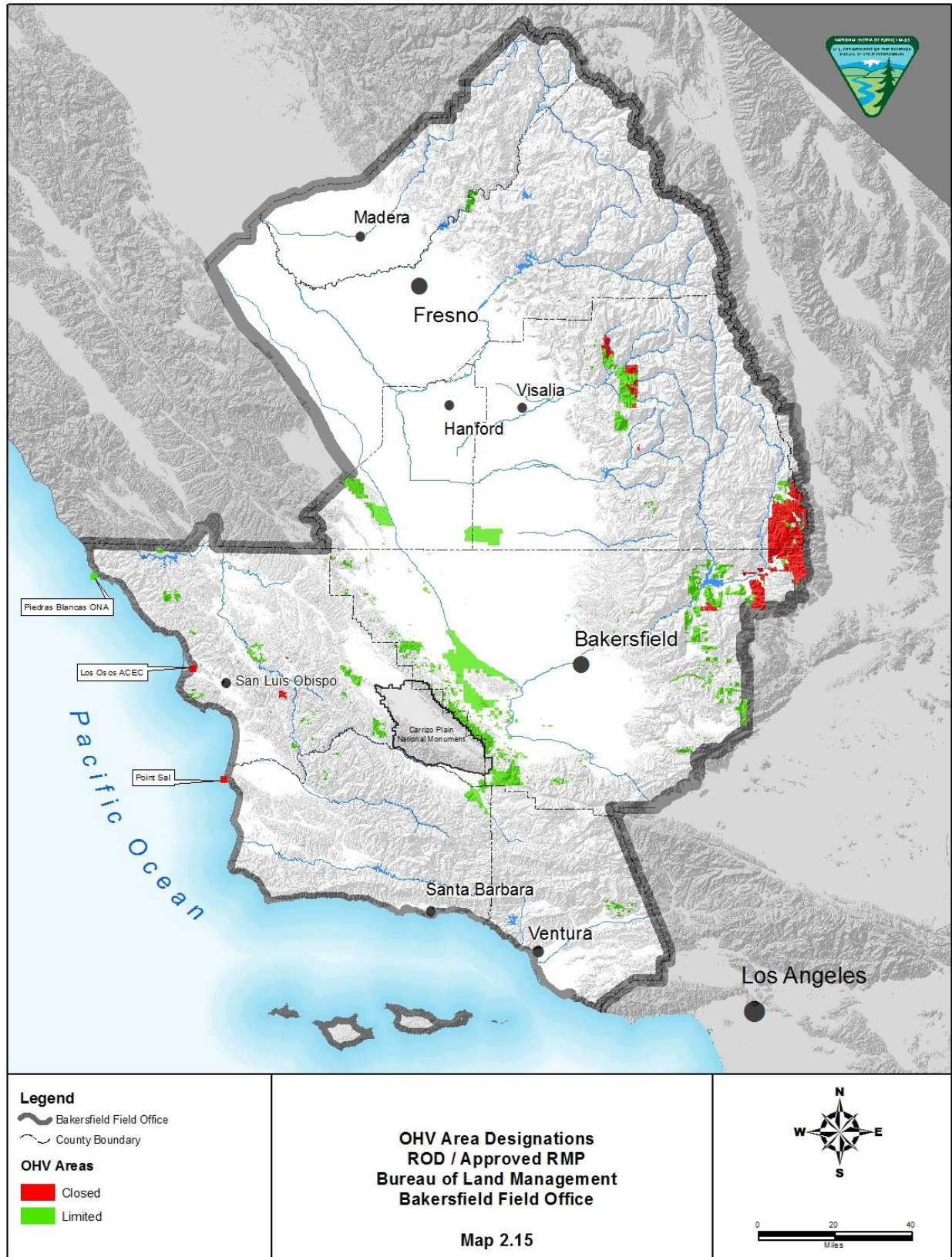
[CTTM-I-4] Coordinate current and future route designations/re-designations within the Temblor area with the Carrizo Plain National Monument to ensure appropriate connectivity across the monument boundary to Temblor Ridge Road.

[CTTM-I-5] Strive to acquire legal public access across private property for Rocky Gorge and Tombstone Ridge trails within the Keysville SRMA.

Administrative Actions

- Establish relationships and enter into agreements with local OHV groups and other groups and communities for long-term route maintenance and community support.
- Participate in regional or municipal transportation planning and promote appropriate legal access consistent with the land use plan.
- Casual and authorized recreational uses of the travel system will be addressed when authorizing actions. Where major arteries in the recreational route network will be truncated or considerably altered by the authorization, mitigation will be required.
- Develop brochures, maps, access guides, and information sheets to disseminate targeted recreation opportunity information to the public.

Map 2.15 – OHV Area Designations



These maps are oversized and do not fit in the body of this document. They are found in the map packet on the back cover of the printed version and hyperlinked from the list below in the electronic version of this document.

Map 2.16 – Travel Management Network Maps

- A – Lake Isabella
- B – Madera Area
- C – Kings/Tulare Area
- D – Atwell Island
- E – Kern Southwest
- F – Ventura Area
- G – Central San Luis Obispo County
- H – Santa Barbara Area
- I – West San Luis Obispo County

2.12 Lands and Realty

Goal

[LR-G-1] Provide lands, interests in land, and authorizations for public and private uses while maintaining and improving resource values and public land administration to the extent consistent with federal law.

Objectives

[LR-O-1] Meet other resource objectives through retention and/or land tenure adjustments.

[LR-O-2] Meet public, private, and Federal agency needs for realty-related land use authorizations and land withdrawals, including those authorizations necessary for wind, solar, biomass, and other forms of renewable energy development, to the extent consistent with federal law.

[LR-O-3] Increase public access to public lands when consistent with other resource objectives.

[LR-O-4] Resolve unauthorized uses or occupancy to assure consistency with RMP goals and objectives.

Land Tenure

Decisions

[LR-D-1.1] Disposal of the following areas is not deemed to serve national interest; components of the NCL; lands managed for wilderness characteristics; Land and Water Conservation Fund (LWCF) acquisitions; leased fluid mineral estate; mineral estate with significant fluid mineral potential⁶; and SRMAs.

⁶ Retention of mineral estate does not preclude disposal of public lands surface.

[LR-D-1.2] Retain all lands and interest in lands in federal ownership unless disposal is deemed to serve national interest. Disposal is deemed to serve national interest if the following criteria are determined to be met through site specific investigation and, therefore, would be considered available for disposal:

- (a) Disposal of lands would promote effective administration;
- (b) Lands do not contain important cultural, biological, recreational, or other resource values, the loss of which cannot be adequately mitigated;
- (c) Lands do not contribute to a regional conservation strategy or habitat linkage;
- (d) Lands do not have overriding public values or interests; and
- (e) Lands do not represent substantial public investments.

[LR-D-1.3] Lands considered available for disposal that meet the following criteria as described in section 203(a) of FLPMA may be sold under direct, competitive, or modified sale:

- (a) such tract because of its location or other characteristics is difficult and uneconomic to manage as part of the public lands, and is not suitable for management by another department or agency; or
- (b) such tract was acquired for specific purpose and the tract is no longer required for that or any other purpose; or
- (c) disposal of such tract will serve important public objectives, including but not limited to, expansion of communities and economic development, which cannot be achieved prudently or feasibly on land other than public land and which outweigh other public objectives and values, including, but not limited to, recreation and scenic values, which would be served by maintaining such tract in federal ownership.

[LR-D-1.4] Seek acquisition of lands and interest in lands meeting the following criteria from willing grantors;

- (a) Demonstrate high cultural, biological or other natural resource values, important recreational opportunities or mineral potential;
- (b) Located within specially designated areas (e.g., ACECs, Components of the NCL, SRMAs);
- (c) Provide access to existing parcels of public lands; and
- (d) Promote effective administration.

[LR-D-1.5] Determine the public lands (61,440 acres) and federal mineral estate (337,440 acres) shown on Map 2.17 as available for consideration of a disposal action (sale, exchange, or other means) in so much that these lands meet the “isolated, difficult or expensive to manage, or are needed for community expansion” disposal criteria contained in FLPMA Section 203(a). However, site-specific investigation to ascertain whether a specific parcel meets the disposal criteria outlined in this RMP would still be required prior to any disposal action being taken.

[LR-D-1.6] Manage newly acquired land² to meet the same goals and objectives, and under the same allocations and management decisions, as surrounding public lands or in a manner consistent with the terms of acquisition, to the extent consistent with federal law.

⁷ Acquisition is subject to conformance with underlying statutory authority and DOJ title standards.

Land Use Authorizations

Decisions

[LR-D-2.1] Continue the designation of existing and potential utility corridors delineated in the Western Regional Utility Corridor Study of 1993 as right-of-way corridors.

[LR-D-2.2] Identify 142,630 acres as available for utility scale renewable energy rights-of-way. In addition, 285,460 acres would be available for all types if rights-of-way.

[LR-D-2.3] Utility-scale renewable energy rights-of-way will be excluded on 262,340 acres, including: all ACECs, the Piedras Blancas ONA, SRMAs, VRM Class I and II, designated Wilderness areas and the PCNST corridor. Of this acreage, all other types of rights-of-way will be excluded on 118,860 acres: designated Wilderness and the PCNST corridor. (Map 2.18 and Map 2.19)

[LR-D-2.4] Proposed rights-of-way will be avoided on 103,510 acres, except where a specific type of right-of-way is excluded (**LR-D-2.3**): all ACECs, WSAs, lands managed for wilderness characteristics, the Piedras Blancas ONA, and suitable Wild and Scenic River corridors. (Map 2.18 and Map 2.19).

[LR-D-2.5] Utility-scale renewable energy rights-of-way will be avoided on a total of 31,300 acres of: Tehachapi Linkage area of ecological importance (27,290 acres), WSAs (1,860 acres), and lands managed for wilderness characteristics (2,150 acres). (Map 2.18).

[LR-D-2.6] Apply resource specific, Best Management Practices (such as BMPs for VRM, air, soil, water, biological resources, etc., see Appendix 3) as terms and conditions to ROW authorizations based on site-specific NEPA analysis to minimize environmental impacts.

Key Implementation Decisions

[LR-I-2.1] Commercial filming permits that are routine in nature (such as less than 14 days in duration and less than 50 people, use designated routes or previously disturbed areas, effect no present traditional cultural values) will be issued pursuant to FLPMA, where no surface disturbance is proposed, and where there will be minimal to no impacts on resources.

Withdrawals

Decisions

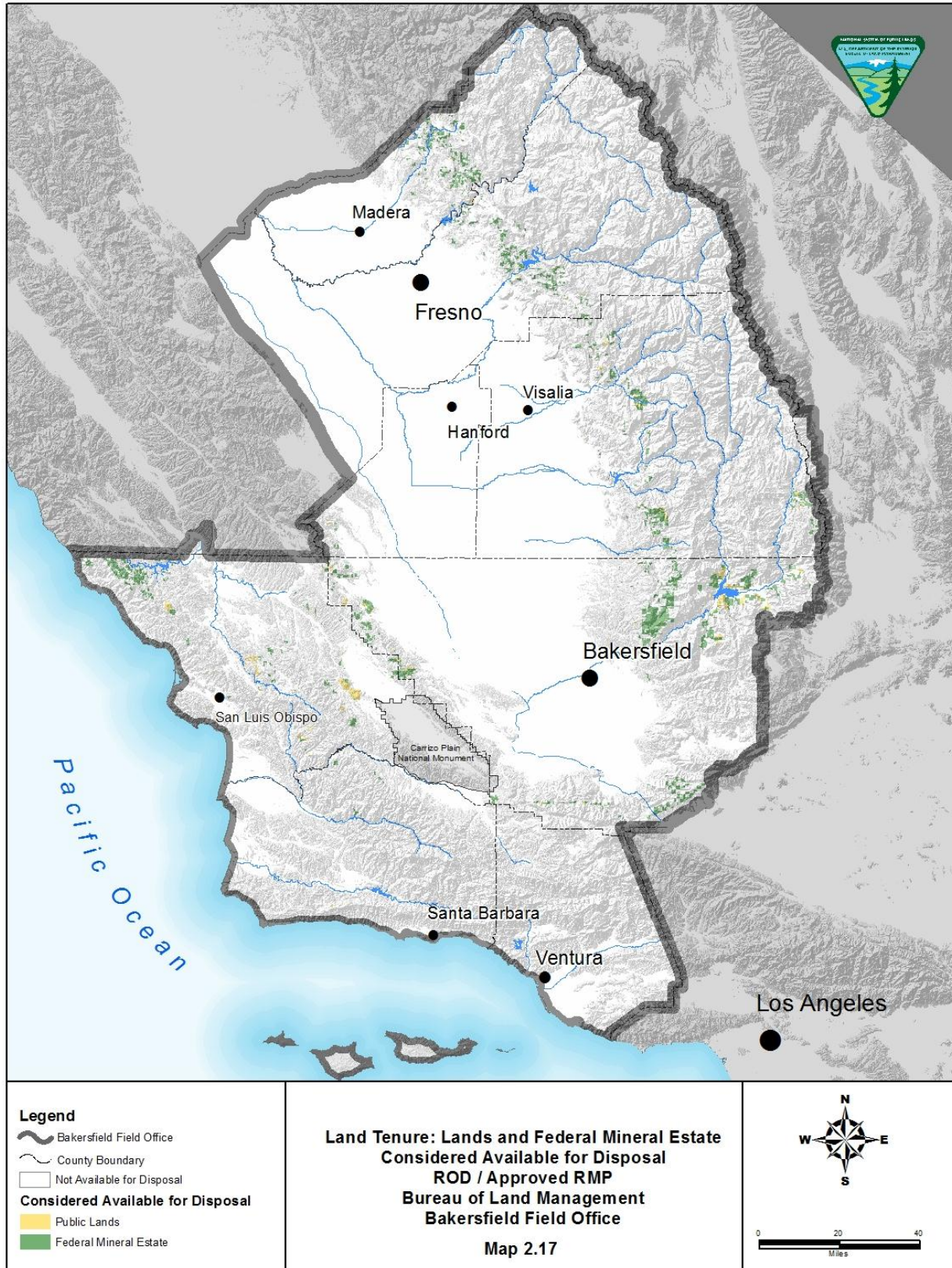
[LR-D-3.1] Continue the existing withdrawal from application under the non-mineral public land laws and from disposition under the homestead, desert land entry and script selection laws for the Caliente, Monache-Walker Pass and Temblor National Cooperative Land and Wildlife Management Areas (NCLWMAs) (183,620 acres)(Public Land Order 2460).

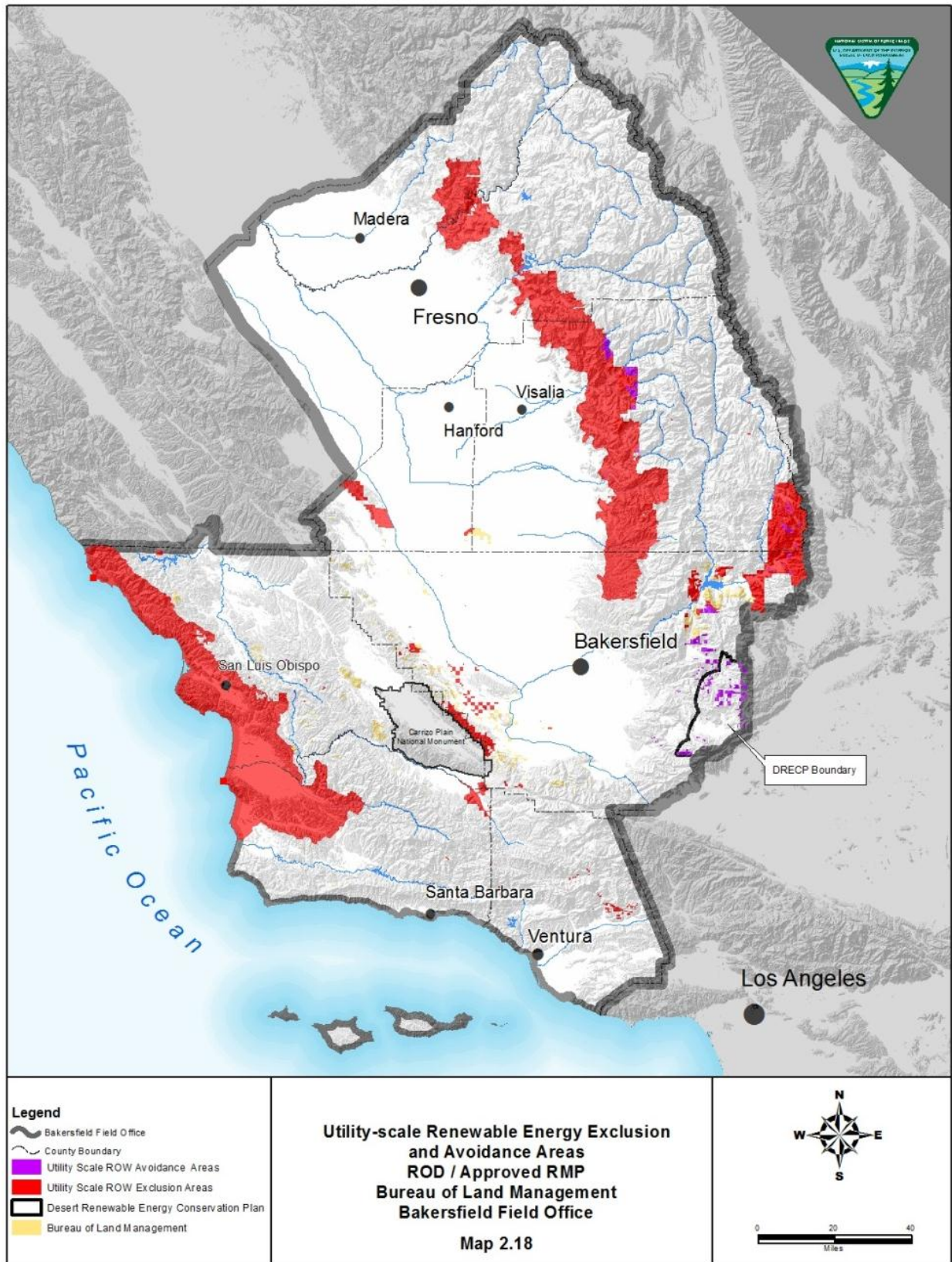
[LR-D-3.2] Continue the existing withdrawal from settlement, sale, location, or entry under the general land laws, including the United States mining laws, 30 U.S.C. Ch. 2 (1994), mineral leasing laws, 30 U.S.C. 181 et seq. (1994) and mineral material sale laws 30 U.S.C. 601-604 (1994), of Piedras Blancas Light Station (20 acres) as shown on Map 2.20 (Public Land Order 7501).

[LR-D-3.3] Continue the existing withdrawal from all forms of appropriation under the public land laws, including the mining laws, 30 U.S.C. Ch. 2, but not from leasing under the mineral leasing laws, of the Piute Cypress Natural Area (760 acres) as shown on Map 2.20 (Public Land Order 3510).

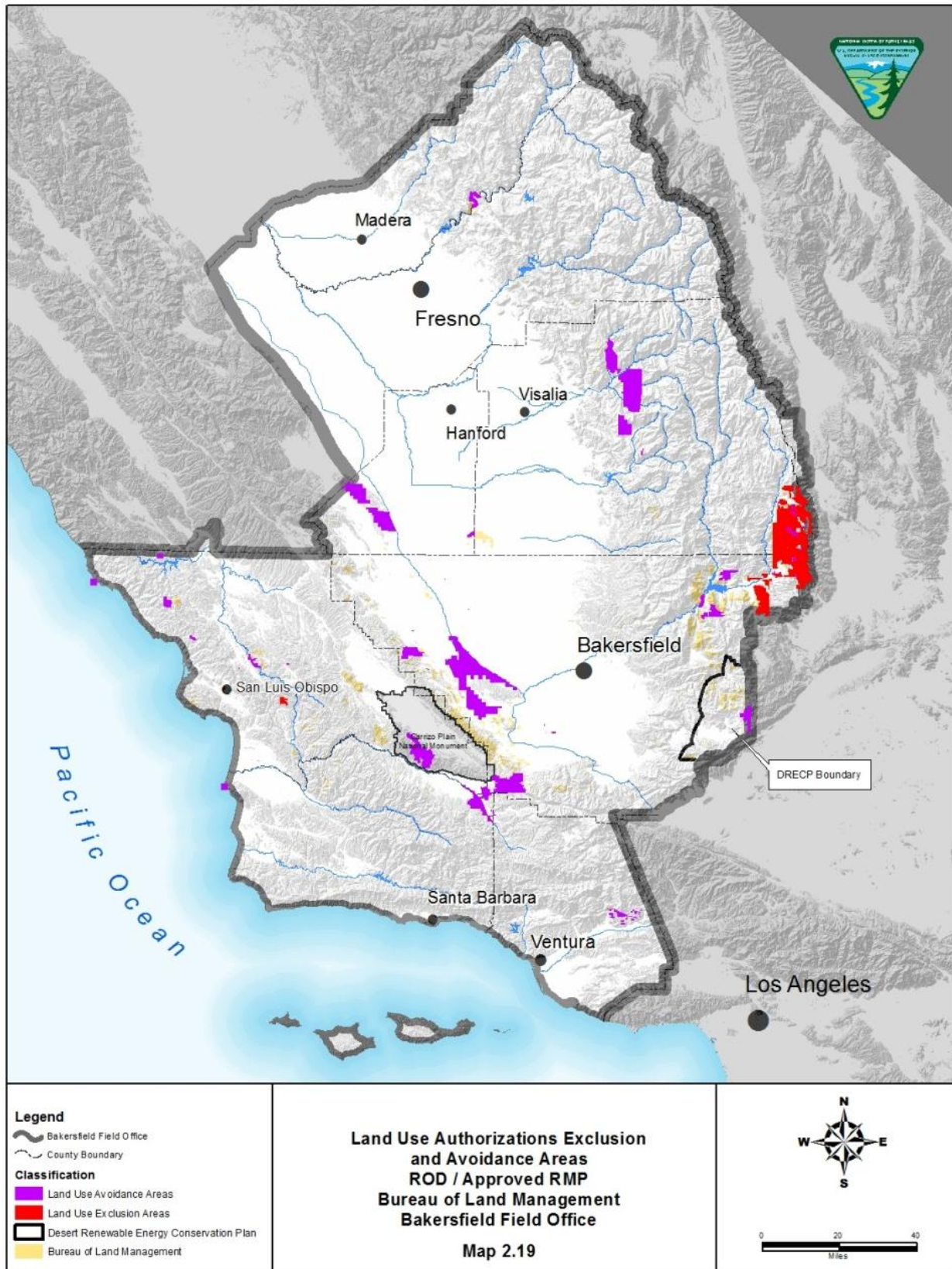
[LR-D-3.4] Continue the existing withdrawal from location under the General Mining Law, 30 U.S.C. Ch. 2, of the Keysville (390 acres) and San Joaquin River Gorge (3,070 acres) areas as shown on Map 2.20.

[LR-D-3.5] Recommend the riparian zone in Salinas River ACEC (approximately 10 acres) as shown on Map 2.20 for proposal to be withdrawn from appropriation and entry under the General Mining Law.

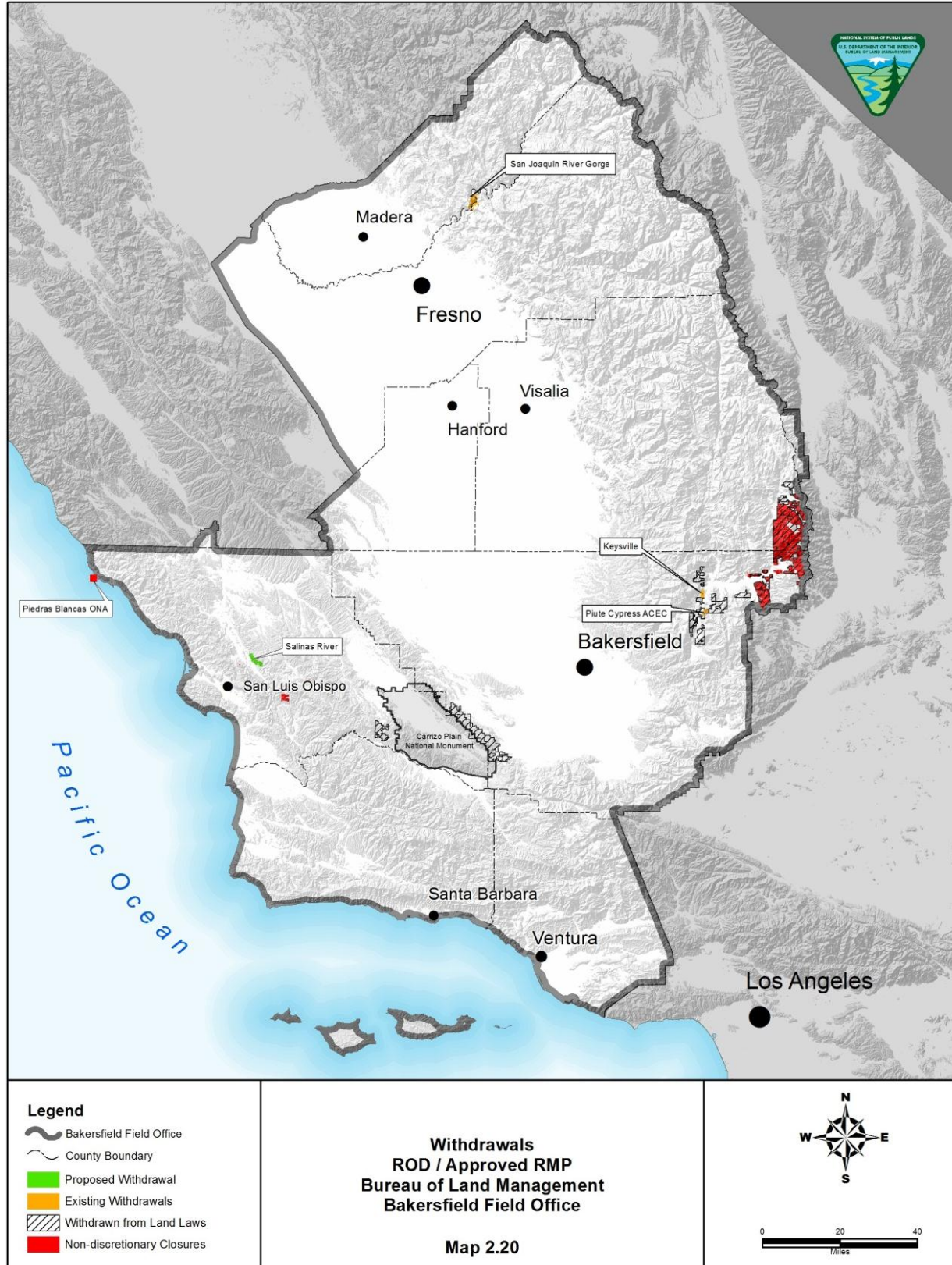
Map 2.17 – Lands and Federal Mineral Estate Considered Available for Disposal

Map 2.18 – Utility-Scale Renewable Energy Exclusion and Avoidance Areas

Map 2.19 – Land Use Authorizations Exclusion and Avoidance Areas



Map 2.20 - Withdrawals



2.13 Livestock Grazing

Goal

[LG-G-1] Manage livestock grazing authorizations in a manner that meets or exceeds the Standards for Rangeland Health and is consistent with other RMP goals.

Objective

[LG-O-1] Manage grazing authorizations to meet or exceed the Standards of Rangeland Health.

[LG-O-2] Provide for livestock grazing opportunities on lands in the grazing decision area in a manner that limits impacts on other resources and meets RMP goals.

Decisions

[LG-D-1] Allocate public lands for livestock grazing based on the following acreages (Map 2.21):

- (a) Available: 328,900 acres
- (b) Unavailable: 66,100 acres

[LG-D-2] Identify 7,800 acres (Atwell Island) of those acres allocated as Available for livestock grazing only for the purpose of vegetation management objectives other than producing livestock forage.

[LG-D-3] Allocate newly acquired lands to match allocations given to the surrounding or adjacent lands, except where land is unsuitable for livestock grazing or the purpose for which the land was acquired is incompatible with livestock grazing based on resource conditions or in accordance with use restrictions contained in acquisition documents⁸, to the extent consistent with federal law.

[LG-D-4] Manage livestock grazing on individual pastures of allotments or entire allotments which lie primarily within the Bakersfield FO Planning Area in conformance with this RMP's goals and objectives. Allow management of livestock grazing on individual pastures of allotments or entire allotments which lie primarily within other Field Office or BLM jurisdictional boundaries in conformance with the goals and objectives applicable to the managing office's land use plan.

[LG-D-5] Apply the appropriate Central California Guidelines for Livestock Grazing Management (BLM 1999; http://www.blm.gov/ca/pdfs/caso_pdfs/Cen-ROD.pdf) to the applicable grazing authorizations as needed to meet the Central California Standards for Rangeland Health as follows:

CENTRAL CALIFORNIA STANDARDS FOR RANGELAND HEALTH

STANDARD: SOILS – Soils exhibit functional biological and physical characteristics that are appropriate to soil type, climate, and land form.

Meaning That: Precipitation is able to enter the soil surface at appropriate rates; the soil is adequately protected against accelerated erosion; and the soil fertility is maintained at appropriate levels.

⁸ Acquisition is subject to conformance with underlying statutory authority and DOJ title standards.

As Indicated By:

- Ground cover (vegetation and other types of ground cover such as rock) is sufficient to protect sites from accelerated erosion.
- Litter/residual dry matter is evident, in sufficient amounts to protect the soil surface.
- A diversity of plant species, with a variety of root depths, is present and plants are vigorous during the growing season.
- There is minimal evidence of accelerated erosion in the form of rills, gullies, pedestaling of plants or rocks, flow patterns, physical soil crusts/surface sealing, or compaction layers below the soil surface
- Biological (microphytic or cryptogamic) soil crusts are in place where appropriate.

STANDARD: SPECIES – Viable, healthy, productive, and diverse populations of native and desired species, including special status species (Federal T&E, Federal proposed, Federal candidates, BLM sensitive, or Calif. State T&E) are maintained or enhanced where appropriate.

Meaning That: Native and other desirable plant and animals are diverse, vigorous, able to reproduce and support the hydrologic cycle, nutrient cycles, and energy flows over space and time.

As Indicated By:

- Wildlife habitats include seral stages, vegetation structure, and patch size to promote diverse and viable wildlife populations.
- A variety of age classes are present for most perennial plant species.
- Plant vigor is adequate to maintain desirable plants and ensure reproduction and recruitment of plants when favorable climatic events occur.
- The spatial distribution and cover of plant species and their habitats allows for reproduction and recovery from localized catastrophic events.
- A diversity of plant species with various phenological stages and rooting depths are present on sites where appropriate.
- Appropriate natural disturbances are evident.
- Levels of non-native plants and animals are at acceptable levels.
- Special status species present are healthy and in numbers that appear to ensure stable to increasing populations; habitat areas are large enough to support viable populations or are connected adequately with other similar habitat areas.
- Adequate organic matter (litter and standing dead plant material) is present for site protection and decomposition to replenish soil nutrients.
- Where appropriate, biological soil crusts (also called microphytic or cryptogamic soil crusts) are present and not excessively fragmented.
- Noxious and invasive species are contained at acceptable levels.

STANDARD: RIPARIAN – Riparian/wetland vegetation, structure and diversity, and stream channels and floodplains are functioning properly, and meeting regional and local management objectives.

Meaning That: The vegetation and soils interact to capture and pass sediment, sustain infiltration, maintain the water table, stabilize the channel, sustain high water quality, and promote biodiversity appropriate to soils, climate, and landform.

As Indicated By:Vegetation Attributes:

- Vegetation cover is greater than 80% or the percentage that will protect banks and dissipate energy during high flows.
- Age-class and structure of woody/riparian vegetation are diverse and appropriate for the site.
- Where appropriate, shading is sufficient to provide adequate thermal regulation for fish and other riparian dependent species.
- Where appropriate, there is adequate woody debris.
- A diversity of plant species with various phenological stages and rooting depths is present. Root masses are sufficient to stabilize stream banks and shorelines.
- Plant species present indicate that soil moisture characteristics are being maintained.
- There is minimal cover of invader/shallow-rooted species.
- Adequate organic matter (litter and standing dead plant material) is present to protect the site and to replenish soil nutrients through decomposition.
- Point bars are vegetated.

Physical Indicators:

- Streambank stability, pool frequency, substrate sediments, stream width, and bank angles are appropriate for the stream type.

STANDARD: WATER QUALITY – Surface and groundwater complies with objectives of the Clean Water Act and other applicable water quality requirements, including meeting the California State standards.

Management Objective: For water bodies, the primary objective is to maintain the existing quality and beneficial uses of water, protect them where they are threatened (and livestock grazing activities are a contributing factor), and restore them where they are currently degraded (and livestock grazing activities are a contributing factor). This objective is of even higher priority in the following situations:

- (a) where beneficial uses of water bodies have been listed as threatened or impaired pursuant to Section 303(d) of the Federal Clean Water Act;
- (b) where aquatic habitat is present or has been present for Federal threatened or endangered, candidate, and other special status species dependent on water resources; and,
- (c) in designated water resource sensitive areas such as riparian and wetland areas.

Meaning That: BLM will, pursuant to the Clean Water Act:

Maintain the physical, biological, and chemical integrity of waters flowing across or underlying the lands it administers;

Protect the integrity of these waters where it is currently threatened;

Insofar as is feasible, restore the integrity of these waters where it is currently impaired;

Not contribute to pollution and take action to remedy any pollution resulting from its actions that violates applicable California (including the requirements identified in Regional Basin Plans), or Tribal water quality standards or other applicable water quality requirements (e.g., requirements adopted by SWRCB or RWQCB in California, or US EPA pursuant to Section 303(d) of the Clean Water Act or the Coastal Zone Reauthorization Act). Where action related to grazing management is required, such action will be taken as soon as practicable but not later than the start of the next grazing year (in accordance with 43 CFR 4180.1).

Be consistent with the non-degradation policies identified in the Regional Basin Plans in California.

Work with the State (including the Regional Water Quality Control Boards) and U.S. EPA to establish appropriate beneficial uses for public waters, establish appropriate numeric targets for 303(d)-listed water bodies, and implement the applicable requirements to ensure that water quality on public lands meets the criteria for the designated beneficial uses of the water.

Develop and implement Best Management Practices (BMPs) approved by the SWRCB to protect and restore the quality and beneficial uses of water, and monitor both implementation and effectiveness of the BMPs. These BMPs will be developed in full consultation, coordination, and cooperation with permittees and other interests.

As Indicated By:

- The following do not exceed the applicable requirements: chemical constituents, water temperature, nutrient loads, fecal coliform, turbidity, suspended sediment, and dissolved oxygen.
- Achievement of the standards for riparian, wetlands, and water bodies.
- Aquatic organisms and plants (e.g., macro-invertebrates, fish, algae, and plants) indicate support for beneficial uses.
- Monitoring results or other data that show water quality is meeting the standard.

CENTRAL CALIFORNIA GUIDELINES FOR GRAZING MANAGEMENT

Guideline 1: Livestock grazing operations will be conducted so that progress is made toward maintaining or promoting adequate amounts of vegetative ground cover, including standing plant material and litter to support infiltration and permeability, and maintain soil moisture storage and soil stability appropriate for the ecological sites within the management units. The ground cover should maintain soil organisms, plants, and animals to support the hydrologic and nutrient cycles, and energy flow.

Guideline 2: Implement grazing systems that regulate the timing and intensity of grazing. Continuous season-long grazing use is allowed if it has been demonstrated that it can be consistent with achieving a healthy, properly functioning ecosystem. Grazing systems should specify season of use based on plant phenology and geohydrologic processes where appropriate. On annual rangelands, mulch management should be used to define target forage use levels that will ensure

that sufficient amounts of residual dry matter (RDM) or standing plant material will be maintained throughout the grazing season. Mulch levels for annual grasses should meet the requirements of Table 2.1, whenever feasible. Mulch levels will include a "buffer" to account for RDM loss from other natural processes (decomposition, animal use, etc.). Exceptions may be approved during the green season when substantial regrowth is expected or if lower RDM levels are required to meet particular rangeland health objectives, such as reducing competition for a desired species.

Guideline 3: On Annual Range, readiness will be determined by: (1) Minimum RDM levels at the time of turnout prior to green season growth are exceeded by 200 pounds per acre; or (2) Minimum RDM levels and at least 2 inches of new growth are present in the growing season.

Guideline 4: Where appropriate, use grazing systems that maintain the presence and distribution of microsites for seed germination.

Guideline 5: Perennial plant utilization should be limited to appropriate levels of the current year's growth as indicated in Table 2.1, unless it has been proven that this level of use is incompatible with the continued existence of the plant.

Management changes will be implemented (e.g., reductions in stocking rate or another management change) if utilization guidelines on the average of the upland key areas across the pasture (or allotment if there is only one pasture) are exceeded for 2 consecutive years or in any 2 years out of every 5 years. In addition, at least 70% of upland key areas on the pasture (or allotment) are not to exceed maximum utilization guidelines in most years. Because of the potential long-term damage to perennial grass species associated with severe grazing, severe grazing use (>70% utilization) in any upland key area in any year will result in a management change the following year. If any particular key area fails to meet the guidelines for more than 2 consecutive years, then management action will be taken to remedy the problem in the area of the allotment that key area represents. The average (mean) utilization on key species will be estimated at each key area and used to determine if the guidelines have been met. There are indications that the median may be a better statistic to use than the mean; we will calculate both statistics from the same data sets and make a determination on which statistic to use after examining the data over a period of a few years.

For allotments not meeting or making significant progress toward meeting the standards (and for which lower utilization levels of perennial upland species would be expected to help move these allotments toward the standards), utilization data already in hand will be used to determine whether a management change is necessary. Thus, for example, if utilization on a particular key area has exceeded the thresholds of Table 2.1 for the two years previous to the approval of these standards and guidelines, a management change will be implemented prior to the first grazing year following this approval. In addition to implementing management changes that are expected to bring utilization levels within threshold values, close monitoring will follow to ensure that the grazing use levels are not exceeded during the grazing period following the management changes. If utilization levels are exceeded or expected to be exceeded during this period, a reduction or curtailment of further grazing in the area represented by the key area will be required for the remainder of the grazing season. In addition, further management changes will be implemented prior to the start of the next grazing season to bring utilization levels within thresholds.

Guideline 6: Implement grazing systems that permit existing native species to complete entire life cycles and sustain the spatial distribution of microsites necessary for seed germination at intervals sufficient to maintain the viability of the species.

Guideline 7: Use grazing systems that are compatible with the persistence of desired species. Grazing use should provide appropriate levels of plant matter that will promote the existence of desirable plants and animals.

Guideline 8: Native species are recommended for all revegetation and enhancement projects unless they are not readily available in sufficient quantities or are incapable of maintaining or achieving properly functioning conditions and biological health.

Guideline 9: Within identified deer concentration areas there will be no more than 20 percent utilization of annual growth on key browse species prior to October 1.

Guideline 10: Periods of rest from livestock grazing or other avoidable disturbances should be provided during/after episodic events (e.g., flood, fire, drought) and during critical times of plant growth needed to achieve proper functioning conditions, recovery of vegetation, or desired plant community.

Guideline 11: Grazing management practices will allow for the reproduction of species that will maintain riparian-wetland functions, including energy dissipation, sediment capture, groundwater recharge, streambank stability, the hydrologic cycle, nutrient cycle, and energy flow.

Guideline 12: Grazing practice should maintain a minimum herbage stubble height on all stream-side, riparian and wetland areas at the end of the growing season. There should be sufficient residual stubble or regrowth at the end of the growing season to meet the requirements of plant vigor maintenance, bank protection, and sediment entrapment (Table 2.1).

Management changes will be implemented (e.g., reductions in stocking rate or another management change) if stubble heights on the average of the key riparian areas across the pasture (or allotment if there is only one pasture) fall below the guidelines for 2 consecutive years or in any 2 years out of every 5 years. In addition, at least 70% of riparian key areas on the allotment are to exceed minimum stubble heights in most years. If any particular key area fails to meet the guidelines for more than 2 consecutive years, then management action will be taken to remedy the problem in the area of the allotment that key area represents. Because stream banks may be inadequately protected by heavy use in any one year and because stubble heights below 3 inches result in cattle shifting their preference to shrubs, stubble heights below 2 inches in any one year will require a management change in the following year.

The mean stubble height on key riparian species will be estimated at each riparian key area and used to determine if the guidelines have been met. There are indications that the median may be a better statistic to use than the mean; we will calculate both statistics from the same data sets and make a determination on which statistic to use after examining the data over a period of a few years.

For allotments not meeting or making significant progress toward meeting the standards (and for which higher stubble would be expected to help move these allotments toward the standards), stubble height data already in hand will be used to determine whether a management change is

necessary. Thus, for example, if stubble heights on a particular key area have fallen below the thresholds of Table 2.1 for the two years previous to the approval of these standards and guidelines, a management change will be implemented prior to the first grazing year following this approval. In addition to implementing management changes that are expected to bring stubble heights within threshold values, close monitoring will follow to ensure the grazing use levels are not exceeded during the grazing period following the management changes. If utilization levels are exceeded or expected to be exceeded during this period, a reduction or curtailment of further grazing in the area represented by the key area will be required for the remainder of the grazing season. In addition, further management changes will be implemented prior to the start of the next grazing season to bring utilization levels within thresholds.

Guideline 13: Water sources, wetlands and riparian areas may be fenced to reduce impacts from livestock.

Guideline 14: The development of water sources will maintain ecologic and hydrologic function and processes.

Guideline 15: Locate salt blocks and other supplemental feed well away from riparian/wetland areas.

Guideline 16: Locate new livestock handling and/or management facilities outside of riparian/wetland areas. For existing livestock handling facilities inside riparian areas, ensure that facilities do not prevent attainment of standards. Limit livestock trailing, bedding, watering, loading, and other handling efforts to those areas and times that will not retard or prevent attainment of standards.

Guideline 17: Implement grazing systems that will promote compliance with the Water Quality Standards.

- (a) Apply the management practices recognized and approved by the State of California as Best Management Practices (BMPs) for grazing related activities to protect and maintain water quality.
- (b) In watersheds draining into water bodies that have been listed or are proposed for listing as having threatened or impaired beneficial uses, and where grazing activities may contribute to the pollutants causing such impairment, the management objective is to fully protect, enhance, and restore the beneficial uses of the water

Guideline 18: The plan for grazing on any allotment must consider other uses (recreation, wildlife, mineral resource development, etc.) and be coordinated with other users of the public lands so that overall use does not detract from the goal of achieving rangeland health.

Table 2.1
Forage Utilization and Mulch Management Requirements (Table A from Central California Standards for Rangeland Health and Guidelines for Livestock Grazing Management ROD)

| Precipitation | Plant Community | Slope, Elevation | | | Minimum Residual Dry Matter ^a (lbs/ac) | | | Maximum Utilization of Key Perennials, ^{c, d} |
|---------------|--|------------------|--------|------------|---|-----|-----|--|
| 4-10 inches | California annual grassland | <25% | 25-45% | >45% | 200 | 250 | 300 | 30-45% |
| 10-40 Inches | California annual grassland, Oak woodlands | <25% | 25-45% | >45% | 400 | 600 | 800 | 30-45% |
| | | <15% | | 1000-2500' | 700-900 ^b | | | |
| | | <15% | | >2500' | 1000-1200 ^b | | | |
| 8-30 Inches | Sagebrush grassland, semi-desert grass and shrubland, Pinyon-juniper woodland, Cool season pasture | NA | | | NA | | | 30-40% |
| | Coniferous forest, mountain shrubland | NA | | | NA | | | 30-40% |
| | Alpine tundra | NA | | | NA | | | 20-30% |
| | Salt Desert Shrubland | NA | | | NA | | | 25-35% |
| 4-40 Inches | Riparian areas, wetlands | NA | | | 4-6 inch stubble height ^c | | | 35-45% herbs, 10-20% shrubs, 0-20% trees |

^a Minimum to be present at fall/winter green-up.

^b Higher minimum is for sites that are: in unsatisfactory condition, grazed during active growth, not rested, or on steeper slopes.

^c On sites in unsatisfactory condition and/or trend, perennial plant utilization should be no more than 15-25% current annual growth where less than one period of rest is provided per growing season of use.

^d Stubble height and percent utilization levels are initial values that should be adjusted to consider timing of grazing use and plant phenology, resource conditions and a site's resiliency at the allotment, pasture or site-specific location. Perennial plant utilization levels and stubble heights are based on a literature review by Holechek (1988, 1991), Holechek et al. (1998) and Willoughby.

[LG-D-6] Apply the appropriate Bakersfield FO-specific guidelines for livestock grazing management to the applicable grazing authorizations within the grazing decision area as shown in Table 2.2:

Table 2.2
Bakersfield Field Office-Specific Guidelines for Livestock Grazing Management

| ALLOTMENT LOCATION | SPECIFIC RESOURCE | GUIDELINE |
|---|--------------------------|---|
| Within San Joaquin Valley listed species habitat | Mulch Readiness | 500 lbs/ac. And 2" green growth, or 700 lbs/ac. Without green growth |
| | Mulch Threshold | 500 lbs/ac |
| | Saltbush Scrub | Dec. 1-May 31 season of use or meets form class, foliage density, and reproductive uniformity criteria. |
| Riparian Areas | Poor-Fair condition | Nov. 1-May 31 season of use and apply the Central CA Guidelines for Livestock Grazing Management. |
| | Good-Excellent condition | Maintain current season of use and apply the Central CA Guidelines for Livestock Grazing Management. |
| Known population ⁹ of California jewelflower, <i>Caulanthus californicus</i> | | No grazing unless in approved study or research show grazing beneficial. |
| Known population of San Joaquin woolly threads, <i>Monolopia congdonii</i> | | Apply the appropriate Central CA Guidelines for Livestock Grazing Management as needed to meet the Standards of Rangeland Health. |
| Known population of Kern mallow, <i>Eremalche kernensis</i> | | No grazing unless in approved study or research shows grazing beneficial. |
| Known population of Hoover's woolly star, <i>Eriastrum hooveri</i> | | Apply the appropriate Central CA Guidelines for Livestock Grazing Management as needed to meet the Standards of Rangeland Health. |
| Known population of Shevock's monkeyflower, <i>Mimulus shevockii</i> | | No grazing. |
| Known occurrence of Kern primrose sphinx moth | | No grazing. |
| Known occurrence of Tehachapi slender salamander | | Apply the appropriate Central CA Guidelines for Livestock Grazing Management as needed to meet the Standards of Rangeland Health. |
| Other special status species | | Apply the appropriate Central CA Guidelines for Livestock Grazing Management as needed to meet the Standards of Rangeland Health and/or develop a management guideline that takes into account specific species requirements. |

⁹ For the purposes of applying the livestock management guidelines, known occupied habitats and/or known populations are areas containing the species of concern. On a case-by-case basis and dependent on the specific needs of the species, in addition to the area containing the species of concern, the guideline may also be applied to adjacent areas that are determined to 1) have similar habitat characteristics and are likely to contain the species, or 2) directly influence or affect the habitat conditions in the area containing the species. For example, an annual plant may be known to exist on 10 acres. The adjacent 40 acres has similar habitat characteristics, and even though the plant has not been documented from the adjacent 40 acres, it is expected to occur on the 40 acres. In this case, the management guideline for that species would be applied to all 50 acres. Furthermore, the 80 acres in the watershed above the known population may also have the specific management guideline applied if the grazing use of those 80 acres is expected to directly influence the 10 acre existing population or the habitat suitability of the adjacent 40 acres.

[LG-D-7] Authorize livestock grazing at the initial implementation levels (Table 2.3). Based on existing authorizations, projected new authorizations and application of the Central California and Bakersfield FO Specific Guidelines for Livestock Grazing Management, forage authorized for livestock grazing within the Decision Area would total approximately 40,200 AUMs.

Table 2.3
Livestock Grazing Implementation Levels

| Allotment Number | Allotment Name | Public Acres ¹ | Mgmt. Status ² | Type Auth. ³ | Kind Of Stock | Period Begin Date | Period End Date | Public Aums |
|------------------|---|---------------------------|---------------------------|-------------------------|---------------|-------------------|-----------------|-------------|
| 2 | Oilfield Road | 440 | M | 15 | Sheep | 12/1 | 5/31 | 73 |
| 3 | Naval Pet Res. I | 1,518 | M | 15 | Sheep | 12/1 | 5/31 | 253 |
| 5 | Blossom Peak | 80 | C | 15 | Cattle | 3/1 | 6/1 | 7 |
| 6 | Cuyama 2 | 480 | C | 15 | Cattle | 3/1 | 2/28 | 80 |
| 7 | Freeborn Mt. | 1,804 | C | 15 | Cattle | 3/1 | 2/28 | 254 |
| 8 | Pleito Hills | 3,423 | C | 15 | Cattle | 3/1 | 2/28 | 1,028 |
| 9 | Badger Creek | 480 | C | 15 | Cattle | 4/1 | 9/30 | 90 |
| 10 | Santa Rita | 160 | C | 15 | Cattle | 3/1 | 9/15 | 16 |
| 12 | Live Oak Pass | 280 | C | 15 | Cattle | 6/1 | 9/30 | 70 |
| 13 | Temblor Creek | 328 | M | 15 | Cattle | 3/1 | 2/28 | 82 |
| 14 | Case Mountain | 3,903 | I | 15 | Cattle | 10/1 | 5/31 | 296 |
| 15 | North Temblor ⁴ | 34,795 | M | 15 | Cattle | 3/1 | 2/28 | 7,733 |
| | North Temblor ⁴ | - | M | 15 | Cattle | 12/1 | 5/31 | - |
| | North Temblor (Portion in BKFO Managed by CPNM) | 137 | M | 15 | Cattle | 3/1 | 2/28 | 30 |
| 16 | Oil Field | 4,270 | M | 15 | Sheep | 12/1 | 5/31 | 303 |
| 17 | North Fork River | 5,693 | M | 15 | Cattle | 3/1 | 2/28 | 456 |
| 19 | Buena Vista Creek | 720 | M | 15 | Sheep | 12/1 | 5/31 | 107 |
| 20 | Elephant Back | 80 | C | 15 | Cattle | 3/1 | 2/28 | 16 |
| 21 | Frazer Valley | 1,694 | M | 15 | Cattle | 12/1 | 5/31 | 184 |
| 23 | Hanning Flat West | 575 | C | 3 | Cattle | 11/1 | 5/31 | 57 |
| 24 | Bear Creek | 405 | M | 15 | Cattle | 3/1 | 2/28 | 10 |
| 27 | Bitterwater Valley | 80 | C | 15 | | | | 12 |
| 28 | Kettleman Hills | 5,216 | I | 15 | Cattle | 12/1 | 5/31 | 1,304 |
| | Kettleman Hills | - | I | 15 | Cattle | 3/1 | 2/28 | - |
| 30 | West Klipstein | 561 | C | 15 | Cattle | 3/1 | 2/28 | 112 |
| 32 | Hubbard Hill | 3,080 | C | 15 | Cattle | 3/1 | 2/28 | 418 |
| 33 | Mankins Creek | 476 | C | 15 | Cattle | 10/1 | 6/30 | 80 |
| 34 | North Comb Rocks | 230 | C | 15 | | | | 39 |
| 35 | Red Hill | 160 | C | 15 | Cattle | 3/1 | 2/28 | 3 |
| 36 | Horn Mountain | 1,517 | C | 15 | Cattle | 3/1 | 2/28 | 65 |
| 37 | Raven Pass | 40 | C | 15 | Cattle | 9/1 | 5/31 | 12 |
| 38 | North Naval Petroleum Res. | 2,278 | I | 15 | | | | 380 |
| 39 | Chimineas Ranch South ⁴ | 4,982 | M | 15 | Cattle | 12/1 | 5/31 | 730 |
| 40 | Rio Bravo | 401 | C | 15 | Cattle | 3/1 | 2/28 | 100 |
| 41 | Derby Acres | 530 | C | 15 | | | | 151 |
| 42 | Jack Canyon | 33 | C | 15 | Cattle | 3/1 | 2/28 | 12 |
| 45 | Goldpan Canyon | 470 | I | 15 | Cattle | 3/1 | 2/28 | 84 |
| 47 | Rankin Ranch | 867 | C | 15 | Cattle | 3/1 | 2/28 | 144 |
| 48 | Mountain Creek | 264 | C | 15 | Cattle | 3/1 | 2/28 | 88 |
| 49 | Loraine | 678 | I | 15 | Cattle | 3/1 | 2/28 | 113 |
| 50 | Santa Barbara Canyon | 1,734 | M | 15 | Cattle | 3/1 | 2/28 | 118 |

| Allotment Number | Allotment Name | Public Acres ¹ | Mgmt. Status ² | Type Auth. ³ | Kind Of Stock | Period Begin Date | Period End Date | Public Aums |
|------------------|-----------------------|---------------------------|---------------------------|-------------------------|-----------------|-------------------|-----------------|-------------|
| 51 | Studhorse Canyon | 498 | M | 3 | Cattle | 11/1 | 5/31 | 100 |
| 52 | Thompson Ridge | 1,250 | M | 15 | Cattle | 5/1 | 7/31 | 63 |
| 54 | Willow Spring Canyon | 480 | M | 15 | Cattle | 3/1 | 2/28 | 96 |
| 55 | South Mountain | 186 | C | 15 | Cattle | 3/1 | 2/28 | 23 |
| 56 | Round Mountain Road | 160 | M | 15 | Cattle | 12/1 | 5/31 | 27 |
| 57 | Santiago Creek | 2,723 | M | 15 | Cattle | 3/1 | 2/28 | 545 |
| | Santiago Creek | - | M | 15 | Cattle | 12/1 | 5/31 | - |
| 58 | Anderson Canyon | 2,120 | C | 15 | Cattle | 3/1 | 2/28 | 311 |
| 59 | Loco Bill Canyon | 640 | M | 15 | Cattle | 4/1 | 9/30 | 82 |
| 60 | Santa Teresa | 1,883 | M | 15 | Cattle | 3/1 | 2/28 | 400 |
| 61 | Oak Grove | 2,901 | I | 15 | Cattle | 4/1 | 9/30 | 235 |
| 62 | Curtis Mountain | 40 | C | 15 | Cattle | 3/1 | 2/28 | 13 |
| 63 | Chico Martinez | 8,602 | I | 15 | Cattle | 3/1 | 2/28 | 1,671 |
| | Chico Martinez | - | I | 15 | Cattle | 12/1 | 5/31 | - |
| 64 | Cedar Canyon | 624 | C | 15 | Cattle | 10/15 | 6/30 | 139 |
| | Cedar Canyon | - | C | 15 | Cattle | 12/1 | 5/31 | - |
| 65 | Packwood | 1,155 | M | 15 | Cattle | 12/1 | 5/31 | 282 |
| | Packwood | - | M | 15 | Cattle | 3/1 | 2/28 | - |
| 66 | Liveoak Canyon | 80 | C | 15 | | | | 13 |
| 68 | San Emigdio | 650 | C | 15 | Cattle | 3/1 | 2/28 | 191 |
| 71 | Rancheria | 194 | C | 15 | | | | 49 |
| 72 | Bluestone Ridge | 2,673 | M | 15 | Cattle | 12/1 | 6/30 | 668 |
| 73 | Chimineas Ranch North | 3,949 | M | 15 | Cattle | 12/1 | 5/31 | 759 |
| 74 | Freedom Hill | 2,278 | M | 3 | Cattle | 3/1 | 5/15 | 539 |
| 75 | Kelso Peak | 768 | M | 3 | Cattle | 2/1 | 5/15 | 154 |
| 76 | Sacatar Meadow | 6,320 | C | 3 | Cattle | 9/1 | 10/31 | 96 |
| 77 | Walker Pass West | 14,566 | I | 3 | Cattle | 1/1 | 6/30 | 781 |
| 78 | Airport | 917 | M | 3 | Cattle | 3/1 | 5/15 | 92 |
| 79 | Fay Canyon | 361 | C | 3 | Cattle | 3/1 | 4/30 | 64 |
| 80 | Smith Canyon | 2,760 | M | 3 | | | | 60 |
| 81 | Nellie's Nipple | 3,885 | M | 3 | Cattle | 3/15 | 10/14 | 528 |
| 82 | Short Canyon | 3,260 | M | 3 | Cattle | 2/1 | 4/30 | 150 |
| 83 | Lynch Canyon | 510 | C | 3 | Cattle | 3/1 | 4/30 | 64 |
| 84 | Cyrus Canyon | 1,061 | M | 3 | Cattle | 10/1 | 5/15 | 106 |
| 85 | Cooks Peak | 2,111 | C | 3 | Cattle | 11/1 | 5/31 | 217 |
| 86 | Cholla Canyon | 4,572 | M | 3 | Cattle | 10/15 | 6/30 | 1,825 |
| 87 | Havilah Basin | 4,862 | M | 3 | Cattle | 3/1 | 2/28 | 356 |
| | Havilah Basin | - | M | 3 | Cattle | 5/1 | 9/30 | - |
| 88 | Sales Creek | 40 | C | 15 | Cattle | 3/1 | 2/28 | 50 |
| 89 | Bodfish | 114 | C | 3 | Cattle & Horses | 3/1 | 9/30 | 14 |
| 90 | Wagy Flat | 10,138 | M | 3 | Cattle | 2/15 | 4/30 | 521 |
| 91 | Sulphur Ridge | 506 | C | 15 | Cattle | 3/1 | 2/28 | 34 |
| 93 | Eagle's Nest Peak | 680 | C | 15 | Cattle | 11/1 | 5/31 | 182 |
| 94 | South Comb Rocks | 399 | C | 15 | Cattle | 10/1 | 6/30 | 100 |
| 95 | Progress Gulch | 480 | C | 15 | Cattle | 3/1 | 6/30 | 80 |
| 96 | Maricopa ⁴ | 5,979 | I | 15 | Cattle | 12/1 | 5/31 | 939 |
| | Maricopa ⁴ | - | I | 15 | Cattle | 3/1 | 2/28 | - |
| 97 | Mc Van Oil Field | 200 | C | 15 | Cattle | 3/1 | 2/28 | 34 |

| Allotment Number | Allotment Name | Public Acres ¹ | Mgmt. Status ² | Type Auth. ³ | Kind Of Stock | Period Begin Date | Period End Date | Public Aums |
|------------------|--|---------------------------|---------------------------|-------------------------|----------------|-------------------|-----------------|-------------|
| 98 | Fresno River | 160 | C | 15 | Cattle | 5/1 | 10/31 | 36 |
| 99 | Bittercreek Drainage | 240 | C | 15 | Cattle | 3/1 | 2/28 | 60 |
| 100 | Dry Creek | 160 | C | 15 | Cattle | 3/1 | 2/28 | 20 |
| 102 | Burnt Point | 1,493 | M | 15 | Cattle | 3/1 | 2/28 | 79 |
| 103 | Milk Ranch Peak | 1,652 | C | 15 | Cattle | 4/15 | 9/30 | 133 |
| 104 | Wash Burn Cove | 628 | M | 15 | Cattle | 10/1 | 4/15 | 118 |
| 106 | Western Minerals Rd. | 1,540 | M | 15 | Cattle | 12/1 | 5/31 | 308 |
| 107 | Cienaga Canyon | 1,902 | M | 15 | Cattle | 12/1 | 5/31 | 380 |
| 108 | Paso Robles | 20 | C | 15 | Horses | 1/1 | 3/31 | 3 |
| 111 | Sand Canyon | 2,702 | I | 15 | Cattle | 3/1 | 2/28 | 365 |
| 113 | Johns Peak | 1,040 | C | 15 | Cattle | 3/1 | 2/28 | 168 |
| 114 | East Klipstein | 90 | C | 15 | Cattle | 3/1 | 9/30 | 18 |
| 115 | Power Line Road | 215 | M | 15 | Sheep | 1/1 | 5/31 | 36 |
| 116 | Devils Gulch | 600 | M | 15 | Cattle | 12/1 | 5/31 | 120 |
| 117 | Red Mountain | 7,317 | I | 15 | | | | 327 |
| 118 | Scobie Meadow | 6,890 | M | 3 | Cattle | 6/1 | 10/31 | 182 |
| 119 | Bald Eagle Peak | 2,400 | M | 3 | Cattle | 3/1 | 2/28 | 168 |
| 120 | Spanish Needle Creek | 3,160 | M | 3 | Cattle | 3/15 | 6/5 | 40 |
| 123 | Canebrake | 8,238 | M | 3 | Cattle | 1/1 | 6/30 | 952 |
| 124 | Long Valley | 17,687 | M | 3 | Cattle | 10/1 | 11/30 | 226 |
| 125 | Kennedy Lamont | 44,296 | M | 3 | Cattle | 7/1 | 9/30 | 396 |
| 126 | Lower Kennedy Table | 105 | M | 15 | Cattle | 9/15 | 5/31 | 30 |
| 128 | Lwr Hiddenvalley Rch | 1,331 | M | 15 | Cattle | 12/1 | 5/31 | 236 |
| 129 | Big Sandy | 813 | M | 15 | Cattle | 12/1 | 5/31 | 225 |
| 130 | Smalley Road | 540 | M | 15 | Cattle | 11/15 | 5/15 | 188 |
| 136 | Fowler Mountain | 280 | M | 15 | Cattle | 3/1 | 2/28 | 120 |
| 149 | South Fork Kern River | 744 | C | 3 | Cattle | 11/1 | 6/30 | 19 |
| 157 | Wheeler Ridge | 480 | C | 15 | Cattle | 12/1 | 5/31 | 144 |
| | Wheeler Ridge | - | C | 15 | Cattle | 3/1 | 2/28 | - |
| 3464 | Franciscan | 800 | M | 15 | Cattle | 3/1 | 2/28 | 168 |
| 3655 | Wood Canyon ⁴ | 204 | M | 15 | Cattle | 12/1 | 5/31 | 5 |
| 3718 | Buena Vista | 311 | M | 15 | Cattle | 3/1 | 2/28 | 62 |
| 3719 | Vista Del Mar | 165 | C | 15 | | | | 10 |
| 3720 | Klau Mine | 12 | C | 15 | | | | 3 |
| 3750 | San Joaquin River Slope | 857 | M | 15 | Cattle | 12/1 | 5/31 | 240 |
| 4309 | Surprise Arroyo (~ Portion in BKFO Managed by HFO) | 1,300 | I | 15 | Cattle & Sheep | 1/1 | 4/30 | ~417 |
| 5008 | Rudnick Common (~ Portion in BKFO Managed by RFO) | 7,000 | I | 3 | Cattle | 3/1 | 2/28 | ~412 |
| | | | | | | | | 34,177 |
| | Available for application | 40,300 | | | | | | 6,000 |
| | Estimated potential grazing opportunity ⁵ | | | | | | | 40,177 |

¹ Acreage figures in this table are approximate and may not correspond with cumulative totals elsewhere in this document.

² C=Continue, M=Moderate, I=Intensive (also see Selective Management Categories in PRMP/FEIS Appendix F-4).

³ 3=Grazing permits issued on public lands within the grazing districts established under the Taylor Grazing Act; 15=Grazing leases on public lands outside the original grazing district boundaries.

⁴ Portion of this allotment lies within the Carrizo Plain National Monument.

⁵ Total of authorized AUMs and projected future authorized AUMs, under the assumptions that 75% of acres available for application would be authorized and given a stocking rate of 5 acres/AUM.

Map 2.21 – Livestock Grazing Allocations

This map is oversized and does not fit in the body of this document. It is found in the map packet on the back cover of the printed version and hyperlinked here in the electronic versions of this document.

2.14 Minerals Management

Goal

[MM-G-1] Support development of mineral resources on public lands in an environmentally sound manner.

Leasable Minerals

Objective

[MM-O-1] Facilitate reasonable, economical, and environmentally sound exploration and development of leasable minerals while minimizing impacts to resources.

2.14.1.1 Fluid Minerals

Allocations Summary

Table 2.4
Fluid Minerals Allocations Summary

| Allocation | Acreage | Management Action |
|---|-----------|-------------------|
| Closed – All Fluid Mineral Leasing | 149,600 | MM-D-1.1.3 |
| Closed – Geothermal Leasing | 26,440 | MM-D-1.1.4 |
| Open with No Surface Occupancy (NSO) | 3,880 | MM-D-1.1.5 |
| Open with standard stipulations | 0 | MM-D-1.1.1 |
| Open with special stipulations - Controlled Surface Use (CSU) | 1,011,470 | MM-D-1.1.5 |

Decisions

[MM-D-1.1.1] Identify 0 acres as open to fluid mineral leasing, subject to existing regulations and formal orders; and the terms and conditions of the standard lease form.

[MM-D-1.1.2] Identify 0 acres as open to fluid mineral leasing, subject to moderate constraints.

[MM-D-1.1.3] Identify 149,600 acres (Map 2.22) as closed to fluid mineral leasing:

- Non-discretionary closures – Wilderness, WSAs, Piedras Blancas ONA, and the PCNST
 - Discretionary closures – Bitter Creek ACEC, Blue Ridge ACEC, Erskine Creek ACEC, Piute Cypress ACEC, and Point Sal ACEC; lands with wilderness characteristics; segments of the Lower Kern River, North Fork of the Kaweah River, San Joaquin River, and Chimney Creek determined to be suitable as Wild and Scenic Rivers; and Deer Spring area of ecological importance.

[MM-D-1.1.4] Identify 26,440 acres, in the Kaweah ACEC (Map 2.22) as closed only to geothermal leasing

[MM-D-1.1.5] Identify approximately 1,011,470 acres (Map 2.22) as open to fluid mineral leasing, subject to major constraints (both CSU – Protected Species and CSU – Sensitive Species). Of this at least 3,880 acres would also be subject to a No Surface Occupancy stipulation. Additional CSU stipulations may be applied to all new leases in conjunction with the lease sale as determined appropriate and in conformance with the RMP.

[MM-D-1.1.6] Establish the major constraint of “NSO – General” that prohibits surface disturbance on the entire lease for the purpose of minimizing or eliminating adverse effects on unique or significant natural and cultural resources that are incompatible with fluid mineral development with the following stipulation language:

All or a portion of this lease has been identified by the current RMP (e.g., ACECs and areas of ecological importance with this stipulation prescribed) as containing unique or significant natural or cultural values. No new surface disturbing activity is allowed on the lease. This stipulation may be granted exception, modified, or waived as follows:

Exception: *The Authorized Officer may grant an exception if after discussion with an appropriate agency (e.g., CDFW, SHPO, and USFWS) it decides that an environmental review determines the action as proposed or conditioned would not impair the values present because of temporary conditions.*

Modification: *The Authorized Officer may modify this stipulation to allow surface use on a portion or even all of the lease if an environmental review determines the action as proposed or conditioned would not impair the values present.*

Waiver: *The Authorized Officer may grant a waiver if an environmental review determines the values for which the NSO was applied no longer exist.*

Objective: *To minimize or eliminate adverse effects on unique or significant natural and cultural resources that are incompatible with fluid mineral development.*

Application: The NSO-General stipulation would be applied when adequate protection of surface resources cannot be provided through mitigation, and fluid mineral development of the lease from an off-site location is recommended. If there is no surface location available for directional drilling, the land would not be leased.

Review Process: Any proposed surface-disturbing activity would be reviewed to determine whether it is in compliance with the NSO stipulation. If the review determines the proposed action would not impair the values present and would be consistent with the management of the ACEC or area of ecological importance, exception or modification may be granted. Any decision to grant an exception or modification would be based on field inspection and inventory and the NEPA review process.

[MM-D-1.1.7] Establish the major constraint of “NSO – Compensation Lands ACEC” that prohibits surface disturbance on the entire lease for the purpose of minimizing or eliminating adverse effects associated with fluid mineral development on lands acquired as compensation lands with the following stipulation language:

All or a portion of this lease occurs within the boundaries of the Compensation Lands ACEC. These lands may have a governing document that prohibits certain activities. No new surface disturbing activity is allowed on the lease. Furthermore, access to federal minerals within the lease will only be allowed from off-site sources not considered to be compensation lands (e.g., compensation land in private ownership). This stipulation shall not be waived, however may be granted exception or modified as follows:

Exception: *The Authorized Officer may grant an exception if after discussion with an appropriate agency (e.g., CDFW and USFWS) it decides that environmental review determines the action as proposed or conditioned would not impair the values present and is consistent with the document that established the compensation land and with federal law.*

Modification: *The Authorized Officer may modify this stipulation to allow surface use on a portion or the entire lease if after discussion with an appropriate agency (e.g., CDFW and USFWS) it decides that environmental review determines the action as proposed or conditioned would not impair the values present and is consistent with the document that established the compensation land and with federal law.*

Objective: *To minimize or eliminate adverse effects associated with fluid mineral development on lands acquired as compensation land.*

Application: The NSO-Compensation Lands stipulation would be applied to all new leases within the Compensation Lands ACEC. Furthermore, access to federal minerals within the lease will only be allowed from off-site sources that are not Compensation Lands. If all of the surrounding land is also Compensation Lands, and there is no other surface location available for directional drilling, the land would not be leased.

Review Process: Any proposed surface-disturbing activity would be reviewed to determine whether it is in compliance with the NSO stipulation. If the review determines the proposed action would not impair the values present and would be consistent with the management of the ACEC; exception or modification may be granted after discussion with the USFWS. Any decision to grant an exception or modification would be based on field inspection and inventory and the NEPA review process.

[MM-D-1.1.8] Establish the major constraint “CSU – Defense” for the purpose of minimizing or eliminating conflict between fluid mineral development and military base operations with the following stipulation language:

All or a portion of this lease contains federal mineral estate under the surface administration of the Department of Defense. Surface disturbing activities may be moved, modified, or prohibited at the discretion of the Base Commander(s) to ensure these activities do not interfere with military activity on the base and to ensure personnel safety. Furthermore, processing times for proposed actions may be delayed beyond established standards to accommodate review and coordination with the Base Commander(s). This stipulation shall not be modified or granted exception; however, it may be waived as follows:

Waiver: *The Authorized Officer may grant a waiver to this stipulation if the surface administration changes from the Department of Defense to another entity.*

Objective: *To minimize or eliminate conflict between fluid mineral development and military base operations.*

Application: The CSU-Defense stipulation would be applied to federal reserved mineral estate under the surface administration of the Department of Defense. Approximately 69,700 acres are affected, including Point Mugu, Port Hueneme, San Nicholas Island, Vandenberg Air Force Base, Camp Roberts, and Lemoore Naval Air Station. Coordination with local government agencies regarding the development of stipulations would be at the discretion of the base commander.

When a tract of land on a military installation is nominated for lease sale, the legal description of the tract of interest would be forwarded to the attention of the base commander. The base commander would respond to the BLM with the recommended wording of the CSU-Defense stipulation. The wording would vary based on the base mission and would be applied to the entire military installation or to a limited portion of the parcel, at the discretion of the base commander. The BLM may alternatively identify in advance of lease sale offerings the terms and conditions applicable to military installations and thus be able to offer the leases for bid with advance disclosure of the terms and conditions.

Review Process: Generally, the following procedure would be used to approve surface-disturbing activities on leases with the CSU-Defense stipulation. The proposed activity would be reviewed to determine if the mission of the military installation would be affected. The review process would involve meetings coordinated by the BLM between the lessee and the representatives of the military base to determine impacts and potential effects.

Approval: If the review determines that the mission of the military installation would not be affected Bureau approval of the proposed activity would normally be granted within 30 days of the review. If the review determines that the mission of the military installation would be adversely affected, the BLM would coordinate with the Base Commander and the applicant to modify the proposal. Modifications may include movement of activities, seasonal restrictions, mitigation and/or compensation. Modified proposals would be developed cooperatively with the applicant to ensure that the modified project still meets the applicant's objective.

[MM-D-1.1.9] Establish the major constraint “CSU - Protected Species” for the purpose of minimizing or eliminating adverse effects associated with fluid mineral development on federally proposed and listed species with the following stipulation language:

All or a portion of the lease occurs within the range of one or more plant or animal species that are either listed or proposed for listing as threatened or endangered by the USFWS. A list of such species will be provided at the time of leasing and updated as necessary over the term of the lease. To determine whether species on this list or their habitat are present, a preliminary environmental review will be conducted for all surface disturbing activities. Presence of habitat or species may result in the proposed action being moved, modified, or delayed to mitigate project effects. Offsite compensation that would satisfactorily offset the loss of habitat may be required. Prohibition of all surface disturbing activities on the lease will only occur as needed to avoid jeopardizing the continued existence of a listed or proposed species, or when the proposed action is inconsistent with the recovery needs of a species as identified in an approved USFWS Recovery Plan through consultation with USFWS. Furthermore, processing times for proposed actions may be delayed beyond established standards to accommodate species surveys, and

consultation or conferencing with the USFWS. This stipulation shall not be waived; however, it may be modified or an exception may be granted as follows:

Exception: *The Authorized Officer may grant an exception if an environmental review determines the action as proposed or conditioned would have no effect on listed or proposed species.*

Modification: *The Authorized Officer may modify this stipulation to reflect new information with regard to the range of listed or proposed species through the expansion or reduction of lands subject to this stipulation for a specific species.*

Objective: *To minimize or eliminate adverse effects associated with fluid mineral development on federally proposed and listed species.*

Application: At the time of leasing, the CSU-Protected Species stipulation would be attached to all leases within the range of federally listed or proposed species. A list of protected species found within the Field Office boundary would be included with the stipulation for each lease at the time of leasing. This list may be updated at the time of APD/NOS submittal.

Review Process: Generally, the following process would be used to approve surface-disturbing activities on leases with the CSU-Protected Species stipulation. The proposed activity would be reviewed to determine if listed or proposed species would be affected. This review may involve site-specific surveys for plant and animal species conducted according to established methods that may specify certain seasons or other conditions. In some cases, this may mean that a survey cannot be completed until the next growing season for some plant species or after seasonal appearance for some animal species.

If the review determines that listed or proposed species would not be affected, an exception to the stipulation and approval of the application would normally be granted within 30 days of the review.

If the review were to determine that listed or proposed species may be affected, but in a beneficial, insignificant, or benign manner, and written concurrence is received from the USFWS, approval of the application would normally be granted within 30 days of receiving USFWS concurrence. There is no regulatory timeframe for USFWS to provide their written concurrence.

If it is determined that a listed or proposed species may be adversely affected, the BLM would work with the applicant to modify the proposal to minimize impacts. Modifications may include movement of activities, seasonal restrictions, mitigation, or compensation. Modified proposals would be developed with the applicant to ensure that the modified project still meets the applicant's objective. If the modified project would still adversely affect a listed or proposed species, the BLM would begin formal consultation or conference with the USFWS.

Coordination with the USFWS on Listed Species: Currently there are two options for meeting the formal consultation requirement. A new consultation may be initiated or a previously completed formal consultation may be used.

If a new consultation were initiated, the USFWS would issue a document, called the biological opinion. The USFWS has up to 135 days to complete a biological opinion, and it may request a 60-day extension. Extensions beyond 195 days require the consent of an applicant.

A previously completed formal consultation may also be used to meet the formal consultation requirement. An example of previously completed consultation that may be used is the *San Joaquin Valley Oil and Gas Programmatic Biological Opinion*.

Upon completion of a new consultation or determination that a previously completed consultation can be used, approval of the application will normally be granted within 30 days. If the new consultation concludes that a listed species may be jeopardized, then surface disturbance will be prohibited on the lease.

Surface disturbance will also be prohibited if the consultation concludes that the proposed action is inconsistent with the recovery needs of the listed species as identified in an approved USFWS Recovery Plan. Although Recovery Plans are not requirements, BLM has voluntarily chosen to apply their recommendations through the land use plan (see BR-D 28), and these recommendations are reflected in this stipulation.

Coordination with the USFWS on Proposed Species: BLM policy requires a conferencing with the USFWS on any action that may adversely affect proposed species. Depending on the complexity of the situation, a conference may be completed in a single telephone conversation or may require the time frames of a consultation. Generally, on completion of the conference, approval of the application will be granted within 30 days.

If the conference were to show that a proposed species may be jeopardized, surface-disturbing activities would be prohibited on the lease.

Final Approval: Final approval of applications that would have no effect on listed or proposed species would normally be granted within 30 days of the review.

Final approval for projects that may affect listed or proposed species in a beneficial, insignificant, or benign manner would normally be granted within 30 days of receiving USFWS written concurrence.

For projects that require consultation or conference with the USFWS, final approval would normally be granted within 30 days of consultation or conference completion. Conditions of approval would include any conditions specified by the BLM or USFWS for minimizing impacts.

[MM-D-1.1.10] Establish the major constraint “CSU – Critical Habitat” for the purpose of minimizing or eliminating adverse effects associated with fluid mineral development on habitat designated as critical, or is proposed for designation as critical habitat by the USFWS with the following stipulation language:

All or a portion of this lease lies within an area that is designated as critical habitat, or is proposed for designation as critical habitat by the USFWS. A list of these areas affecting this lease will be provided at the time of leasing and will be updated as necessary over the term of the lease. Any proposed surface disturbing activity occurring on the affected portions of this lease will be reviewed to determine if the activity would affect designated or proposed critical habitat. Determination of effects to designated or proposed critical habitat may result in the

proposed action being moved, modified, seasonally restricted, or delayed. Consultation or conference with the USFWS is required if designated or proposed critical habitat may be affected. Off-site compensation that would satisfactorily offset the loss of habitat may be required. Prohibition of all surface disturbing activities on the lease will only occur as needed to avoid destroying or adversely modifying critical habitat or proposed critical habitat, or when the proposed action is inconsistent with the recovery needs identified in an approved USFWS Recovery Plan based on consultation with USFWS. Furthermore, processing times for proposed actions may be delayed beyond established standards to accommodate species surveys, and consultation or conferencing with the USFWS. This stipulation shall not be waived; however, it may be granted exception or modified as follows:

Exception: *The Authorized Officer may grant an exception if an environmental review determines the action as proposed or conditioned would have no effect on critical habitat or proposed critical habitat.*

Modification: *The Authorized Officer may modify this stipulation to reflect new information with regard to the critical habitat or proposed critical habitat through the expansion or reduction of lands subject to this stipulation for a specific species.*

Objective: *To minimize or eliminate adverse effects associated with fluid mineral development on habitat designated as critical, or is proposed for designation as critical habitat by the USFWS.*

Application: The CSU-Critical Habitat stipulation would be applied to leases in areas that are designated as critical habitat or that are proposed for designation as critical habitat for certain species. A list of species and parcels would be included with the stipulation for each lease. The USFWS designates or proposes critical habitat according to the regulations found in 50 CFR 424. Critical habitat is one of the following:

- Specific areas within the geographical area currently occupied by a species, at the time it is listed in accordance with the Endangered Species Act, on which are found those physical or biological features (i) essential to the conservation of the species and (ii) that may require special management considerations or protection, and
- Specific areas outside the geographical area occupied by a species at the time it is listed upon a determination by the Secretary that such areas are essential for conservation of the species (50 CFR 424.02).

Review Process: Generally, the following process would be used to approve surface-disturbing activities on leases with the CSU-Critical Habitat stipulation. The proposed activity would be reviewed to determine if designated or proposed critical habitat would be affected. This review may involve site-specific surveys for plant and animal species, conducted according to established methods, which may specify certain seasons or other conditions. In some cases this may mean that a survey cannot be completed until the next growing season for some plant species or after seasonal appearance for some animal species.

If the review determines that designated or proposed critical habitat will not be affected, an exception to the stipulation would be granted, and approval of the application will normally be granted within 30 days of the review.

If the review determines that designated or proposed critical habitat may be affected, but in a beneficial, insignificant, or benign manner, and written concurrence is received from the USFWS, the application would normally be approved within 30 days of receiving USFWS concurrence. There is no regulatory timeframe for USFWS to provide their written concurrence.

If it is determined that designated or proposed critical habitat may be adversely affected, BLM would work with the applicant to modify the proposal to minimize impacts. Modifications may include relocating activities, seasonal restrictions, mitigation, and compensation. Modified proposals would be developed with the applicant to ensure that the modified project still meets the applicant's objective. If the modified project were to still adversely affect designated or proposed critical habitat, the BLM would initiate formal consultation or conference with the USFWS.

Coordination with the USFWS on Designated Critical Habitat: The BLM is required to initiate formal consultation with the USFWS for any action that may affect designated critical habitat. As a result of the consultation, the USFWS would issue a biological opinion within 135 days, and it may request a 60-day extension. Extensions beyond 195 days require the consent of an applicant.

As part of the biological opinion, the USFWS would determine if the proposed action would be likely to destroy or adversely modify critical habitat. Destruction or adverse modification of critical habitat means a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include those adversely modifying any of the physical or biological features that were the basis for determining the habitat to be critical (50 CFR 402.02).

If consultation concludes that critical habitat would be destroyed or adversely modified, then surface disturbance would be prohibited on the affected portion of the lease. Surface disturbance also would be prohibited if the consultation were to conclude that the proposed action is inconsistent with the recovery needs of the listed species, as identified in an approved USFWS recovery plan.

Coordination with the USFWS on Proposed Critical Habitat: BLM policy requires conferencing with the USFWS on any action that may adversely affect proposed critical habitat. Depending on the complexity of the situation, a conference may be completed in a single telephone conversation or may require the time frames of a consultation. Generally, on completion of the conference, the application would be approved within 30 days. If the conference were to show that proposed critical habitat would be destroyed or adversely modified, then surface disturbance would be prohibited on the affected portion of the lease.

[MM-D-1.1.11] Establish the major constraint “CSU - Sensitive Species” for the purpose of minimizing or eliminating adverse effects associated with fluid mineral development on federal candidate, State listed and BLM sensitive species with the following stipulation language:

All or a portion of this lease is within the range of one or more plant or animal species that are either federal candidates for listing as threatened or endangered (federal candidate), are listed by the State of California as threatened or endangered (state listed), or are designated by the BLM as sensitive (BLM sensitive). A list of species will be provided at the time of leasing and updated as necessary over the term of the lease. To determine whether species on this list or

their habitat are present, a preliminary environmental review will be conducted for all surface disturbing activities. Presence of habitat or species may result in the proposed action being moved more than 200 meters (656 feet) but not more than a quarter-mile or off of the lease and prohibition of activities during seasonal use period. Furthermore, processing times for proposed actions may be delayed beyond established standards to accommodate species surveys, and coordination with the USFWS and California Department of Fish and Game. This stipulation shall not be waived; however, it may be granted exception or modified as follows:

Exception: *The Authorized Officer may grant an exception if an environmental review determines the action as proposed or conditioned would have no effect on federal candidate, state listed, and BLM sensitive species.*

Modification: *The Authorized Officer may modify the stipulation to reflect new information with regard to federal candidate, state listed or BLM sensitive species lists. Furthermore, the authorized officer may modify the maximum distance that a potential location could be moved to extend farther than the stated quarter-mile to maintain the sensitive species protection goals.*

Objective: *To minimize or eliminate adverse effects associated with fluid mineral development on federal candidate, state listed, and BLM sensitive species.*

Application: The CSU-Sensitive Species stipulation would be attached to all leases that are within the range of a federal candidate, state listed or BLM sensitive species. A list of sensitive species within the Field Office boundary would be included with the stipulation for each lease when the lease is issued.

Review Process: Generally the following process would be used to approve surface-disturbing activities on leases with the CSU-Sensitive Species stipulation. The proposed activity would be reviewed to determine if special status species would be affected. This review may involve site-specific surveys for plant and animal species, conducted according to established methods that may specify certain seasons or other conditions. In some cases this may mean that a survey cannot be completed until the next growing season for some plants or after seasonal appearance for some animal species.

If the review determines that a special status species may be adversely affected, then surface-disturbing activities may be relocated up to a quarter-mile, but not off the lease, and certain surface-disturbing activities may be prohibited during seasonal periods. BLM policy may also require coordination with the USFWS or California Department of Fish and Game.

[MM-D-1.1.12] Establish the major constraint “CSU – Priority Species, Plant Communities and Habitats” for the purpose of minimizing or eliminating adverse effects associated with fluid mineral development on rare and/or endemic vegetation, plants, and communities, including riparian and serpentine endemics, with the following stipulation language:

All or a portion of the lease has been identified by the current RMP (i.e., ACECs and areas of ecological importance with this stipulation prescribed) as containing priority species, plant communities, or habitat that may be adversely affected by fluid mineral development. A list of affected parcels or portions of the lease will be provided at the time of leasing. To identify the possibility of adverse impact resulting from fluid mineral development, a preliminary environmental review will be conducted for all surface disturbing activities. Identification of

adverse impacts may result in the proposed action being moved, modified, seasonally delayed, or prohibited from all or a portion of this lease. Furthermore, processing times for proposed actions may be delayed beyond established standards to accommodate species surveys. This stipulation shall not be waived, but may be granted exception or modified as follows:

Exception: *The Authorized Officer may grant an exception if an environmental review determines the action as proposed or conditioned would have no effect on priority species, plant communities, or habitats.*

Modification: *The Authorized Officer may modify the stipulation to reflect new information with regard to the presence of priority species, plant communities, or habitat through the expansion or reduction of lands subject to this stipulation.*

Objective: *To minimize or eliminate adverse effects associated with fluid mineral development on priority species, plant communities, or habitat.*

Application: The CSU-Priority Species, Plant Communities and Habitats stipulation would be applied to specific areas that contain unique or significant biological and botanical values as described in the RMP (i.e., ACECs and areas of ecological importance).

Review Process: Generally the following process would be used to approve surface-disturbing activities on leases with the CSU- Priority Species, Plant Communities and Habitats stipulation: The proposed activity would be reviewed to determine if the values for which the area was recognized would be affected. This review may involve site-specific surveys for plant species, conducted according to established methods, which may specify certain seasons or other conditions. In some cases this may mean that a survey cannot be completed until the next growing season for some plants species.

If the review were to determine that the values for which the area was recognized may be adversely affected, then surface-disturbing activities may be moved, modified, or prohibited on portions of or the entire lease and certain activities may be prohibited during seasonal periods.

[MM-D-1.1.13] Establish the major constraint “CSU - Raptor” for the purpose of minimizing or eliminating adverse effects associated with fluid mineral development on sensitive raptor foraging areas, winter roosting areas, or nest sites with the following stipulation language:

All or a portion of this lease has been identified as an important raptor foraging, wintering, or nesting area. Any proposed surface disturbing activity will be reviewed to determine if the activity would affect raptor foraging, wintering, or nesting habitat. Determination of effects to raptor foraging, wintering, or nesting habitat may result in the proposed action being moved more than 200 meters (656 feet) but not more than a half-mile and prohibition of activities during seasonal use period. This stipulation may be granted exception, modified, or waived as follows:

Exception: *The Authorized Officer may grant an exception if the operator submits a plan that demonstrates that impacts from the proposed action are minimal or can be adequately mitigated.*

Modification: *The Authorized Officer may modify the distance and other provisions of this stipulation based on new information and increasing or decreasing levels of the impacts anticipated from fluid mineral development.*

Waiver: *The Authorized Officer may waive the stipulation should new information show the area no longer contains sensitive raptor habitat for foraging, winter roosting, or nesting.*

Objective: *To minimize or eliminate adverse effects associated with fluid mineral development on sensitive raptor foraging areas, winter roosting areas, or nest sites.*

Application: The CSU-Raptor stipulation would be applied to lands that have been identified as important raptor foraging, wintering, or nesting areas. Such lands include, but are not limited to, the Hopper Mountain, Kaweah, Kettleman Hills, Chico Martinez, Temblor, Caliente Mountain, and the San Joaquin River Gorge areas.

Review Process: Generally, the following process would be used to approve surface-disturbing activities on leases with the CSU-Raptor stipulation. The proposed activity would be reviewed to determine if sensitive raptor foraging areas, winter roosting areas, or nest sites would be affected. If the review were to show that sensitive raptor use areas may be adversely affected, then surface-disturbing activities may be relocated up to one-half mile or certain activities may be prohibited during seasonal periods. Modified proposals would be developed with the applicant to ensure that the modified project still meets the applicant's objective.

Different raptor species and different individuals vary in their sensitivity and ability to habituate to disturbances. Type and extent, duration and timing, and visibility of disturbance and influence of other environmental factors, such as topography, also affect the significance of the disturbance in any particular case. Often, moving an activity out of visibility, such as behind a topographic feature, would be sufficient. Delaying certain new activities until young birds have fledged is also a common tactic. Movement of surface-disturbing activities to retain roost trees or hunting perches may also be used.

The following species or groups of species would be eligible for protection under the CSU-Raptor stipulation: golden eagle, bald eagle, black-shouldered kite, northern harrier, sharp-shinned hawk, Cooper's hawk, northern goshawk, red-shouldered hawk, red-tailed hawk, Swainson's hawk, rough-legged hawk, ferruginous hawk, osprey, American kestrel, merlin, prairie falcon, peregrine falcon, and all owl species.

[MM-D-1.1.14] Establish the major constraint "CSU – Known Cultural Resources" for the purpose of minimizing or eliminating adverse effects associated with fluid mineral development on National Register-listed or eligible cultural properties with the following stipulation language:

All or a portion of the lease contains National Register-listed or potentially eligible cultural properties that may be adversely affected by fluid mineral development. A list of affected parcels or portions of the lease will be provided at the time of leasing. To identify the possibility of adverse impacts resulting from fluid mineral development, a preliminary cultural resource review/survey will be conducted for all surface disturbing activities. Identification of adverse impacts may result in the proposed action being moved or modified. Surface-disturbing activities would be prohibited on the portion of the lease where National Register-listed properties or

properties potentially eligible for listing on the National Register occur. This stipulation may be modified, waived, or granted exception as follows:

Exception: *The Authorized Officer may grant an exception, with concurrence from the California State Historic Preservation Office and Native American tribes, if a subsequent formal eligibility evaluation indicates the cultural property is ineligible.*

Modification: *The Authorized Officer may modify the stipulation to reflect new information from formal eligibility evaluations for cultural properties through the expansion or reduction of land where surface disturbing activities would be prohibited.*

Waiver: *The Authorized Officer may grant a waiver to the stipulation should the results of formal eligibility evaluation determine all cultural properties ineligible for listing on the National Register.*

Objective: *To minimize or eliminate adverse effects associated with fluid mineral development on known National Register-listed or potentially eligible cultural properties.*

Application: *The CSU—Known Cultural Resources stipulation would be applied to lands that contain known National Register-listed or potentially eligible cultural properties. The locations and number of acres affected would be determined at the leasing stage.*

Review Process: *Generally, the following process would be used to approve surface-disturbing activities on leases with the CSU-Known Cultural Resources stipulation. The proposed surface disturbing activity would be reviewed to determine if a known National Register-listed or potentially eligible cultural property would be affected. If the review were to show that the cultural property may be adversely affected, then surface-disturbing activities would be relocated or modified. Surface-disturbing activities would be prohibited on the lease only where the proposed action would be likely to destroy or adversely affect a known National Register-listed property or properties found eligible for listing on the National Register.*

[MM-D-1.1.15] Establish the major constraint of “CSU – Compensation Lands” for the purpose of minimizing or eliminating adverse effects associated with fluid mineral development on lands managed as compensation land with the following stipulation language:

All or a portion of this lease underlies lands managed as compensation land by the BLM or an entity other than the BLM that may have a governing document that prohibits certain activities. To allow only a compatible amount of disturbance to unique or significant biological values, no more than ten (10) percent of the surface within any parcel may be disturbed on the surface reserve lands overlaying the lease. Furthermore, access to federal minerals within the lease will not disturb more than ten (10) percent of the surface within any parcel from off-site sources that are compensation lands (e.g., compensation land in private ownership). This stipulation may be granted exception, modified, or waived as follows:

Exception: *The Authorized Officer may grant an exception if after discussion with an appropriate agency (e.g., CDFW and USFWS) it decides that environmental review determines the action as proposed or conditioned would not impair the values present and is consistent with the document that established the compensation land and federal law.*

Modification: *The Authorized Officer may modify this stipulation if after discussion with an appropriate agency (e.g., CDFW and USFWS) it decides that environmental review determines the action as proposed or conditioned would not impair the values present and is consistent with the document that established the compensation land and federal law.*

Waiver: *The Authorized Officer may grant a waiver to the stipulation if the lease parcel no longer considered as compensation land by the appropriate agency (e.g., BLM, CDFW and USFWS).*

Objective: *To minimize or eliminate adverse effects associated with fluid mineral development on lands managed as compensation land.*

Application: The CSU–Compensation Lands stipulation would be applied to mineral estate underlying areas managed as compensation lands by the BLM or an entity other than BLM.

Review Process: Generally the following process would be used to approve surface-disturbing activities on leases with the CSU–Compensation Lands stipulation: The document governing the specific parcel of compensation land would be reviewed to determine if the proposed activity is allowed on the parcel. If the proposed activity is allowed by the governing document, the activity would be reviewed to determine if the proposed surface disturbance would exceed the 10 percent threshold. If the review determines that the proposed activity would cumulatively exceed this threshold, actions to reduce the cumulative surface disturbance to below 10 percent, such as restoration, would be required prior to approval of the proposed activity.

If the review resulted in a determination that the proposed activity is not allowed by the governing document, or that the cumulative surface disturbance cannot be kept at or below the 10 percent threshold, then new surface-disturbing activities would be prohibited.

If lands adjacent to the lease have also been set aside as compensation lands, either by BLM or another entity, off-site surface-disturbing activities to access federal mineral estate will be subjected to the same restrictions as above.

[MM-D-1.1.16] Establish the major constraint “CSU – Existing Surface Use/Management” for the purpose of minimizing or eliminating conflict between fluid mineral development and existing surface use on both public lands and split estate overlying federal minerals, including risk to public health and safety, and social and economic impacts (noise, aesthetics, etc.) with the following stipulation language:

All or a portion of the lease contains federal mineral estate underlying surface with an established use or management that may be incompatible with fluid mineral development. A preliminary environmental review will be conducted for all surface disturbing activities to identify possible conflict between surface use and fluid mineral development. Surface disturbing activities may be moved, modified, or prohibited to accommodate the existing surface use should the Authorized Officer determine the incompatibility of these uses. Specifically, fluid mineral development shall not occur:

- (1) Closer to any development (e.g., public highway, institution, place of public assembly, or occupied dwelling) than allowed by the county/city regulation or statute applicable to the area in which the proposed action occurs (including those exceptions where closer spacing is allowed);*

- (2) *In a manner that significantly and adversely impacts natural and/or cultural resources of which the surface owner/administrator is charged with the management and protection;*
or
- (3) *In a manner that significantly and adversely impacts existing recreation opportunity of which the surface owner/administrator is charged with the management and protection.*

Furthermore, processing times for proposed actions may be delayed beyond established standards to accommodate review and coordination with the surface owner/administrator. This stipulation shall not be waived, but may be granted exception or modified as follows:

Exception: *The Authorized Officer may grant an exception where a surface use agreement exists between the lessee and surface owner/administrator that allows for the proposed fluid mineral development. Furthermore, exception may be granted where the proposed action is deemed, following an environmental review, to have discountable or insignificant impacts on the existing surface use.*

Modification: *The Authorized Officer may modify this stipulation to further restrict surface use for mineral development on a portion of or all the lease if a more stringent requirement with regard to the location of facilities is deemed necessary following an environmental review (e.g., greater than county/city restrictions on fluid mineral development).*

Objective: *To minimize or eliminate conflict between fluid mineral development and existing surface uses on both public lands and split estate over federal minerals, and to reduce impacts associated with fluid mineral resource development on the owners/occupants within a dwelling or structure on split estate lands.*

Application: The CSU-Existing Surface Use/Management stipulation would be applied to areas where the authorized officer determines that pre-existing surface management uses/conditions would be incompatible with or preclude oil and gas operations from using the surface of a portion or even all of the leased land. The locations and number of acres affected would be determined at the leasing stage.

Review Process: Generally the following process would be used to approve surface-disturbing activities with the CSU-Existing Surface Use/Management stipulation. The proposed activity would be reviewed cooperatively with the surface manager to determine if it is compatible with the existing uses/conditions, and if not, the activity would be moved or possibly even denied/rejected.

[MM-D-1.1.17] Establish the major constraint of “CSU – Chimineas Ranch” for the purpose of preventing or reducing disturbance to unique or significant natural resources from fluid mineral development with the following stipulation language:

This lease is within the boundaries of, or adjacent to, the State of California’s Chimineas Unit of the Carrizo Plain Ecological Reserve, an area that contains unique or significant natural or cultural values. Prior to the authorization of any surface disturbing activities, a preliminary environmental review will be conducted to identify the potential presence of natural or cultural values. Authorizations may be delayed until completion of the necessary surveys during the

appropriate time period for these resources. Surface disturbing activities may be prohibited on portions or the entire lease, and some activities may be prohibited during seasonal time periods. This stipulation shall not be waived, however may be granted exception or modified as follows:

Exception: *The Authorized Officer may grant an exception if, after discussion with CDFW, an environmental review determines that the activity, as proposed or conditioned, would not impair the values present and is consistent with the management of the ecological reserve.*

Modification: *The Authorized Officer may modify this stipulation to further restrict surface use on a portion of or the entire lease if a more stringent requirement is deemed necessary to protect resource values following an environmental review.*

Objective: *To prevent or reduce disturbance to unique or significant natural or cultural values from fluid mineral development.*

Application: The CSU–Chimineas Ranch stipulation would be applied to lands adjacent to, or within the boundaries of the California Department of Fish and Game’s Chimineas Unit of the Carrizo Plain Ecological Reserve, where the surface is managed by BLM. Split estate land, where the surface is management by the California Department of Fish and Game, would be subject to the CSU-Existing Surface Use/Management stipulation.

Review Process: Generally, the following process would be used to approve surface disturbing activities on leases with the CSU–Chimineas Ranch stipulation. The proposed activity would be reviewed to determine if the values for which the area was recognized would be affected. This review may involve site specific surveys for plant and animal species, conducted according to established methodologies which may specify certain seasons or other conditions. In some cases this may mean that a survey cannot be completed until the next growing season for some plants or after seasonal appearance for some animal species.

If the review determines that the values for which the area was recognized may be adversely affected, then surface disturbing activities may be prohibited on all or portions of the lease and certain activities may be prohibited during seasonal periods.

[MM-D-1.1.18] These stipulations and decisions do not apply to geophysical exploration conducted outside the rights granted by a Federal oil and gas lease. Stipulations governing geophysical exploration would be established in site specific NEPA documentation and incorporate appropriate protective measures (Appendix 3).

Administrative Actions

- Collaborate with oil, gas, and geothermal operators, surface owners, and other federal and state agencies to ensure that development, including off-site access when required, is conducted so as to minimize impacts on natural and cultural resources and surface owner objects of concern.
- Conduct regular inspections to ensure compliance with laws, regulations, and COAs that would affect areas, such as safety, production and royalty accountability, and the environment.
- Manage new and existing leases to ensure timely lease restoration, including interim reclamation, plugging uneconomic wells, eliminating redundant roads, and final reclamation when the last well is plugged and there is no further economic value to the lease.

- Enforce good housekeeping requirements; for example, require operators to maintain a neat and orderly appearance of sites, to remove junk and trash, and otherwise to minimize landscape intrusions.
- All surface estate will be treated with equal diligence, whether the surface was public land or split estate.

2.14.1.2 Solid (Non-Energy) Leasable Minerals

Objective

[MM-O-1.2] Provide opportunities for reasonable, economical, and environmentally sound exploration and development of Solid (Non-Energy) leasable minerals while minimizing impacts to resources.

Decisions

[MM-D-1.2.1] Identify 108,540 acres as closed to Solid (Non-Energy) leasable mineral development: all ACECs, lands managed for wilderness characteristics, and suitable segments of WSRs (Map 2.23).

[MM-D-1.2.2] Identify 906,906 acres as open to solid (non-energy) mineral leasing and development.

Locatable Minerals

Objective

[MM-O-2] Facilitate reasonable, economical, and environmentally sound exploration and development of locatable minerals, while ensuring compatibility with other resources and uses including public health and safety.

Decisions

[MM-D-2.1] Establish the following ACECs, areas of ecological importance, cultural resource sites and RMZs (52,210 acres), in accordance with 43 CFR 3809.31, as areas requiring a 15 day notification be given to the BLM prior to beginning any activity under the mining laws including Casual Use, to allow the BLM to determine whether a notice or plan of operations must be submitted: Ancient Lakeshores ACEC, Blue Ridge ACEC, Chico Martinez ACEC, Cypress Mountain ACEC, Erskine Creek ACEC, Hopper Mountain ACEC, Horse Canyon ACEC, Kaweah ACEC, Point Sal ACEC, Terra Redonda ACEC, Deer Springs, Frog Pond, Granite Cave, Huasna Peak, South Lake Cultural Area, Gold Fever RMZ, The Dam RMZ, Wallow Rock RMZ (Map 2.24). Furthermore, in evaluating mining Notices or Plans of Operation undue and unnecessary degradation will consider the values, resources and objectives for which these areas have been designated or identified in the RMP.

[MM-D-2.2] Interpret the definition of Casual Use provided in 43 CFR 3809.5 for the Decision Area to include the following stipulations, any operations not meeting these would require the filing of a notice or plan of operations:

- (a) Casual Use does not include the disturbance to trees (DBH 4" and greater) and shrubs (taller or wider than 3'); including their root areas (i.e., removal or undermining of these vegetation types will require at a minimum a Notice);
- (b) Casual Use does not include any operations on or within 30 feet of the centerline of designated routes and trails;

- (c) Casual Use does not include any activity that pumps water from water courses for any purpose, except in association with Suction Dredging;
- (d) Casual Use does not include the removal of more than one cubic yard of material from the site for offsite processing;
- (e) Casual Use does not include activity that creates high walls in excess of 3 feet or undermines earthen banks, large rocks, or boulders.
- (f) Casual Use does not include any high-banking, hydraulic mining, and ground sluicing;
- (g) Casual Use does not include any sluices, riffle boxes, and dry washers with collecting surfaces of greater than ten square feet;
- (h) Casual use does not include any disturbance that would result in an adverse effect, as described by Section 106 of the NHPA, to listed, eligible, and those sites or historic districts being treated as eligible until formal eligibility evaluations have been completed; and
- (i) Casual Use will abide by the discovery clause; whereby all activity will cease upon discovery of any subsurface archaeological, historical, or paleontological remains. The discovery must be left intact and reported to the BLM immediately. Operations may only resume on clearance by the BLM and may require the filing of a Notice or Plan of Operations.

Salable Minerals

Objectives

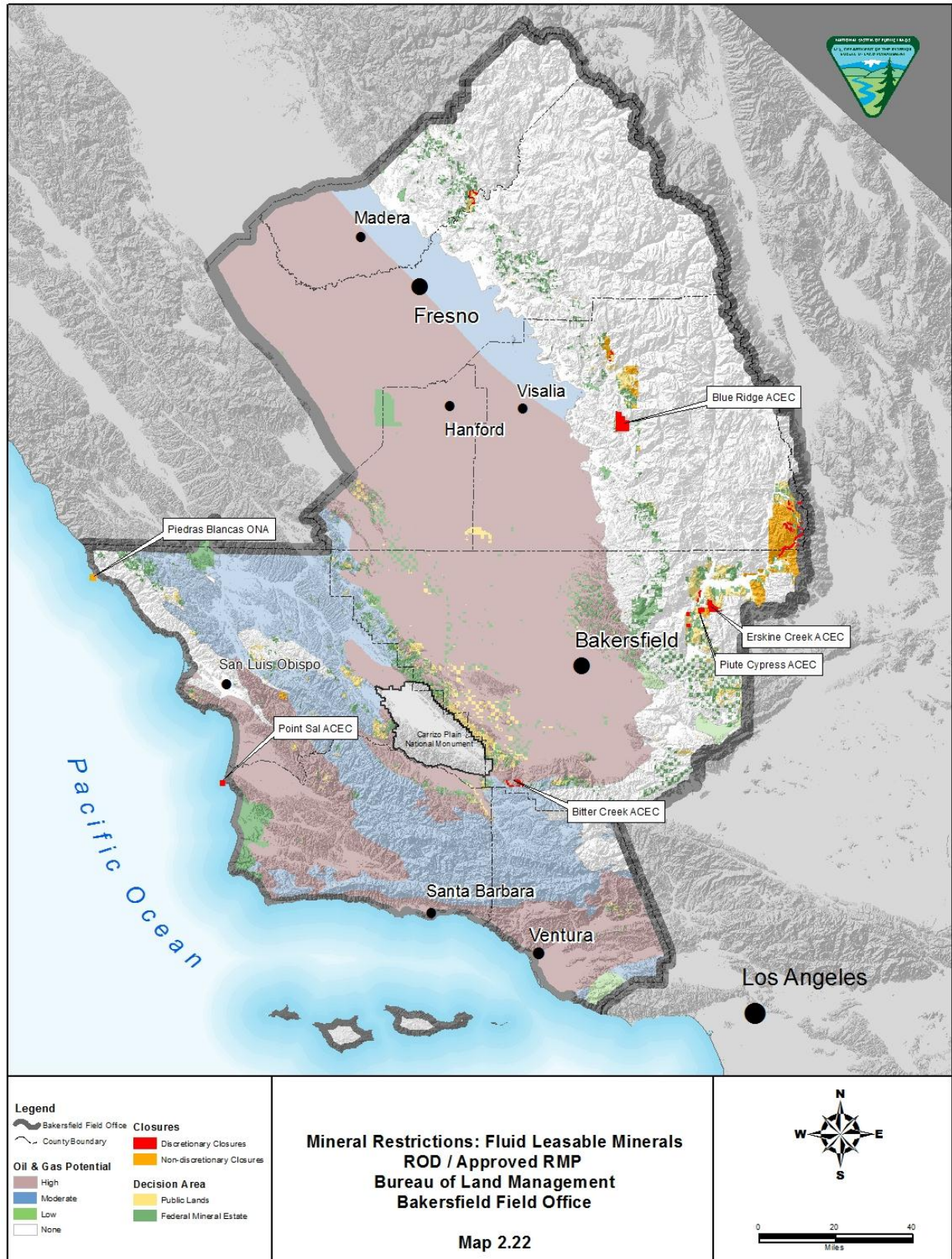
[MM-O-3] Provide salable minerals needed for community and economic purposes and facilitate their reasonable, economical, and environmentally sound development where available and compatible with resource objectives.

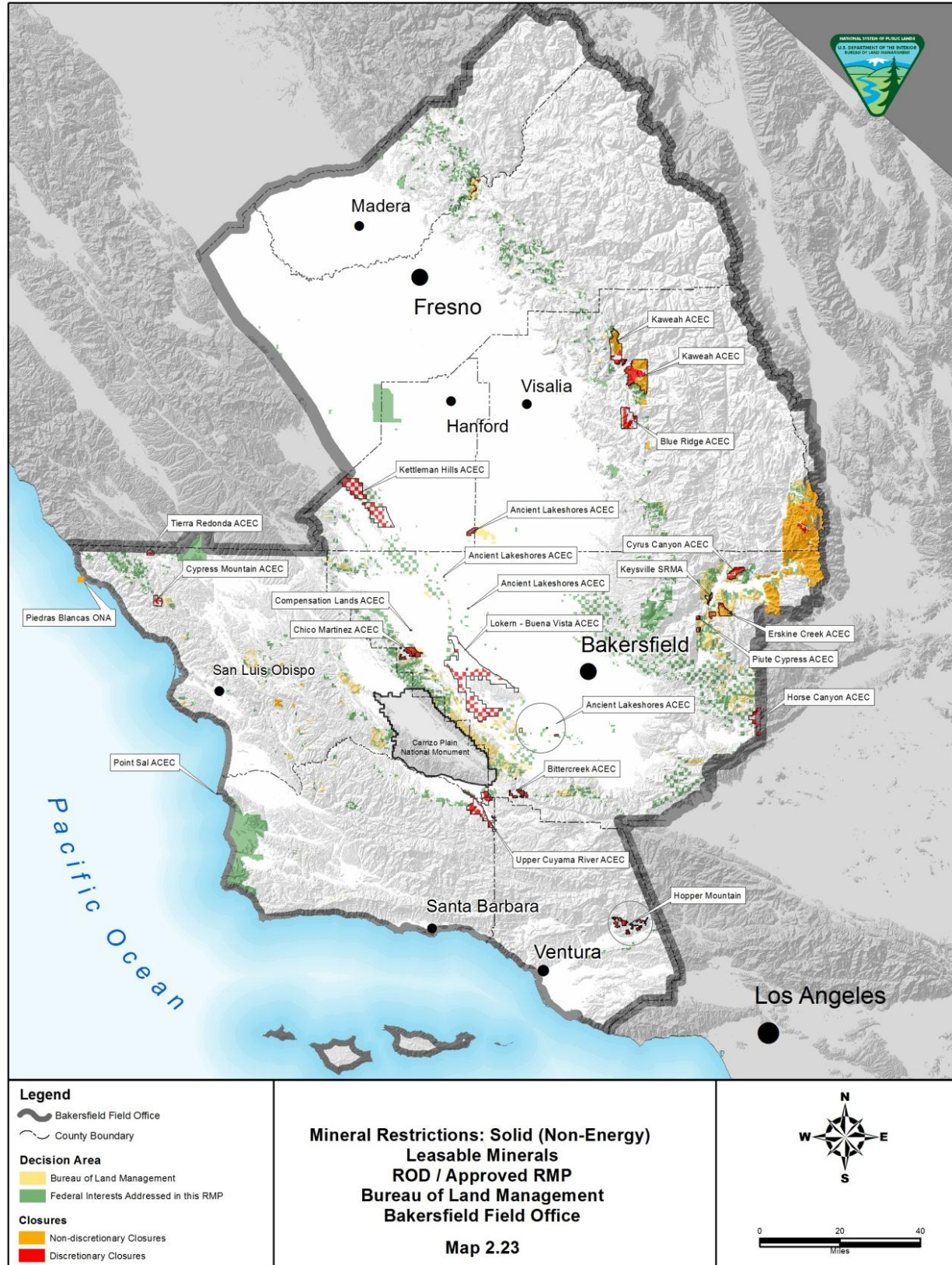
Decisions

[MM-D-3.1] Identify 108,540 acres as closed to mineral material disposal: all ACECs, lands managed for wilderness characteristics and suitable segments of WSRs, unless otherwise noted for administrative purposes only (Map 2.25).

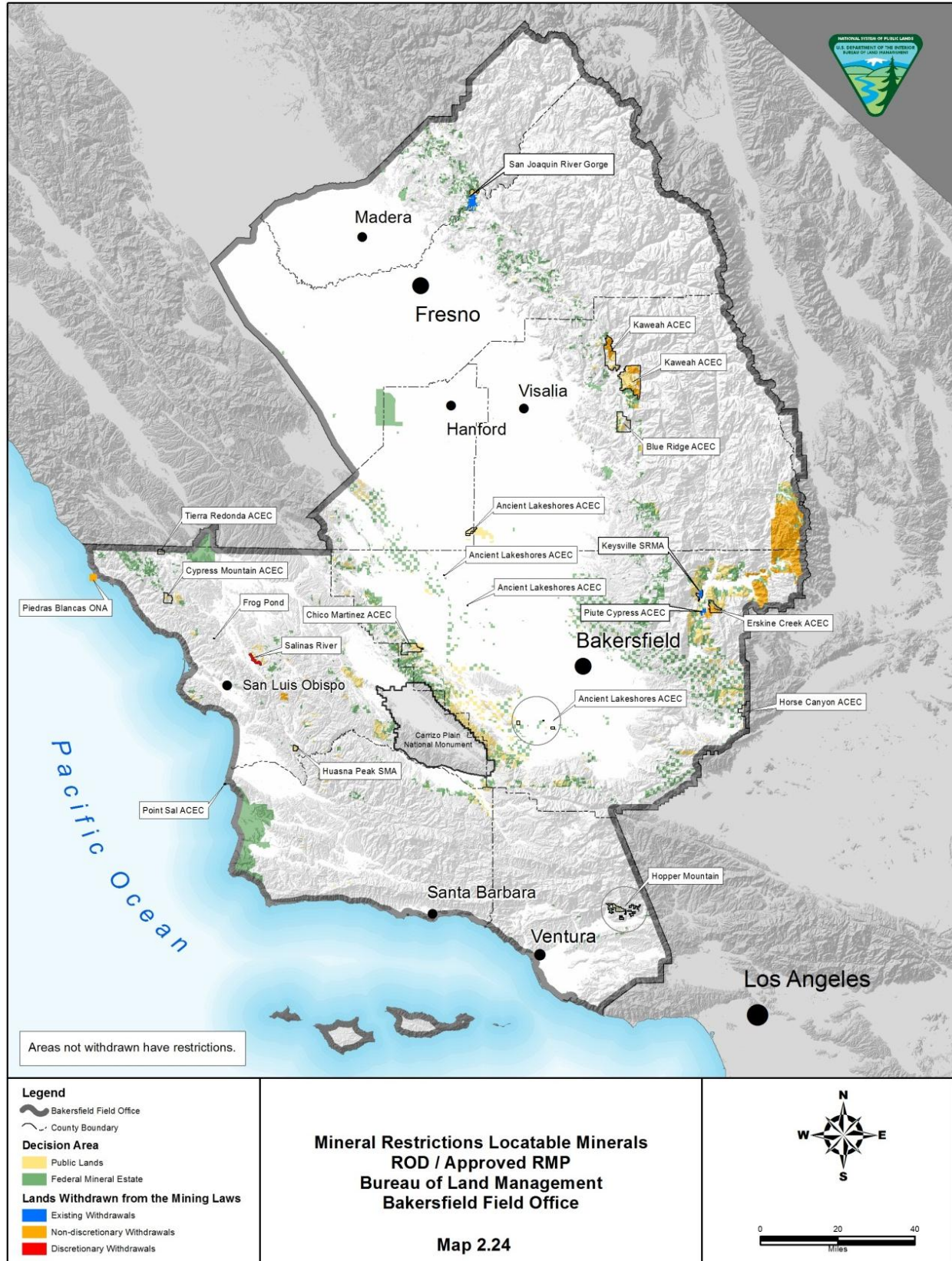
[MM-D-3.2] Identify 906,906 acres as open to mineral material disposal.

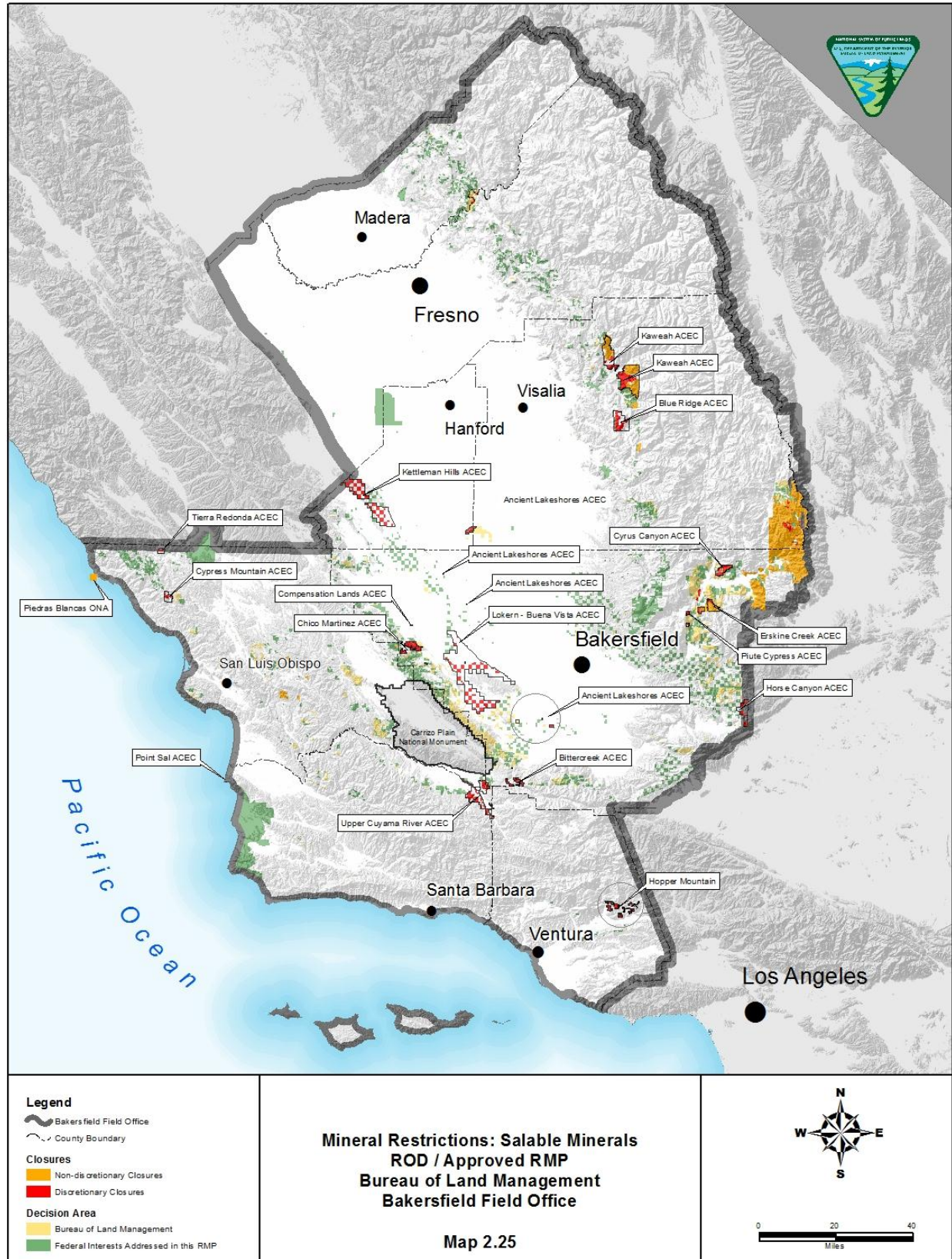
Map 2.22 – Mineral Restrictions: Fluid Leasable Minerals



Map 2.23 – Mineral Restrictions: Solid (Non-Energy) Leasable Minerals

Map 2.24 – Mineral Restrictions: Locatable Minerals



Map 2.25 – Mineral Restrictions: Salable Minerals

2.15 Recreation and Visitor Services

Goal

[RVS-G-1] Support growing demand for recreation access to public lands and maintain a diversity of recreation opportunities promoting a multiple use philosophy.

Objective

[RVS-O-1] Coordinate recreation management activities through an ecosystem-based management style that considers the landscape setting and patterns of land ownership to fully realize program goals.

Allocations Summary

Table 2.5
Recreation Management Allocations Summary

| Recreation Management Area | BLM Acres | Management Action |
|---|----------------|-------------------|
| Keyesville SRMA | 10,860 | RVS-D-1 |
| San Joaquin River Gorge SRMA | 6,486 | RVS-D-2 |
| Temblor SRMA | 24,247 | RVS-D-3 |
| Subtotal SRMA Acres | 41,593 | |
| Atwell Island ERMA | 6,796 | RVS-D-4 |
| Case Mountain ERMA | 18,130 | RVS-D-5 |
| Chimney Peak ERMA | 105,495 | RVS-D-6 |
| Fresno River ERMA | 159 | RVS-D-7 |
| Subtotal ERMA Acres | 130,581 | |
| Areas Not Managed for Recreation | 191,520 | RVS-D-8 |

See Map 2.26 Recreation Management Area Designations

Decisions

[RVS-D-1] Designate 10,860 acres (Map 2.27) as the Keyesville Special Recreation Management Area, established with a “destination” market strategy for southern and central California, including the population centers of Bakersfield, Los Angeles, Riverside and San Bernardino, along with nearby rural communities. The SRMA is subdivided into four (4) Recreational Management Zones, each with the following recreation objectives, targeted activities, experiences, benefits, Natural Resource Recreation Settings, and management activities:

SRMA Wide Administrative Actions:

- Support competitive and commercial activities through the Special Recreation Permit process including maintaining the designated “Keyesville Classic” race course.
- Manage in coordination with adjacent National Forest.
- Establish collaborative partnerships with local interest/user groups.
- Promote volunteerism/friends group for the area.

French Gulch RMZ: In visitor assessments, 50% of respondents who participated in targeted activities report the ability to realize the targeted experiences and benefits.

Market Segment: Extensive trail systems for multiple users of varying experience levels.

Recreation Management Objective: Manage to provide opportunities for visitors to engage in dispersed camping and OHV recreation. The RMZ will also serve as a staging area for long-range OHV touring of both BLM and US Forest Service lands.

Targeted Activities: Trail use (motorized, mechanized and non-mechanized uses); cultural discovery; dispersed camping; and recreational gold prospecting

Targeted Experiences: Developing skills and abilities; testing personal endurance; gaining a greater sense of self-confidence; telling others about the trip; enjoying risk-taking adventure; and discussing equipment with others

Targeted Benefits: *Personal:* Improved mental well-being; greater self-reliance; improved skills for outdoor enjoyment. *Community:* Heightened sense of satisfaction with the community. *Economic:* Improved local economic stability; maintenance of community's distinctive recreation tourism market. *Environmental:* Increased awareness and protection of natural landscapes; reduced negative human impacts such as litter, vegetative trampling, and unplanned trails.

Table 2.6

French Gulch RMZ Natural Resource Recreation Settings

| Characteristic | Prescribed Setting | Description |
|---|--------------------|---|
| PHYSICAL – Land and Facilities: Character of the natural landscape | | |
| Remoteness | Middle Country | On or near motorized routes, but at least ½ mile from all improved roads, though they may be in sight. |
| Naturalness | Middle Country | Natural appearing landscape, except for obvious motorized routes. |
| Visitor Facilities | Middle Country | Maintained and marked trails, simple trailhead developments, improved signs, and very basic toilets. |
| SOCIAL – Visitor Use and Users: Character of recreation tourism use | | |
| Contacts with Groups | Middle Country | 7-14 encounters a day off travel routes (e.g., staging areas) and 15-29 encounters a day en route. |
| Group Size | Backcountry | 4-6 people per group. |
| Evidence of Use | Front Country | Small areas of alteration prevalent. Surface vegetation gone with compacted soils observed. Sounds of people regularly heard. |
| OPERATIONAL – Administration and Services: Character of how area/visitors are served | | |
| Mechanized Use | Middle Country | Four-wheel-drives, all-terrain vehicles, dirt bikes, or snowmobiles, in addition to non-motorized mechanized use. |
| Visitor Services | Middle Country | Area brochures and maps, plus area personnel occasionally present to provide on-site assistance. |
| Management Controls | Middle Country | Occasional regulatory signing. Motorized and mechanized use restrictions. Random enforcement presence. |

Management Activities:

- Create a versatile trail system supporting a variety of uses, skill levels and experiences through collaboration with user groups and partners.
- Allow specialized vehicle recreation (motorcycle and mountain bicycle trials experiences) at a number of sites identified for the purpose.
- Install information kiosks and disseminate information brochures at key locations within the RMZ
- Manage as VRM Class III (See Chapter 2 - 2.8 Visual Resources)
- Establish, in accordance with 43 CFR 3809.31, the RMZ as an area requiring a 15 day notification be given to the BLM prior to beginning any activity under the mining laws including; Casual Use, to allow the BLM to determine whether a notice or plan of operations must be submitted. Furthermore, in evaluating mining Notices or Plans of Operation undue and unnecessary degradation will consider unmitigatable impacts to the targeted activities, experiences and benefits established for the RMZ.
- Manage areas Withdrawn from the General Mining Law to accommodate the collection of non-renewable resources under 46 CFR 8365.1-5(c) for sale to commercial dealers through the establishment of a permit system for such collection. All public lands users wishing to collect non-renewable resources, such as mineral specimens (e.g., Gold), would be required to complete the permit process.

Gold Fever RMZ: In visitor assessments, 65% of respondents who participated in targeted activities report the ability to realize the targeted experiences and benefits.

Market Segment: Interpretation of gold mining history, and other historic resources.

Recreation Management Objective: Manage this RMZ to provide opportunities for visitors to engage in personal and guided (interpreted) discovery of the historical significance of the area. Manage this zone to provide opportunities for community residents and regional, national, and international visitors who use the area for sustainable day use and camping, OHV touring opportunities, opportunities to learn about historical mining, and to gain appreciation of the natural setting of the greater Keysville region through self-discovery.

Targeted Activities: Cultural/historical discovery; trail use (motorized, mechanized and non-mechanized uses); and recreational gold prospecting.

Targeted Experiences: Savoring the total sensory experience of a natural landscape; escaping everyday responsibilities for a while; feeling good about the way shared cultural heritage is being protected; learning about things; just knowing this attraction is in or near the community

Targeted Benefits: *Personal:* Greater respect for shared cultural heritage; closer relationship with the natural world. *Community:* Greater understanding of the community's cultural identity; greater community involvement in recreation and other land use decisions. *Economic:* Improved local economic stability; maintenance of community's distinctive recreation tourism market. *Environmental:* Increased awareness and protection of natural landscapes; reduced negative human impacts such as litter, vegetative trampling, and unplanned trails.

Table 2.7
Gold Fever RMZ Natural Resource Recreation Settings

| Characteristic | Prescribed Setting | Description |
|---|---------------------------|--|
| PHYSICAL – Land and Facilities: Character of the natural landscape | | |
| Remoteness | Front Country | On or near improved gravel roads, but at least ½ mile from highways. |
| Naturalness | Front Country | Landscape partially modified by roads/trails, utility lines, etc., but none overpower natural landscape features. |
| Visitor Facilities | Front Country | Improved yet modest, rustic facilities, such as campsites, restrooms, trails, and interpretive signs. |
| SOCIAL – Visitor Use and Users: Character of recreation tourism use | | |
| Contacts with Groups | Front Country | 15-29 encounters a day off travel routes (e.g., campgrounds) and 30 or more encounters a day en route. |
| Group Size | Middle Country | 7-12 people per group |
| Evidence of Use | Front Country | Small areas of alteration prevalent. Surface vegetation gone, with compacted soils observed. Sounds of people regularly heard. |
| OPERATIONAL – Administration and Services: Character of how area/visitors are served | | |
| Mechanized Use | Front Country | Two-wheel-drive vehicles predominant, but also four-wheel-drives and non-motorized mechanized use. |
| Visitor Services | Rural | Information described to the left, plus experience and benefit descriptions. Area personnel do on-site education. |
| Management Controls | Middle Country | Occasional regulatory signing. Motorized and mechanized use restrictions. Random enforcement presence. |

Management Activities:

- Provide extensive opportunities for interpretation and education.
- Establish, in accordance with 43 CFR 3809.31, the RMZ as an area requiring a 15 day notification be given to the BLM prior to beginning any activity under the mining laws including; Casual Use, to allow the BLM to determine whether a notice or plan of operations must be submitted. Furthermore, in evaluating mining Notices or Plans of Operation undue and unnecessary degradation will consider unmitigatable (43 CFR 3809.5) impacts to the targeted activities, experiences and benefits established for the RMZ.
- Manage areas Withdrawn from the General Mining Law to accommodate the collection of non-renewable resources under 46 CFR 8365.1-5(c) for sale to commercial dealers through the establishment of a permit system for such collection. All public lands users wishing to collect non-renewable resources, such as mineral specimens (e.g., Gold), would be required to complete the permit process.
- Manage as VRM Class III (See Chapter 2 - 2.8 Visual Resources)
- Stabilize and maintain historic buildings and facilities to support public use (see Chapter 2 – 2.4 Cultural Resources).
- Establish visitor contact station to originate interpretive and educational activities from.
- Prohibit the discharge of firearms, except the legal taking of game species.

The Dam RMZ: In visitor assessments, 50% of respondents who participated in targeted activities report the ability to realize the targeted experiences and benefits.

Market Segment: River access for commercial and causal white-water kayaking and rafting.

Recreation Management Objective: Manage this RMZ in coordination with the US Forest Service with cooperation from local permitted outfitters and guides to provide opportunities to access the Lower Kern River for high-adventure activities whilst promoting visitor health and safety.

Targeted Activities: White-water boating; water-play; and fishing

Targeted Experiences: High adventure; personal challenge; self-discovery; appreciation for the power of the natural world

Targeted Benefits: *Personal:* Increase self-respect; sense of achievement. *Community:* Bonding through shared experiences. *Economic:* Increased draw to destination; promotion of local business (outfitters); improved local economic stability; maintenance of community's distinctive recreation tourism market. *Environmental:* Increased awareness and protection of natural landscapes; reduced negative human impacts such as litter, vegetative trampling, and unplanned trails.

Table 2.8

The Dam RMZ Natural Resource Recreation Settings

| Characteristic | Prescribed Setting | Description |
|---|--------------------|--|
| PHYSICAL – Land and Facilities: Character of the natural landscape | | |
| Remoteness | Front Country | On or near improved gravel roads, but at least ½ mile from highways. |
| Naturalness | Front Country | Landscape partially modified by roads/trails, utility lines, etc., but none overpower natural landscape features. |
| Visitor Facilities | Rural | Modern facilities, such as campgrounds, group shelters, boat launches, and occasional exhibits. |
| SOCIAL – Visitor Use and Users: Character of recreation tourism use | | |
| Contacts with Groups | Front Country | 15-29 encounters a day off travel routes (e.g., campgrounds) and 30 or more encounters a day en route. |
| Group Size | Rural | 26-50 people per group. |
| Evidence of Use | Front Country | Small areas of alteration prevalent. Surface vegetation gone, with compacted soils observed. Sounds of people regularly heard. |
| OPERATIONAL – Administration and Services: Character of how area/visitors are served | | |
| Mechanized Use | Front Country | Two-wheel-drive vehicles predominant, but also four-wheel-drives and non-motorized mechanized use. |
| Visitor Services | Front Country | Information materials describe recreation areas and activities. Area personnel are periodically available. |
| Management Controls | Front Country | Rules clearly posted, with some seasonal or day-of-week use restrictions. Periodic enforcement presence. |

Management Activities:

- Manage Special Recreation Permitting for white-water boating in collaboration and through interagency agreement with the US Forest Service.
- Maintain existing white-water boating facilities at “Slippery Rock” and “BLM South” for use by both commercial and private boaters. Limit use of “Granite Launch” to authorized Special Recreation Permit holders. Prohibit use of the “Low-water Launch” by boaters upon completion of Granite Launch.
- Manage as VRM Class III (See Chapter 2 - 2.8 Visual Resources)
- Restrict motorized access to street legal vehicles only (See Chapter 2 – 2.11 Comprehensive Trail and Travel Management).
- Prohibit overnight camping and use of campfires except in limited designated camping areas (including at Sandy Flat) located to protect sensitive resources.
- Prohibit the discharge of firearms and coordinate with CDFW to prohibit hunting.
- Establish, in accordance with 43 CFR 3809.31, the RMZ as an area requiring a 15 day notification be given to the BLM prior to beginning any activity under the mining laws including; Casual Use, to allow the BLM to determine whether a notice or plan of operations must be submitted. Furthermore, in evaluating mining Notices or Plans of Operation undue and unnecessary degradation will consider unmitigatable impacts to the targeted activities, experiences and benefits established for the RMZ.
- Manage areas Withdrawn from the General Mining Law to accommodate the collection of non-renewable resources under 46 CFR 8365.1-5(c) for sale to commercial dealers through the establishment of a permit system for such collection. All public lands users wishing to collect non-renewable resources, such as mineral specimens (e.g., Gold), would be required to complete the permit process.
- Cables, ropes, or tethers shall not cross the river and must not create hazards for boaters or other river users.

Wallow Rock RMZ: In visitor assessments, 75% of respondents who participated in targeted activities report the ability to realize the targeted experiences and benefits.

Market Segment: Structured developed camping with easy access to the river.

Recreation Management Objective: Manage to provide visitors with access to a wide variety of recreational opportunities in the area and enjoy camping in a developed setting, specifically tailored to larger group camping experiences.

Targeted Activities: Camping/Group Camping

Targeted Experiences: Enjoying the closeness of friends and family; relishing group affiliation and togetherness; enjoying meeting new people with similar interests

Targeted Benefits: *Personal:* Stronger ties with family and friends; restore mind from unwanted stress. *Community:* Greater interaction with visitors from different cultures. *Economic:* Improved local economic stability; maintenance of community’s distinctive recreation tourism market.

Environmental: Increased awareness and protection of natural landscapes; reduced negative human impacts such as litter, vegetative trampling, and unplanned trails.

Table 2.9
Wallow Rock RMZ Natural Resource Recreation Settings

| Characteristic | Prescribed Setting | Description |
|---|--------------------|---|
| PHYSICAL – Land and Facilities: Character of the natural landscape | | |
| Remoteness | Rural | On or near paved primary highways, but still within a rural area. |
| Naturalness | Front Country | Landscape partially modified by roads/trails, utility lines, etc., but none overpower natural landscape features |
| Visitor Facilities | Rural | Modern facilities, such as campgrounds, group shelters, boat launches, and occasional exhibits. |
| SOCIAL – Visitor Use and Users: Character of recreation tourism use | | |
| Contacts with Groups | Rural | People seem to be generally everywhere. |
| Group Size | Front Country | 13-25 people per group. |
| Evidence of Use | Rural | A few large areas of alteration. Surface vegetation absent, with hardened soils. Sounds of people frequently heard. |
| OPERATIONAL – Administration and Services: Character of how area/visitors are served | | |
| Mechanized Use | Front Country | Two-wheel-drive vehicles predominant, but also four-wheel-drives and non-motorized mechanized use. |
| Visitor Services | Rural | Information described to the left, plus experience and benefit descriptions. Area personnel do on-site education. |
| Management Controls | Rural | Regulations prominent. Total use limited by permit, reservation, etc. Routine enforcement presence. |

Management Activities:

- Identify group and individual campsites within a developed campground.
- Manage as VRM Class IV (See Chapter 2 – 2.8 Visual Resources)
- Prohibit the discharge of firearms and coordinate with CDFW to prohibit hunting.
- Establish, in accordance with 43 CFR 3809.31, the RMZ as an area requiring a 15 day notification be given to the BLM prior to beginning any activity under the mining laws including; Casual Use, to allow the BLM to determine whether a notice or plan of operations must be submitted. Furthermore, in evaluating mining Notices or Plans of Operation undue and unnecessary degradation will consider unmitigatable impacts to the developed infrastructure and consequently the targeted activities, experiences and benefits established for the RMZ.
- Establish, in accordance with 43 CFR 8365.1-5(b)(2), the RMZ as a developed recreation area, where the collection of nonrenewable resources, such as rocks, mineral specimens, comment invertebrate fossils and semi-precious gem stones is prohibited.

[RVS-D-2] Designate 6,520 acres (Map 2.28) as the San Joaquin River Gorge Special Recreation Management Area, established with a “community” market strategy for local communities, nearby rural areas and the population centers of Fresno-Clovis and Madera. The SRMA is subdivided into three (3)

Recreational Management Zones, each with the following recreation objectives, targeted activities, experiences, benefits, Natural Resource Recreation Settings, and management activities:

SRMA Wide Administrative Actions:

- Develop community collaboration and partnerships.
- Install signs to reduce user conflict and conflict with adjacent landowners.

Pa'San RMZ: In visitor assessments, 50% of respondents who participated in targeted activities report the ability to realize the targeted experiences and benefits.

Market Segment: Semi-primitive directed non-motorized trail use in a natural scenic setting.

Recreation Management Objective: Manage this RMZ to provide opportunities for visitors to engage in a remote isolated recreational experience. Manage this RMZ to provide opportunities for community residents and regional visitors who use the area seasonally to engage in sustainable, primarily primitive day-use opportunities and gain appreciation of the natural setting of the San Joaquin River corridor through self-discovery and exploration.

Targeted Activities: Hiking; mountain biking; and horseback riding

Targeted Experiences: Developing skills and abilities; testing personal endurance; savoring the total sensory experience of a natural landscape; escaping everyday responsibilities for awhile

Targeted Benefits: *Personal:* Greater self-reliance; improved skills for outdoor enjoyment; closer relationship with the natural world. *Community:* Greater freedom from urban living. *Economic:* More positive contributions to local and regional economies. *Environmental:* Increased awareness and protection of natural landscapes; reduced negative human impacts such as litter, vegetative trampling, and unplanned trails.

Table 2.10
Pa'San RMZ Natural Resource Recreation Settings

| Characteristic | Prescribed Setting | Description |
|---|--------------------|--|
| PHYSICAL – Land and Facilities: Character of the natural landscape | | |
| Remoteness | Backcountry | More than ½ mile from any kind of motorized route/use area, but not as distant as 3 miles. |
| Naturalness | Backcountry | Natural appearing landscape, having modifications not readily noticeable. |
| Visitor Facilities | Backcountry | Some primitive trails made of native materials, such as log bridges and carved wooden signs. |
| SOCIAL – Visitor Use and Users: Character of recreation tourism use | | |
| Contacts with Groups | Middle Country | 7-14 encounters a day off travel routes (e.g., staging areas) and 15-29 encounters a day en route. |
| Group Size | Middle Country | 7-12 people per group |
| Evidence of Use | Middle Country | Small areas of alteration. Surface vegetation showing wear, with some bare soils. Sounds of people occasionally heard. |
| OPERATIONAL – Administration and Services: Character of how area/visitors are served | | |
| Mechanized Use | Backcountry | Mountain bikes and perhaps other mechanized use, but all are non-motorized. |
| Visitor Services | Middle Country | Area brochures and maps, plus area personnel occasionally present to provide on-site assistance. |
| Management Controls | Middle Country | Occasional regulatory signing. Motorized and mechanized use restrictions. Random enforcement presence. |

Management Activities:

- Maintain, improve and expand a network of recreational trails.
- Manage as VRM Class I (See Chapter 2 – 2.8 Visual Resources)

Tahoot RMZ: In visitor assessments, 75% of respondents who participated in targeted activities report the ability to realize the targeted experiences and benefits.

Market Segment: Interpretation and education programs for regional community.

Recreation Management Objective: Manage this zone to provide opportunities for community residents and visitors to engage in sustainable personal discovery, interpretive programs, and educational opportunities, while protecting critical resources.

Targeted Activities: Interpretation; environmental education; hiking, horseback riding; mountain biking and camping

Targeted Experiences: Enjoying easy access to natural landscapes; enjoying access to hands-on environmental learning; enjoying needed physical exercise

Targeted Benefits: *Personal:* Better-informed and more responsible visitor; enhanced awareness and understanding of nature; increased appreciation of the area's cultural history. *Community:* Greater community valuation of its ethnic diversity; greater protection of the area's historic and archaeological sites. *Economic:* More positive contributions to local and regional economies.

Environmental: Increased awareness and protection of natural landscapes; reduced negative human impacts such as litter, vegetative trampling, and unplanned trails.

Table 2.11
Tahoot RMZ Natural Resource Recreation Settings

| Characteristic | Prescribed Setting | Description |
|---|--------------------|---|
| PHYSICAL – Land and Facilities: Character of the natural landscape | | |
| Remoteness | Rural | On or near paved primary highways, but still within a rural area. |
| Naturalness | Front Country | Landscape partially modified by roads/trails, utility lines, etc., but none overpower natural landscape features. |
| Visitor Facilities | Front Country | Improved yet modest, rustic facilities, such as campsites, restrooms, trails, and interpretive signs. |
| SOCIAL – Visitor Use and Users: Character of recreation tourism use | | |
| Contacts with Groups | Front Country | 15-29 encounters a day off travel routes (e.g., campgrounds) and 30 or more encounters a day en route. |
| Group Size | Rural | 26-50 people per group. |
| Evidence of Use | Rural | A few large areas of alteration. Surface vegetation absent, with hardened soils. Sounds of people frequently heard. |
| OPERATIONAL – Administration and Services: Character of how area/visitors are served | | |
| Mechanized Use | Front Country | Two-wheel-drive vehicles predominant, but also four-wheel-drives and non-motorized mechanized use. |
| Visitor Services | Rural | Information described to the left, plus experience and benefit descriptions. Area personnel do on-site education. |
| Management Controls | Rural | Regulations prominent. Total use limited by permit, reservation, etc. Routine enforcement presence. |

Management Activities:

- Maintain, improve and expand a network of recreational facilities including trails, campgrounds, parking areas, visitor contact location and outdoor classrooms; establishing standard and expanded amenity fees as appropriate.
- Ensure that management balances the preservation of natural and cultural resources with the opportunity to provide for public recreation, interpretation and education about the natural and cultural heritage of the area.
- Provide nature-based educational opportunities locally and regionally to include outdoor classrooms and interpretation of natural and cultural resources.
- Manage as VRM Class IV (See Chapter 2 – 2.8 Visual Resources).

Wu Ki'Oh RMZ: In visitor assessments, 50% of respondents who participated in targeted activities report the ability to realize the targeted experiences and benefits.

Market Segment: Multiple river accesses for recreational experiences of varying complexity.

Recreation Management Objective: Manage this RMZ to provide opportunities for community residents and regional visitors to engage in sustainable, primarily primitive day-use opportunities

and gain appreciation of the natural setting of the San Joaquin River through self-discovery and exploration.

Targeted Activities: Fishing; water play; gold panning; and kayaking

Targeted Experiences: Developing skills and abilities; testing personal endurance; enjoying risk-taking adventure; savoring the total sensory experience of a natural landscape; escaping everyday responsibilities for awhile

Targeted Benefits: *Personal:* Greater self-reliance; improved skills for outdoor enjoyment; closer relationship with the natural world. *Community:* Greater freedom from urban living. *Economic:* More positive contributions to local and regional economies. *Environmental:* Increased awareness and protection of natural landscapes; reduced negative human impacts such as litter, vegetative trampling, and unplanned trails.

Table 2.12
Wu Ki'Oh RMZ Natural Resource Recreation Settings

| Characteristic | Prescribed Setting | Description |
|---|--------------------|--|
| PHYSICAL – Land and Facilities: Character of the natural landscape | | |
| Remoteness | Front Country | On or near improved gravel roads, but at least ½ mile from highways. |
| Naturalness | Backcountry | Natural appearing landscape, having modifications not readily noticeable. |
| Visitor Facilities | Middle Country | Maintained and marked trails, simple trailhead developments, improved signs, and very basic toilets. |
| SOCIAL – Visitor Use and Users: Character of recreation tourism use | | |
| Contacts with Groups | Middle Country | 7-14 encounters a day off travel routes (e.g., staging areas) and 15-29 encounters a day en route. |
| Group Size | Middle Country | 7-12 people per group |
| Evidence of Use | Middle Country | Small areas of alteration. Surface vegetation showing wear, with some bare soils. Sounds of people occasionally heard. |
| OPERATIONAL – Administration and Services: Character of how area/visitors are served | | |
| Mechanized Use | Backcountry | Mountain bikes and perhaps other mechanized use, but all are non-motorized. |
| Visitor Services | Front Country | Information materials describe recreation areas and activities. Area personnel are periodically available. |
| Management Controls | Middle Country | Occasional regulatory signing. Motorized and mechanized use restrictions. Random enforcement presence. |

Management Activities:

- Restrict recreational gold prospecting activities to gold panning and sluicing only in addition to the following;
- All mining and prospecting activity must be confined to within 25 feet of the current water level.
- Prohibit disturbance of the river bank vegetation.
- Prohibit dry washing.
- Manage as VRM Class II (see Chapter 2 – 2.8 Visual Resources).

[RVS-D-3] Designate 24,250 acres (Map 2.29) as the Temblor Special Recreation Management Area, established with a “community” market strategy for local communities (Taft), nearby rural areas and the population center of Bakersfield. The SRMA is subdivided into two Recreational Management Zones, each with the following recreation objectives, targeted activities, experiences, benefits, Natural Resource Recreation Settings, and management activities:

SRMA Wide Administrative Actions:

- Encourage strong stewardship ethic among users through dissemination of information via kiosks and brochures.
- Coordinate management with local communities and user groups.
- Establish a system of grading trail experience/difficulty.
- Encourage local volunteer groups to actively monitor trail network, use, and compliance.
- Acquire public access.

Temblor North RMZ: In visitor assessments, 50% of respondents who participated in targeted activities report the ability to realize the targeted experiences and benefits.

Market Segment: Motorized recreation on designated trails.

Recreation Management Objective: Manage to provide opportunities for visitors to engage in a remote isolated recreation experience with opportunities for community residents and visitors who use the area seasonally to engage in sustainable, primarily primitive opportunities and gain appreciation of the natural setting of the Temblor Mountain Range through self-discovery, and OHV touring on designated routes.

Targeted Activities: OHV trail riding; hunting; target shooting; and dispersed camping.

Targeted Experiences: Developing skills and abilities; testing personal endurance; enjoying risk-taking adventure; savoring the total sensory experience of a natural landscape; escaping everyday responsibilities for awhile

Targeted Benefits: *Personal:* Greater self-reliance; improved skills for outdoor enjoyment; Closer relationship with the natural world. *Community:* Providing a place near but outside the community to recreate; removing unwanted use from industrial areas; addressing health and safety concerns. *Economic:* Improved local economic stability; maintenance of community’s distinctive recreation tourism market. *Environmental:* Increased awareness and protection of natural landscapes; reduced negative human impacts such as litter, vegetative trampling, and unplanned trails.

Table 2.13
Temblor North RMZ Natural Resource Recreation Settings

| Characteristic | Prescribed Setting | Description |
|---|--------------------|--|
| PHYSICAL – Land and Facilities: Character of the natural landscape | | |
| Remoteness | Middle Country | On or near motorized routes, but at least ½ mile from all improved roads, though they may be in sight. |
| Naturalness | Middle Country | Natural appearing landscape, except for obvious motorized routes. |
| Visitor Facilities | Backcountry | Some primitive trails made of native materials, such as log bridges and carved wooden signs. |
| SOCIAL – Visitor Use and Users: Character of recreation tourism use | | |
| Contacts with Groups | Backcountry | 3-6 encounters a day off travel routes (e.g., campsites) and 7-15 encounters a day on travel routes. |
| Group Size | Backcountry | 4-6 people per group. |
| Evidence of Use | Middle Country | Small areas of alteration. Surface vegetation showing wear, with some bare soils. Sounds of people occasionally heard. |
| OPERATIONAL – Administration and Services: Character of how area/visitors are served | | |
| Mechanized Use | Middle Country | Four-wheel-drives, all-terrain vehicles, dirt bikes, or snowmobiles, in addition to non-motorized mechanized use. |
| Visitor Services | Backcountry | Basic maps, but area personnel seldom available to provide on-site assistance. |
| Management Controls | Middle Country | Occasional regulatory signing. Motorized and mechanized use restrictions. Random enforcement presence. |

Management Activities:

- Develop high quality trail system, including maintenance of many existing trail, creating additional recreation trails and closure of inappropriate routes in partnership with user groups and adjacent land owners.
- Limit commercial Special Recreation Permits available within the SRMA to no more than three (3) active permits. Special Recreation Permits for competitive events would not be issued.

Urban Interface RMZ: In visitor assessments, 65% of respondents who participated in targeted activities report the ability to realize the targeted experiences and benefits.

Market Segment: Immediate access for local communities to wild, open, unconfined space.

Recreation Management Objective: Manage this zone to provide opportunities for community residents and visitors who use the area seasonally to engage in sustainable urban access for primarily day-use opportunities and gain appreciation of the natural setting of the San Joaquin Valley through self-discovery and OHV touring on designated routes.

Targeted Activities: OHV trail riding; driving for pleasure; dispersed camping

Targeted Experiences: Developing skills and abilities; testing personal endurance; enjoying risk-taking adventure; savoring the total sensory experience of a natural landscape; escaping everyday responsibilities for awhile

Targeted Benefits: *Personal:* Greater self-reliance; improved skills for outdoor enjoyment; closer relationship with the natural world. *Community:* Providing a place near but outside the community to recreate; removing unwanted use from industrial areas; addressing health and safety concerns. *Economic:* Improved local economic stability; maintenance of community's distinctive recreation tourism market. *Environmental:* Increased awareness and protection of natural landscapes; reduced negative human impacts such as litter, vegetative trampling, and unplanned trails.

Table 2.14

Urban Interface RMZ Natural Resource Recreation Settings

| Characteristic | Prescribed Setting | Description |
|---|--------------------|---|
| PHYSICAL – Land and Facilities: Character of the natural landscape | | |
| Remoteness | Front Country | On or near improved gravel roads, but at least ½ mile from highways. |
| Naturalness | Front Country | Landscape partially modified by roads/trails, utility lines, etc., but none overpower natural landscape features. |
| Visitor Facilities | Middle Country | Maintained and marked trails, simple trailhead developments, improved signs, and very basic toilets. |
| SOCIAL – Visitor Use and Users: Character of recreation tourism use | | |
| Contacts with Groups | Middle Country | 7-14 encounters a day off travel routes (e.g., staging areas) and 15-29 encounters a day en route |
| Group Size | Middle Country | 7-12 people per group |
| Evidence of Use | Front Country | Small areas of alteration prevalent. Surface vegetation gone with compacted soils observed. Sounds of people regularly heard. |
| OPERATIONAL – Administration and Services: Character of how area/visitors are served | | |
| Mechanized Use | Middle Country | Four-wheel-drives, all-terrain vehicles, dirt bikes, or snowmobiles, in addition to non-motorized mechanized use. |
| Visitor Services | Middle Country | Area brochures and maps, plus area personnel occasionally present to provide on-site assistance. |
| Management Controls | Front Country | Rules clearly posted, with some seasonal or day-of-week use restrictions. Periodic enforcement presence. |

Management Activities:

- Acquire legal public access from the community of Taft.
- Establish parking/staging area in cooperation with adjacent land owners.
- Develop high quality trail system, including maintenance of many existing trails, creating additional recreation trails and closure of inappropriate routes in partnership with user groups and adjacent land owners.
- Limit commercial Special Recreation Permits available within the SRMA to no more than three (3) active permits. Special Recreation Permits for competitive events would not be issued.

[RVS-D-4] Designate 22,550 acres (Map 2.30) as the Atwell Island Extensive Recreation Management Area with the following recreation objective, Natural Resource Recreation Settings, management activities and allowable use decisions;

Recreation Objective: Within the life of the RMP the Atwell Island ERMA will offer recreation opportunities in a front country setting (restored wetland from abandoned farmland), that focus on wildlife viewing and appreciation, through the non-motorized/non-mechanized exploration of the restored area(s).

Table 2.15

Atwell Island ERMA Natural Resource Recreation Settings

| Characteristic | Prescribed Setting | Description |
|---|---------------------------|---|
| PHYSICAL – Land and Facilities: Character of the natural landscape | | |
| Remoteness | Middle Country | On or near motorized routes, but at least ½ mile from all improved roads, though they may be in sight. |
| Naturalness | Middle Country | Natural appearing landscape, except for obvious motorized routes. |
| Visitor Facilities | Middle Country | Maintained and marked trails, simple trailhead developments, improved signs, and very basic toilets. |
| SOCIAL – Visitor Use and Users: Character of recreation tourism use | | |
| Contacts with Groups | Middle Country | 7-14 encounters a day off travel routes (e.g., staging areas) and 15-29 encounters a day en route. |
| Group Size | Backcountry | 4-6 people per group. |
| Evidence of Use | Front Country | Small areas of alteration prevalent. Surface vegetation gone with compacted soils observed. Sounds of people regularly heard. |
| OPERATIONAL – Administration and Services: Character of how area/visitors are served | | |
| Mechanized Use | Middle Country | Four-wheel-drives, all-terrain vehicles, dirt bikes, or snowmobiles, in addition to non-motorized mechanized use. |
| Visitor Services | Middle Country | Area brochures and maps, plus area personnel occasionally present to provide on-site assistance. |
| Management Controls | Middle Country | Occasional regulatory signing. Motorized and mechanized use restrictions. Random enforcement presence. |

Management Activities:

- Prohibit overnight camping and use except for; future specific areas identified for nocturnal visitation for wildlife viewing and stargazing.
- Coordinate with CDFW to prohibit hunting except as allowed by Special Recreation Permit and/or specially organized hunt activity; Prohibit air-soft and paintball activities, including organized games and casual use of these types of equipment unless authorized through a Special Recreation Permit;
- Seasonally prohibit access to wetland areas, as needed to support restoration objectives.
- Prohibit pets and other domesticated animals (not including authorized livestock grazing) from wetland areas.

- Require all pets and domestic animals (not including authorized livestock grazing) to be on a leash. Special Recreation Permits may be issued for activities allowing off-leash activity, such as, dog trial events.

[RVS-D-5] Designate 21,160 acres (Map 2.31) as the Case Mountain Extensive Recreation Management Area with the following recreation objective, Natural Resource Recreation Settings, management activities and allowable use decisions;

Recreation Objective: Within the life of the RMP the Case Mountain ERMA will offer recreation opportunities in an unchanged middle country setting, which facilitates the visitors' freedom to participate in non-motorized activities that includes; mountain bicycling, camping, hunting, wildlife and nature observation, photography, and picnicking.

Table 2.16
Case Mountain ERMA Natural Resource Recreation Settings

| Characteristic | Prescribed Setting | Description |
|---|--------------------|--|
| PHYSICAL – Land and Facilities: Character of the natural landscape | | |
| Remoteness | Middle Country | On or near motorized routes, but at least ½ mile from all improved roads, though they may be in sight. |
| Naturalness | Middle Country | Natural appearing landscape, except for obvious motorized routes. |
| Visitor Facilities | Backcountry | Some primitive trails made of native materials, such as log bridges and carved wooden signs. |
| SOCIAL – Visitor Use and Users: Character of recreation tourism use | | |
| Contacts with Groups | Backcountry | 3-6 encounters a day off travel routes (e.g., campsites) and 7-15 encounters a day on travel routes. |
| Group Size | Backcountry | 4-6 people per group. |
| Evidence of Use | Middle Country | Small areas of alteration. Surface vegetation showing wear, with some bare soils. Sounds of people occasionally heard. |
| OPERATIONAL – Administration and Services: Character of how area/visitors are served | | |
| Mechanized Use | Backcountry | Mountain bikes and perhaps other mechanized use, but all are non-motorized. |
| Visitor Services | Backcountry | Basic maps, but area personnel seldom available to provide on-site assistance. |
| Management Controls | Backcountry | Signs at key access points on basic user ethics. May have backcountry use restrictions. Enforcement presence rare. |

Management Activities:

- Prohibit air-soft and paintball activities, including organized games and casual use of these types of equipment unless authorized through a Special Recreation Permit;
- Acquire legal public access to suitable parking/staging area.
- Develop suitable facilities to support use at parking/staging areas.
- Manage and maintain connected trails for mountain bicycling experiences.
- Limit available commercial Special Recreation Permits for guide and outfitting services to no more than five (5). Special Recreation Permits for competitive events would not be issued.

[RVS-D-6] Designate 123,450 acres (Map 2.32) as the Chimney Peak Extensive Recreation Management Area with the following recreation objective, Natural Resource Recreation Settings, management activities and allowable use decisions;

Recreation Objective: Throughout the life of the RMP the Chimney Peak Extensive Recreation Management Area will offer recreation opportunities, in an unchanged backcountry/primitive physical recreation setting, that facilitate the visitors' freedom to participate in primitive unconfined recreation types through easy access to designated Wilderness including campgrounds, trailheads and trails.

Table 2.17

Chimney Peak ERMA Natural Resource Recreation Settings

| Characteristic | Prescribed Setting | Description |
|---|--------------------|---|
| PHYSICAL – Land and Facilities: Character of the natural landscape | | |
| Remoteness | Backcountry | More than ½ mile from any kind of motorized route/use area, but not as distant as 3 miles |
| Naturalness | Backcountry | Natural appearing landscape, having modifications not readily noticeable. |
| Visitor Facilities | Backcountry | Some primitive trails made of native materials, such as log bridges and carved wooden signs. |
| SOCIAL – Visitor Use and Users: Character of recreation tourism use | | |
| Contacts with Groups | Backcountry | 3-6 encounters a day off travel routes (e.g., campsites) and 7-15 encounters a day on travel routes. |
| Group Size | Backcountry | 4-6 people per group. |
| Evidence of Use | Backcountry | Areas of alteration uncommon. Little surface vegetation wear observed. Sounds of people infrequent. |
| OPERATIONAL – Administration and Services: Character of how area/visitors are served | | |
| Mechanized Use | Primitive | None whatsoever (except campgrounds, access points and cherry-stems). |
| Visitor Services | Backcountry | Basic maps, but area personnel seldom available to provide on-site assistance. |
| Management Controls | Backcountry | Signs at key access points on basic user ethics. May have backcountry use restrictions. Enforcement presence rare |

Management Activities:

- Maintain and improve designated camping areas at Chimney Creek, Long-Valley and Walker Pass.

[RVS-D-7] Designate 160 acres (T 7 S, R 20 E, Section 2; Map 2.33) as the Fresno River Extensive Recreation Management Area with the following recreation objective, Natural Resource Recreation Settings, management activities and allowable use decisions;

Recreation Objective: Within the life of the RMP the Fresno River ERMA will offer limited recreation opportunities in a rural setting, facilitating various interpretative and educational opportunities.

Table 2.18
Fresno River ERMA Natural Resource Recreation Settings

| Characteristic | Prescribed Setting | Description |
|---|---------------------------|---|
| PHYSICAL – Land and Facilities: Character of the natural landscape | | |
| Remoteness | Middle Country | On or near motorized routes, but at least ½ mile from all improved roads, though they may be in sight. |
| Naturalness | Middle Country | Natural appearing landscape, except for obvious motorized routes. |
| Visitor Facilities | Middle Country | Maintained and marked trails, simple trailhead developments, improved signs, and very basic toilets. |
| SOCIAL – Visitor Use and Users: Character of recreation tourism use | | |
| Contacts with Groups | Middle Country | 7-14 encounters a day off travel routes (e.g., staging areas) and 15-29 encounters a day en route. |
| Group Size | Backcountry | 4-6 people per group. |
| Evidence of Use | Front Country | Small areas of alteration prevalent. Surface vegetation gone with compacted soils observed. Sounds of people regularly heard. |
| OPERATIONAL – Administration and Services: Character of how area/visitors are served | | |
| Mechanized Use | Middle Country | Four-wheel-drives, all-terrain vehicles, dirt bikes, or snowmobiles, in addition to non-motorized mechanized use. |
| Visitor Services | Middle Country | Area brochures and maps, plus area personnel occasionally present to provide on-site assistance. |
| Management Controls | Middle Country | Occasional regulatory signing. Motorized and mechanized use restrictions. Random enforcement presence. |

Management Activities:

- Prohibit overnight camping.
- Require an authorization or mining notice for casual use prospecting activity, other than gold panning.

[RVS-D-8] Identify 191,520 acres as lands not designated within a Recreation Management Area (Map 2.26). Close 4,110 of these acres (Map 2.34) to public access located within producing oilfields, with well densities averaging higher than 20 wells per 40 acres (or 0.5 wells per acre).

[RVS-D-9] Limit dispersed camping within the Decision Area; unless otherwise noted, to 14 days within a 90 day period. After the 14th day, campers must move beyond a 25-mile radius of their previous camp. In addition:

- Prohibit dispersed camping within 100ft of any fresh water source
- Prohibit dispersed camping within 300ft of any suitable or designated WSR categorized as wild or scenic.
- Prohibit dispersed camping within 100ft of any suitable or designated WSR categorized as recreational.

[RVS-D-10] Limit parking for dispersed camping (including cars, trucks, recreation vehicles, and trailers ["fifth wheels"]) to one vehicle width from the edge of the designated route.

[RVS-D-11] Limit Specialized Vehicle Recreation to those areas, trails, and routes designated for that purpose within the Decision Area. Through a Special Recreation Permit, this activity could be allowed on a case-by-case basis, pending the NEPA process on each application.

[RVS-D-12] Establish and identify (3,125 acres), in accordance with 43 CFR 8365.1-5(b)(2), the Wallow Rock RMZ and Horse Canyon ACEC as areas where the collection of nonrenewable resources, such as rocks, mineral specimens, comment invertebrate fossils and semi-precious gem stones is prohibited.

Key Implementation Decisions

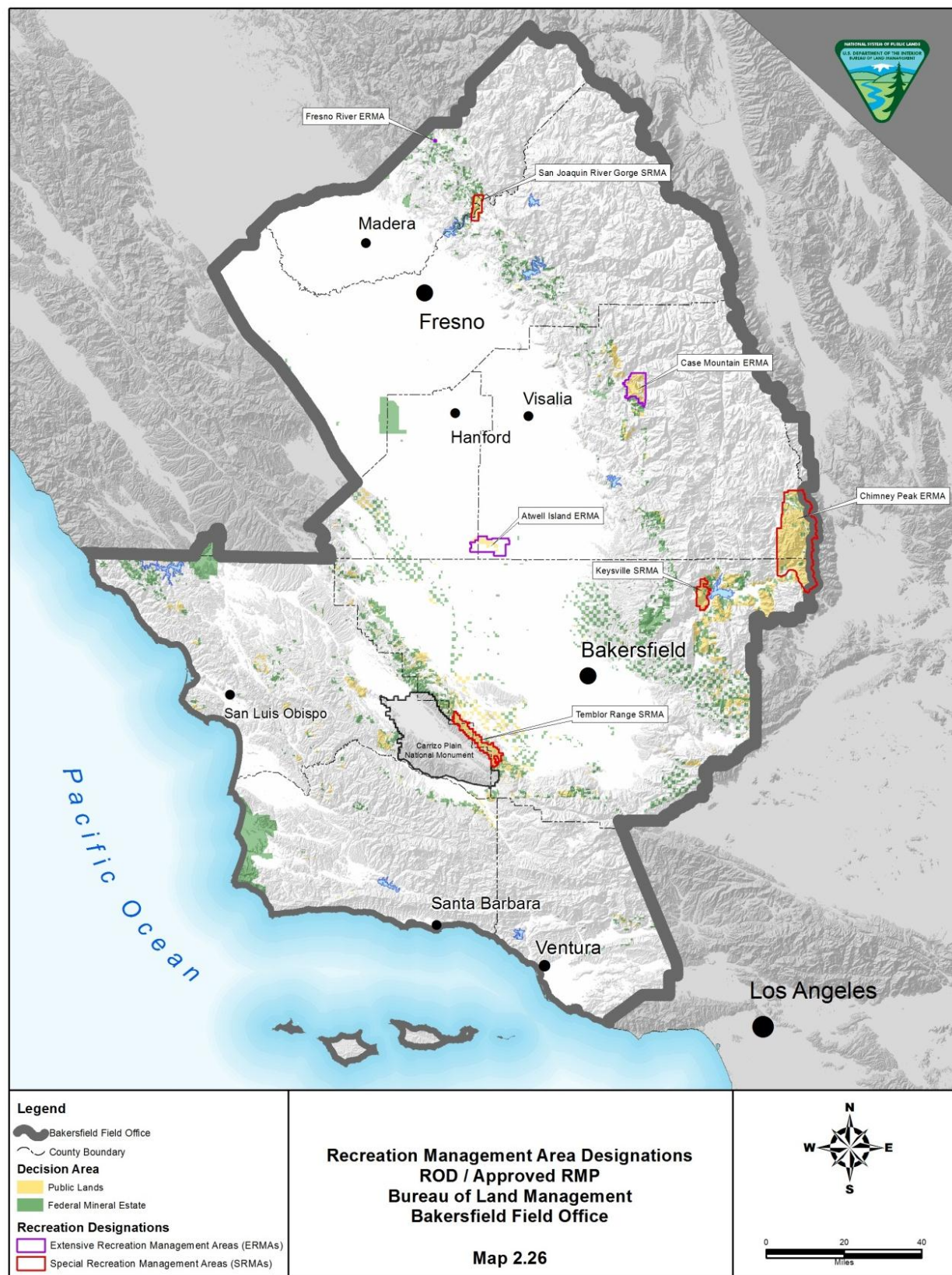
[RVS-I-1] Establish Supplementary Rules to implement and enforce allocations, management restrictions, and decisions within the RMP.

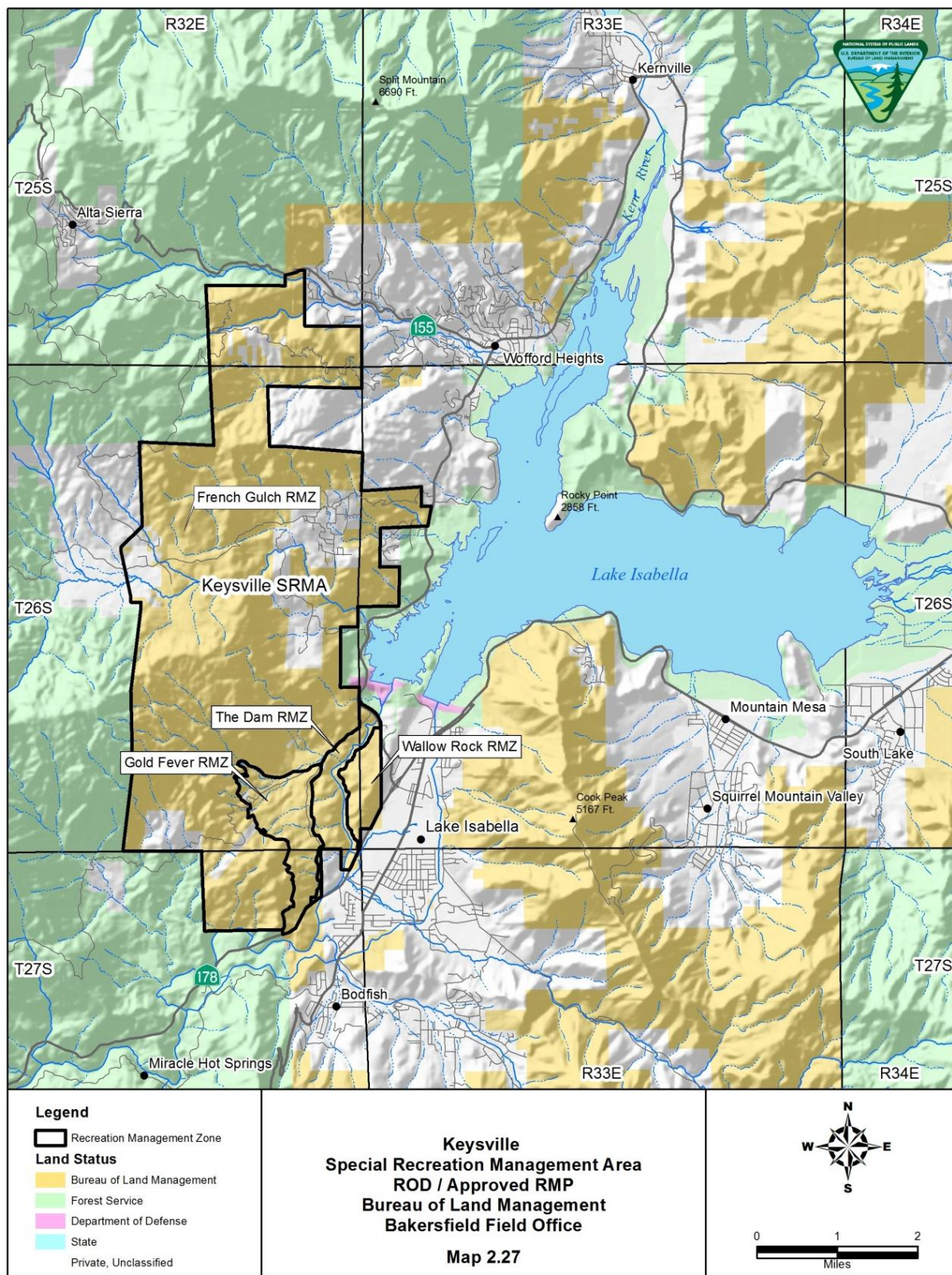
[RVS-I-1] Establishment of fees for various recreation sites including; Case Mountain and Chimney Peak ERMA, and Urban Interface, Temblor North, Wallow Rock and Gold Fever RMZs will be fully addressed in area specific activity level plans and in accordance with the current regulation guiding the establishment of recreational use fees.

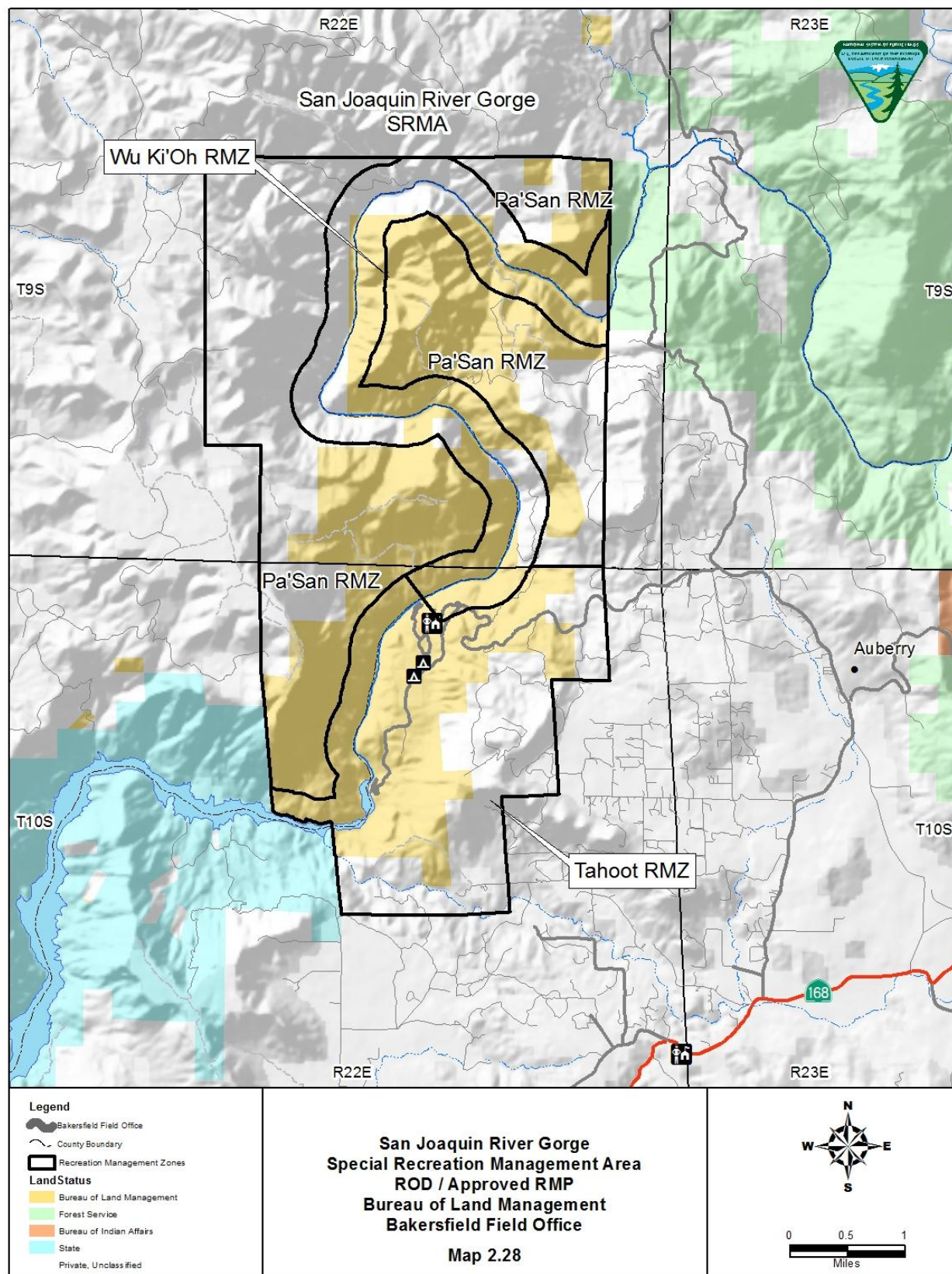
Administrative Actions

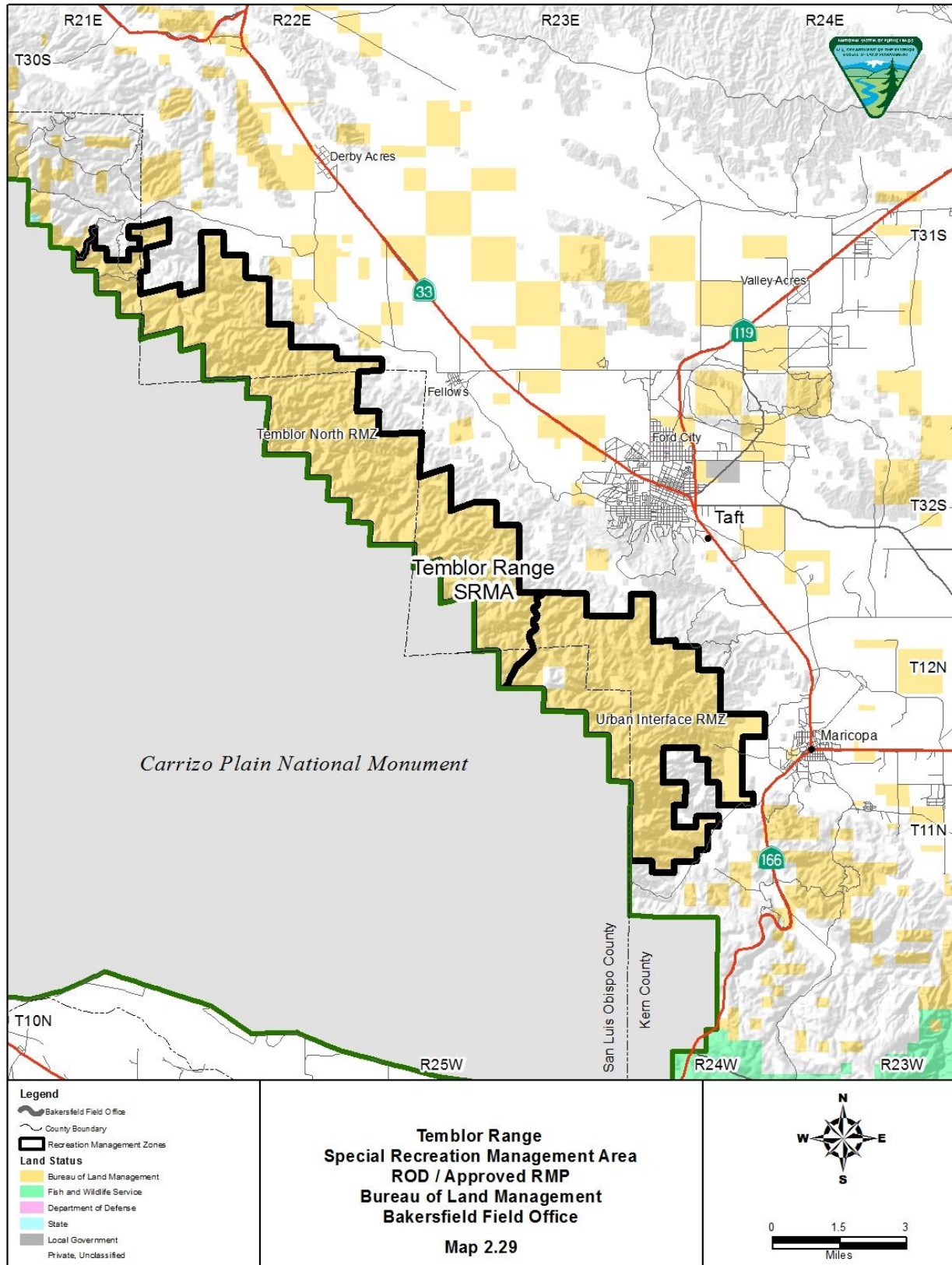
- When practical, participate in partnerships and cooperative agreements to provide for opportunities and outcomes beyond the scope of the agencies' abilities.
- Encourage efforts to establish multijurisdictional recreation areas to provide for motorized recreation experiences, including participation with other stakeholders, user groups, and interested parties in identifying potential areas and collaborating in management efforts.
- Maintain efforts with user groups, neighboring field offices, other federal, state, and local agencies to provide diverse contiguous recreation opportunities for non-mechanized, mechanized, and motorized trails and routes for recreation, including developing regional multijurisdictional information; continue the Adopt-a-Trail program; support friends groups, associations, and organized private entities, and continue to use and support BLM volunteers.
- Incorporate federal accessibility standards in the design and construction of new and renovated facilities, appropriate trails, and signs, including the Uniform Federal Accessibility Standards (UFAS) and the Americans with Disabilities Act (ADA) Accessibility guidelines.
- Management responses to unacceptable resource and social conditions would range from least restrictive methods (e.g., information and education) to most restrictive (e.g., visitor limits, supplemental rules, or restrictions). Where feasible, the least restrictive methods would be the first priority.

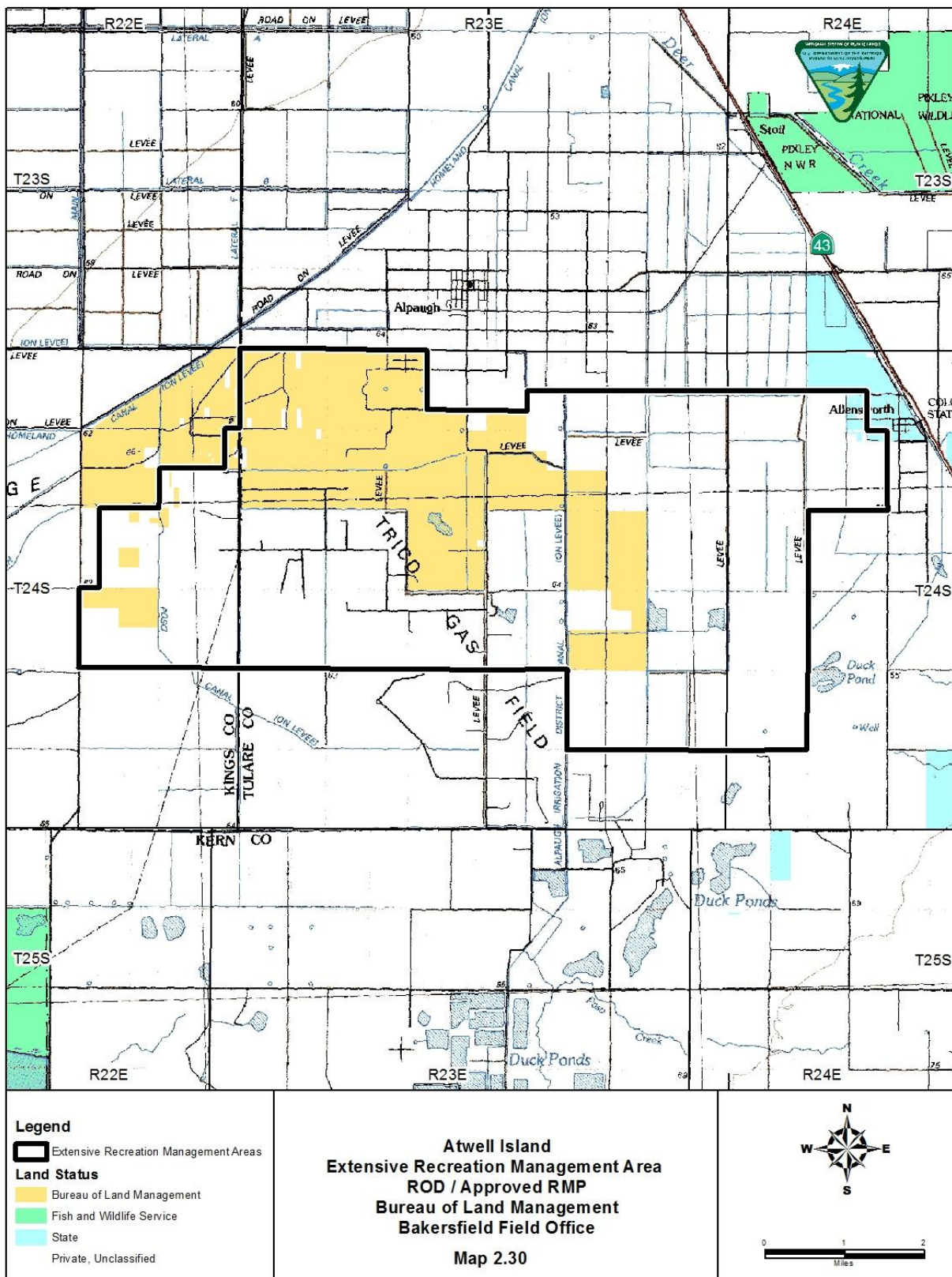
Map 2.26 – Recreation Management Area Designations



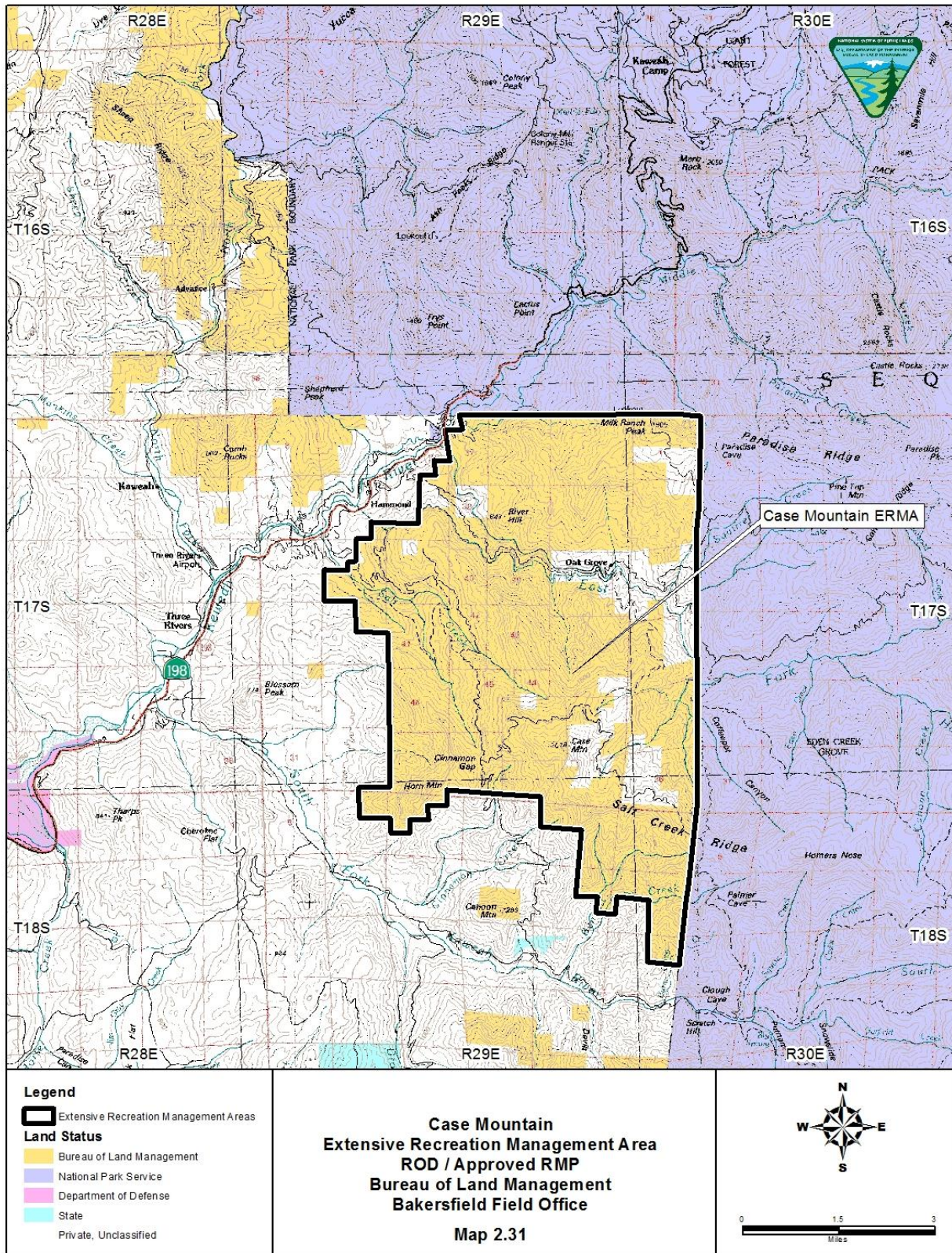
Map 2.27 – Special Recreation Management Area: Keysville

Map 2.28 – Special Recreation Management Area: San Joaquin River Gorge

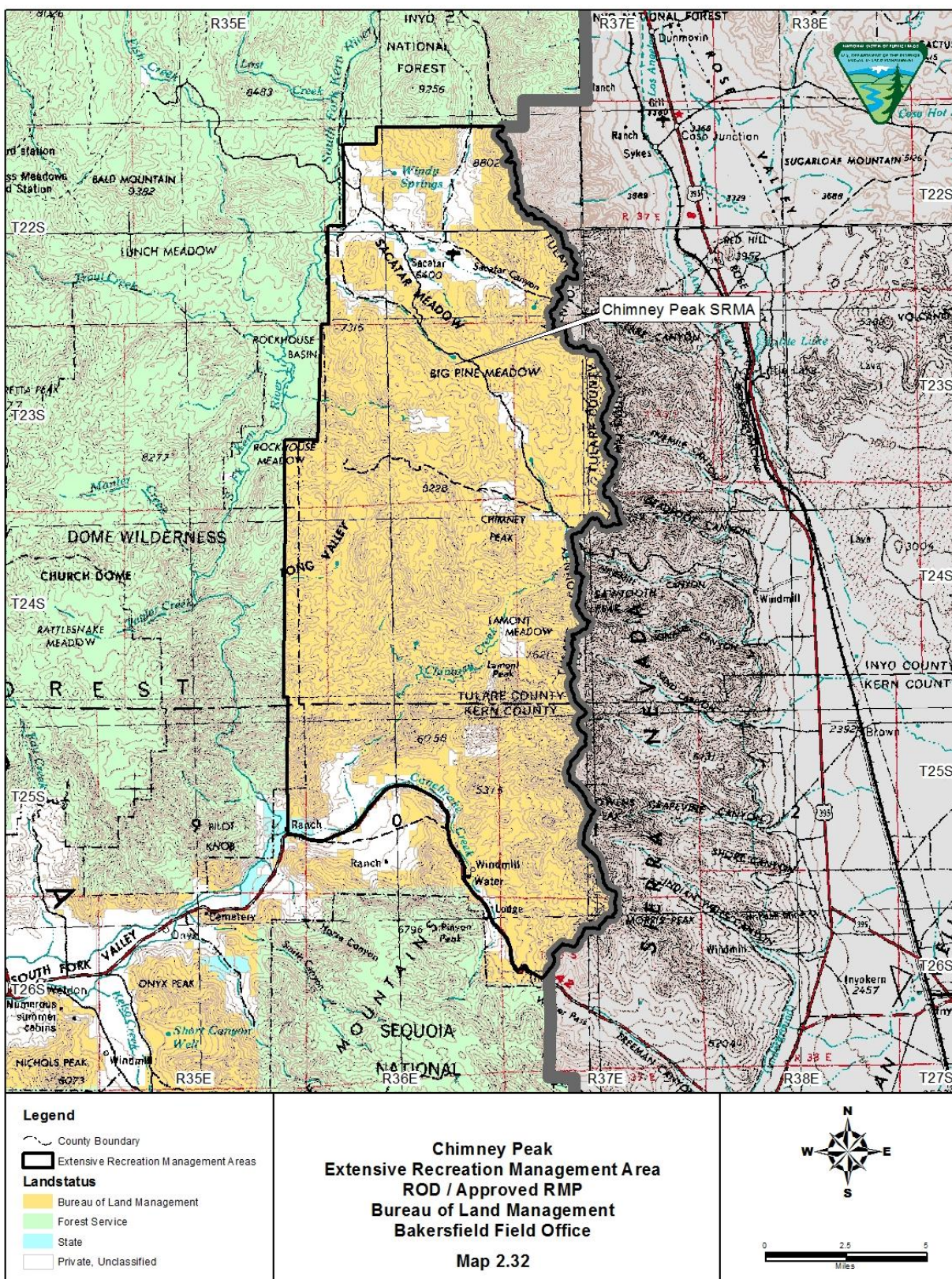
Map 2.29 – Special Recreation Management Area: Temblor Range

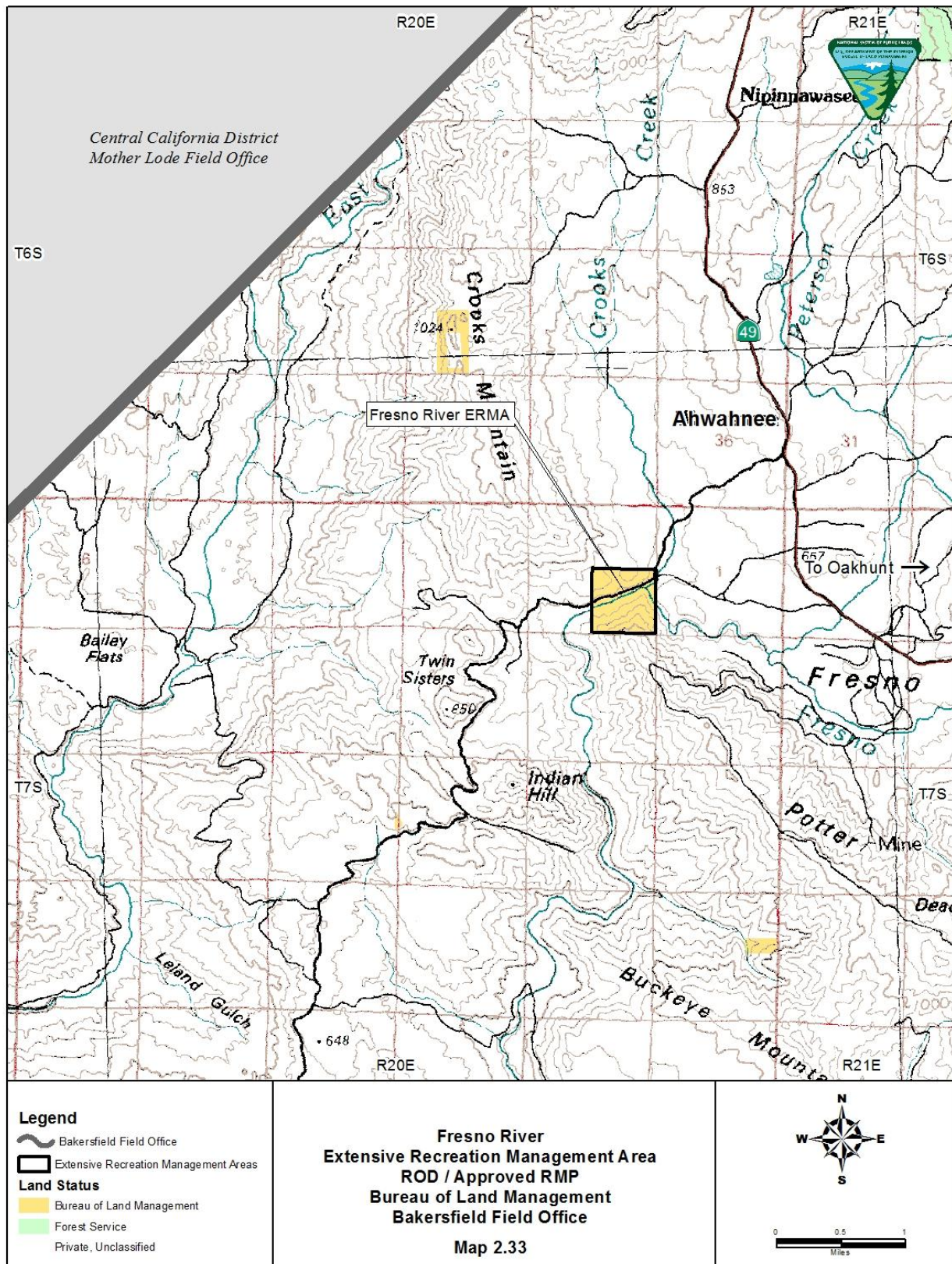
Map 2.30 – Extensive Recreation Management Area: Atwell Island

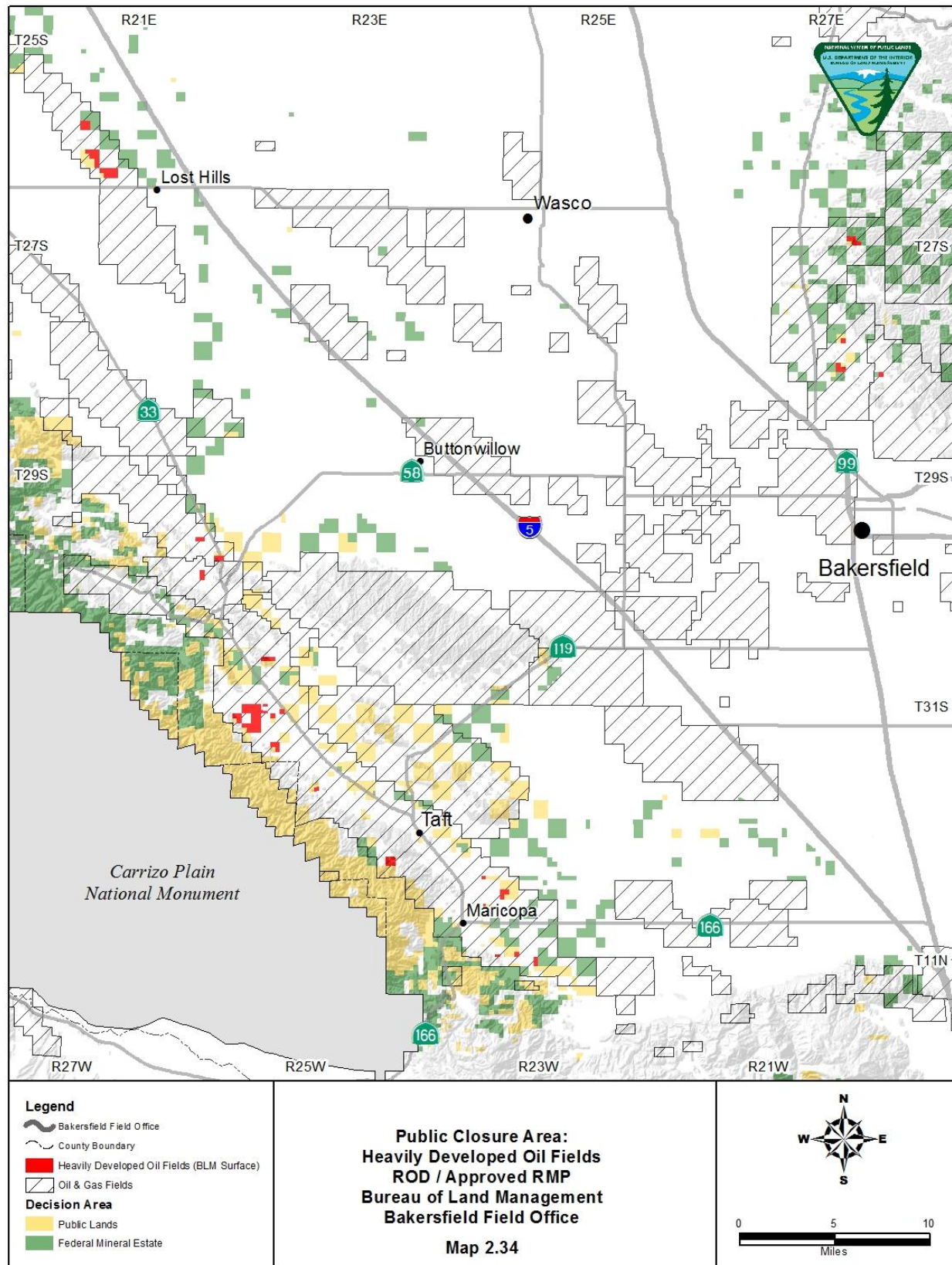
Map 2.31 – Extensive Recreation Management Area: Case Mountain



Map 2.32 – Extensive Recreation Management Area: Chimney Peak



Map 2.33 – Extensive Recreation Management Area: Fresno River

Map 2.34 – Public Closure Area: Heavily Developed Oil Fields

2.16 Interpretation and Environmental Education

Goals

[IE-G-1] Instill a public stewardship ethic of natural and cultural resources, and foster an appreciation of multiple-use public lands.

[IE-G-2] Establish an emotional connection to the landscape and its natural and cultural resources.

Objectives

[IE-O-1] Incorporate “Tread Lightly” and “Leave No Trace”, into BLM interpretive and education programs and visitor information media.

[IE-O-2] Provide interpretive and educational opportunities to allow all visitors to explore public lands and learn about the natural and cultural environment and reduce their impacts on biological and cultural resources.

[IE-O-3] Educate public land users and affected communities on the role of wildland fire in ecosystems, its risk to public health and safety, and the safe use of fire in the recreational environment.

Decisions

[IE-D-1] Identify San Joaquin River Gorge, Piedras Blancas Light Station, and Keyville Historic Mining District as important cultural and historic resources available for interpretation and educational programs.

[IE-D-2] Identify Atwell Island and Piedras Blancas Light Station as important biological resource areas available for interpretation and educational programs.

[IE-D-3] Identify wildland fire as important resource requiring interpretation and education programs.

[IE-D-4] Identify SRMAs as suitable locations to conduct and promote “Take It Outside” and “Hands on the Land” interpretive and education programs.

[IE-D-5] Accommodate permit requests for, scientific research by qualified individuals or institutions and educational uses of public lands by academic entities. Authorization may be given for any resource program and provide for appropriate access.

Special Designations

2.17 Areas of Critical Environmental Concern

Allocations Summary

Table 2.19
ACEC Allocations Summary

| ACEC Name | BLM Acres (decision area) | Management Action |
|-------------------------|------------------------------|----------------------|
| Ancient Lakeshores | 1,985 | AC-1 |
| Bitter Creek | 2,872 | AC-2 |
| Blue Ridge | 4,759 | AC-3 |
| Chico Martinez | 4,607 | AC-4 |
| Compensation Lands | 283 | AC-5 |
| Cypress Mountain | 1,080 | AC-6 |
| Cyrus Canyon | 4,299 | AC-7 |
| Erskine Creek | 4,019 | AC-8 |
| Hopper Mountain | 4,514 | AC-9 |
| Horse Canyon | 2,830 | AC-10 |
| Kaweah | 27,037 | AC-11 |
| Kettleman Hills | 13,695 | AC-12 |
| Lokern-Buena Vista | 15,492 | AC-13 |
| Los Osos | 5 | AC-14 |
| Piute Cypress | 2,517 | AC-15 |
| Point Sal | 76 | AC-16 |
| Salinas River | 1,604 | AC-17 |
| Tierra Redonda | 412 | AC-18 |
| Upper Cuyama Valley | 9,025 | AC-19 |
| Total ACEC Acres | 101,111 | |

See Map 2.35 Areas of Critical Environmental Concern

Additional information for each ACEC can be found in the Evaluation of Proposed Areas of Critical Environmental Concern (Draft RMP/Draft EIS, Appendix I).

Goals

[AC-1] Ancient Lakeshores ACEC:

[Goal] Protect and preserve important cultural resources, natural systems and processes, and habitat for listed species.

[Objective] Protect significant cultural resources from degradation. Maintain rare alkali sink plant communities and ensure no net loss of associated habitat for state and federally listed plants and animals.

[AC-D-1] Designate 1,985 acres of public lands; within a boundary of 2,041 acres (encompassing the existing Alkali Sink and Goose Lake ACECs with the expansion to include the Sand Ridge

portion of Atwell Island), as the Ancient Lakeshores ACEC (Map 2.36) administered with the following special management:

- (a) Apply fluid mineral leasing stipulation (NSO) within the ACEC;
- (b) Require a 15 day notification be given to the BLM prior to beginning any activity under the mining laws, including Casual Use, within the ACEC, in accordance with 43 CFR 3809.31, to allow the BLM to determine whether a plan of operations must be submitted.
- (c) Exclude the authorization of rights-of-way related to utility scale renewable energy projects (i.e., those producing electricity for the national grid);
- (d) Allocate as unavailable for livestock grazing, except for the Sand Ridge unit which is available for livestock grazing but only for the purpose of vegetation management to meet resource objectives other than the production of livestock forage;
- (e) Prohibit campfires and overnight camping;
- (f) Prohibit cross country equestrian travel; and
- (g) Prohibit air-soft and paintball activities, including organized games and casual use of these types of equipment.

[AC-2] Bitter Creek ACEC:

[Goal] Provide suitable habitat for federally listed species.

[Objective] Provide suitable foraging and roosting habitat for California condor in support of the California Condor Recovery Program and Bitter Creek National Wildlife Refuge.

[AC-D-2] Designate 1,026 acres of public lands and 1,792 acres of federal mineral estate; within a boundary of 2,872 acres, as the Bitter Creek ACEC (Map 2.37) administered with the following special management:

- (a) Closed to fluid mineral leasing;
- (b) Exclude the authorization of rights-of-way related to utility scale renewable energy projects;
- (c) Prohibit public access to lands adjacent to USFWS surface (434 acres);
- (d) Prohibit campfires and overnight camping; and
- (e) Prohibit the discharge of firearms for shooting sports activities; except for the legal taking of game species.

[AC-3] Blue Ridge ACEC:

[Goal] Provide suitable habitat for federally listed species.

[Objective] Provide suitable roosting habitat for California condor.

[AC-D-3] Designate 3,177 acres of public lands and 2,104 acres of federal mineral estate; within a boundary of 11,051 acres as the Blue Ridge ACEC (Map 2.38) administered with the following special management:

- (a) Closed to fluid mineral leasing;

- (b) Require a 15 day notification be given to the BLM prior to beginning any activity under the mining laws, including Casual Use, within the ACEC, in accordance with 43 CFR 3809.31, to allow the BLM to determine whether a plan of operations must be submitted.
- (c) Exclude authorization of rights-of-way related to utility scale renewable energy projects;
- (d) Restrict public access through temporary emergency closure or in coordination with adjacent land managers, as needed for Condor protection; and
- (e) Prohibit the discharge of firearms for shooting sports activities; except for the legal taking of game species.

[AC-4] Chico Martinez ACEC:

[Goal] Protect cultural resources, geologic formations, and various natural processes.

[Objective] Protect important cultural, paleontological resources, and the Zemorrian stage geologic formations. Provide habitat for the San Joaquin Suite of listed species.

[AC-D-4] Designate 3,235 acres of public lands and 1,371 acres of federal mineral estate; within a boundary of 4,607 acres, as the Chico Martinez ACEC (Map 2.39) administered with the following special management:

- (a) Apply fluid mineral leasing stipulations (CSU-Protected Species, CSU-Sensitive Species and CSU-Raptor stipulations) within the ACEC;
- (b) Require a 15 day notification be given to the BLM prior to beginning any activity under the mining laws, including Casual Use, within the ACEC, in accordance with 43 CFR 3809.31, to allow the BLM to determine whether a plan of operations must be submitted.
- (c) Closed to mineral materials disposals, except for administrative purposes; and
- (d) Exclude authorization of rights-of-way related to utility scale renewable energy projects.

[AC-5] Compensation Lands ACEC:

[Goal] Provide suitable habitat for listed species, and protection for various natural systems.

[Objective] Manage habitat for the benefit the species identified in the applicable compensation document to promote recovery of the target species.

[AC-D-5] Designate 283 acres of public lands and any future parcels of compensation land as the Compensation Lands ACEC (Map 2.40) administered with the following special management:

- (a) Apply fluid mineral leasing stipulation (MM-D-1.1.7 NSO-Compensation Lands) within the ACEC;
- (b) Exclude authorization of rights-of-way related to utility scale renewable energy projects;
- (c) Recommend any future parcels of compensation land, including any non-habitat acres that may be included in the acquisition, for ACEC consideration if there is evidence that the lands meet the relevance and importance criteria of the regulations. Upon completion of NEPA, public review, and a plan amendment, such lands would become part of the Compensation Lands ACEC;
- (d) Prohibit campfires and overnight camping;

- (e) Prohibit cross country equestrian travel in areas that are not grazed by livestock;
- (f) Prohibit air-soft and paintball activities, including organized games and casual use of these types of equipment; and
- (g) Require all pets to be leashed (maximum eight-foot length) at all times. Require removal of pet fecal matter by owners or handlers.

[AC-6] Cypress Mountain ACEC:

[Goal] Protect and preserve natural systems and processes.

[Objective] Preserve unique plant communities of serpentine chaparral and northern interior cypress forest dominated by Sargent cypress.

[AC-D-6] Designate 1,080 acres of public lands; within a boundary of 3,035 acres, as the Cypress Mountain ACEC (Map 2.41) administered with the following special management:

- (a) Identify as open for fluid mineral leasing, subject to moderate constraints (CSU- Priority Species, Plant Communities and Habitats stipulations);
- (b) Establish the ACEC, in accordance with 43 CFR 3809.31, as a special area requiring a 15 day notification be given to the BLM prior to beginning any activity under the mining laws including; Casual Use, to allow the BLM to determine whether a plan of operations must be submitted.
- (c) Identify as an exclusion area for rights-of-way related to utility scale renewable energy projects;
- (d) Identify as unavailable for livestock grazing;
- (e) Prohibit campfires and overnight camping;
- (f) Prohibit cross county equestrian travel; and
- (g) Prohibit the casual collection of plants or their parts without BLM authorization.

[AC-7] Cyrus Canyon ACEC:

[Goal] Provide suitable habitat for sensitive species and protection for natural systems.

[Objective] Protect sensitive biological resources including Kelso Creek monkeyflower and riparian values.

[AC-D-7] Designate 3,757 acres of public lands and 542 acres of federal mineral estate; within a boundary of 4,299 acres, as the Cyrus Canyon ACEC (Map 2.42) administered with the following special management:

- (a) Identify as closed to mineral materials disposals, except for administrative purposes;
- (b) Identify as an exclusion area for rights-of-way related to utility scale renewable energy projects;
- (c) Identify the Cyrus Canyon Kelso Creek Monkeyflower Unit as unavailable for livestock grazing;
- (d) Prohibit campfires and overnight camping;

- (e) Prohibit equestrian use;
- (f) Prohibit air-soft and paintball activities, including organized games and casual use of these types of equipment;
- (g) Prohibit the casual collection of plants or their parts without BLM authorization; and
- (h) No new apiary permits will be authorized. The existing apiary permit may be renewed but not transferred. The existing apiary site will be retired when the current holder does not renew the permit.

[AC-8] Erskine Creek ACEC:

[Goal] Provide suitable habitat for sensitive species and protection for various natural processes and geologic formations.

[Objective] Protect the limestone caves, riparian areas, manage habitat to support populations of Kern County larkspur and Piute Mountain jewelflower.

[AC-D-8] Designate 3,015 acres of public lands and 1,004 acres of federal mineral estate; within a boundary of 4,141 acres, as the Erskine Creek ACEC (Map 2.43) administered with the following special management:

- (a) Identify as closed to fluid mineral leasing;
- (b) Identify as an exclusion area for rights-of-way related to utility scale renewable energy projects (i.e., those producing electricity for the national grid);
- (c) Identify as unavailable for livestock grazing; and
- (d) Establish the ACEC, in accordance with 43 CFR 3809.31, as a special area requiring a 15 day notification be given to the BLM prior to beginning any activity under the mining laws including; Casual Use, to allow the BLM to determine whether a plan of operations must be submitted.

[AC-9] Hopper Mountain ACEC:

[Goal] Provide suitable habitat for federally listed species.

[Objective] Provide suitable roosting and nesting habitat for California condor in support of the California Condor Recovery Program.

[AC-D-9] Designate 2,027 acres of public lands and 2,948 acres of federal mineral estate; within a boundary of 4,976 acres, as the Hopper Mountain ACEC (Map 2.44) administered with the following special management:

- (a) Identify as open for fluid mineral leasing, subject to major constraints (CSU-Protected Species and CSU-Raptor stipulations)
- (b) Establish the ACEC, in accordance with 43 CFR 3809.31, as a special area requiring a 15 day notification be given to the BLM prior to beginning any activity under the mining laws including; Casual Use, to allow the BLM to determine whether a plan of operations must be submitted;

- (c) Identify as an exclusion area for rights-of-way related to utility scale renewable energy projects;
- (d) Identify portions as unavailable for livestock grazing;
- (e) Restrict public access through temporary emergency closure or in coordination with adjacent land managers, as needed for Condor protection;
- (f) Implement Best Management Practices to minimize impacts on condors from public use and oil field activities; and
- (g) Prohibit campfires and overnight camping.
- (h) Prohibit the discharge of firearms for shooting sports activities; except for the legal taking of game species.

[AC-10] Horse Canyon ACEC:

[Goal] Protect cultural resources, and various natural processes.

[Objective] Protect significant cultural sites, including traditional cultural properties associated with Native American values and important paleontological resources.

[AC-D-10] Designate 1,491 acres of public lands and 1,339 acres of federal mineral estate; within a boundary of 6,897 acres, as the Horse Canyon ACEC (Map 2.45) administered with the following special management:

- (a) Apply fluid mineral leasing stipulation (NSO) within the ACEC;
- (b) Require a 15 day notification be given to the BLM prior to beginning any activity under the mining laws including Casual Use within the ACEC, in accordance with 43 CFR 3809.31, to allow the BLM to determine whether a plan of operations must be submitted.
- (c)) Prohibit the collection of nonrenewable resources, such as rocks, mineral specimens, comment invertebrate fossils and semi-precious gem stones within the ACEC, in accordance with 43 CFR 8365.1-5(b)(2).
- (d) Exclude the authorization of rights-of-way related to utility scale renewable energy projects; and
- (e) Unavailable for livestock grazing.

[AC-11] Kaweah ACEC:

[Goal] Provide suitable habitat for sensitive species and protection for various natural processes, geologic formations, and cultural resources.

[Objective] Protect the Case Mountain giant sequoia groves, limestone caves and other karst features, riparian areas, and cultural resources. Manage habitat to support populations of California spotted owl, Pacific fisher, and Kaweah monkey flower.

[AC-D-11] Designate 26,891 acres of public lands and 150 acres of federal mineral estate; within a boundary of 33,559 acres (expanding the existing Case Mountain ACEC), as the Kaweah ACEC (Map 2.46) administered with the following special management:

- (a) Identify as open for leasing oil and gas resources, subject to moderate constraints (CSU-Raptor stipulations);
- (b) Identify as closed to geothermal leasing;
- (c) Establish, in accordance with 43 CFR 3809.31, the ACEC as a special area requiring a 15 day notification be given to the BLM prior to beginning any activity under the mining laws including; Casual Use, to allow the BLM to determine whether a plan of operations must be submitted.
- (d) Identify as an exclusion area for rights-of-way related to utility scale renewable energy projects;
- (e) Identify the giant sequoia groves as unavailable for livestock grazing;
- (f) Prohibit public access to recreation sites along the North Fork of the Kaweah River.
- (g) Prohibit air-soft and paintball activities, including organized games and casual use of these types of equipment unless authorized through a Special Recreation Permit;
- (h) Prohibit the casual collection of plants or their parts without BLM authorization; and
- (i) Protect the giant sequoia groves and mixed conifer forest through implementation of fuels reduction techniques including prescribed burning and vegetation thinning, and removal of ladder fuels.

[AC-12] Kettleman Hills ACEC:

[Goal] Provide suitable habitat for federal and state listed species and protection for natural systems and processes.

[Objective] Protect significant paleontological resources and provide habitat for the suite of San Joaquin Valley listed species including ecologically functioning valley upland habitats.

[AC-D-12] Designate 6,726 acres of public lands and 6,969 acres of federal mineral estate; within a boundary of 28,874 acres (expanding the existing 9,794-acre ACEC), as the Kettleman Hills ACEC (Map 2.47) administered with the following special management:

- (a) Identify as open for fluid mineral leasing, subject to major constraints (CSU-Protected Species, CSU-Sensitive Species, and CSU-Raptor stipulations);
- (b) Identify as closed to mineral materials disposals, except for administrative purposes;
- (c) Identify as an exclusion area for rights-of-way related to utility scale renewable energy projects; and
- (d) Prohibit campfires.

[AC-13] Lokern-Buena Vista ACEC:

[Goal] Provide suitable habitat for federal and state listed species and protection for natural systems and processes.

[Objective] Provide habitat for the suite of San Joaquin Valley listed species including ecologically functioning valley upland habitats.

[AC-D-13] Designate 11,330 acres of public lands and 4,162 acres of federal mineral estate; within a boundary of 69,624 acres (combining the existing Lokern ACEC with the expansion to include the Buena Vista Hills and Valley), as the Lokern-Buena Vista ACEC (Map 2.48) administered with the following special management:

- (a) Identify as open for fluid mineral leasing, subject to major constraints (CSU-Protected Species and CSU-Sensitive Species stipulations;
- (b) Identify as closed to mineral materials disposals, except for administrative purposes;
- (c) Identify as an exclusion area for rights-of-way related to utility scale renewable energy projects; and
- (d) Prohibit campfires.

[AC-14] Los Osos ACEC:

[Goal] Protect and preserve important cultural resources, natural systems and processes, and habitat for listed species.

[Objective] Protect significant cultural resources from damage and degradation. Maintain rare and endemic plant communities including coastal dune scrub, central maritime chaparral, and pygmy oak forest. Ensure no net loss of associated habitat for special status plants and animals.

[AC-D-14] Designate 5 acres of public lands; within a boundary of 32 acres, as the Los Osos ACEC (Map 2.49) administered with the following special management:

- (a) Identify as an exclusion area for rights-of-way related to utility scale renewable energy projects;
- (b) Identify as unavailable for livestock grazing;
- (c) Prohibit campfires and overnight camping;
- (d) Designate as OHV Closed area;
- (e) Prohibit mechanized use, equestrian use, and cross-country travel by pedestrians;
- (f) Require all pets to be leashed (maximum eight-foot length) at all times. Require removal of pet fecal matter by owners or handlers;
- (g) Prohibit air-soft and paintball activities, including organized games and casual use the these types of equipment; and
- (h) Prohibit the casual collection of plants or their parts without BLM authorization.

[AC-15] Piute Cypress ACEC:

[Goal] Provide suitable habitat for sensitive species and protection for natural systems.

[Objective] Ensure no net loss of Piute Cypress groves and associated habitat for special status plants.

[AC-D-15] Designate 2,305 acres of public lands and 212 acres of federal mineral estate; within a boundary of 2,544 acres (expanding the existing 1,104-acre ACEC), as the Piute Cypress ACEC (Map 2.50) administered with the following special management:

- (a) Identify as closed to fluid mineral leasing;
- (b) Identify as closed to mineral materials disposals, except for administrative purposes;
- (c) Identify as an exclusion area for rights-of-way related to utility scale renewable energy projects;
- (d) Protect Piute cypress communities from livestock grazing if deemed necessary through appropriate studies;
- (e) Prohibit campfires; and
- (f) Prohibit the casual collection of plants or their parts without BLM authorization.

[AC-16] Point Sal ACEC:

[Goal] Protect and preserve important cultural resources, natural systems and processes, and habitat for listed species.

[Objective] Preserve significant cultural resources and maintain habitat for sensitive and listed species and unique plant species assemblages.

[AC-D-16] Designate 77 acres of public lands, as the Point Sal ACEC (Map 2.51) administered with the following special management:

- (a) Collaborate with adjacent land owners (California State Parks and Santa Barbara County) for cohesive management of the region;
- (b) Identify as closed to fluid mineral leasing;
- (c) Establish, in accordance with 43 CFR 3809.31, the ACEC as a special area requiring a 15 day notification be given to the BLM prior to beginning any activity under the mining laws including; Casual Use, to allow the BLM to determine whether a plan of operations must be submitted.
- (d) Identify as an exclusion area for rights-of-way related to utility scale renewable energy projects;
- (e) Identify as unavailable for livestock grazing;
- (f) Prohibit campfires and overnight camping;
- (g) Prohibit all cross-country travel;
- (h) Designate as OHV Closed area;
- (i) Prohibit mechanized and equestrian use; and
- (j) Prohibit the casual collection of plants or their parts without BLM authorization.

[AC-17] Salinas River ACEC:

[Goal] Provide suitable habitat for special status species and protection for natural systems.

[Objective] Maintain rare plant communities including central coast live oak riparian forest, central coast arroyo willow riparian forest, sycamore alluvial woodland, and central coast riparian scrub. Ensure no net loss of associated habitat for special status plants and animals.

[AC-D-17] Designate 946 acres of public lands and 658 acres of federal mineral estate; within a boundary of 2,383 acres, as the Salinas River ACEC (Map 2.52) administered with the following special management:

- (a) Identify as open to fluid mineral leasing, subject to moderate constraints (CSU-priority species, plant communities and habitats stipulation);
- (b) Recommend proposal of the riparian zone (approximately 10 acres) for withdrawal from appropriation and entry under the General Mining Law;
- (c) Identify as an exclusion area for rights-of-way related to utility scale renewable energy projects;
- (d) Identify as unavailable for livestock grazing;
- (e) Prohibit campfires and overnight camping;
- (f) Prohibit cross country equestrian travel; and
- (g) Prohibit the discharge of firearms, except the legal taking of game species.

[AC-18] Tierra Redonda ACEC:

[Goal] Protect geologic formations, and various natural processes.

[Objective] Preserve significant paleontological resources, unique sand dune formation and coast live oak woodland.

[AC-D-18] Designate 331 acres of public lands and 81 acres of federal mineral estate; within a boundary of 1,311 acres, as the Tierra Redonda ACEC (Map 2.53) administered with the following special management:

- (a) Identify as open for fluid mineral leasing, subject to major constraints (NSO);
- (b) Establish, in accordance with 43 CFR 3809.31, the ACEC as a special area requiring a 15 day notification be given to the BLM prior to beginning any activity under the mining laws including; Casual Use, to allow the BLM to determine whether a plan of operations must be submitted.
- (c) Identify as an exclusion area for rights-of-way related to utility scale renewable energy projects;
- (d) Identify as unavailable for livestock grazing;
- (e) Prohibit campfires and overnight camping;
- (f) Prohibit cross country equestrian travel; and
- (g) Prohibit the casual collection of plants or their parts without BLM authorization.

[AC-19] Upper Cuyama Valley ACEC:

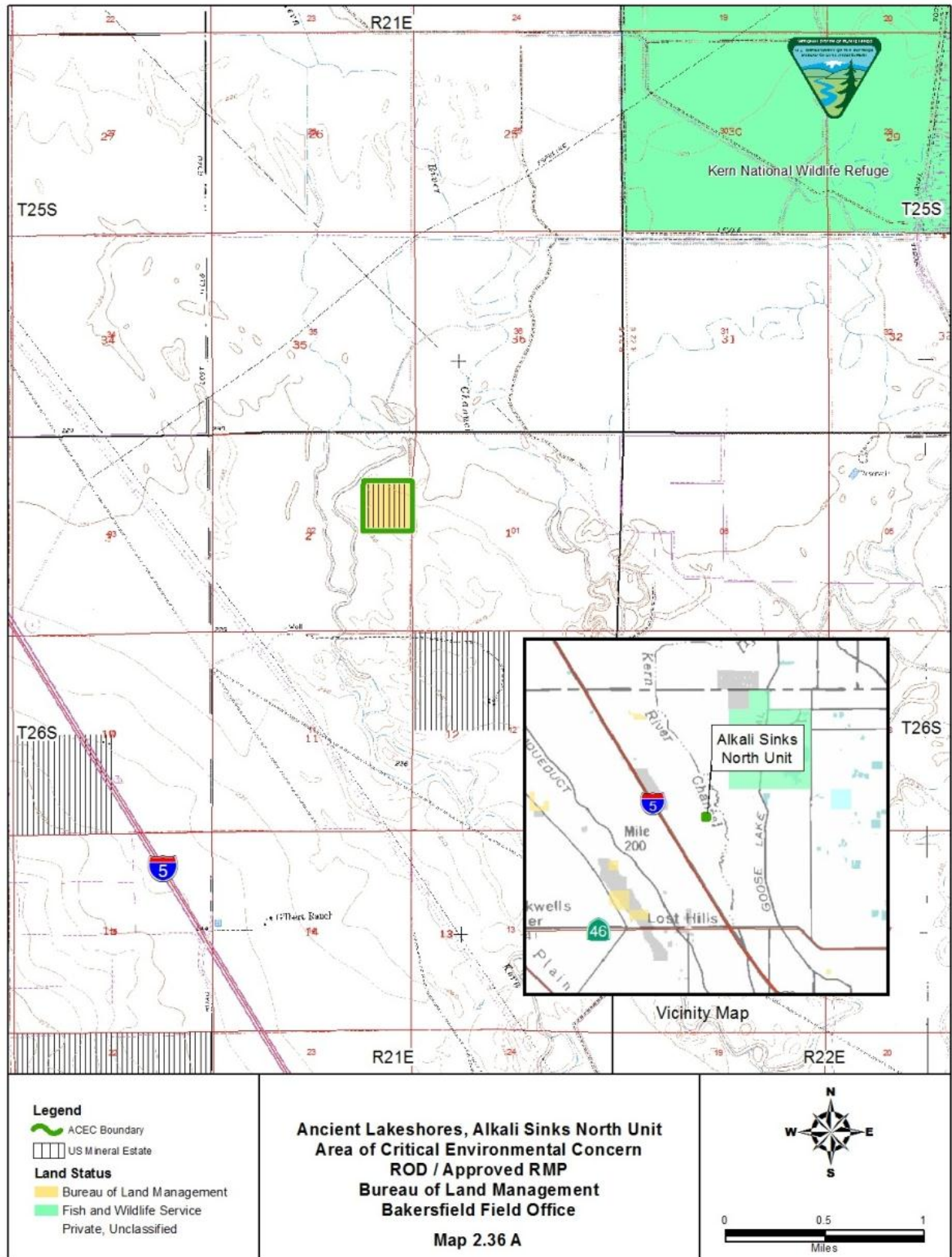
[Goal] Provide suitable habitat for sensitive and listed species and protection for natural systems.

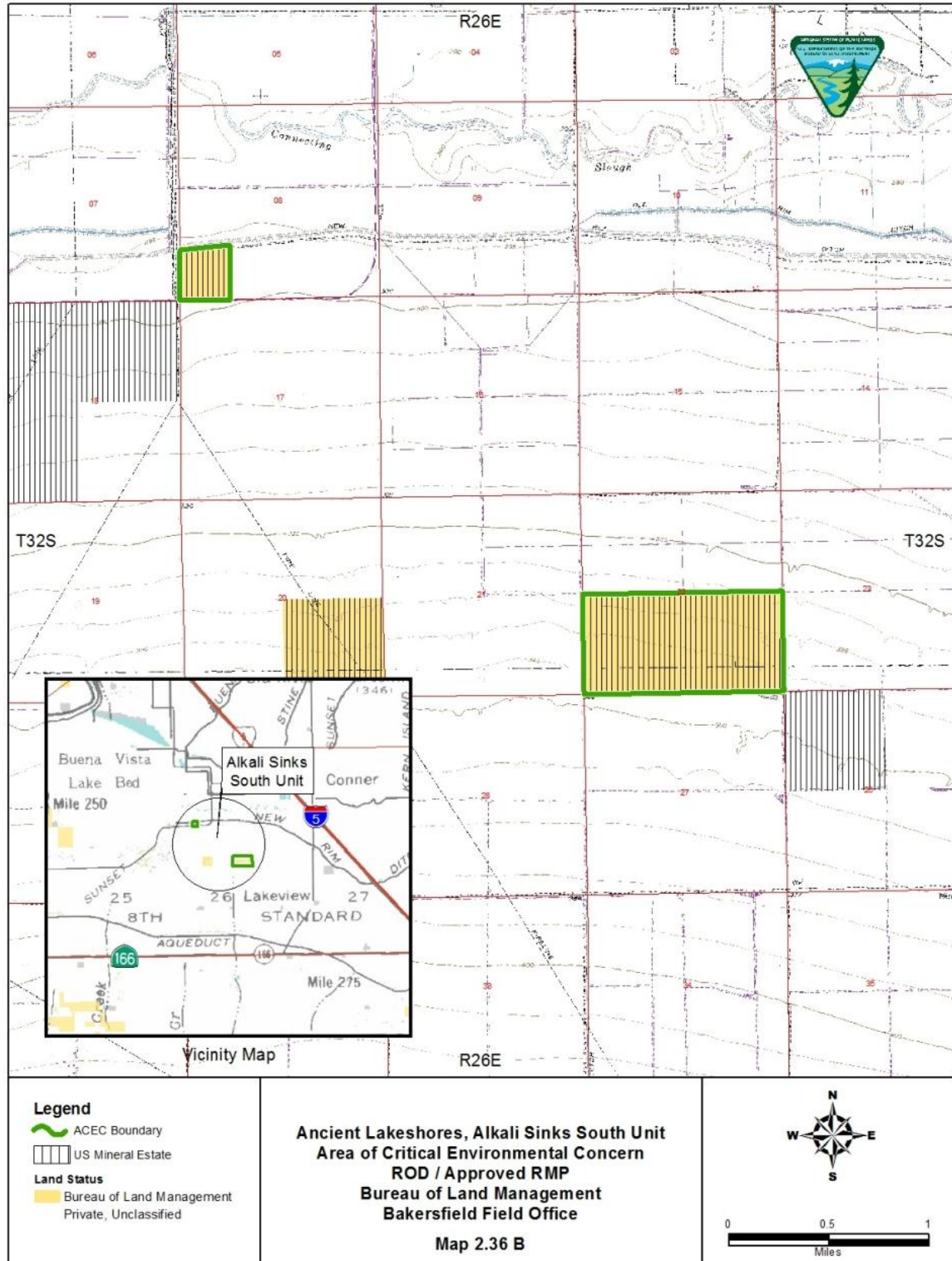
[Objective] Protect habitat for blunt-nosed leopard lizard and its hybrid zone, Kern primrose sphinx moth, and California jewelflower. Maintain the link between the Sierra Madre and the San Emigdio Mountains.

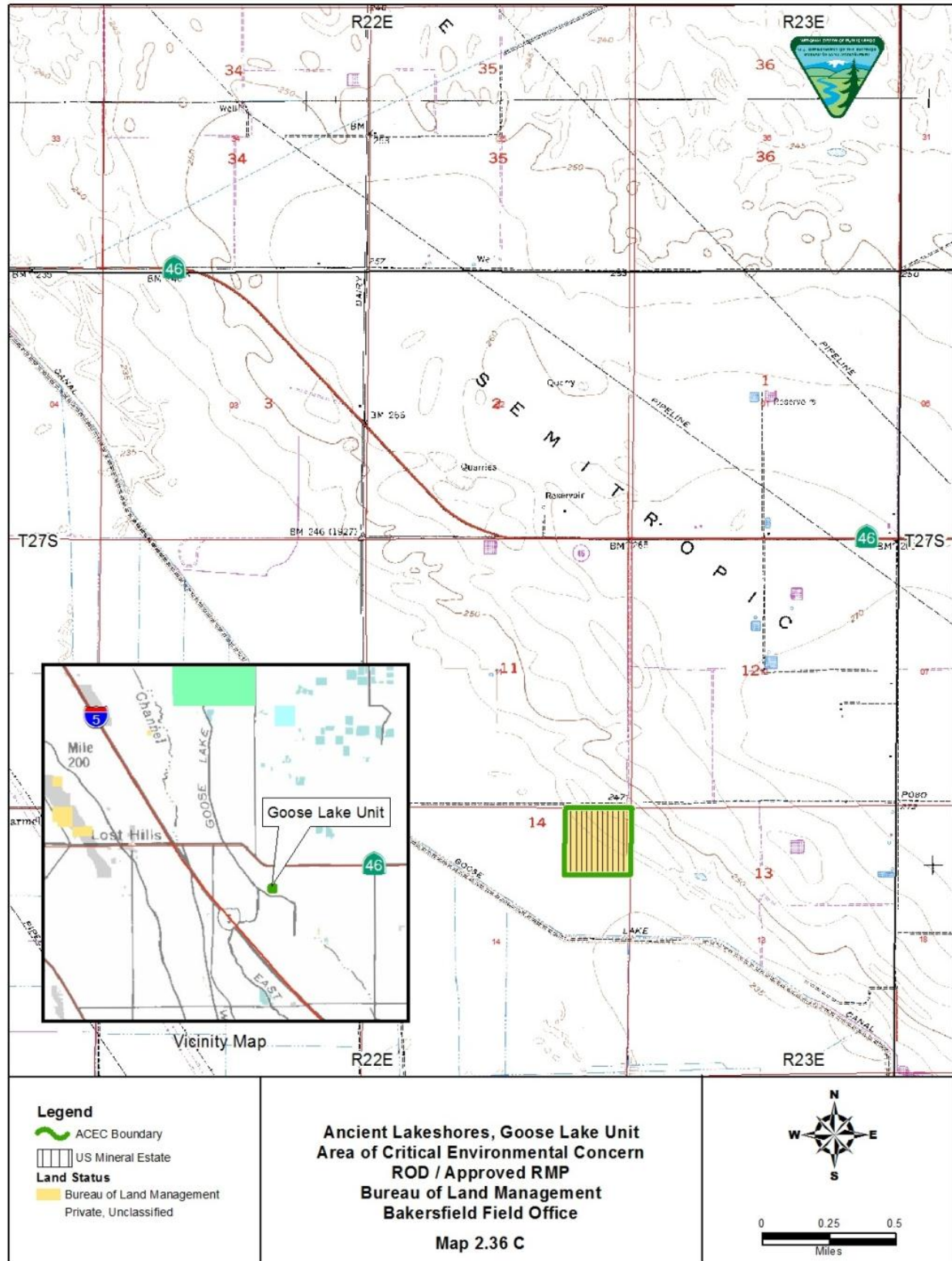
[AC-D-19] Designate 6,351 acres of public lands and 2,584 acres of federal mineral estate; within a boundary of 15,247 acres, as the Upper Cuyama Valley ACEC (Map 2.54) administered with the following special management:

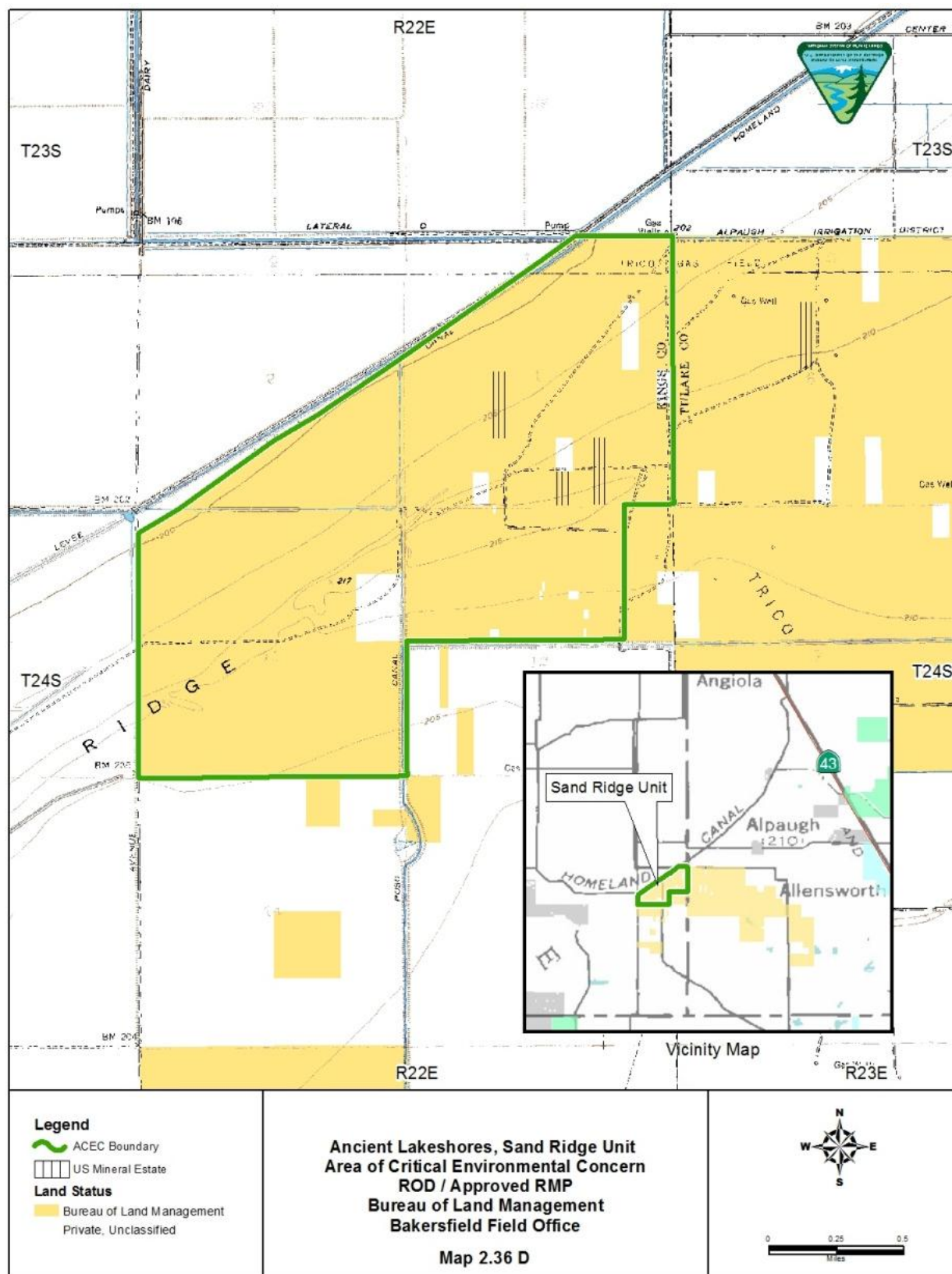
- (a) Identify as open for fluid mineral leasing subject to major constraints (CSU-Protected Species and CSU-Sensitive Species) stipulations;
- (b) Identify as an exclusion area for rights-of-way related to utility scale renewable energy projects;
- (c) Identify as unavailable for livestock grazing habitat containing California jewelflower or Kern primrose sphinx moth;
- (d) Prohibit equestrian use in habitat containing California jewelflower or Kern primrose sphinx moth;
- (e) Prohibit cross country equestrian travel outside of livestock grazing allotments; and
- (f) Prohibit the casual collection of plants or their parts without BLM authorization.

Map 2.36 – Ancient Lakeshores ACEC

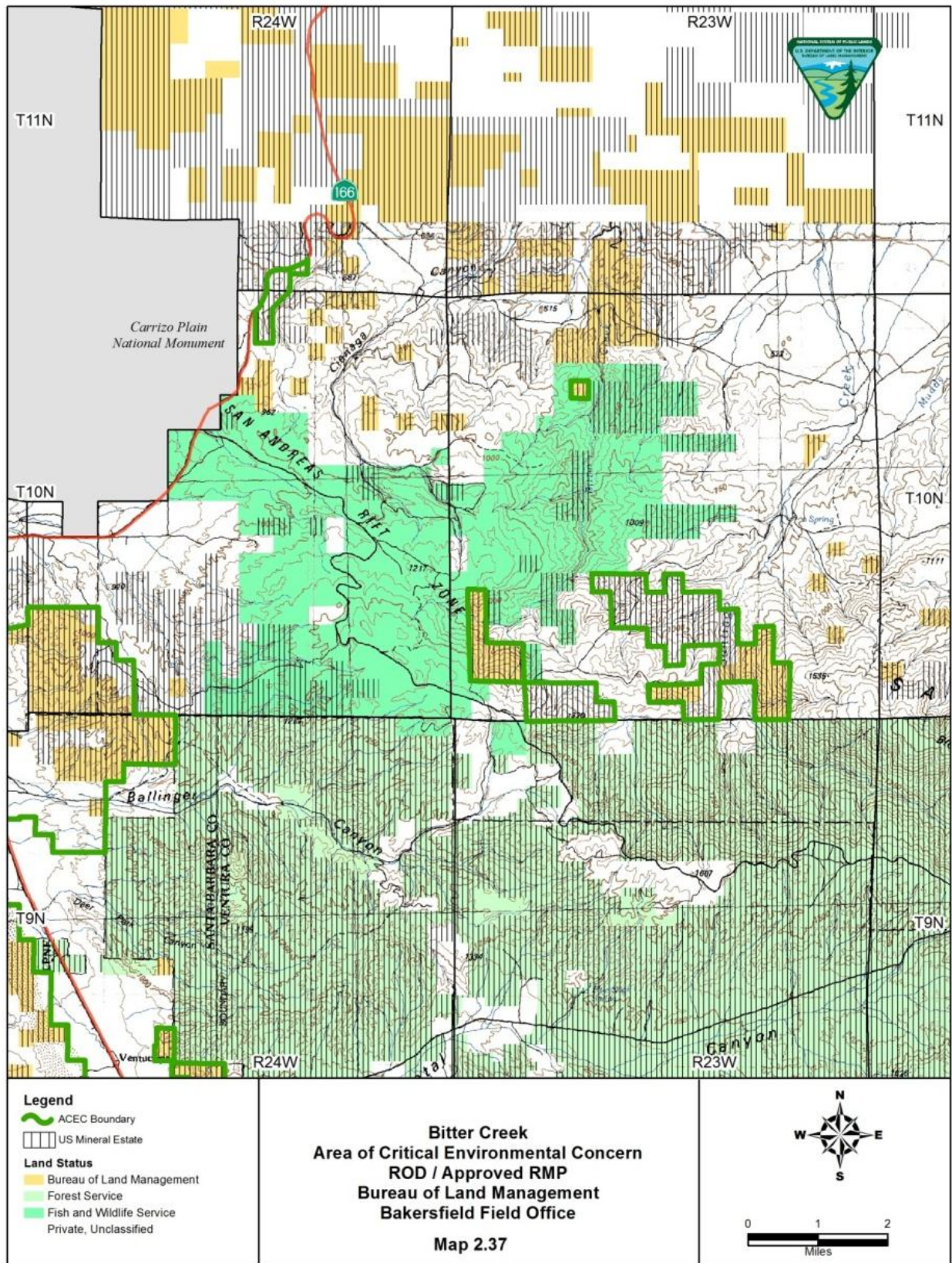




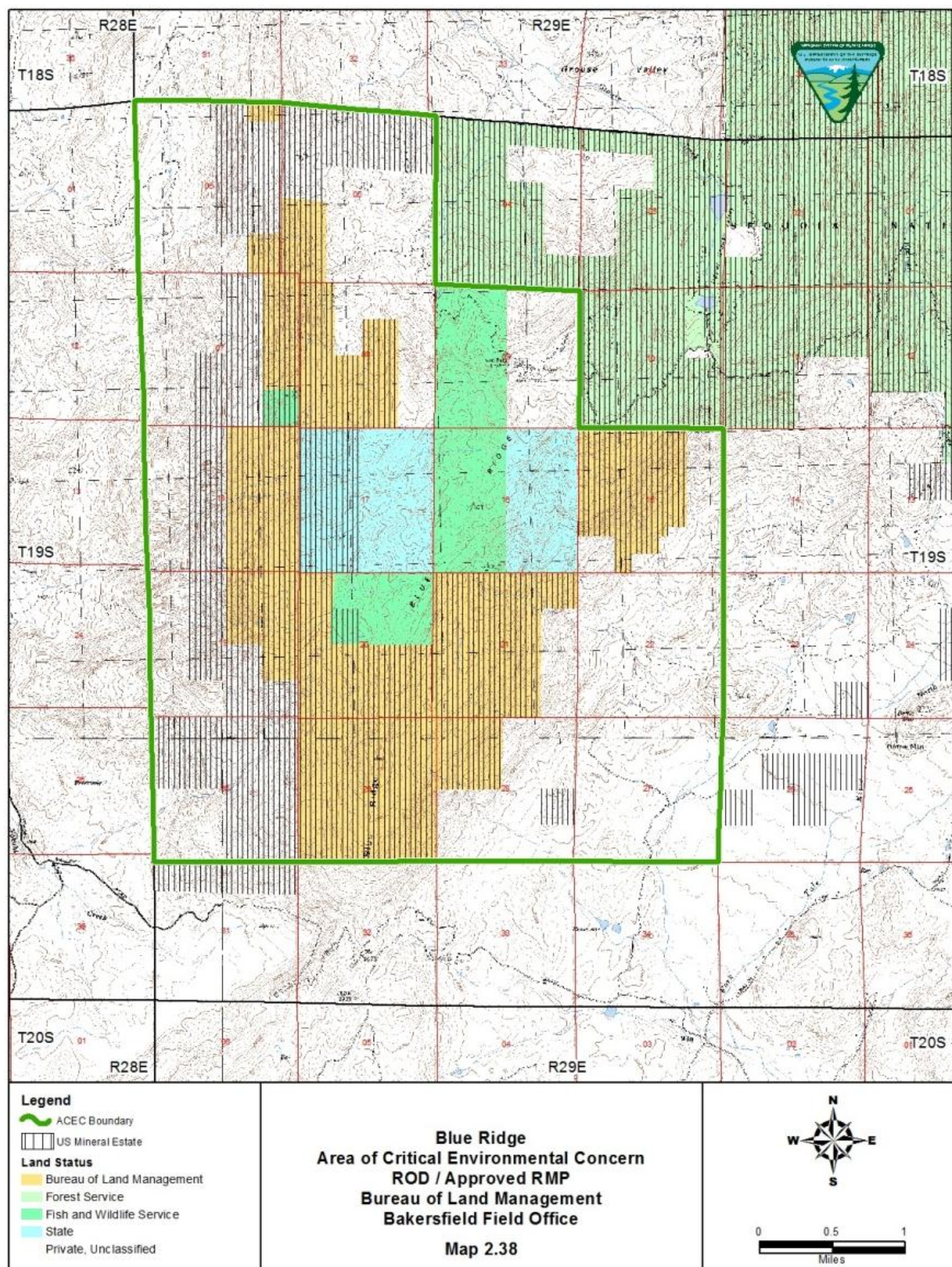




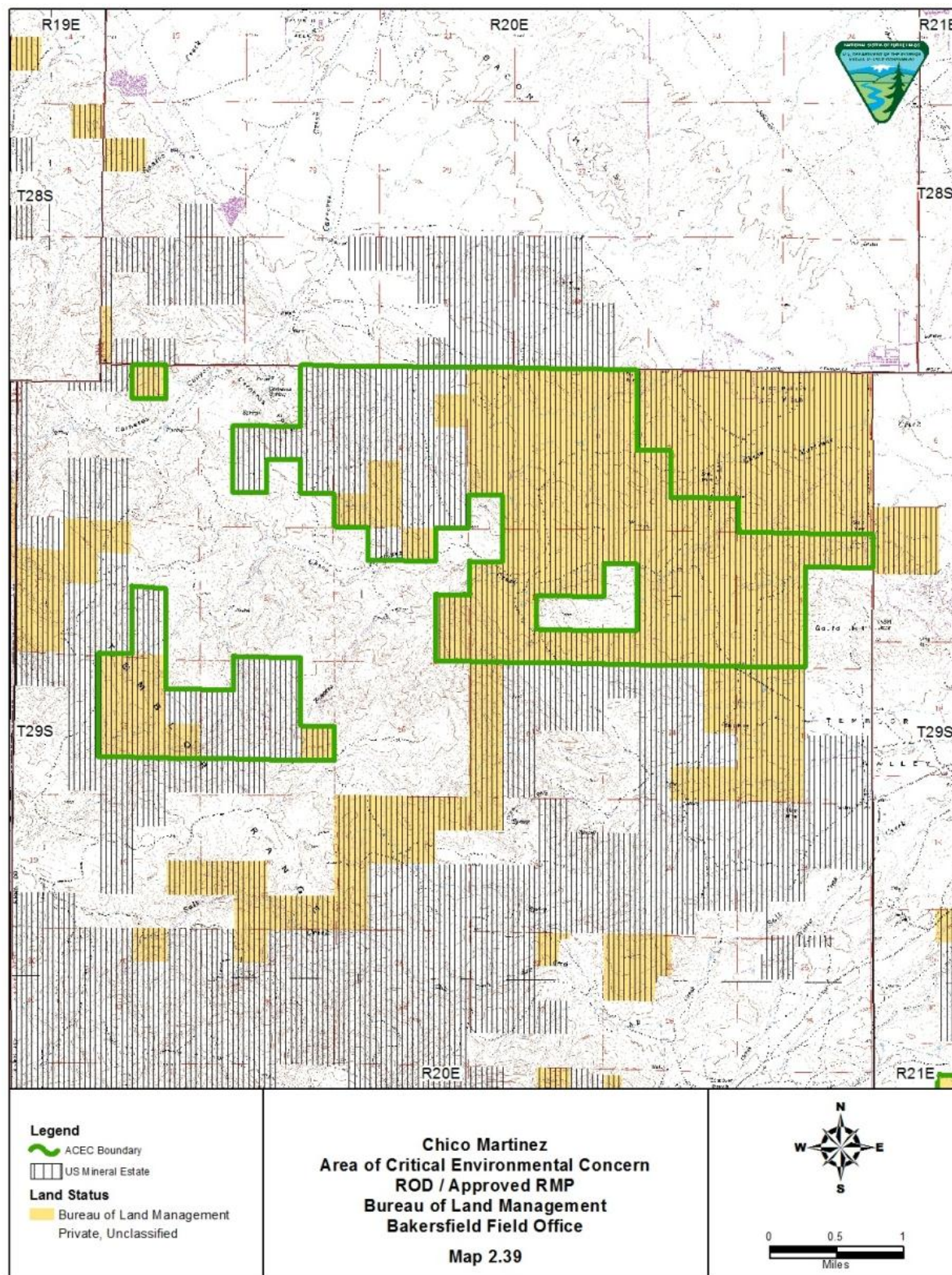
Map 2.37 – Bitter Creek ACEC



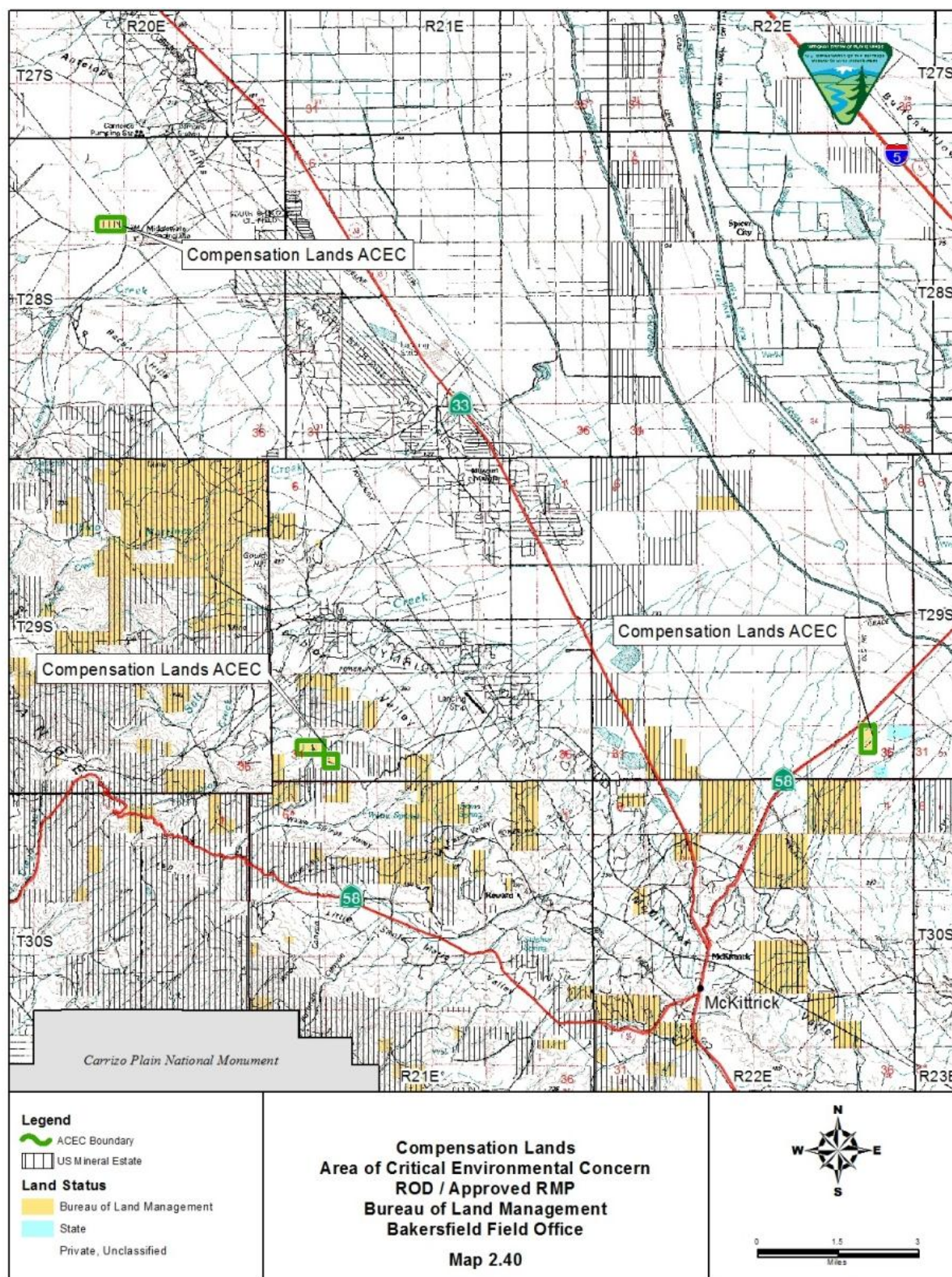
Map 2.38 – Blue Ridge ACEC

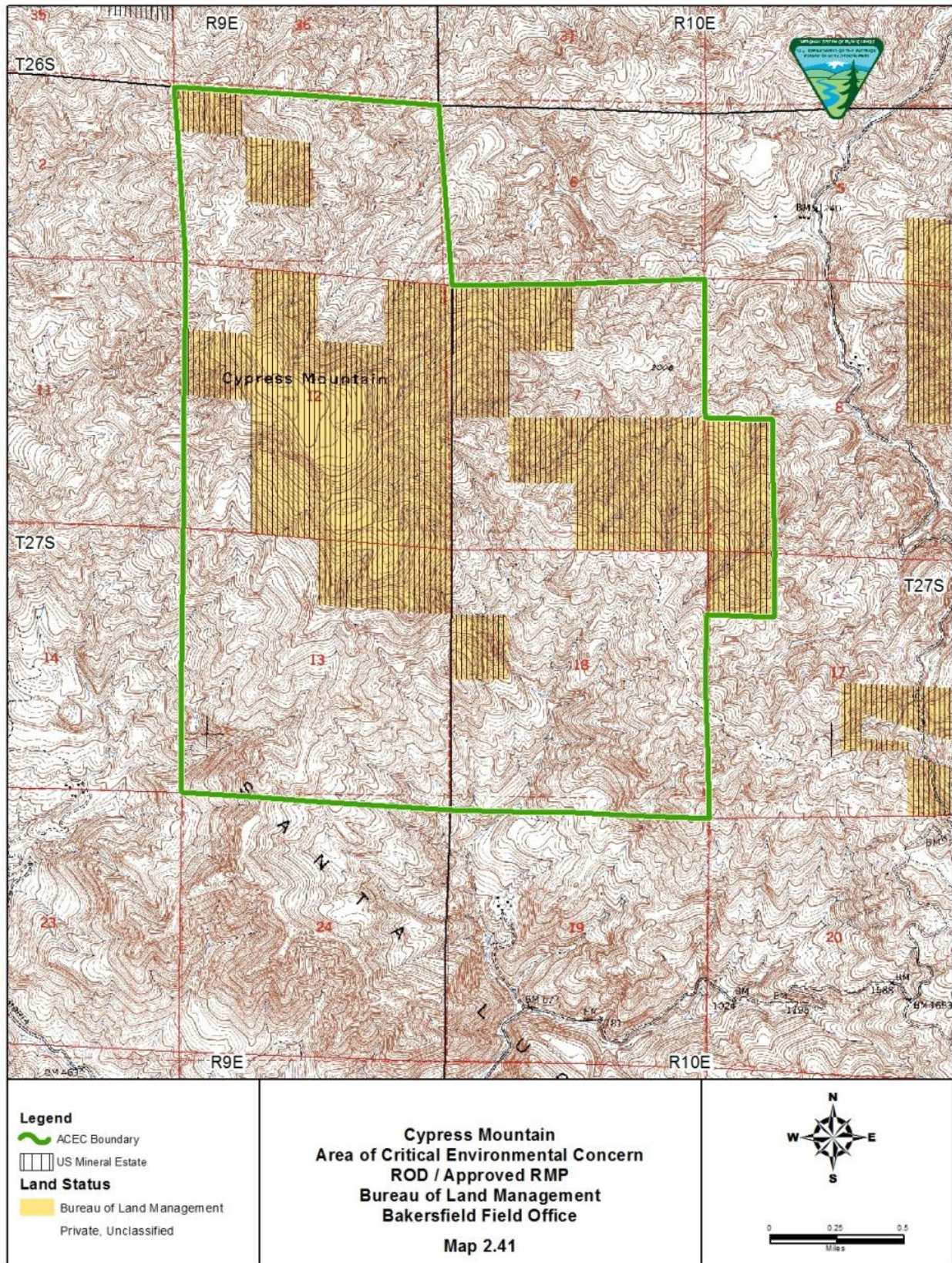


Map 2.39 – Chico Martinez ACEC

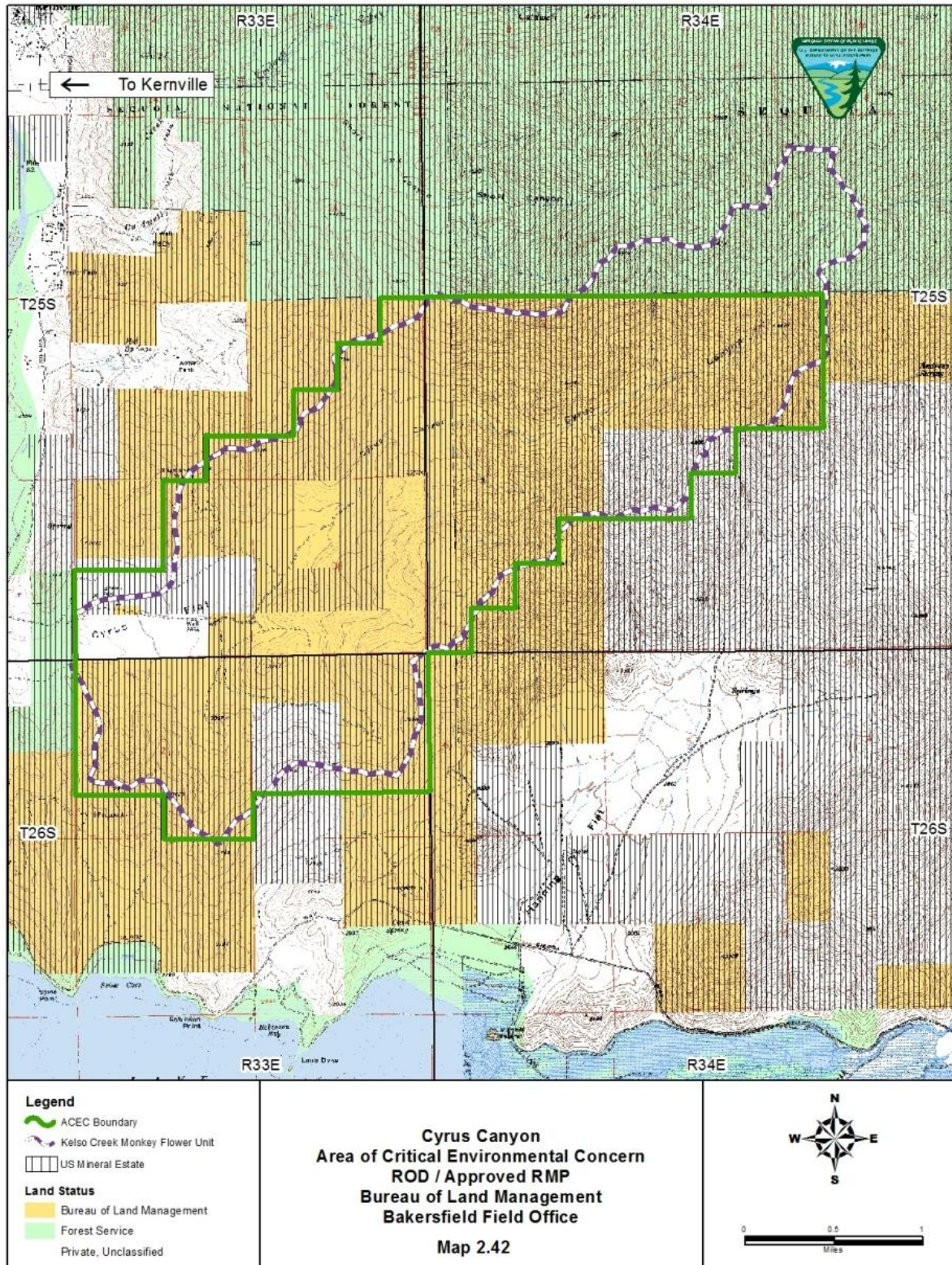


Map 2.40 – Compensation Lands ACEC

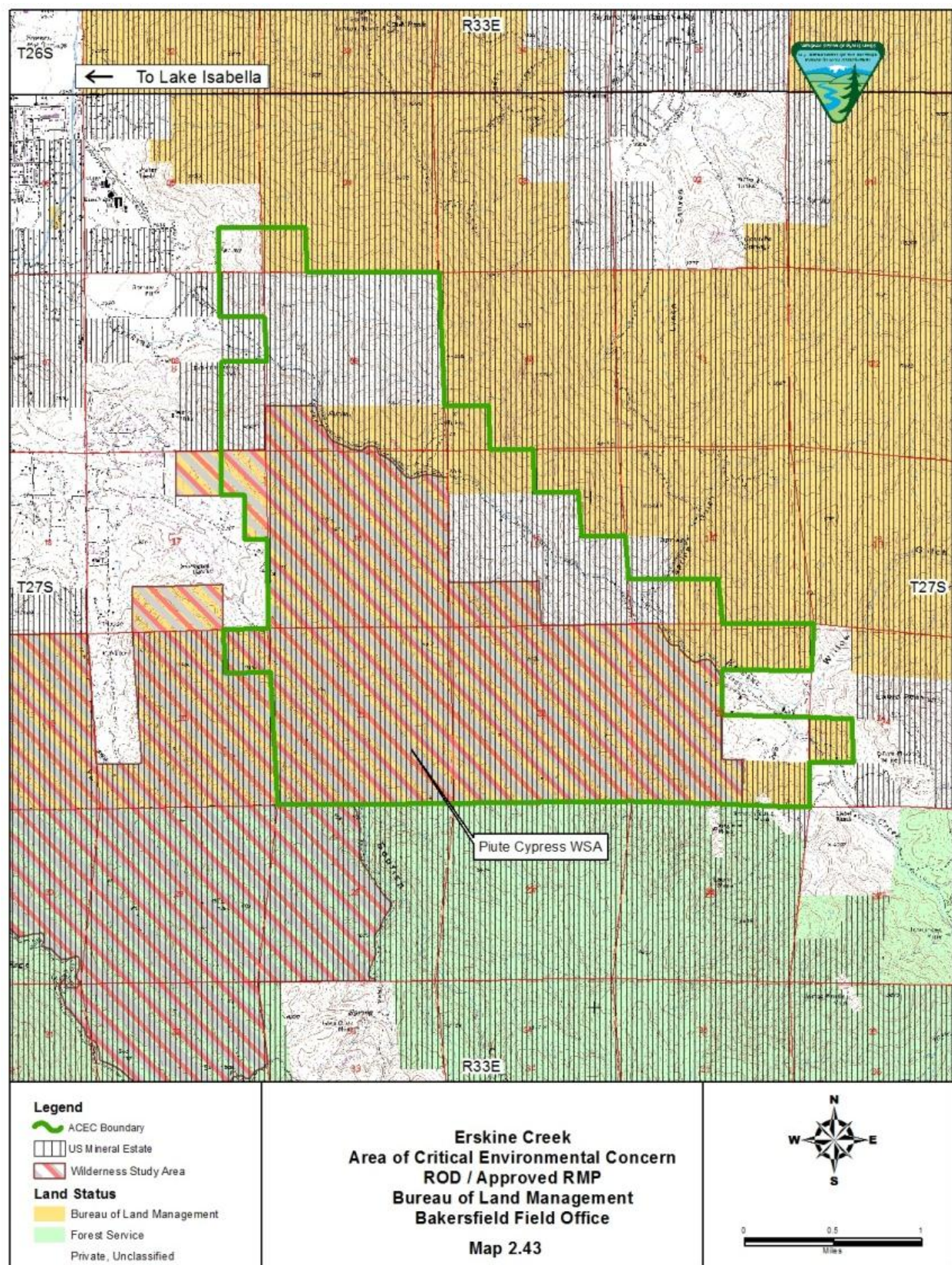


Map 2.41 – Cypress Mountain ACEC

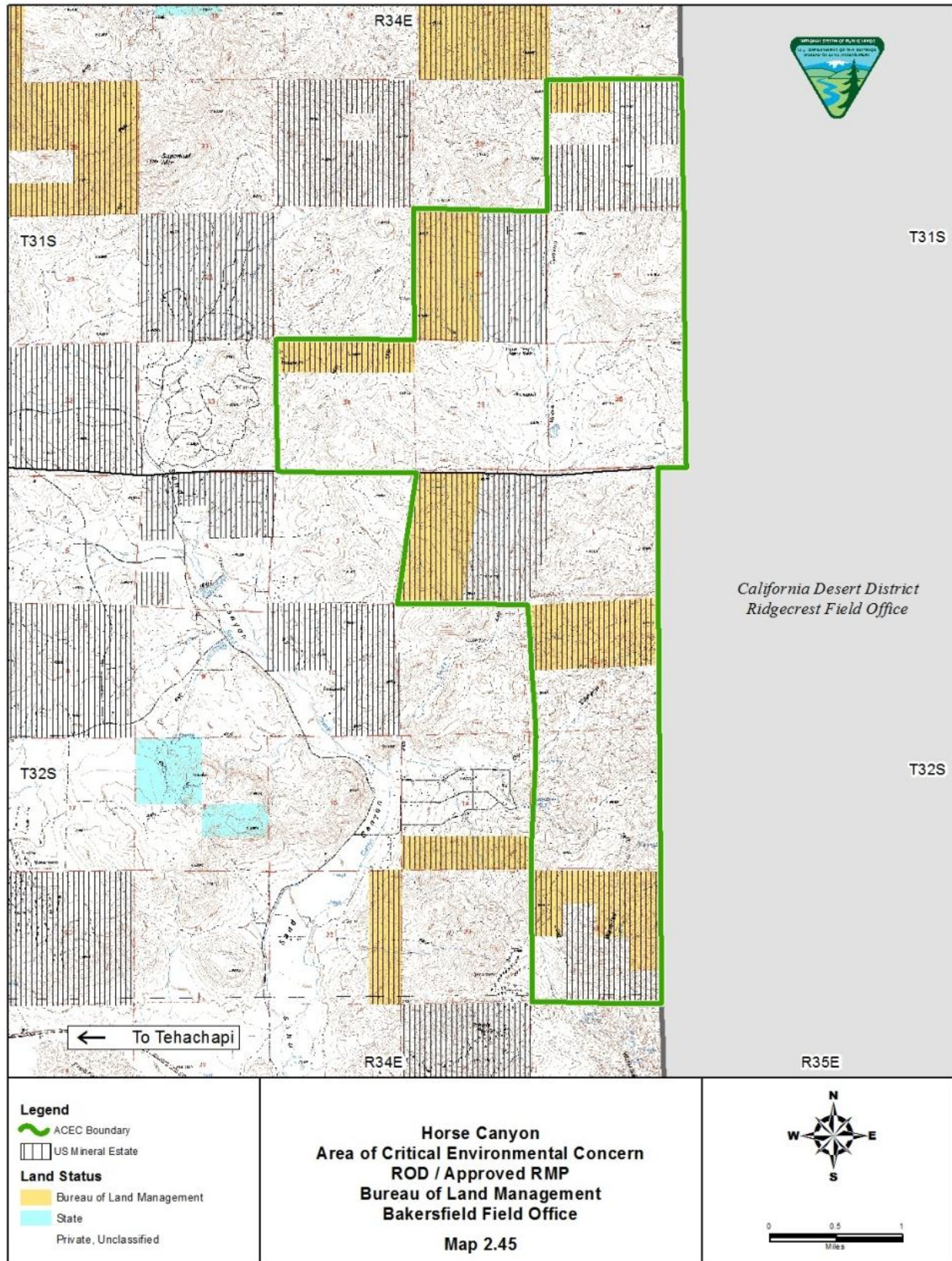
Map 2.42 – Cyrus Canyon ACEC



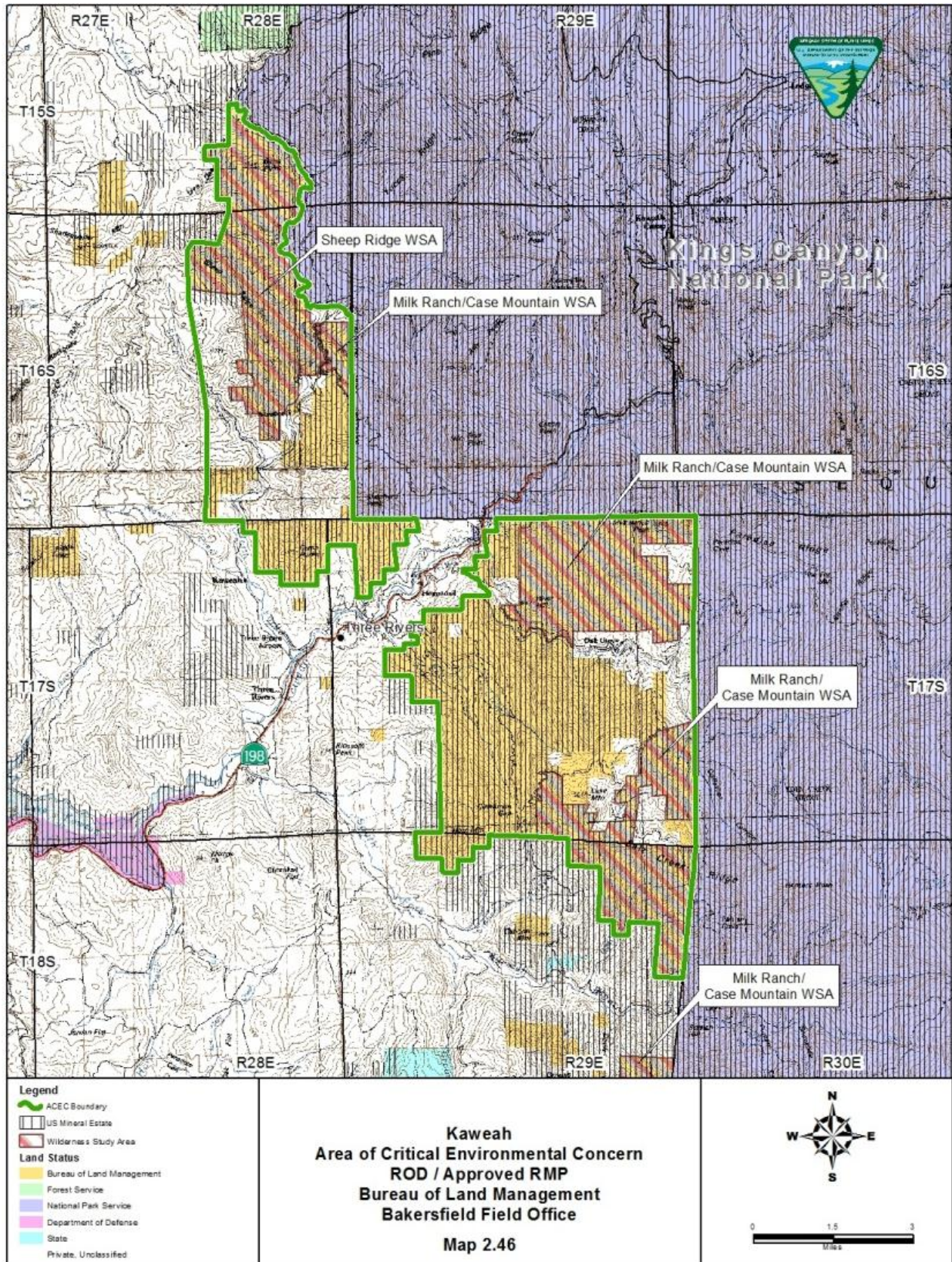
Map 2.43 – Erskine Creek ACEC



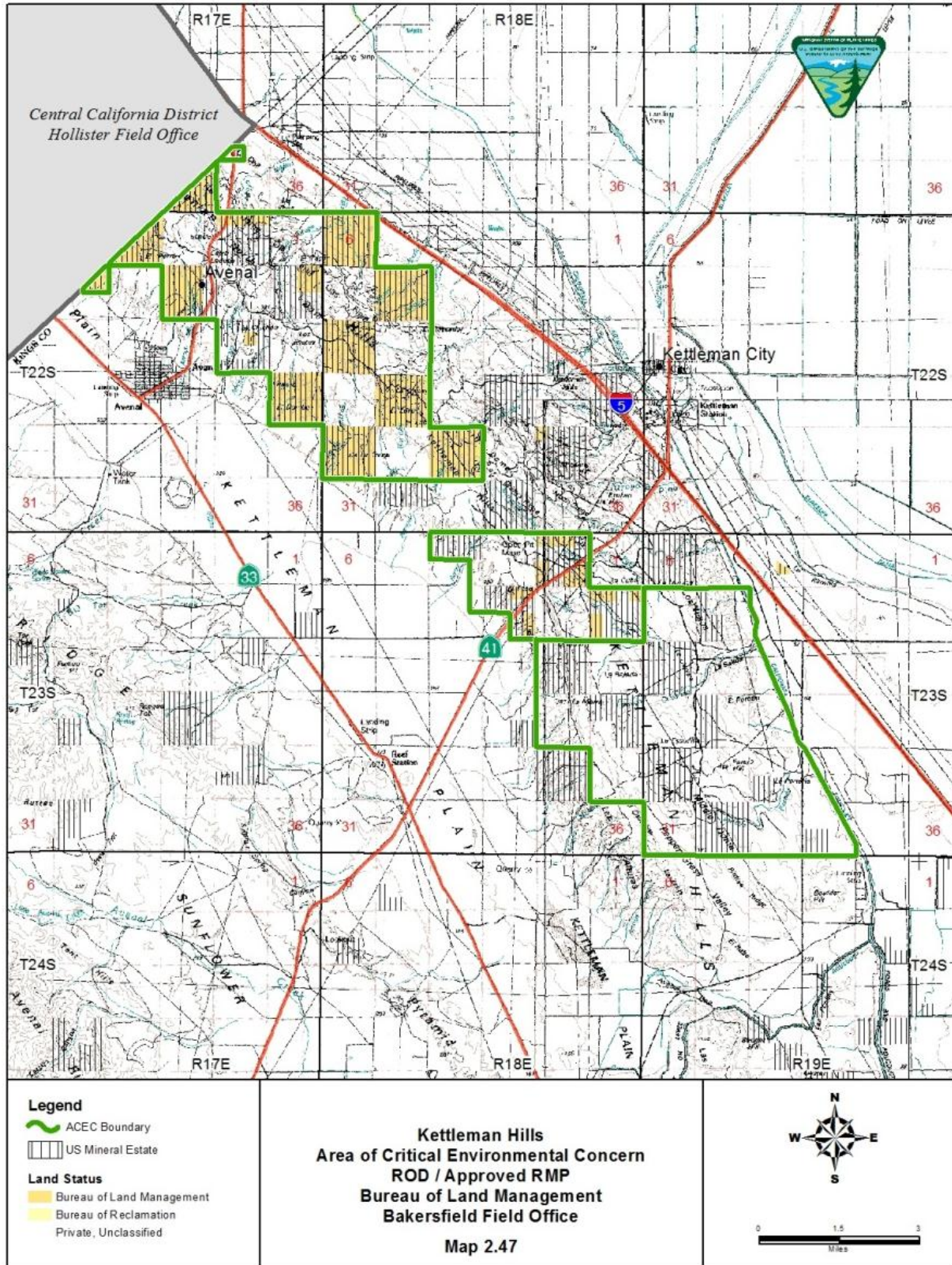
Map 2.45 – Horse Canyon ACEC



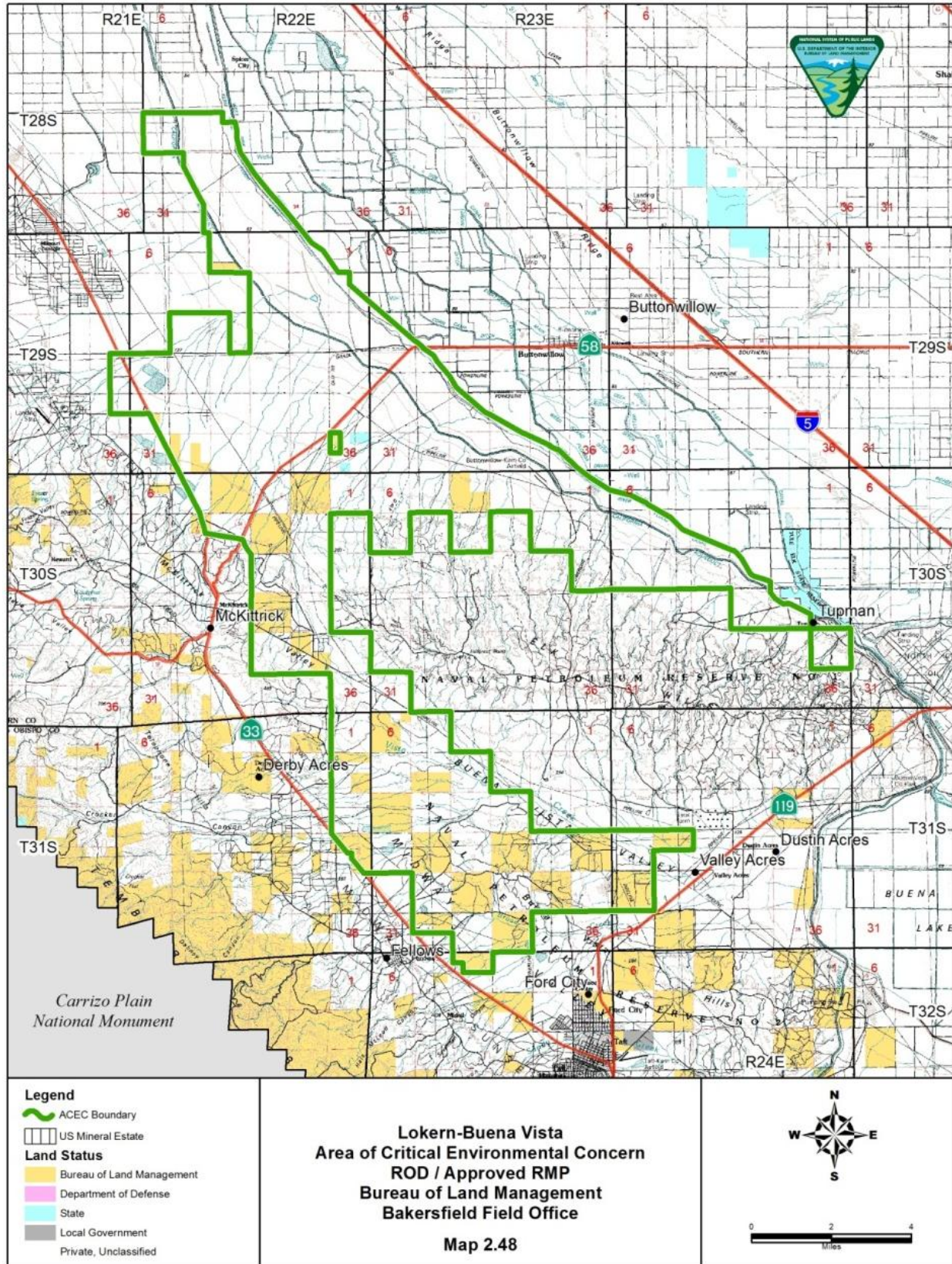
Map 2.46 – Kaweah ACEC



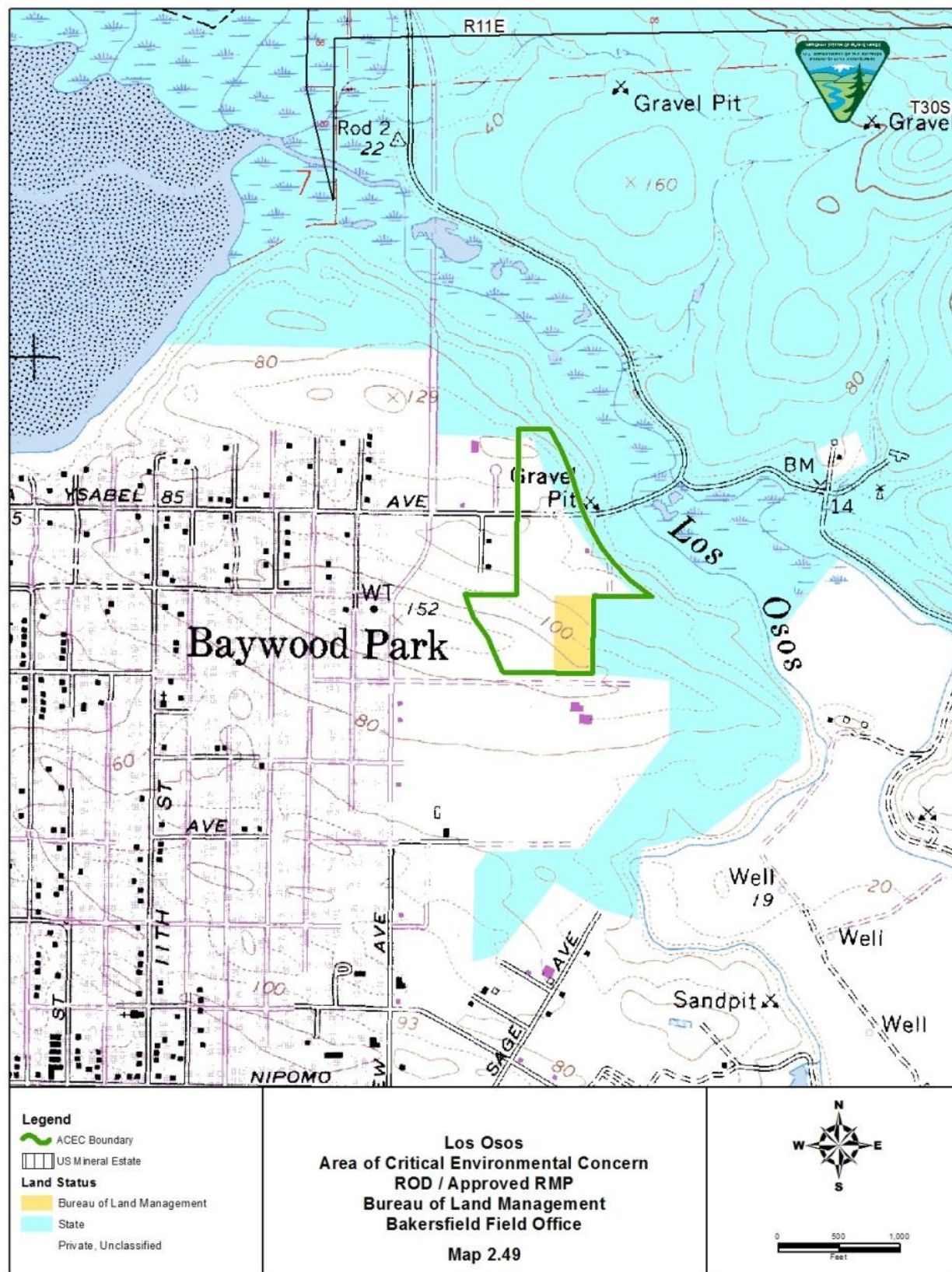
Map 2.47 – Kettleman Hills ACEC



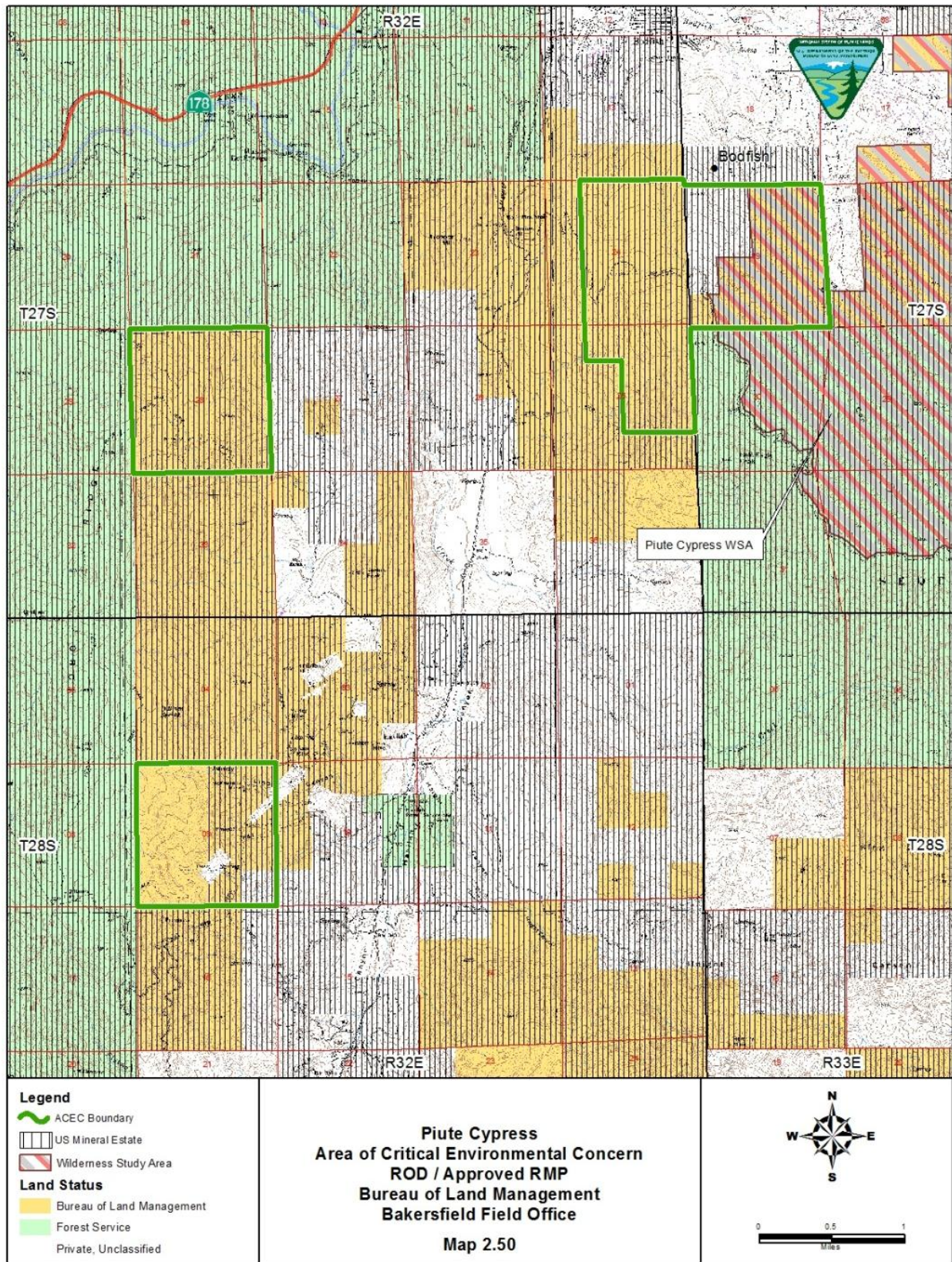
Map 2.48 – Lokern-Buena Vista ACEC



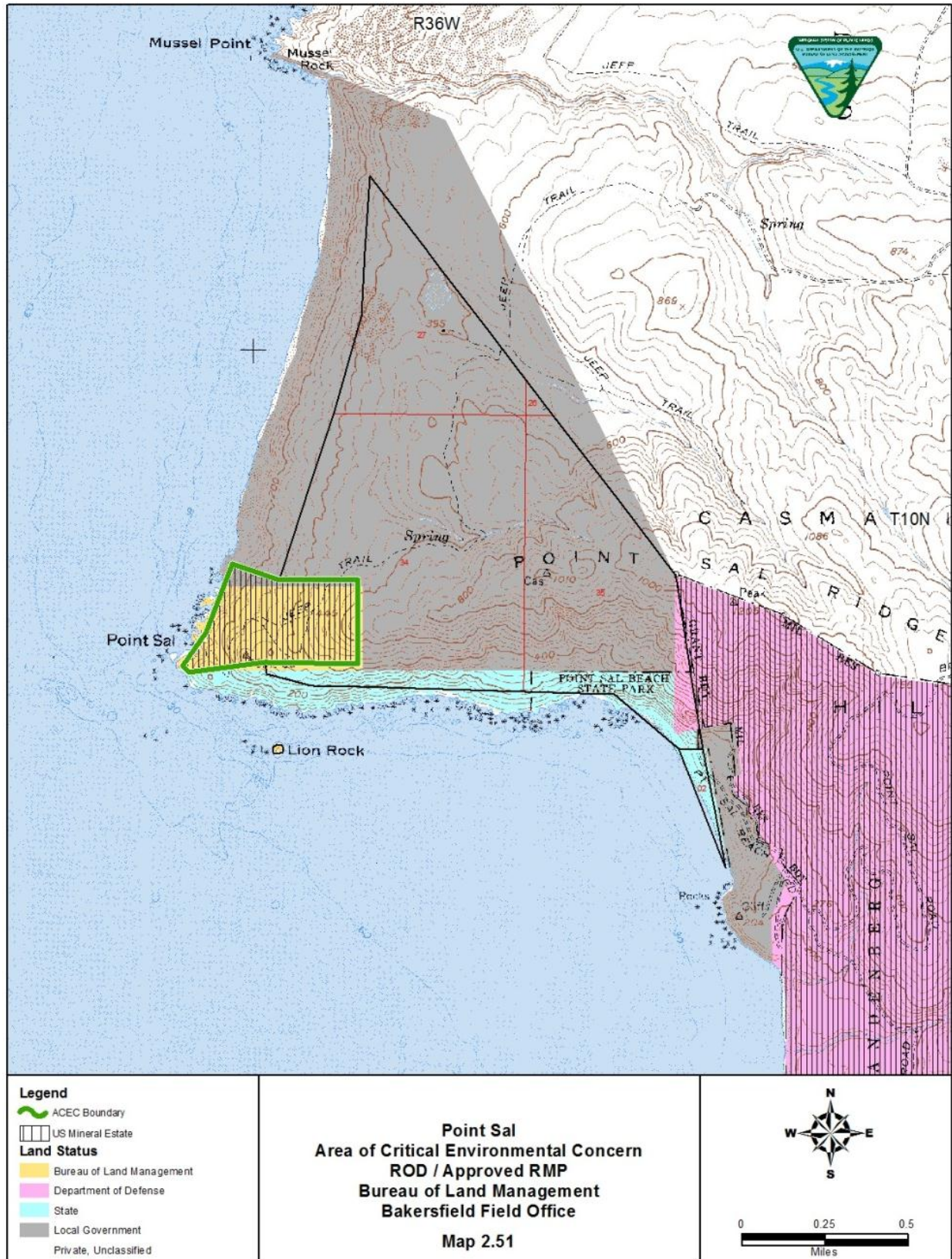
Map 2.49 – Los Osos ACEC



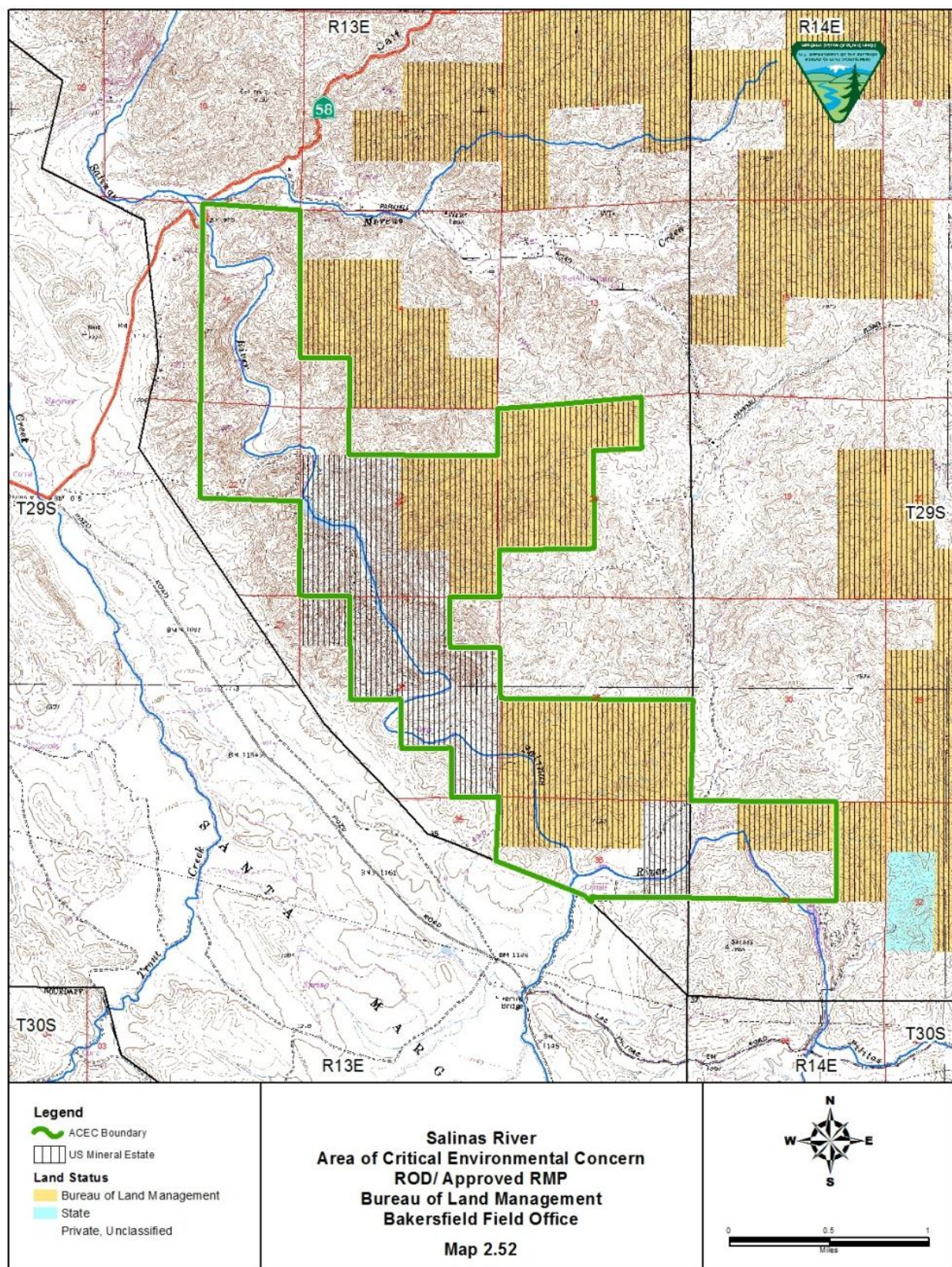
Map 2.50 – Piute Cypress ACEC



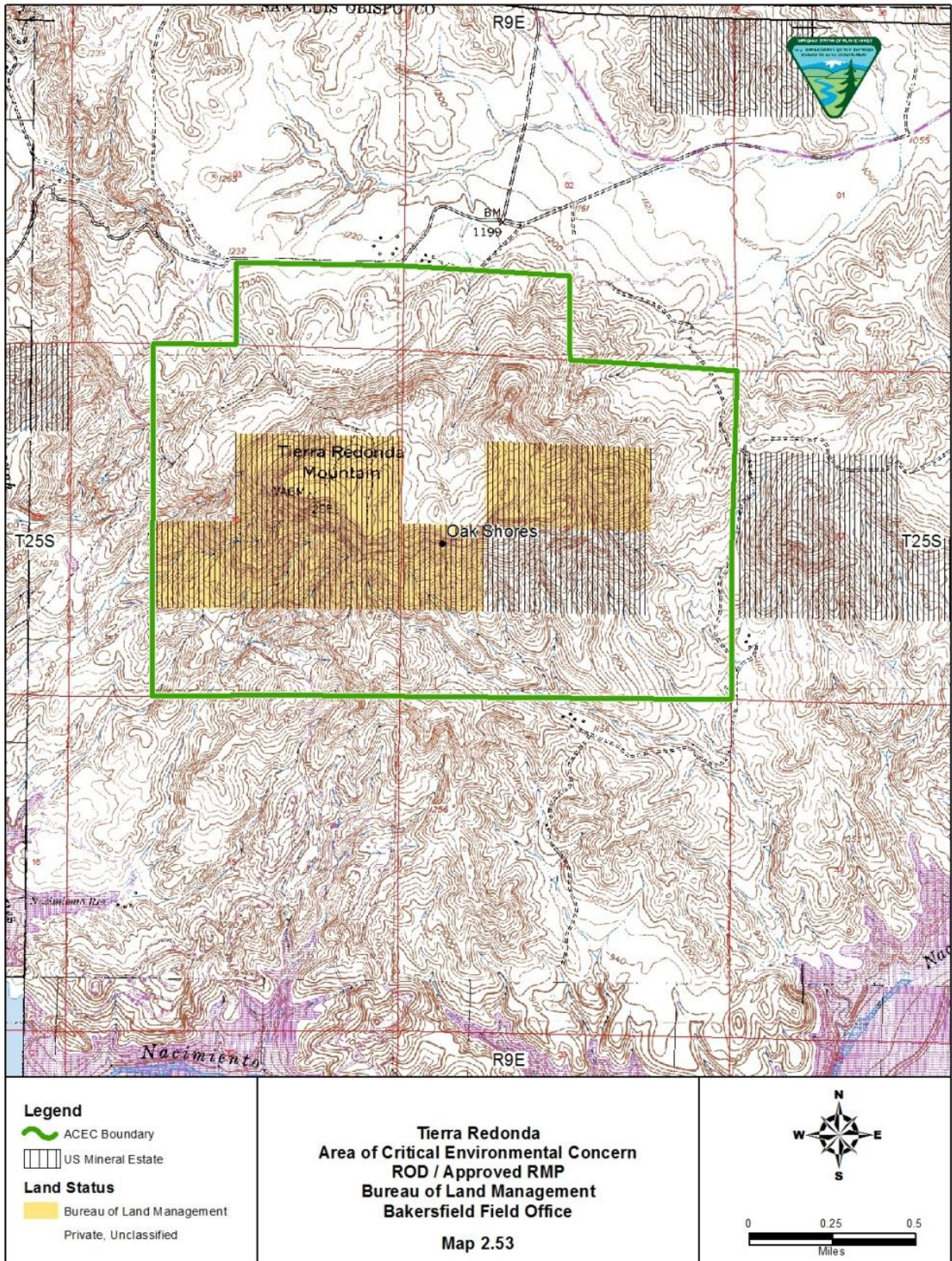
Map 2.51 – Point Sal ACEC



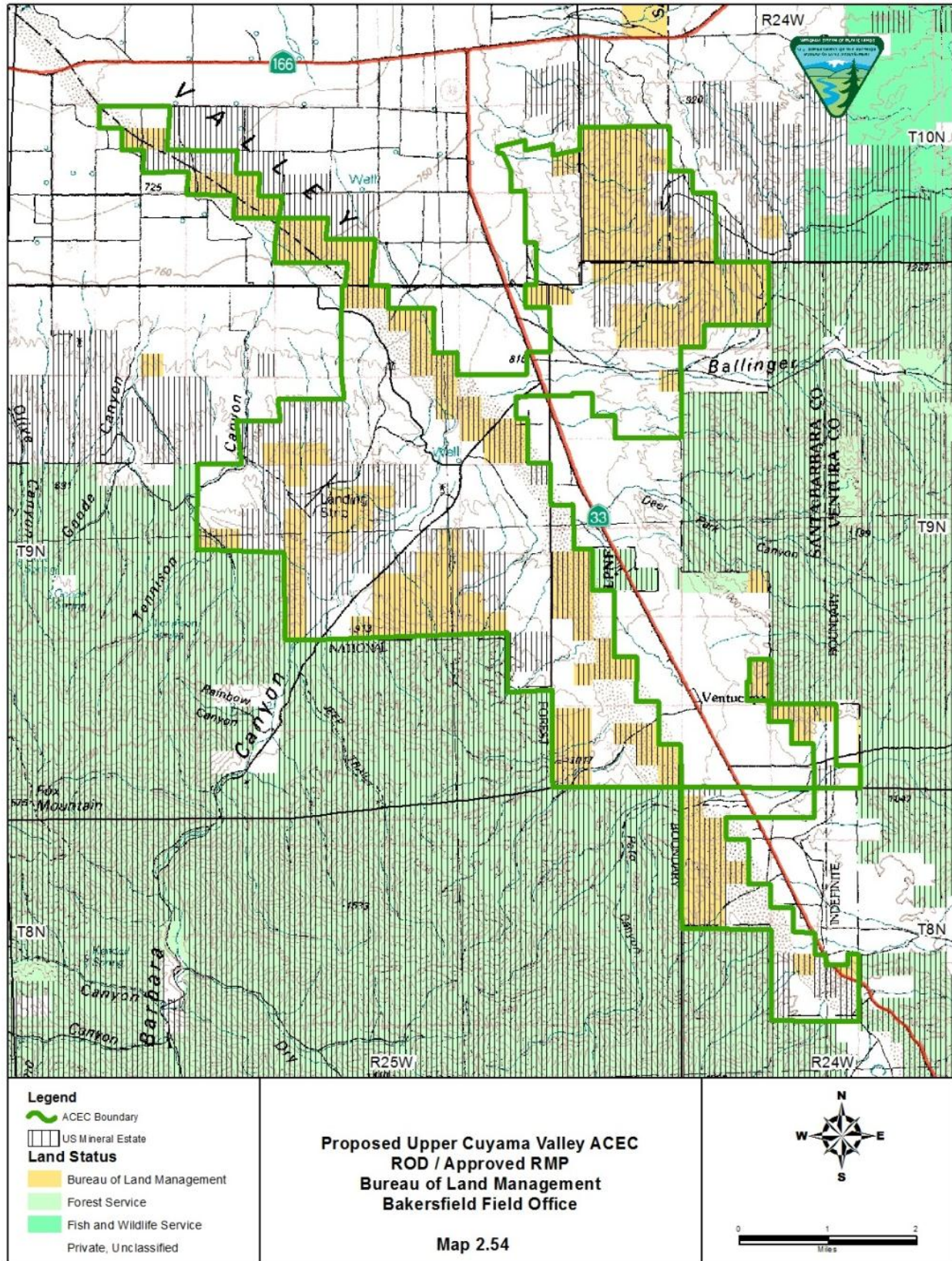
Map 2.52 – Salinas River ACEC



Map 2.53 – Tierra Redonda ACEC



Map 2.54 – Upper Cuyama Valley ACEC



2.18 Outstanding Natural Areas

Goal

[ONA-G-1] Protect, conserve, and enhance, for the benefit and enjoyment of present and future generations, the Piedras Blancas Light Station Outstanding Natural Area for its unique and nationally important historical, natural, cultural, scientific, educational, scenic, and recreational values.

Objective

[ONA-O-1] Reconstruct, preserve and interpret the Piedras Blancas Light Station to during the period of its greatest historic significance (1875 and 1940), while providing for resource protection and managed use by the visiting public.

[ONA-O-2] Provide support for international research of coastal ecosystems surrounding the Piedras Blancas Light Station.

[ONA-O-3] Protect and coordinate the interpretation of the important archaeological sites with the affected Native American communities.

[ONA-O-4] Coordinate and collaborate management of the Piedras Blancas Light Station with California Department of Parks and Recreation, San Luis Obispo County, local communities, and other interested entities.

Decisions

[ONA-D-1] The following features and structures would be restored or reconstructed to provide an accurate representation of what Piedras Blancas looked like in its early years:

- (a) Lighthouse
- (b) Fog Signal Building
- (c) Fuel/Oil House
- (d) Tank Storage Building
- (e) Fuel and Storage Building
- (f) Laundry
- (g) Watchroom
- (h) Keeper's Triplex
- (i) Head Keeper's Residence
- (j) Barn
- (k) Historic Landscape

[ONA-D-2] Close, prohibit, or otherwise make unavailable the Piedras Blancas Light Station to the following:

- (a) All forms of entry, appropriation, or disposal under the public land laws;
- (b) Operation of the mineral leasing and geothermal leasing laws and the mineral materials laws;
- (c) Livestock grazing;
- (d) Public access except for BLM tours, permits, and other specific authorizations;
- (e) Equestrian use; and

- (f) Authorization of commercial communications transmission equipment.

[ONA-D-3] Continue the withdrawal of the Piedras Blancas Light Station ONA from location, entry, and patent under the public land mining laws beyond the legislatively provided 20-year withdrawal to extend for the life of this RMP.

[ONA-D-4] Manage the Piedras Blancas Outstanding Natural Area as VRM Class I, in accordance with its special designation, with special consideration of the importance of the cultural modifications and to restoring the historic lighthouse and facilities. This VRM Class I is adjusted to consider these cultural artifacts as an important facet of the visual landscape and to allow for the maintenance, repair, and continued restoration to preserve the outstanding visual landscape of the area.

[ONA-D-5] Provide access to Native Americans for traditional cultural and religious purposes. The site may be closed to the general public to protect the privacy of traditional cultural and religious activities in such areas by the Native American religious community.

[ONA-D-6] Acquire water supply conveyance rights on a corridor between the Light Station boundary and a nearby spring or water source and acquire an appropriate water right from the State of California for all water use.

[ONA-D-7] Acquire access rights on a corridor between the Light Station boundary and the nearest public road. Add and administer as part of the Outstanding Natural Area any additional lands or interest in lands next to the Outstanding Natural Area acquired by the United States.

2.19 Back Country Byways

Goal

[BCB-G-1] Where appropriate and feasible, highlight the spectacular nature of the western landscapes through education and interpretation along linear travel routes which provide recreational driving opportunities that allow for the experiences of solitude and isolation.

Objectives

[BCB-O-1] Provide an appropriate level of driving opportunity commensurate with route conditions.

Decision

[BCB-D-1] Revoke the Back Country Byway designation of Canebrake and Long Valley Loop Roads as the Chimney Peak Back Country Byway.

2.20 National Trails

Goal

[NT-G-1] Provide continued protection and support for national trails, to preserve, improve and restore the character for which they were designated.

Objectives

[NT-O-1] Coordinate and collaboration on the management of the PCNST to maintain its integrity, continue maintenance, and enforce allowable uses, while providing appropriate access and facilities for users and maintaining the scenic character and quality of the trail.

[NT-O-2] Provide for the ever-increasing outdoor recreation needs of an expanding population, promoting the preservation of, public access to, travel within, and enjoyment of the outdoor areas through the support of National Recreation Trails.

Decisions

[NT-D-1] Acknowledge the BLM Ridgecrest Field Office managing role on the PCNST Dove Springs and Cache Peak segments where the trail crosses in the Decision Area. Support management on these segments of the trail in accordance with the management prescriptions in effect for the trail on adjacent lands within the California Desert District.

[NT-D-2] Establish a 0.25-mile wide corridor along the PCNST (Owens Peak segment) to apply specific management incorporating and amended by the comprehensive PCNST Management Plan (Pacific Crest Trail Management Options Plan, BLM 1980), as follows:

- (a) Close to fluid mineral and geothermal leasing;
- (b) Close to the mineral material disposal;
- (c) Designate as VRM Class I;
- (d) Identify the corridor as a ROW exclusion area; and
- (e) Identify the corridor as lands to be retained.

[NT-D-3] Continue designation and management of the Wu Ki' Oh Trail (formerly named the Squaw Leap Trail) as a National Recreation Trail.

[NT-D-4] Recommend for designation the San Joaquin River Trail as a National Recreation Trail in coordination with other affected entities.

2.21 Wild and Scenic Rivers

The suitability evaluation for each eligible river segment can be found in the Wild and Scenic River Suitability Report for Bakersfield Field Office, California (Draft RMP/Draft EIS, Appendix J).

Goal

[WSR-G-1] River segments suitable for inclusion in the National Wild and Scenic Rivers System (NWSRS) would be free-flowing in nature, meet water quality standards, and continue to possess outstandingly remarkable values (ORVs) that make them eligible.

Objectives

[WSR-O-1] Determine suitable river segments for inclusion in the National Wild and Scenic Rivers System (NWSRS). Manage those suitable river segments so to maintain their free-flowing nature, water quality, ORVs, and tentative classification, pending congressional action or for the duration of the RMP.

Decisions

[WSR-D-1] Determine as suitable and recommended for congressional designation in the NWSRS for the classifications identified:

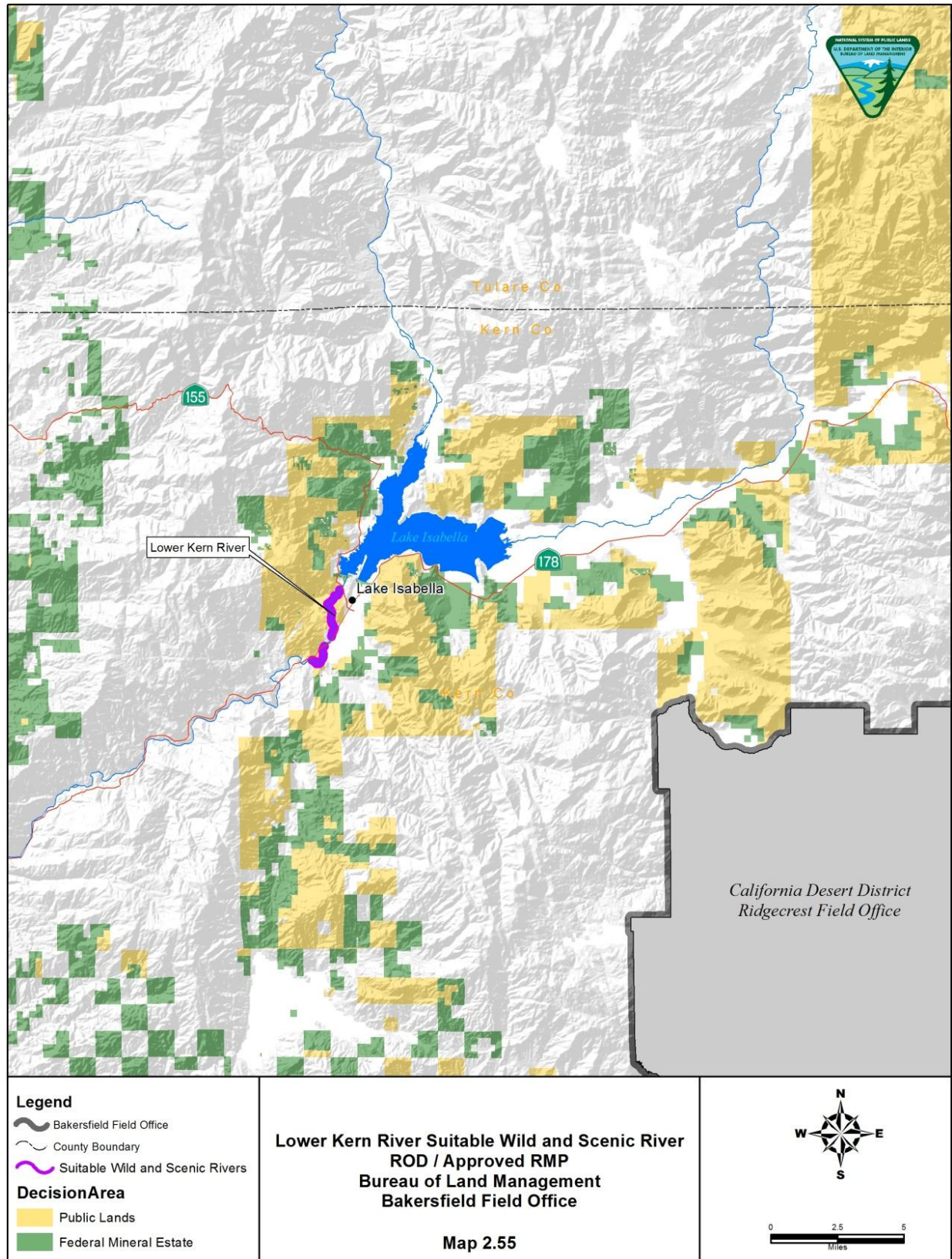
Table 2.20
Suitable Wild and Scenic River Summary

| River Segment | Classification | Outstandingly Remarkable Value(s) | Mileage | Map |
|--------------------------------|-------------------|-----------------------------------|---------|----------|
| Lower Kern River | Recreational | Recreational, Wildlife, Historic | 3.2 | Map 2.55 |
| Chimney Creek | Wild/Recreational | Scenic, Wildlife, Botanical | 15.5 | Map 2.56 |
| North Fork of the Kaweah River | Scenic | Wildlife, Cultural, Visual | 2.5 | Map 2.57 |
| San Joaquin River Segment 1 | Wild/Scenic | Scenic, Cultural | 8.0 | Map 2.58 |

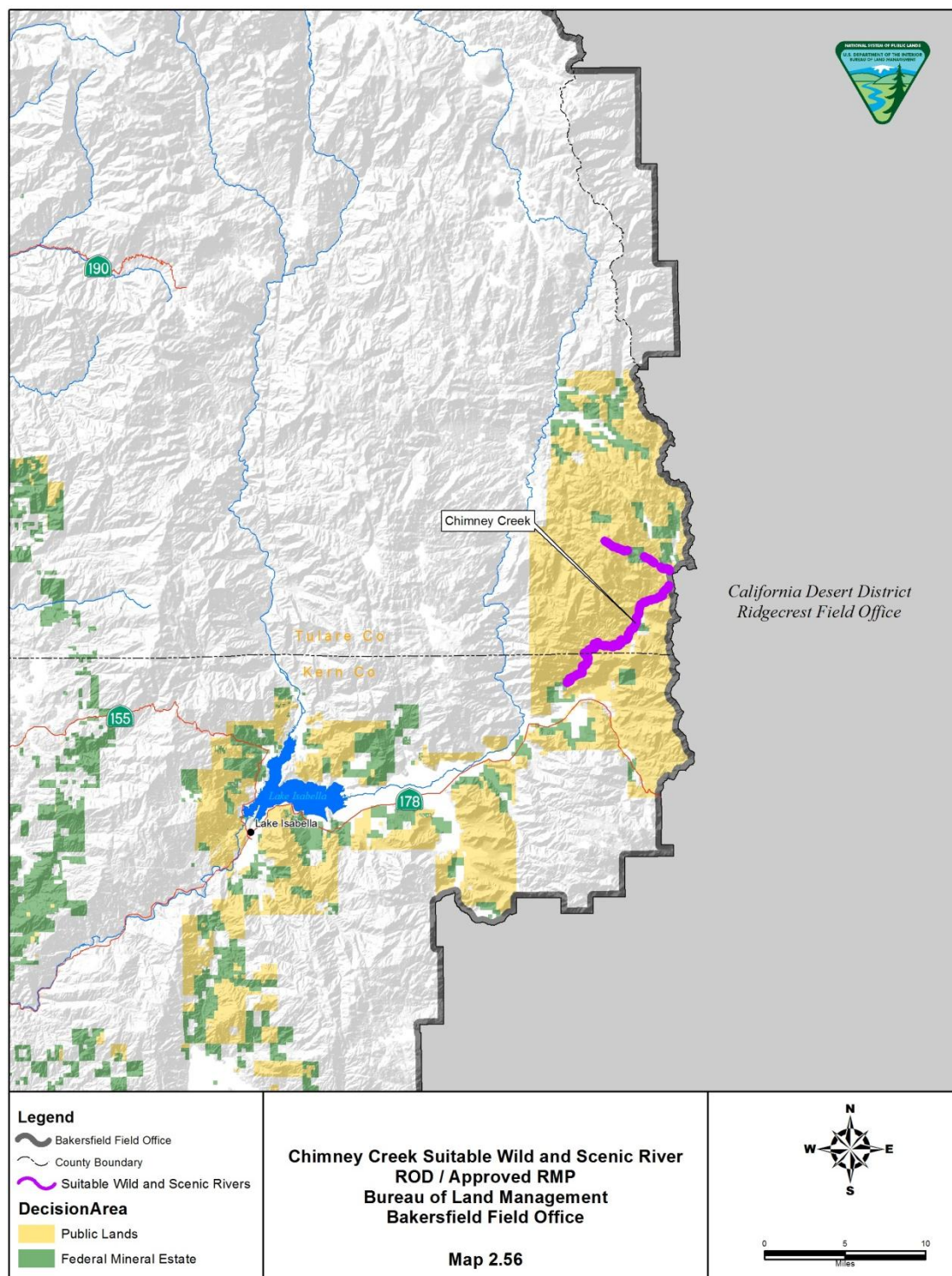
[WSR-D-2] Establish a corridor extending 0.25 miles from each edge suitable river segment, in which the following interim protective management guidelines would apply:

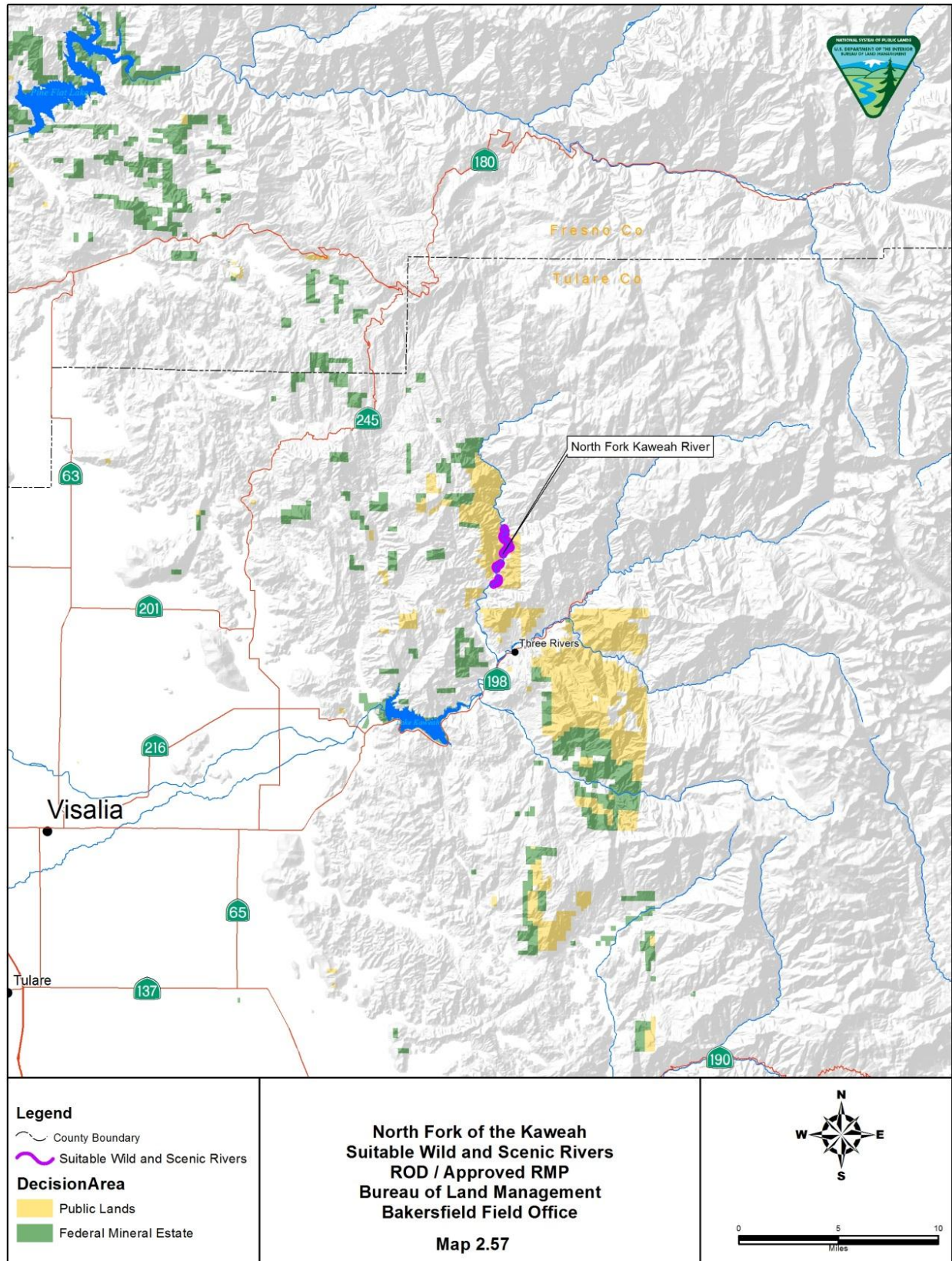
- (a) Approve no actions altering the free-flowing nature of the suitable segment through impoundments, diversions, channeling, or riprapping;
- (b) Approve no actions that would measurably diminish the stream segment's identified outstandingly remarkable value(s); and
- (c) Approve no actions that would modify the setting or level of development of the suitable river segment to a degree that would change its identified classification.

Map 2.55 – Lower Kern River Suitable Wild and Scenic River

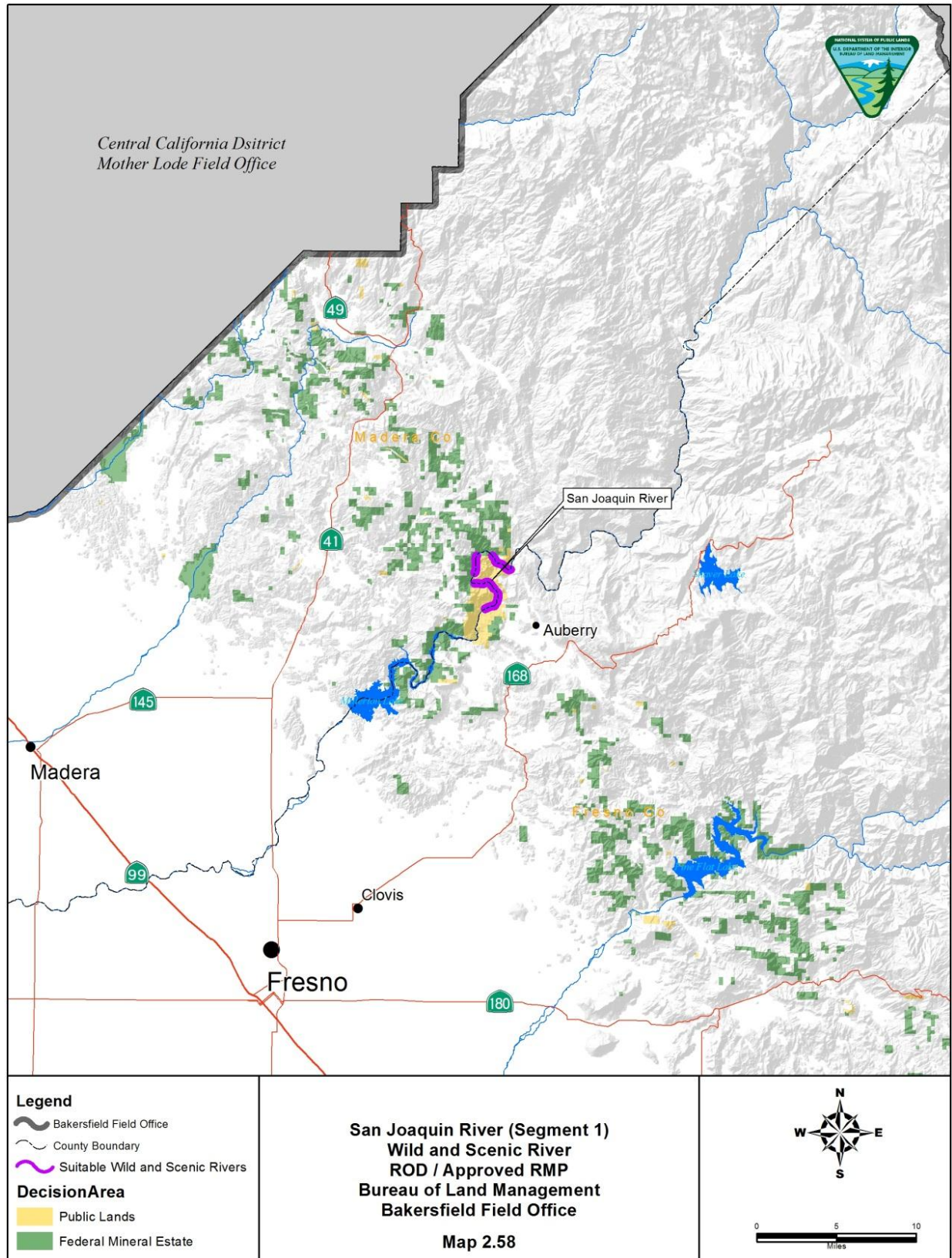


Map 2.56 – Chimney Creek Suitable Wild and Scenic River



Map 2.57 – North Fork of the Kaweah Suitable Wild and Scenic River

Map 2.58 – San Joaquin River (Segment 1) Suitable Wild and Scenic River



2.22 Wilderness Study Areas

Goal

[WSA-G-1] WSAs would continue to be suitable for future designation as wilderness until such time that congress either designates as wilderness or releases the area.

Objective

[WSA-O-1] Manage WSAs in a manner that does not impair the suitability of the area for the future designation as wilderness until such time that Congress releases them from study status.

[WSA-O-2] If released by Congress from study status, maintain wilderness character, where present, within WSAs.

Decision

[WSA-D-1] Manage WSAs in accordance with BLM Interim Management Policy for Lands under Wilderness Review (IMP) (BLM Handbook H-8550-1 [BLM 1995])

[WSA-D-2] Manage for wilderness characteristics the following WSAs if released from study status by Congress, unless congressional release language provides other specific management guidance;

- (d) Machesna WSA (adjacent to USFS Machesna Mountain Wilderness);
- (e) Owens Peak WSA;
- (f) Rockhouse WSA;
- (g) Sacatar Meadows WSA;
- (h) Scodie WSA; and
- (i) Garcia Mountain WSA (adjacent to USFS Garcia Mountain Wilderness).

[WSA-D-2] Manage the Milk Ranch/Case Mountain WSA and Sheep Ridge WSA if released from study status by Congress, in accordance with the Kaweah ACEC, unless congressional release language provides other specific management guidance

[WSA-D-3] Manage portions of the Piute Cypress WSA in accordance with both the Erskine Creek ACEC and Piute Cypress ACEC if released from study status by Congress, unless congressional release language provides other specific management guidance. The portion not within either ACEC would be managed as multiple-use dispersed public lands.

[WSA-D-4] Manage the Black Mountain WSA and Moses WSA multiple-use dispersed public lands.

3 Chapter Three - Public Involvement in Implementation

Plan implementation is a continuous process that will occur throughout the life of the Approved RMP. The public can be involved in RMP implementation through a variety of venues. Some of the management decisions contained in this document will require preparation of detailed, site-specific NEPA analyses prior to implementation. This type of analysis often requires public input during the initial scoping period, and provides further protest or appeal opportunities.

After issuing the Approved RMP and ROD, an Implementation Strategy will be developed. The regular coordination associated with that document will include an update on implementation of the plan, foreseeable activities for the upcoming year, and opportunities for continued collaboration with the numerous federal and state agencies, Native American tribes, local agencies, elected officials, existing partners, stakeholders, and members of the public interested and involved in the management of public lands in the Bakersfield Field Office. Additional coordination and collaboration meetings could be held as needed.

Some of the decisions contained in this document will require preparation of detailed project-level NEPA analyses prior to implementation. Tribal consultation and public involvement opportunities, including further protest or appeal opportunities, may be provided. Other decisions have been addressed to a sufficient level of detail to be implemented over time without further public involvement opportunities.

4 Chapter Four - Resource Management Plan Implementation

The RMP will be implemented as funding and workforce allow. Most of the land use plan decisions are effective on approval of this document, but some decisions will take a number of years to implement on the ground. Implementation monitoring will track which decisions have been implemented and when.

After issuing the ROD/Approved RMP, BLM will prepare an Implementation Plan that establishes tentative timeframes for completion of “one-time” actions identified in the Approved RMP. Most of these actions require additional analysis and site specific activity planning. This schedule does not include the decisions which are effective immediately upon approval of the plan (usually allocations), or the actions which describe the ongoing management that will be incorporated and applied as site-specific proposals are analyzed on an ongoing basis. This schedule will assist BLM managers and staff in preparing budget requests and in scheduling work. The proposed schedule, however, must be considered tentative and will be affected by future funding, changing program priorities, non-discretionary workloads, and cooperation by partners and external publics. Periodic review of the plan will provide consistent tracking of accomplishments and provide information that can be used to develop annual budget requests to continue implementation.

Plan implementation is a continuous and active process. Decisions presented in the Chapter 2 of this Approved RMP are of three types: Immediate, One-Time, and Long- Term.

Immediate Decisions: These decisions go into effect upon signature of the ROD and Approved RMP. These include decisions such as the allocation of lands as available or unavailable for oil and gas leasing, ACEC designations, and OHV designations. Immediate decisions require no additional analysis and provide the framework for any subsequent activities proposed in the planning area. Proposals for actions such as oil and gas leasing, land adjustments, and other allocation-based actions will be reviewed against these decisions/allocations to determine if the proposal is in conformance with the plan.

One-Time Decisions: These types of decisions include those that are implemented after additional site-specific analysis is completed. Examples are implementation of the recommendations to withdraw lands from locatable mineral entry or development of a habitat management plan or a special recreation management area plan. One-time decisions usually require additional analysis and are prioritized as part of BLM’s budget process. Priorities for implementation of "one-time" RMP decisions will be based on several criteria, including:

- Current and projected resource needs and demands,
- National and Statewide BLM management direction and program emphasis, and
- Funding.

Long-Term Guidance/Life of Plan Direction: These decisions include the goals, objectives, and management actions established by the plan that are applied during site-specific analyses and activity planning. This guidance is applied whether the action is initiated by BLM or by a non-BLM project proponent. Long-term guidance and plan direction is incorporated into BLM management as implementation level planning and project analysis occurs (for example, as a result of the watershed assessment process or receipt of a land use application).

Interdisciplinary impact analysis will be based on this RMP/EIS and other applicable EISs. If the analysis prepared for site-specific projects finds potential for significant impacts not already described in an existing EIS, another EIS or a supplement to an existing EIS may be warranted.

Site-specific environmental analyses and documentation (including the use of categorical exclusions and determinations of NEPA adequacy where appropriate) may be prepared for one or more individual projects in accordance with management objectives and decisions established in the approved land use plan. In addition, BLM will ensure that the environmental review process includes evaluation of all critical elements, including cultural resources and threatened and endangered species, and completes required USFWS Section 7 consultations and coordination with the SHPO.

4.1 Plan Maintenance

Land use plan decisions and supporting information can be maintained to reflect minor changes in data, but maintenance is limited to refining, documenting, and/or clarifying previously approved decisions. Some examples of maintenance actions include:

- Correcting minor data, typographical, mapping, or tabular data errors
- Refining baseline information as a result of new inventory data (e.g., changing the boundary of an archaeological district, refining the known habitat of special status species, or adjusting the boundary of a fire management unit based on updated fire regime condition class inventory, fire occurrence, monitoring data, and/or demographic changes)
- Applying an existing oil and gas lease stipulation to a new area prior to the lease sale based on new inventory data (e.g., apply an existing protective stipulation for cultural resources to a newly discovered cultural site.)

BLM expects that new information gathered from field inventories and assessments, research, other agency studies, and other sources will update baseline data and/or support new management techniques, best management practices, and scientific principles (for example, the annual review of scientific information regarding oil and gas development). Adaptive management strategies may be used when monitoring data is available as long as the goals and objectives of the plan are met. Where monitoring shows land use plan actions or best management practices are not effective or otherwise do not meet public land goals and objectives, or new information indicates that additional land use plan actions or best management practices are needed, modifications or adjustments may occur without amendment or revision of the plan as long as assumptions and impacts disclosed in the analysis remain valid and broad-scale goals and objectives are not changed.

Plan maintenance will be documented in supporting records. Plan maintenance does not require formal public involvement, interagency coordination, or the NEPA analysis required for making new land use plan decisions.

4.2 Changing/Amending the Plan

The Approved RMP may be changed, should conditions warrant, through a plan amendment or plan revision process. A plan amendment may become necessary if major changes are needed or to consider a proposal or action that is not in conformance with the plan or for other reasons. The results of monitoring, evaluation of new data, or policy changes and changing public needs might also provide the impetus for an amendment. Generally, an amendment is issue-specific. If several areas of the plan

become outdated or otherwise obsolete, a plan revision may become necessary. Plan amendments and revisions are accomplished with public input and the appropriate level of environmental analysis.

5 Chapter Five - Plan Evaluation and Adaptive Management

5.1 Plan Evaluation

Evaluation is a process in which the plan and monitoring data are reviewed to determine if management goals and objectives are being met and if management direction is sound. Land use plan evaluations determine if decisions are being implemented, if mitigation measures are satisfactory, if there are significant changes in the related plans of other entities, if there is new data of significance, and if decisions should change through amendment or revision. Monitoring data gathered over time is examined and used to determine whether management actions are meeting objectives. Conclusions are then used to make recommendations on whether to continue current management or to identify what changes need to be made in management practices to meet RMP objectives.

BLM will use land use plan evaluations to determine if the decisions in the RMP, supported by the accompanying NEPA analysis, are still valid in light of new information and monitoring data. Evaluation of the RMP will generally be conducted every five years, unless unexpected actions, new information, or significant changes in other plans, legislation, or litigation triggers an evaluation. Evaluations will follow the protocols established by BLM's Land Use Planning Handbook (H-1601-1) and 43 CFR Part 1610.4-9 or other appropriate guidance in effect at the time the evaluation is initiated.

5.2 Monitoring

Monitoring is the process of following up on management actions and documenting the BLM's progress toward full implementation of the land use plan and the achievement of desired outcomes. Monitoring the Approved RMP involves tracking the implementation and effectiveness of land use plan decisions identified in Chapter 2. Implementation monitoring tracks the completion of land use plan decisions whereas effectiveness monitoring helps determine whether completion of land use plan decisions achieves anticipated desired outcomes. If implementation of land use plans does not achieve anticipated desired outcomes, adaptive management may be necessary.

Management actions identified for the Bakersfield RMP are based on studies and the best scientific and commercial information available; however, conditions may change over time. Experience has shown that implemented management actions can be improved as new technology and new information become available. It is also possible that changes in land use will require a different management action to protect the resources. To address the changing conditions and provide management flexibility using BMPs, the Bakersfield FO will monitor and evaluate the Approved RMP.

5.3 Adaptive Management

Adaptive management is a system of management practices based on clearly identified outcomes, monitoring to determine if management actions are meeting outcomes, and, if not, facilitating management changes that will best ensure that outcomes are met or to re-evaluate the outcomes. When land use plan actions or best management practices are found to be ineffective or new information indicates that new land use plan actions or best management practices are needed, modifications may occur without amendment of the plan as long as assumptions and impacts disclosed

in the analysis remain valid and broad-scale goals and objectives are not changed. This approach will use on-the-ground monitoring, review of scientific information, and consideration of practical experience to adjust management and modify implementation of the plan to reach the desired outcome.

6 *Appendices*

Appendix 1: Air Resource Management Plan

Appendix 2: Travel Management Plan

Appendix 3: Best Management Practices and Standard Operating Procedures

Appendix 4: Biological Resources Conservation Strategy

Appendix 5: Piedras Blancas Light Station ONA

Appendix One
Air Resources Management Plan

6.1 Appendix 1 – Air Resources Management Plan

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6.1.1 Purpose

The purpose of this air resources management plan is to address air quality issues identified by the Bureau of Land Management (BLM) in its analysis of potential impacts to air resources for the Bakersfield Field Office Resource Management Plan (RMP). This plan outlines the specific requirements for managing air resources and authorizing activities that have the potential to adversely impact air resources within the Bakersfield Field Office Planning Area. The plan also outlines specific requirements for proponents of projects that have the potential to generate air emissions and adversely impact air resources within the Planning Area.

6.1.2 Air Quality Issues

The BLM based its identification of air quality issues on the following information:

- Current ambient air quality in portions of the Planning Area exceeds National Ambient Air Quality Standards (NAAQS) for ozone and PM_{2.5}.
- Designated nonattainment areas for ozone and PM_{2.5} occur within the Planning Area.
- The majority of the Planning Area is a designated maintenance area for PM₁₀.
- The Bakersfield Metropolitan Area and Fresno Urbanized Area are designated maintenance areas for CO.
- Historic and continued development of fluid mineral resources, based on the Reasonably Foreseeable Development (RFD) Scenario for Oil and Gas (Proposed RMP/Final Environmental Impact Statement (EIS), Appendix M), and projected levels and locations of development identified in Chapters 3 and 4 of the Proposed RMP/ Final EIS.

6.1.2.1 Magnitude of Emissions

Existing emissions inventories, maintained by regional air pollution control districts, and the California Air Resources Board (CARB) statewide emissions inventory were compiled for the Planning Area. These largely model-derived emissions inventories are categorized by region and source on the CARB web site, providing a snap-shot of a variety of dynamic and variable processes. In conjunction with Public Land Statistics (PLS) well and production data and the California Division of Oil, Gas, and Geothermal Resources (CDOGGR) state well inventory, these emissions inventories were used to determine the extent and magnitude of BLM's total air pollutant emissions and to compare emissions between alternatives. Emissions were calculated using conservative assumptions; air emissions from oil and gas activities assume that all of the potential development identified in the RFD will occur. The RFD is based upon known geologic conditions, current development technology, and industry-provided data about future planned development. Future pricing and economic or technical viability of geologic plays were not taken into account. Assumptions regarding the use of air emission control technologies were also very conservative. For example, air emissions from drilling activities assume a mixture of Tier 1 – Tier 3 diesel engines. However, it is likely that significant emissions reductions will occur over the life of the plan as a result of existing regulatory measures and controls, and may be further reduced through the use of alternative drilling technologies.

As a result, the compiled air emissions inventory represents the emission of air pollutants based upon best available information at the time of writing, but actual emissions increases over the life of the plan are expected to be much lower. Given the conservative assumptions used in generating the emissions

inventory, it is suitable for contrasting the impact of management actions and strategies on air resources among alternatives. It is also useful for identifying those activities that are likely to be major contributors to increased air emissions and developing management actions to minimize their impact to air resources.

Despite the limitations of the air emissions inventory, it supports the following conclusions:

1. For the management actions and activities analyzed, oil and gas development activities are the major contributor to total air emissions;
2. Comprehensive trails and travel management activities (vehicle use on unpaved roads) are a major contributor to particulate emissions; and
3. There is not a substantial difference in total air emissions among alternatives.

The reason there is not a substantial difference in total air emissions among alternatives is the result of several factors:

- The RFD scenario for oil and gas does not vary by alternative.
- Oil and gas development in the Planning Area is primarily focused in discrete areas, mainly in existing oil and gas fields that have been developed and produced for 50-100 years. The constraints placed on oil and gas development under all alternatives to protect other resources do not vary greatly; therefore, the projected emissions do not vary greatly.
- Under all alternatives, existing sources of emissions are assumed to continue to comprise a substantial portion of total projected emissions.
- The air quality analysis focuses on impacts that result from a change in current management.

BLM has discretion to limit the impacts of future development on air resources, primarily through mitigation measures that are applied during project approval. This entails the cooperative development of project-specific measures to minimize impacts to air resources as outlined in the plan and compliance with existing air regulatory agency and permitting requirements.

6.1.2.2 Pollutants of Concern

The emissions inventory compiled for each alternative shows that estimated emissions from BLM authorized activities such as oil and gas development have the potential to cause or contribute to increased levels of ozone and suspended particulate matter, thereby contributing to exceedances of ambient air quality standards. Therefore, the BLM has identified ozone and its precursors (nitrogen oxides (NO_x) and volatile organic compounds/reactive organic gases (VOCs/ROG)) and particulate matter (PM₁₀ and PM_{2.5}) as pollutants of concern to be addressed through specific management actions described in this plan.

6.1.2.3 Air Emission Generating Activities

Air emissions were considered for four (4) broad categories of activities that BLM authorizes, allows, or performs and that have the potential to emit regulated air pollutants. These categories include energy development, vehicle use on unpaved roads, fire and fuels management, and livestock grazing. For activities that have the potential to contribute to increases (or decreases) in concentrations of regulated air pollutants, the estimated emissions were used to determine those activities that warrant specific management strategies for minimizing air quality impacts.

Under each alternative, oil and gas development activities were identified as the major contributor to increases in emissions of NO_x and VOC/ROG. Although Comprehensive Trails and Travel Management designations generally reduce the number of routes available for vehicle use over current management, vehicle use on unpaved roads was identified as the major contributor to particulate matter emissions.

6.1.2.4 Geographic Areas of High Potential for Development

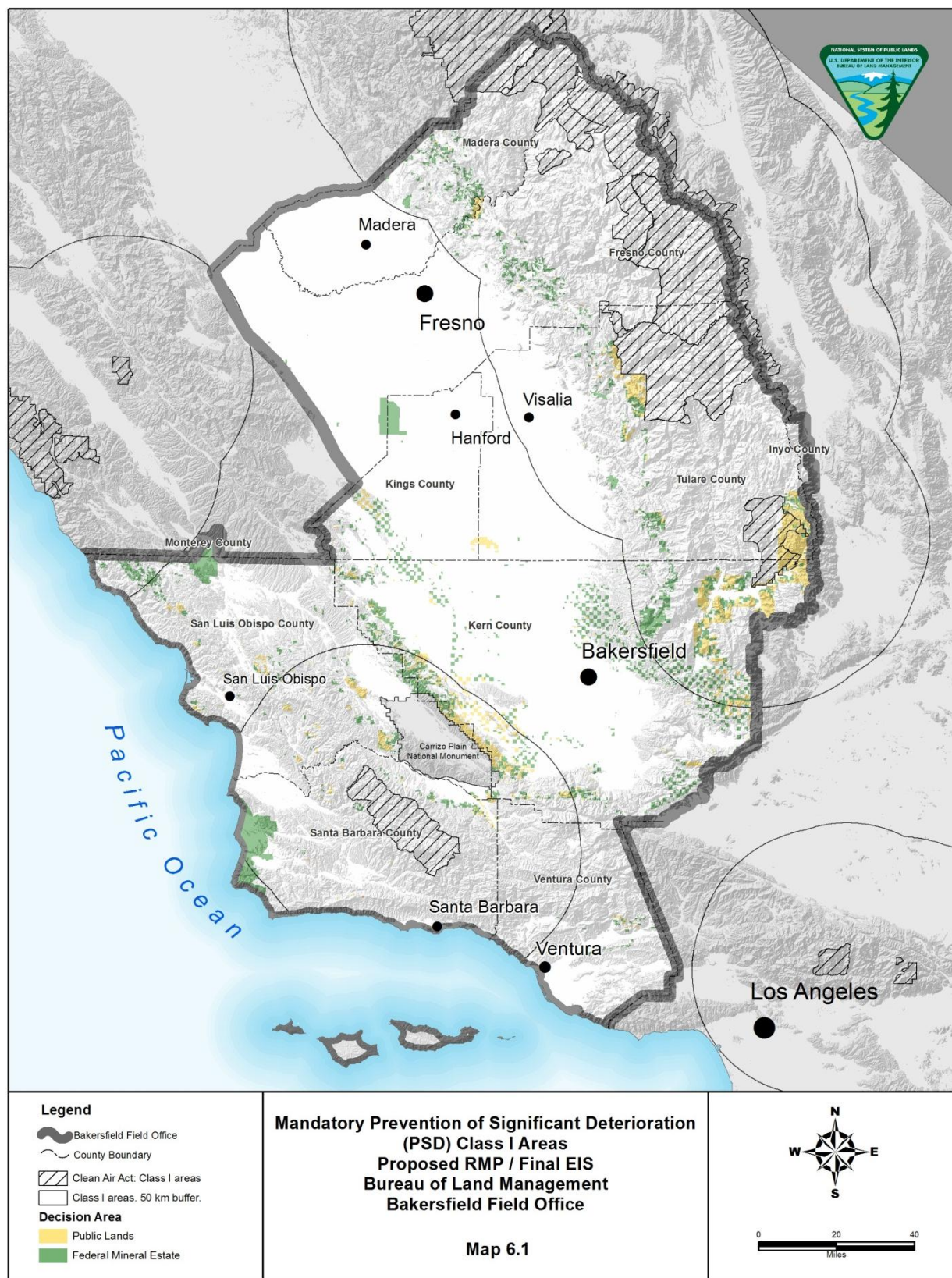
The decision area (acres) for minerals management varies by the specific mineral or mineral group and is therefore addressed separately by mineral program. Fluid minerals include oil, gas, and geothermal resources. Solid (non-energy) minerals include leasable, locatable, and salable mineral resources. Mineral occurrence and development potential in the Planning Area is based on past exploration and development, particularly for oil and gas. The RFD Scenarios (Proposed RMP/Final EIS, Appendix M) identified geographic areas of high, moderate, and low development potential for conventional oil and gas, geothermal, solid (non-energy) leasable minerals, locatable minerals, and salable minerals.

Areas identified within the Planning Area as high potential for conventional oil and gas development are located in the southern San Joaquin Valley, mainly in Kern County. This area has been explored and developed since the 1870's and is comprised of numerous existing oil and gas fields and development units. Moderate to high potential for fluid minerals occurs outside the San Joaquin Valley region throughout the Coast Range; however, the southern Sierra Nevada Mountains (in the eastern portion of the planning area) are considered to have little to no potential for oil and gas.

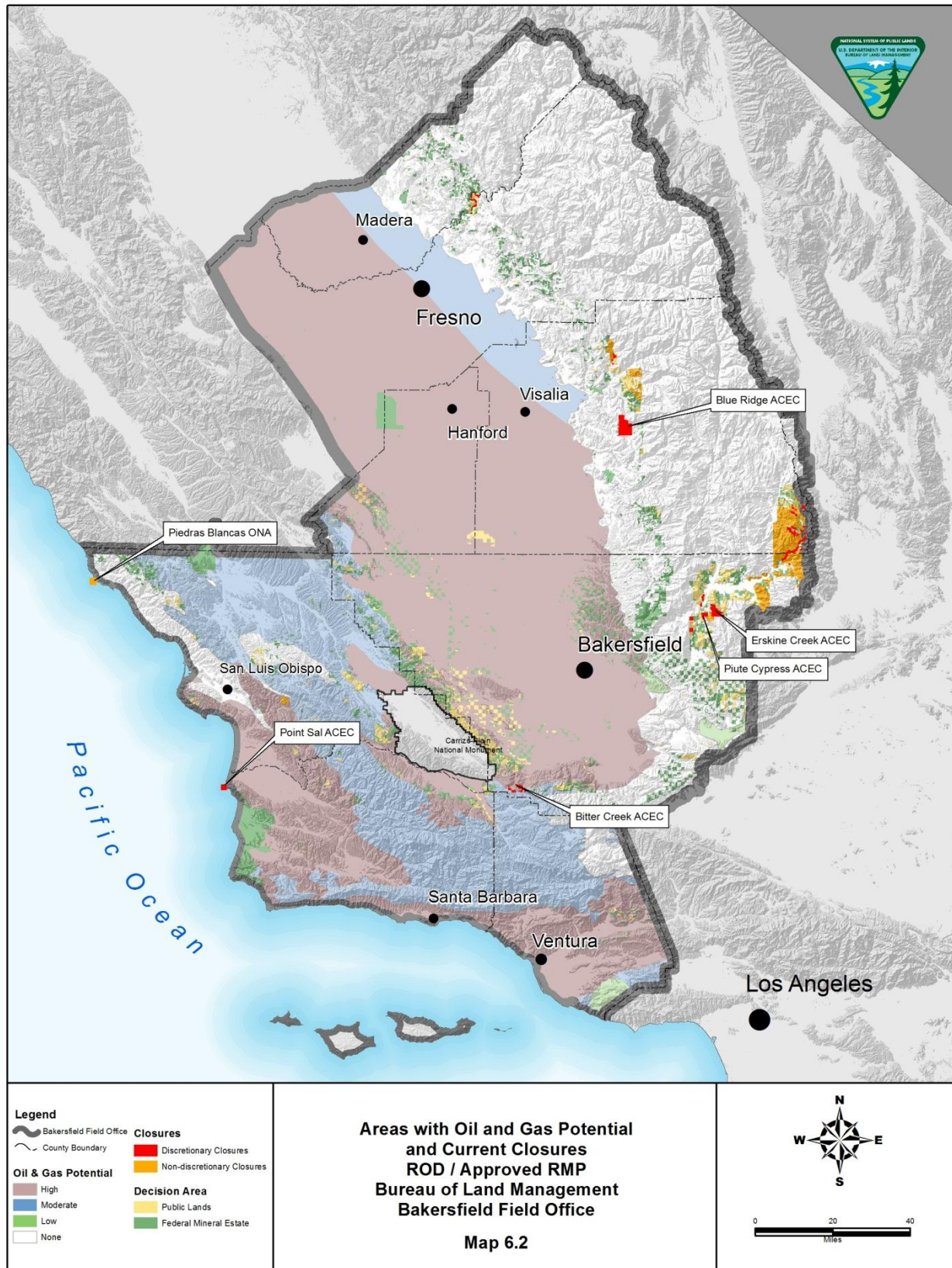
Based on the RFD scenario, oil and gas development is anticipated to occur mainly in Kern and Ventura counties. The fact that future development is expected to occur in areas that are already developed and producing provides the following benefits to air resources:

- Future oil and gas development in areas of existing production reduces impacts to air quality from new construction, new production facilities, and new sources that would be required in undeveloped fields.
- Based on low mineral potential in the eastern portion of the Planning Area and the RFD Scenario, oil and gas development is not likely to occur in proximity to federally designated Class I areas (Map 6.1 and Map 6.2).

Map 6.1 Mandatory Prevention of Significant Deterioration Class 1 Areas



Map 6.2 Areas with Oil and Gas Potential

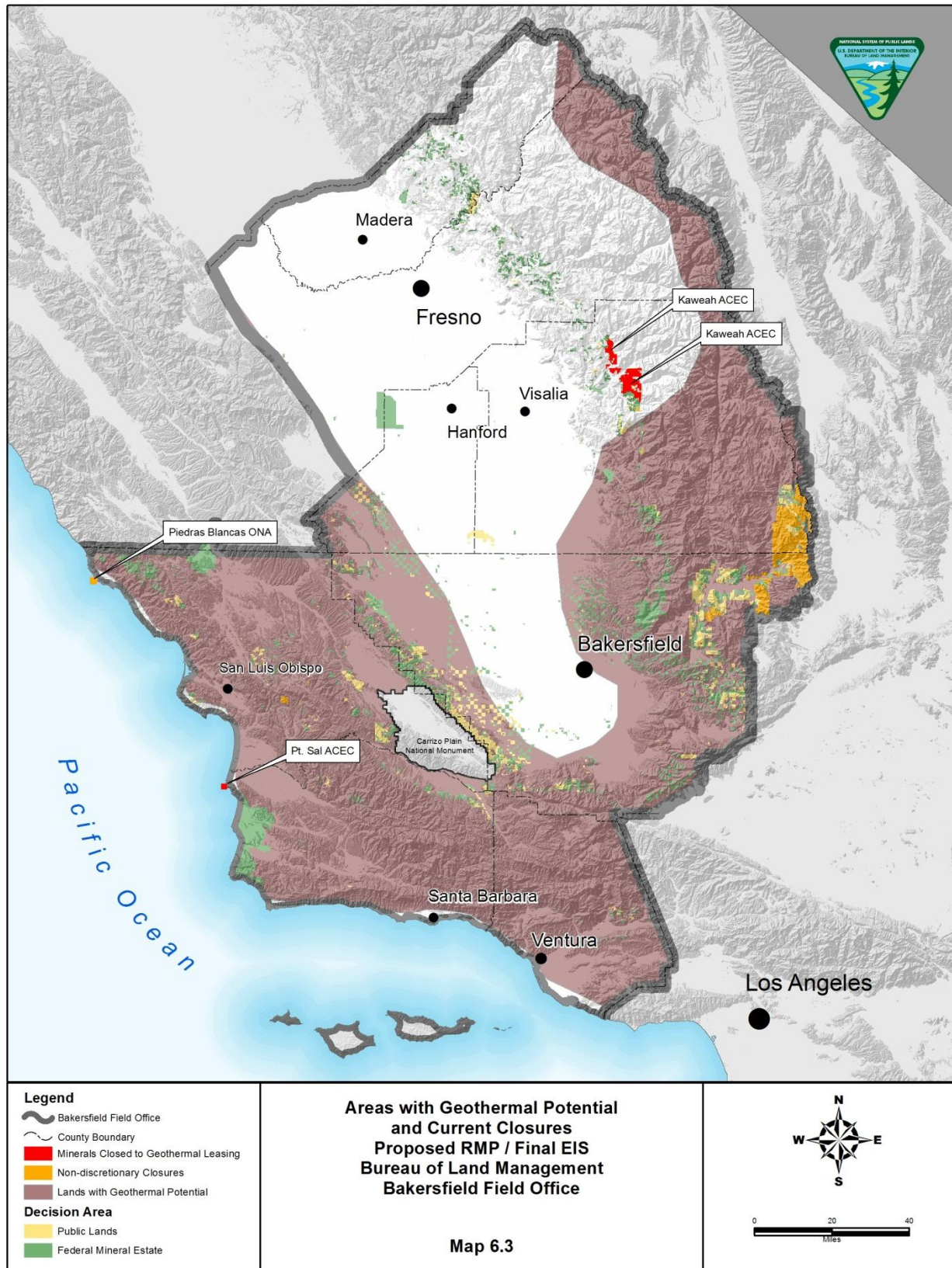


The geothermal resources in the Planning Area occur throughout the southern Sierra Nevada south of Sequoia and Kings Canyon National Parks and in coastal regions west of Sespe Hot Springs in the Transverse Range (Map 6.3). An area with high potential for development of geothermal resources occurs in the Kern River Valley of Kern County extending south and west to Democrat Hot Springs. A broad area of moderate potential surrounds the Kern River Valley, extending from California Hot Springs on the northwest to Walker Pass on the south east. Furthermore, an area extending from Springville on the west nearly to Coso Hot Springs on the east also has moderate potential. In the Transverse Range, an area with several hot springs, extending west from Sespe Hot Springs for over thirty miles, has moderate potential. Although there is known potential, there are currently no federal geothermal leases and historically little interest in geothermal energy development in the Decision Area. Therefore, it is projected that no direct use or indirect use geothermal development will occur on public lands within the Planning Area over the next 10 years.

6.1.2.5 Summary of Air Quality Issues

- Concentrations of ozone precursor emissions (NO_x and VOCs/ROG) and PM_{2.5} within the Planning Area have exceeded current NAAQS (primary).
- The geography of the San Joaquin Valley, the majority of the Planning Area, is highly conducive to the formation of air pollutants.
- A majority of the Planning Area is a designated non-attainment area for ozone.
- Portions of the San Joaquin Valley are designated nonattainment for PM_{2.5}.
- The San Joaquin Valley is a designated PM₁₀ maintenance area.
- The Bakersfield Metropolitan Area and Fresno Urbanized Area are designated maintenance areas for carbon monoxide (CO).
- Emissions calculations showed potentially substantial increases in estimated emissions of ozone forming pollutants (NO_x and VOCs/ROG) which could result in increased concentrations of ozone based on the RFD scenario.
- The air analysis for the RMP showed that oil and gas development activities have the potential to be a major contributor to estimated NO_x, VOCs, and particulate emissions. Vehicle use on unpaved roads is also a major contributor to particulate emissions.

Map 6.3 Areas with Geothermal Potential



6.1.3 Field Office Air Resource Management Requirements

The Bakersfield Field Office has the responsibility to implement the decisions of the RMP in a manner that protects air quality while recognizing valid and existing leasing rights. Within the Planning Area, most areas with high and moderate oil and gas development potential are already leased. While the BLM has limited ability to alter the conditions of existing leases, it can require specific actions and measures necessary to protect air quality in response to identified or anticipated adverse impacts at the project level stage.

Development and implementation of appropriate protection measures is most effective at the project approval stage, because the proposed action has been defined and impacts to air quality are better able to be identified through National Environmental Policy Act (NEPA) analysis. As part of the project approval process the BLM will identify project-specific measures in response to identified impacts to air resources, as outlined in this air resources management plan.

6.1.3.1 Authorization of Air Emission Generating Activities

1.3.1.1 BLM has the authority and responsibility under the Federal Land Policy and Management Act (FLPMA) to manage public lands in a manner that will protect the quality of air and atmospheric values. Therefore, the BLM may manage the pace, place, density, and intensity of leasing and development to meet air quality goals.

1.3.1.2 BLM will, prior to authorization of any activity that has the potential to emit any regulated air pollutant, consider the magnitude of potential air emissions from the project or activity, existing air quality conditions, geographic location, and issues identified during project scoping to identify pollutants of concern and to determine the appropriate level of air analysis to be conducted for the project. In addition to any applicable regulatory requirements, standards, or emission limits, this analysis would include mitigation measures and may include obtaining additional air monitoring data, air dispersion modeling, and/or photochemical grid modeling.

1.3.1.3 BLM will require project proponents to comply with the requirements under Project Specific Requirements of this air resources management plan. BLM will review any project specific emissions inventory submitted as required under Emissions Inventory to determine its completeness and accuracy.

1.3.1.4 For projects that have the potential to exceed *de minimis* levels for criteria pollutant(s) under 40 CFR Part 93, BLM will require the proponent to demonstrate conformity with relevant SIP(s) in one of four ways:

- a) Demonstrate that the project will result in no net increase in area annual emissions of the pollutant for the life of the project (e.g. through the application of emission control technologies, offsets, or other air emission reducing strategies),
- b) Demonstrate that the project will not cause or contribute to a violation of the ambient air quality standard through a quantitative air quality analysis (e.g. air dispersion modeling, photochemical grid modeling or an equivalent level of air analysis),
- c) Show that the emission increases caused by the project are included in the SIP(s), or
- d) Demonstrate that the State agrees to include the emission increases in the SIP(s).

1.3.1.5 Prescribed fire projects will be required to minimize impacts to air quality and will comply with local and State smoke management plans and regulations. Prior to prescribed burning activities, the BLM will submit a smoke management plan to the applicable air district for approval. The BLM will coordinate with the air district to schedule burning activities when meteorological conditions will promote dispersal of emissions, not contribute to poor air quality, and will be in conformance with applicable state implementation plans. The air district is the final regulatory authority on approving planned ignitions based on smoke management concerns.

6.1.3.2 Monitoring

As part of this comprehensive air management plan for the Planning Area, BLM commits to the following measures with regards to ambient air monitoring:

- BLM may require project proponents to conduct pre-construction and/or project air modeling as described in Monitoring.
- BLM will work cooperatively with federal, state, and local air regulatory agencies to determine the best mechanism to submit, track, and approve project-specific monitoring data required in a project-specific NEPA decision document.

6.1.3.3 Modeling

BLM recognizes that air dispersion and photochemical grid models are useful tools in predicting project specific impacts to air quality, predicting the potential effectiveness of control measures and strategies, and for predicting trends in regional concentrations of some air pollutants. As part of this comprehensive air management plan for the Planning Area, BLM commits to the following with regards to air quality modeling:

- BLM will require project specific air quality modeling as outlined in Project Specific Requirements, consistent with the requirements of the NEPA Air Quality MOU for Federal Oil and Gas Decisions.
- BLM will ensure that project specific modeling is carried out in accordance with US EPA modeling guidelines and in cooperation with the air quality interagency review team.
- BLM will support and participate in regional modeling efforts through multi-state and/or multi-agency organizations such as the Western Governors Association – Western Regional Air Partnership and the Federal Leadership Forum.

6.1.3.4 Mitigation

BLM recognizes that many of the activities that it authorizes, permits, or allows generate air pollutant emissions that have the potential to adversely impact air quality. The primary mechanism to reduce air quality impacts is to reduce emissions (mitigation). As part of this comprehensive air management plan for the Planning Area, the BLM commits to the following with regards to reducing emissions:

- BLM will require project proponents to include measures for reducing air pollutant emissions in project proposals.

- BLM will require project proponents to comply with air regulatory agency rules, regulations, and permits and reporting requirements; operators are responsible for obtaining necessary air permits prior to project implementation.
- BLM will require additional air emission control measures and strategies within its regulatory authority and in consultation with the US EPA, the California Air Resources Board (CARB), and pertinent local air pollution control districts.
- BLM will ensure that air pollution control measures and strategies (both operator committed and required mitigation) are enforceable by including specific conditions in permit approvals.

6.1.4 Project Specific Requirements

BLM has identified activities and pollutants of concern for the Planning Area and this section contains specific requirements for project proponents. Mineral development activities, specifically oil and gas development, have been identified as having the potential to contribute to increases in ambient concentrations of ozone, and slight increases in PM₁₀ and PM_{2.5}. Proponents of mineral development projects are required to comply with Emissions Inventory and 1.4.4.1 at a minimum.

6.1.4.1 Emissions Inventory

The proponent of a mineral development project will be required to provide the BLM with an emissions inventory per 40 CFR Part 93 that quantifies the emission of regulated air pollutants from all applicable sources related to the proposed project, including all reasonably foreseeable direct and indirect emissions. Additionally, the project proponent will provide an estimate of greenhouse gas emissions for all sources included in the aforementioned emissions inventory. BLM will use the estimated emissions inventory to identify pollutants of concern and to determine the appropriate level of air analysis to be conducted for the proposed project.

The BLM may require an emissions inventory for other actions depending on the magnitude of potential air emissions from the project or activity, proximity to federally mandated Class I area, sensitive Class II area, population center, location within a non-attainment or maintenance area, meteorological or geographic conditions, existing air quality conditions, magnitude of existing development in the area, or issues identified during project scoping.

6.1.4.2 Monitoring

The BLM may require the proponent of a mineral development project to conduct baseline or life of the project monitoring depending on the magnitude of potential air emissions from the project or activity, proximity to a federally mandated Class I area, sensitive Class II area, or population center, location within a non-attainment or maintenance area, meteorological or geographic conditions, existing air quality conditions, magnitude of existing development in the area, or issues identified during scoping.

6.1.4.3 Modeling

1.4.3.1 The proponent of a mineral development project may be required to conduct air quality modeling for any pollutant(s) of concern, as determined by the BLM, unless the project proponent can demonstrate that the project will result in no net increase in emissions of the pollutant(s) of

concern. BLM, in cooperation with the interagency review team, will determine the parameters for modeling analysis through the development of a project specific modeling protocol.

1.4.3.2 BLM may require air quality modeling if other criteria that warrant an air dispersion or photochemical modeling analysis are identified for purposes of analyzing project direct, indirect, and cumulative impacts to air quality. Such criteria may include the magnitude of potential air emissions from the project or activity, proximity to a federally mandated Class I area, sensitive Class II area, or population center, location within a non-attainment or maintenance area, meteorologic or geographic conditions, existing air quality conditions, magnitude of existing development in the area or issues identified during scoping.

6.1.4.4 Mitigation

1.4.4.1 The proponent of a mineral development project will be required to minimize air pollutant emissions by complying with all applicable state and federal regulations and may be required to apply mitigation including but not limited to Best Available Control Technology, Best Management Practices, emissions offsets, and other control technologies or strategies identified by the BLM and/or federal, state and local air regulatory agencies with delegated regulatory authority.

1.4.4.2 The proponent of a mineral development project that has the potential to emit any regulated air pollutant will be required to provide a detailed description of operator committed measures to reduce project related air pollutant emissions, including greenhouse gases and fugitive dust. Project proponents for oil and gas development projects should refer to the mitigation measures included in Appendix 3: Best Management Practices (BMPs)/Standard Operating Procedures (SOPs) of the Approved RMP and in Table 1.1 below as a reference for potential control technologies and strategies. The list is not intended to preclude the use of other effective air pollution control technologies that may be proposed.

Table 1.1: Mitigation for Oil and Gas Development Activities

| Mitigation Measure | Environmental Benefits | Environmental Liabilities | Feasibility |
|---|---|--|--|
| Control Strategies for Drilling and Compression | | | |
| Directional Drilling | Reduces construction related emissions (dust and vehicle and construction equipment emissions). Decreases surface disturbance and vegetation impacts (dust and CO ₂ and nitrogen flux). Reduces habitat fragmentation. | Could result in higher air impacts in one area with longer sustained drilling times. | Depends on geological strata. |
| Improved engine technology (Tier 2 or better) for diesel drill rig engines | Reduced NO _x , PM, CO, and VOC emissions | -- | Dependent on availability of technology from engine manufacturers. |
| Selective Catalytic Reduction (SCR) for drill rig engines and/or compressors | NO _x emissions reduction, decreased formation of visibility impairing compounds, decreased formation of ozone. NO _x control efficiency of 95 percent achieved on drill rig engines. NO _x emission rate of 0.1 grams per horsepower achieved for compressors | Potential NH ₃ emissions and formation of visibility impairing ammonium sulfate. Regeneration/disposal of catalyst can produce hazardous waste. | Not applicable to 2-stroke engines. |
| Non-selective catalytic reduction (NSCR) for drill rig engines and/or compressors | NO _x emissions reduction, decreased formation of visibility impairing compounds, decreased formation of ozone. NO _x control efficiency of 80-90 percent achieved for drill rig engines. NO _x emission rate of 0.7 grams per horsepower hour achieved for compressor engines greater than 100 horsepower. | -- | Not applicable to lean burn or 2-stroke engines. |

| Mitigation Measure | Environmental Benefits | Environmental Liabilities | Feasibility |
|---|--|---|--|
| Natural Gas fired drill rig engines | NO _x emissions reduction, decreased formation of visibility impairing compounds, decreased formation of ozone. | -- | Requires onsite processing of field gas. |
| Electrification of drill rig engines and/or compressors | Decreased emissions at the source. Transfers emissions to more efficiently controlled source (EGU) | Displaces emissions to EGU. | Depends on availability of power and transmission lines. |
| Improved engine technology (Tier 2 or better) for all mobile and non-road diesel engines. | Reduced NO _x , PM, CO, and VOC emissions. | -- | Dependent on availability of technology from engine manufacturers. |
| Green (also known as closed loop or flareless) completions | Reduction in VOC and CH ₄ emissions. Reduces or eliminate flaring and venting and associated emissions. Reduces or eliminates open pits and associated evaporative emissions. Increased recovery of gas to pipeline rather than atmosphere. | Temporary increase in truck traffic and associated emissions. | Need adequate pressure and flow. Need onsite infrastructure (tanks/dehydrator). Availability of sales line. |
| Green workovers | Same as above. | Same as above. | Same as above. |
| Minimize venting and/or use closed loop process where possible during “blow downs” | Same as above. | -- | |
| Reclaim/remediate existing open pits, no new pits | Reduces VOC and GHG emissions. Reduces potential for soil and water contamination. Reduces odors. | May increase truck traffic and associated emissions. | Requires tank and/or pipeline infrastructure. |
| Electrification of wellhead compression/pumping | Reduces local emissions of fossil fuel combustion and transfers to more easily controlled source. | Displaces emissions to EGU | Depends on availability of power and transmission lines. |
| Renewable power (solar or wind) for compressors | Low or no emissions. | May require construction of infrastructure. Potential visual and/or wildlife impacts. | Depends on availability of power and transmission lines. |

| Mitigation Measure | Environmental Benefits | Environmental Liabilities | Feasibility |
|---|---|---|---|
| Control Strategies Utilizing Centralized Systems | | | |
| Centralization (or consolidation) of processing facilities (separation, dehydration, etc.) | Reduces vehicle miles traveled (truck traffic) and associated emissions. Reduced VOC and GHG emissions from individual dehydrator/separator units. | Temporary increase in construction associated emissions. Higher potential for pipe leaks/groundwater impacts. | Requires pipeline infrastructure. |
| Liquids Gathering Systems (for condensate and produced water) and water delivery systems | Reduces vehicle miles traveled and associated emissions. Reduced VOC and GHG emissions from tanks, truck loading/unloading, and multiple production facilities. | Temporary increase in construction associated emissions. Higher potential for pipe leaks/groundwater impacts. | Requires pipeline infrastructure. |
| Control Strategies for Tanks, Separators, and Dehydrators | | | |
| Eliminate use of open top tanks | Reduced VOC and GHG emissions. | -- | Required by local Air Districts as a BACT for produced water in some areas. |
| Capture and control of flashing emissions from all storage tanks and separation vessels with vapor recovery and/or thermal combustion units | Reduces VOC and GHG emissions. | Pressure build up on older tanks can lead to uncontrolled rupture. | |
| Capture and control of produced water tank emissions | Reduces VOC and GHG emissions. | -- | |
| Capture and control of dehydration equipment emissions with condensers, vapor recovery, and/or thermal combustion | Reduces VOC, HAP, and GHG emissions. | -- | |
| Control Strategies for Misc. Fugitive VOC Emissions | | | |
| Install and maintain low VOC emitting seals, valves, hatches, etc. on production equipment | Reduces VOC and GHG emissions. | -- | -- |

| Mitigation Measure | Environmental Benefits | Environmental Liabilities | Feasibility |
|---|---|---|-------------|
| Initiate equipment leak detection and repair program (including use of FLIR cameras, grab samples, organic vapor detection devices, visual inspection, etc.) | Reduction in VOC and GHG emissions. | -- | |
| Install or convert gas operated pneumatic pumps and/or devices to electric, solar, or instrument (or compressed) air driven pumps and/or devices/controllers. | Reduces VOC and GHG emissions. | Electric or compressed air driven operations can displace or increase combustion emissions. | |
| Use “low” or “no bleed” gas operated pneumatic devices/controllers. | Reduces VOC and GHG emissions. | -- | |
| Use closed loop system or thermal combustion for gas operated pneumatic pump emissions. | Reduces VOC and GHG emissions. | -- | |
| Install vapor recovery on truck loading/unloading operations at tanks. | Reduces emissions of VOC and GHG emissions. | Pressure build up on older tanks can lead to uncontrolled rupture. | |
| Control Strategies for Fugitive Dust and Vehicle Emissions | | | |
| Unpaved surface treatments including watering, chemical suppressants, and gravel | 20 – 80 percent control of fugitive dust (particulates) from vehicle traffic. | Potential impacts to water and vegetation from runoff of suppressants. | -- |
| Use remote telemetry and automation of wellhead equipment | Reduces vehicle traffic and associated emissions. | -- | -- |
| Speed limit control and enforcement on unpaved roads | Reduction of fugitive dust emissions. | -- | -- |
| Reduce commuter vehicle trips through car pools, commuter vans or buses, or innovative work schedules. | Reduced combustion emission, reduced fugitive dust emissions, reduced ozone formation, reduced impacts to visibility. | -- | -- |

| Mitigation Measure | Environmental Benefits | Environmental Liabilities | Feasibility |
|--|---|--|---|
| Miscellaneous Control Strategies | | | |
| Use of ultra-low sulfur diesel in engines, compressors, construction equipment, etc. | Reduces emissions of particulates and sulfates. | -- | -- |
| Reduce unnecessary vehicle idling | Reduced combustion emissions, reduced ozone formation, reduced impacts to visibility. | -- | -- |
| Reduced pace of (phased) development | Peak emissions of all pollutants reduced. | Emissions generated at a lower rate but duration of impacts is longer. | May not be economically viable or feasible if multiple mineral interests. |
| Definitions CO ₂ Carbon Dioxide NO _x Nitrous Oxides CO Carbon Monoxide EGU Electrical Generating Unit VOC Volatile Organic Compound NH ₃ Ammonia BACT Best Available Control Technology GHG Greenhouse Gas HAP Hazardous Air Pollutant CH ₄ Methane | | | |
| | | | |

Appendix Two
Travel Management Plan

6.2 Appendix 2 – Travel Management Plan

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6.2.1 Introduction

Comprehensive travel and transportation management addresses all resource use aspects, including recreational, traditional, casual, agricultural, commercial, and educational; and the accompanying modes and conditions of travel on public lands (BLM Land Use Planning Handbook H-1601-1, Appendix C). As such, it involves more than motorized or off-highway vehicle activities, and includes the travel needs for all BLM-administered resource management programs for such purposes as mineral extraction, energy production, livestock grazing, wildlife enhancement projects, and recreation.

The commencement of travel and transportation management are Travel Management Plans (TMPs), which represent the initial effort to actively consider and apply management to the on-the-ground network of linear travel features occurring on public lands¹⁰. These plans depict the principle transportation structure (roads and trail systems) needed to properly manage public lands and its uses, how this structure will be managed (i.e., the Transportation System), and existing inadequacies of the system – ranging from needed Rights-of-Way or Easements to setting maintenance deficiencies.

TMPs are considered implementation level planning – that tier from, and are directed by, Land Use Plan decisions in the respective Resource Management Plan. These plans may occur as activity level plans associated with a specific area (e.g., a TMP as part of a Special Recreation Management Area Plan or a TMP as part of an ACEC Plan) or, as in the case of the Bakersfield RMP, concurrent with an RMP revision and or amendment – these decisions, however, are still considered to be implementation decisions and can change over time based on, and with, other new implementation decisions. In this regard, travel and transportation management is therefore dynamic. Although a TMP provides initial decisions over route designations these can, and most likely will, be modified over time to reflect changing requirements of route users and interfacing resources.

6.2.2 Authority

The key authorities on which the TMP and Approved RMP have been developed are listed below:

- Executive Order No. 11644, February 8, 1972 (37 *Federal Register* 2877) – This order established criteria by which federal agencies were to develop regulations for the management of OHVs on lands under their management. Agencies are to "monitor the effects" of OHV use on their public lands and, "on the basis of the information gathered, they shall from time to time amend or rescind designation of areas for OHV use "as necessary to further" its policy.
- Executive Order No. 11989, May 25, 1977 (42 *Federal Register* 26959) – This order amended Executive Order 11644 and authorized agencies to adopt a policy that particular lands can be considered closed to OHVs once it is determined that OHV use "will cause or is causing considerable adverse effects" to particular resources.
- 43 CFR Part 8342 – OHV Regulations that establish criteria for designating lands as Open, Limited, or Closed to the use of OHVs.
- Instruction Memorandum No. 2006-173, Implementation of Roads and Trails Terminology Report (BLM 2006).

¹⁰ Site specific route management may have previously occurred, but the TMP attempts to provide guidance and management for a larger area and a network of routes – considered to be the BLM's Transportation System.

- Instruction Memorandum No. 2008-014, Clarification of Guidance and Integration of Comprehensive Travel Transportation Management Planning into the Land Use Planning (BLM 2007).
- Instruction memorandum No. 2012-067, Clarification of Cultural Resource Considerations for Off-Highway Vehicle Designations and Travel management (BLM 2012).
- *National Management Strategy for Motorized Off-Highway Vehicle Use on Public Lands* (BLM 2001).
- *Travel and Transportation Management Handbook H8342-1* (BLM, 2011).

6.2.3 Transportation System

The BLMs Transportation System is a dynamic system that routinely grows and shrinks with the authorization, addition and decommissioning of routes. From a purely policy (H8342-1) standpoint the Transportation System itself is those linear travel features classified as Roads, Primitive Roads and Trails – and subsequently recorded in the BLM’s Facility Asset Management System (FAMS). These asset classifications are defined in Travel Management Handbook H8342-1 and presented below (note: additional information and clarification is provided below each definition in italics);

Road: A linear route declared a road by the owner, managed for use by low-clearance vehicles having four or more wheels, and maintained for regular and continuous use.

Roads are typically improved travel features (e.g., surfaced), or intensively/routinely maintained routes. The classification of a feature as a road implies that routine and regular maintenance of that feature could, and is expected to occur – and any NEPA compliance document authorizing or designating the feature has considered and disclosed this level maintenance. Often these routes are specifically authorized through a Right-of-Way or similar, and the maintenance the responsibility of a third party. As a rule of thumb, these routes should be designed and engineered to meet certain standards – this is not always the case.

Primitive Road: A linear route managed for use by four-wheel drive or high-clearance vehicles. These routes do not normally meet any BLM road design standards.

Primitive Roads – which make up the majority of routes in the Transportation System – are typically unimproved routes, or routes that are maintained on an “as needed” basis. Although the definition states they are managed for use by four-wheel drive or high clearance vehicles – often they are maintained with sufficient frequency to allow regular use by two wheel drive and low-clearance vehicles. Many of these routes are either historic (e.g., old mining or logging roads) or more recent user created routes that see sufficient use to keep vegetation from colonizing the road bed.

Trail: A linear route managed for human-powered, stock, or off-highway vehicle forms of transportation or for historical or heritage values. Trails are not generally managed for use by four-wheel drive or high-clearance vehicles.

Unlike Primitive Roads and Roads the primary use of trails tends to be recreational in nature. With the onset of larger OHV equipment (side-by-sides) the definition above probably does not hold true, in that trails may not always accommodate all OHVs or may indeed sometimes accommodate or be managed for use by four-wheel drive or high-clearance vehicles. This classification is really most useful when

specifically identifying routes with recreational purposes and where the management direction is to limit use to a smaller trail bed e.g., single track, hiking, mountain biking etc.

This limited definition of a Transportation Network is insufficient to cover the range of linear travel features managed by the BLM's Bakersfield Field Office. As such, Temporary Roads and Primitive Routes are also considered to be part of the BLM's Transportation System (although would not be recorded in FAMS).

Temporary Route: Short-term roads, primitive roads or trails authorized or acquired for the development, construction or staging of a project or event that has a finite lifespan.

The first term (short-term) in the definition should be ignored. Although routes may be short-term in nature, the more important artifact of the definition is "has a finite lifespan". Much of the authorized activities in the Bakersfield Field Offices have long, but finite lifespans e.g., 30-year Rights-of-way, 100-year active Oil and Gas Lease. As such, the definition is expanded to include not only short-term roads, primitive roads and trails but also any route associated with a project of a finite lifespan for which a third-party will be responsible for the decommissioning, reclamation and restoration of the route upon completion of the project – at the terminus of the project during the termination, revocation or abandonment process the BLM will specifically address whether the route has public purpose and if so redesignate the route accordingly and absolve the third-party of any maintenance and restoration responsibility. While these routes are specifically authorized, they may be designated for used by a variety of users or as "authorized use only" for all or certain modes-of-transport.

Primitive Route: Any motorized/mechanized linear transportation feature located within Wilderness Study Area (WSA) – remains unclassified until Congressional action occurs on WSA.

This classification applies both to Wilderness Study Areas and Lands with Wilderness characteristics. Should Congressional Action release a Wilderness Study Area from its study status or a Land Use Plan revision or amendment decided not to manage lands with wilderness characteristics for those resource values, the routes should be reclassified and designated appropriately to one of the other designations. If the routes are no longer of public value they should be identified as Transportation Linear Disturbances and decommissioned and restored.

Of final note, "Transportation Linear Disturbances" (TLD) by very definition are not part of the Transportation System – they are however managed concurrently (e.g., following the same guiding principles, on the same data sets etc.) with the Transportation System until such time that no evidence exists of the feature exists on the ground.

6.2.3.1 Transportation System Decisions

There are a number of decisions related to the Transportation System made in the RMP and TMP. Some of these decisions are related to the continuing process of Travel Management; while others are decisions that affect the use of actual on the ground acres and features. The two most critical of these decisions are the OHV Area Designations (decision [CTTM D-2]) which are land use planning level decisions and the Route Designations themselves (decision [CTTM I-2]) which are implementation level decisions. The full text of these decisions are included in Section 6.2.4 below for reference – however understanding what these decisions actually are (or what the decision to be made was) is critical to understanding how Travel Management is implemented in to the future, and as such discussed here.

The OHV Area Designation was historically the only decision actually required by regulations and BLM policy – this changed with the publication of the Travel and Transportation Management Handbook H8342-1 in 2011. This decision was the allocation of all acres of BLM-administered public land as either “open”, “closed” or “limited”. These categories were defined in 43 CFR 8430 and read as follows:

Open – Areas "open" for intensive OHV use where there are no compelling resource protection needs, user conflicts, or public safety issues to warrant limiting cross-country travel. However, motor vehicles may not be operated in a manner causing or likely to cause significant, undue damage to or disturbance of the soil, wildlife, wildlife habitat improvements, cultural or vegetative resources or other authorized uses of the public lands (See 43 CFR 8341).

Limited – The "limited" designation is used in areas where OHV use must be restricted to meet specific resource management objectives. In the current guidance context, this means limited to designated roads and trails, i.e., a route network designated by the BLM in its RMP. These routes may also be limited to: (1) A time or season of use depending on the resources in the area (i.e., Threatened and Endangered Species' habitat or nesting areas, crucial winter ranges, etc.); and/or (2) Type of vehicle use (ATV, Motorcycle, four-wheel vehicle, etc.)

Closed – The BLM designates areas as "closed" if closure to vehicular use is necessary to protect resources, ensure visitor safety, or reduce resource or use conflicts. Access by means other than motor vehicle access is generally allowed. The Field Office Manager may allow OHV use on a case-by-case basis or for emergencies.

These OHV Area Designation decisions only apply to OHVs as defined by the 43 CFR 8340 – and so do not manage all mode-of-transport or all users, which are critical components of a comprehensive approach to travel management. As such, although still required, these decisions serve a lesser purpose than they have historically as managing at this scale often left the BLM without knowledge of the true extent of its Transportation System and the impacts resulting from its existence and use.

By contrast, the Route Designation decision is the site specific (route specific) decision that fully considers and, as appropriate, addresses the existence, use, maintenance and impact of each individual travel feature. All routes within the “limited” OHV Area designation are required by policy to have a Route Specific Designation. There is also value in designating routes in “Closed” and “Open” areas for the purposes of recording specific decisions and ensuring the Transportation System is truly comprehensive and complete. The Route Designation decisions are not fixed in regulation or even policy – thus allowing each Field Office or management unit to determine how routes will be designated.

The Bakersfield specific Route Designation decisions include the two components of a route designation required by policy; an Asset Classification – as described above – and an OHV Route Designation (which is essentially an “Open”, “Limited” or “Closed” designation mimicking definitions used for OHV Area Designations as it relates to the public OHV user). In addition to these, the decision also includes a “Primary Designation” (or mode-of-transport designation) and a “Secondary Designation” (or restriction) – the definitions of these are established in the Approved RMP (decisions [CTTM D-4] and [CTTM I-1]). The Primary Designation essentially controls the mode-of-transport permissible on any route and the Secondary Designation applies additional limitations, e.g., the type of vehicle or user (note that secondary designations are an optional component of the decision). As displayed in the table below, the final route designation decision typically includes the route’s asset classification, primary designation, secondary designation (if applicable), and OHV route designation.

| <u>Asset Classification</u> | <u>Primary Designation</u> | <u>Secondary Designation</u> | <u>Public OHV Route Designation</u> |
|------------------------------------|-----------------------------------|-------------------------------------|--|
| Road | Motorized | Street Legal Vehicles | Limited |
| Primitive Road | Motorized | Authorized Use | Closed |
| Trail | Motorized | - | Open |
| Trail | Non-Motorized | Pedestrian | Closed |

As a standard, when the Route Designation decisions are written in narrative form they should read: XX route is/would be “designated as a Primitive Road for Motorized use by Authorized Users Only; OHV Closed”.

6.2.3.2 Modifications to Proposed Decisions

The proposed route designations were published on August 31, 2012 with the Bakersfield Proposed RMP/Final EIS. Since that time a number of modifications to those proposed decisions have occurred to reflect: (1) new and/or modified route designations that have been authorized in the interim by project/site specific actions; (2) improved inventory - as more field work is complete, and better, more recent, aerial photography reviewed; (3) addition of existing system routes (Pacific Crest National Scenic Trail, Long Valley and Lamont Peak Trails) that were inadvertently omitted; and (4) a number of routes incorrectly designated as Transportation Linear Disturbances have been re-designated as Primitive Roads for Motorized use by Authorized Users as a result of discovery of an existing authorization for the route. The Modifications to Proposed Decisions Table summarizes these changes and is presented in full as an Attachment due to its size (over 300 records). The table below (TMP Table 1) is an excerpt from this Attachment to provide reference and guidance on how to read this table. The complete table is available in electronic versions of this document here, or downloadable at the following website: http://www.blm.gov/ca/st/en/fo/bakersfield/Programs/planning/caliente_rmp_revision.html

TMP Table 1
Modifications to Proposed Decisions

| RMP Route Number | Notes |
|---------------------------------|--|
| 1914 | Changed from “Trail Non-Motorized” to “Primitive Road, Motorized, Authorized Use” due to existing ROW (CACA 26507 8.5’) |
| 29 | Changed from “TLD” to “Primitive Road, Motorized, Authorized Use” due to existing authorization (FPC Proj 298 50’) |
| 30 | Changed from “TLD” to “Primitive Road, Motorized, Authorized Use” due to existing authorization (FPC Proj 298 50’) |
| 1282 | Route not on Public Land |
| 1246 | Route not on Public Land |
| 33 | Changed from “TLD” to “Primitive Road, Motorized, Authorized Use” due to existing ROW (CAS 0066451) |
| 1257 | Route does not exist on the ground |
| 1281 | Route does not exist on the ground |
| 1262 | Route does not exist on the ground |
| 1293 | Route does not exist on the ground |
| 1250 | Route does not exist on the ground |
| 1331 | Route does not exist on the ground |
| 876 | Route does not exist on the ground |
| 32 | Route does not exist on the ground |
| 1295 | Changed from “TLD” to “Primitive Road, Motorized, Authorized Use” due to existing ROW (CAS 0019079 10’) |
| 21 | Aqueduct (not a Linear Transport Feature) |
| 1908 | Aqueduct (not a Linear Transport Feature) |
| 1916 | Aqueduct (not a Linear Transport Feature) |
| 18 | Combined with 17 to make one route |
| 36 | Combined with 24 to make one route |
| 40 | Combined with 24 to make one route |
| 1898 | Combined with 24 to make one route |
| 35 | Combined with 24 to make one route |
| 16 | Changed from “TLD” to “Primitive Road, Motorized, Authorized Use” due to existing authorization (CAC 23726-FD) |
| 1626 | Changed from Motorized Primitive Road to “TLD” to minimize impacts on sensitive Alkali Sink Vegetation community and provide an opportunity to recover the disturbance created by the route. |
| 1627 | Changed from Motorized Primitive Road to “TLD” to minimize impacts on sensitive Alkali Sink Vegetation community and provide an opportunity to recover the disturbance created by the route. |

* TLD: Transportation Linear Disturbance

6.2.3.3 Summaries of Designation Decisions

As previously indicated the Transportation System is dynamic and route designations are a continually evolving to represent the decisions made on the inventory of linear transportation features occurring on BLM-administered public lands or within easements granted to the BLM. These decisions may occur in many different forms from Grazing Authorizations to Oil and Gas development approvals. With that in mind the designation decisions on each route presented within the Approved RMP and this TMP are considered to be accurate only at the time of writing (August 2014) and the Transportation System may have been modified by subsequent authorizations actions between writing and publication and will continue to be modified on into the future. These modifications would normally only affect a small number of routes or routes within a specific project area – and would follow all the guidance for public participation and considerations for designation presented in the Approved RMP decisions.

The designation decisions in the RMP are route specific, i.e., a designation has been provided for each of the inventoried linear travel features. These are documented in the Route Designation Table – Electronic Attachment to this document. There are several different ways these decisions can be summarized and continue to be summarized for various purposes in the future. The method of summation very much depends on the need, but the following serves as some primary examples of how the Final Decisions for this TMP can be summarized;

TMP Table 2
Transportation System by Asset Classification

| Asset Classification | Mileage |
|-----------------------------------|----------------|
| Road | 16 |
| Primitive Road | 1220 |
| Trail | 285 |
| Temporary Road | 0 |
| Primitive Route | 91 |
| Transportation Linear Disturbance | 285 |

The above table (Table 2) is useful for explaining the extent of the Transportation System. It does however have significant limitations, especially to the public, as it does not distinguish the features or assets from their allowable uses (i.e., mode-of-transport or specific user restrictions) – presenting only this data could be misleading.

TMP Table 3
Transportation System by Mode-of-Transport (Primary) Designation

| Mode-of-Transport (Primary) Designation | Mileage |
|--|----------------|
| Motorized | 1576 |
| Non-Motorized | 28 |
| Non-Mechanized | 8 |
| Transportation Linear Disturbance | 285 |

Table 3 again is useful as an overview of the current designations and provides, to a certain extent, additional information on allowable mode-of-transport. The data, however, is also somewhat misleading in that a Motorized designation actually allows all subsequent modes-of-transport (e.g., the number of routes available for non-mechanized use is actually the sum of each from for Motorized, Non-Motorized and Non-Mechanized).

TMP Table 4
Transportation System by Mode-of-Transport Allowable Uses

| Allowable Use | Mileage |
|-----------------------------------|----------------|
| Motorized | 1350 |
| Motorized – Street Legal Only | 77 |
| Motorized – Authorized Use Only | 183 |
| Non-Motorized | 35 |
| Non-Mechanized | 41 |
| Non-Mechanized – Pedestrian Only | 4 |
| Transportation Linear Disturbance | 285 |

The above table (Table 4) is the most descriptive of the Transportation System in terms of allowable uses but does not allude to Asset Classification in any way. This again can be misleading in that totaling the number of features and/or mileage gives totals that exceed the extent of the system. This is because each designation affords the ability for subsequent mode-of-transport to use the route (e.g., both non-motorized and non-mechanized modes-of-transport are permitted on motorized routes), therefore the number of available features and mileage for non-motorized and non-mechanized include those available for motorized as well. As a side note, this table should never be totaled; totals from the actual Transportation System, however, could be added and then percentages calculated to answer such questions as “What percentage of the Transportation system is available for Mountain Bike Use?”

TMP Table 5
Transportation System by OHV Designation

| Route OHV Designation | Mileage |
|------------------------------|----------------|
| Open | 1349 |
| Limited | 256 |
| Closed | 365 |

The final example above (Table 5) serves to summarize the requirements set forth in 43 CFR 8340, but is of limited usefulness beyond that since the OHV Designations apply only to motorized vehicles and excludes authorized and permitted motorized users from the definition of an OHV. As such, many of the routes available to the public would, under this regulation, essentially be considered “closed” (i.e., any route prohibiting motorized use by the public), and only those routes designated motorized with no further restriction would be considered open. The presentation of information like this should always be explained fully as the terminology is confusing and has, and in some cases continues, to be incorrectly used.

In addition to the above tables, the electronic Route Designation table (discussed below), and the Approved ARMP decision itself – these final decisions are represented on Travel Management Maps produced and published with the RMP. These maps are not reproduced as part of the TMP. The most current status of the Transportation System is recorded in the National Ground Transportation Linear Features (GTLF) dataset.

6.2.3.4 Route Designation Table and Justifications

The Route Designation Table is presented in full only as an Electronic Attachment due to its size (over 6000 records). The table below (TMP Table 6) is an excerpt from this Electronic Attachment to provide reference and guidance on how to read this table. The complete table is available in electronic versions of this document here, or downloadable at the following website:

http://www.blm.gov/ca/st/en/fo/bakersfield/Programs/planning/caliente_rmp_revision.html.

The complete table identifies each specific route by a unique number (Route Segment Number) and provides a summary of the rationale supporting the designation.. These rationales have been broken down into categories to simplify the process. These categories are as follows;

OHV Closed Area – Non-Discretionary

This category is used to capture all routes in non-discretionary OHV closed areas (e.g., designated Wilderness). Within these areas there are “Transportation Linear Disturbances” (trespass routes), “Authorized” (grandfathered-in or valid existing rights routes) and “Non-Mechanized” (hiking/horseback riding trails).

OHV Closed Area – Discretionary

This category is used to capture all routes in discretionary OHV closed areas (e.g., some ACECs). Slightly different from above, there are non-motorized, non-mechanized, and authorized routes, and Transportation Linear Disturbances within this category. This category is only use for those areas designated as OHV Closed areas by an RMP (or similar Land Use Planning level document).

Resource Concern – Biology

This category is used when the justification for a route limitation hinges on a biological resource. Examples are; route closures to reduce habitat fragmentation or limited seasonal use for breeding seasons. This justification has also been used when a route has been designated as authorized use only specifically for the benefit of biological resources (e.g., authorized access to a wildlife guzzler).

Resource Concern – Cultural

This category is used when the justification for a route limitation hinges on a cultural resource. Examples are route closures due to proximity to an “eligible” archeological site.

Resource Concern – Air, Soil, Water

This category is used when the justification for a route limitation hinges on Air, Soil or Water. Examples are route restriction associated with riparian crossing, route closures or restrictions to reduce erosion, or route restrictions to reduce particulate (PM10/PM2.5) matter emissions.

Resource Use Concern – Access

This category is used when the justification for a route designation is based on a desire or need for continued access to public lands or to restricted access to authorized users only.

Resource Use Concern – Recreation

This category is used when the justification for a route designation hinges on a recreation value (experience/opportunity). Routes with every designation appear within this category, for example; a Transportation Linear Disturbance designation may be justified under this category when the restoration of the route is related to maintaining the Recreation Opportunity Spectrum's "Primitive Setting"; a non-motorized designation may be justified as enhancing mountain-bike opportunities; an authorized only route may be justified if it is only usable by SRP holders.

Resource Use Concern – Safety

This category is used when the justification for a route limitation hinges on public safety.

TMP Table 6
Excerpt from Route Designation Table

| Route Segment Number | Length (Miles) | Proposed Primary Designation | Proposed Secondary Designation | Route Classification | OHV Designation | Justification Category | Designation Notes |
|----------------------|----------------|-----------------------------------|--------------------------------|----------------------|-----------------|-------------------------------------|---|
| 871 | 0.10 | Linear Transportation Disturbance | | To Be Restored | Closed | OHV Closed Area - Discretionary | Route enters Moses WSA. |
| 1101 | 0.10 | Motorized | | Primitive Road | Open | Resource Use Concern - Access | Route required for access to, from and across public lands |
| 2144 | 2.06 | Non-Mechanized | Pedestrian Only | Trail | Closed | Resource Use Concern - Recreation | Closed to motorized/mechanized to promote recreation opportunity (wildlife watching). |
| 2212 | 0.12 | Linear Transportation Disturbance | | To Be Restored | Closed | Resource Concern - Air, Soil, Water | Route steepness results in unsustainable route. |
| 2224 | 0.10 | Motorized | | Trail | Open | Resource Use Concern - Recreation | Route within Special Recreation Management Area primarily used for recreation. |
| 2336 | 0.12 | Motorized | Street Legal Only | Primitive Road | Limited | Resource Use Concern - Recreation | Restricted to 'Street Legal' vehicles only to meet recreation objectives. |

6.2.4 Travel and Transportation Management Decisions

The Approved RMP makes a number of decisions regarding travel and transportation management. Some of these decisions, such as the OHV area designations, are considered Land Use Planning level decisions, and as such require a Land Use Plan amendment or revision to change – including the public involvement associated with these processes. The Approved RMP also makes some implementation decisions that govern on-the-ground activity; these decisions do not require a Land Use Plan amendment or revision to change, and can, and over the life of the plan will, in fact, be modified by subsequent implementation level activities. The following section serves to clearly identify these decisions and, as necessary, provide additional explanation of their intent.

6.2.4.1 Land Use Plan Level Decision

Land Use Planning level decisions, as previously stated, are those decisions made which would require an amendment or revision, and the associated public procedures, to change. These decisions include the OHV area designations, overarching program goal and objectives and some structured guidance for the future management of the Transportation Network, including the identification of Travel Management Areas. The text of these decisions is presented here for reference. Additional discussion, explanation and clarification of Land Use Planning level decisions [CTTM-D-3] through [CTTM-D-9] is provided in the italicized text titled “Clarification” below the text for each decision.

Goal

[CTTM-G-1] Improve access to, and recreational opportunities on, public lands that complement the character of each geographic zone and the surrounding regions.

Objectives

[CTTM-O-1] Provide reasonable, safe, and environmentally sound access to visitors, local residents, licensed and permitted activities, and property owners through coordination and collaboration on travel systems with other agencies, state and local governments and interested stakeholders.

[CTTM-O-2] Reduce or halt proliferation of motorized and non-motorized routes.

[CTTM-O-3] Maintain an accurate route inventory for management purposes, and for the production of both general and recreation specific Transportation Management Network maps.

[CTTM-O-4] Manage OHV use to protect environmental resources, promote public safety, and provide OHV use opportunities where appropriate. Administratively designate the specific areas on public lands on which the use of OHVs is, and is not permitted.

Decisions

[CTTM-D-1] Delineate Travel Management Areas (TMAs) and associated modes of access and travel, as follows;

- (f) **Primitive TMA** (approximately 139,030 acres): Primarily recreational traffic, access essentially cross country, with few designated and maintained trails. Area is entirely restricted to non-motorized and non-mechanized modes of transport. Aircraft take-off and landing, except emergency, is prohibited.
- (g) **Keyville TMA** (approximately 10,880 acres): Primarily recreational traffic, no area-wide mode of transport restrictions, motorized and mechanized use is limited to routes designated for

these uses. Over time specific routes may be redesignated to limit to specific modes of transport in order to maintain recreational opportunity and experience.

- (h) **Tembler TMA** (approximately 22,870 acres): Primarily recreational traffic, no area-wide mode of transport restrictions, motorized and mechanized use is limited to routes designated for these uses. Permits for motorized and mechanized competitive events will not be issued. Over time specific routes may be redesignated to limit to specific modes of transport in order to maintain recreational opportunity and experience.
- (i) **Intensive TMA** (approximately 40,030 acres): Primarily industrial/commercial traffic, all travel on designated routes. No area-wide mode of transport restrictions. Implement a program of route reduction addressing route construction, use, and abandonment (including restoration) based on a balance between industrial needs and environmental concerns.
- (j) **Extensive TMA** (approximately 195,740 acres): General traffic from multiple uses, motorized and mechanized use limited to routes designated for these uses. No area-wide mode of transport restrictions.

[CTTM-D-2] Designate all public lands in accordance with 43 CFR 8342 as either open, limited, or closed to off-road vehicles, as defined in 43 CFR 8340.0-5(f), (g), and (h), the following OHV areas:

- (d) Open: 0 acres
- (e) Closed: 142,940 acres
- (f) Limited: 261,140 acres

All designations are based on the protection of the resources of the public lands, the promotion of the safety of all the users of the public lands, and the minimization of conflicts among various uses of the public lands; and in accordance with the criteria listed in CTTM-D-5.

[CTTM-D-3] Close areas where off-highway vehicles are causing or will cause unacceptable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources to the type(s) of vehicle causing the adverse effect until the adverse effects are eliminated and measures implemented to prevent recurrence.

[CTTM-D-3 Clarification] – *The decision to close areas where OHVs are causing or have the potential to cause unacceptable adverse effects on natural and cultural resources, authorized uses or other resources, is in itself a fairly self-explanatory decision. There is room however, for interpretation of unacceptable adverse impacts and need for clarification as to how the closure would be implemented.*

This TMP itself cannot set thresholds for the listed resources as to acceptable or unacceptable adverse impacts; however, in order to implement this decision these adverse impacts should be well documented, e.g. descriptive narrative and photos in field notes of the issues. Beyond the identification and documentation of the adverse impact, the following guidance provided by 43 CFR Subpart 8341 and BLM Instruction Memorandum 2013-035, will be used:

- *All closures implemented as a result of this decision will be temporary in nature, implementing the shortest period possible on the smallest area necessary to address the identified impacts. Corrective action prior to the need for closure is greatly encouraged.*
- *Closures must generally be limited to a 24 month period or less. Should adverse impacts require longer than 24-months to resolve, a subsequent closure will be issued prior to the expiration of the original closure.*

- *If it is known that adverse impacts will require a period longer than 24 months to resolve the Field Manager must provide a rationale and justification for the alternative duration in the Federal Register Notice and associated briefing package submitted to the Washington Office for review.*
- *If the intent is long-term closure a land use plan amendment must be issued to implement the closure.*
- *NEPA compliance is generally required prior to closure; closure of roads or trails can be achieved with a Categorical Exclusion if appropriate. Emergency actions may establish “alternative arrangements” for NEPA compliance – however, closures imposed in response to known and long-occurring activities are not considered emergencies.*
- *In order for a temporary closure to be effective and fully enforceable a Federal Register Notice must be prepared, including a briefing package (briefing paper, maps, aerial and other types of photography and supporting documentation) for the Washington Office. These documents must be approved by the State Director prior to Washington Office review.*

[CTTM-D-4] Define primary route designations and limitations as follows:

- Motorized:** a route allowing all modes of transport, motorized vehicles including, standard (street legal) passenger vehicles and OHVs (motorcycles, ATVs, jeeps, and specialized vehicles etc.). All other modes of transport may use these routes unless restricted by a secondary designation.
- Non-motorized:** a route allowing modes of transport that are not motor driven (regardless of motor type, e.g., gas, diesel, electric). Allowable modes of transport include, moving by foot, stock or pack animal, non-motorized boat (kayak, raft, etc.), or mechanical vehicle such as a bicycle.
- Non-mechanized:** a route allowing only travel by natural means, such as by foot, stock or pack animal, except for approved, non-motorized access devices covered under the Americans with Disabilities Act.
- Transportation Linear Disturbance:** prohibiting all types and modes of transport (including all public, authorized and administrative uses); these linear travel features can be decommissioned and restored. This does not impact some modes of transport’s ability to legally travel cross-country.

[CTTM-D-4 Clarification] – *The definition of “primary” route designations serves to identify the allowable mode(s) of transport on a route regardless of any restriction on the type of user. The three categories are presented in hierarchal order: Motorized, Non-motorized, Non-mechanized, and each is inclusive of the modes of transport in the subsequent categories (e.g., a route designated as motorized is also available for non-motorized and non-mechanized modes of transport). The category of Transportation Linear Disturbance is used for any linear travel features that have all modes of transport restricted so that the disturbance may be restored. All inventoried linear travel features have been designated as one of these categories, at a minimum. Any subsequent designations, i.e., for new route or newly discovered routes, will receive a primary designation generally in conjunction with the decision authorizing the activity associated with the route (e.g., creation, restoration or use) and added to the route attributes in the National Ground Transportation Linear Features (GTLF) dataset.*

[CTTM-D-5] Apply and document the application of the following criteria in route designation including the criteria defined in 43 CFR 8342.1;

- (a) [Designated] trails shall be located in a manner to minimize impacts to physical resources (soils, watershed, vegetation, air, and other resources) and to prevent impairment of wilderness suitability;
- (b) [Designated] trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats. Special attention will be given to protect endangered or threatened species and their habitats; and
- (c) [Designated] trails shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreation uses.
- (d) [Designated] areas and trails shall not be located in officially designated wilderness areas or primitive areas. Areas and trails shall be located in natural areas only if the authorized officer determines that off-road vehicle use in such locations will not adversely affect their natural, aesthetic, scenic or other values for which the areas are established.

[CTTM-D-5 Clarification] – *The application and documentation of the designation criteria, as defined in 43 CFR 8342.1, has occurred for each route designated by the Approved RMP and TMP. Any modifications to these route designations and any new designations will continue to consider these designation criteria as they apply to the public lands and resources on BLM-administered public lands within the Bakersfield Field Office. The documentation of the consideration of these criteria shall occur within any decision document pertaining to these routes. For example, the NEPA compliance document for a new right-of-way for a road will include documentation of consideration of the designation criteria.*

[CTTM-D-6] Consider, and document the application of, in addition to the previously identified criteria, the following in all route designations (including re-designations);

- (a) Environmental conditions, such as: soil stability, important wildlife habitat, special status species habitat, proximity to riparian areas or 303(d) streams, and visual resources.
- (b) User conflicts, such as: motorized versus non-motorized and motorized or mechanized versus non-mechanized. Such conflicts must be actual conflicts, rather than perceived conflicts, and appropriately documented.
- (c) Administrative purposes, such as: wildland fire suppression activities, safety, and resource management and permitted activities.
- (d) Public purposes, such as: accessing public or private land, destinations for specific activities, and types of desired use (motorized, mechanized, non-motorized, or non-mechanized).
- (e) Route, mode-of-transport and size limitations, such as: > 50-inch wheel base (full size vehicles), < 50-inch wheel base (all-terrain vehicles), single-track vehicles (motorcycles or mountain bikes), and equestrian or pedestrian only trails.

[CTTM-D-6 Clarification] - *Similarly to [CTTM-D-5] the additional criteria presented in the decision must be considered and that consideration documented in the associated decision document for any action that either redesignates or newly designates a linear travel feature.*

[CTTM-D-7] Apply and document the application of the following principles when making route designation modifications:

- (a) Require the opportunity for public involvement throughout the travel management process ;
- (b) Coordinate route designations with individual stakeholders, user groups, tribes, agencies and local governments;

- (c) Document and record route designation changes appropriately; and
- (d) Provide opportunity for public review and comment on route designation changes.

[CTTM-D-7 Clarification] – *The establishment of some basic principles for public involvement is representative of the commitment to involve the public in the route designations process as it pertains to modification of the Transportation System developed during the RMP process and decided upon in the ROD. As such, any changes to routes already designated, i.e., redesignation and not new designations, will require opportunities for public involvement.*

This decision essentially means that during the development of any proposed activity that redesignates a route, the general public, along with other interested parties, will be provided an opportunity to participate in the process at every step. This will also include a specific opportunity for review and comment prior to the final decision. The scope and level of the public involvement is not specifically set, but should be representative of the action at issue and the level of public interest. For example, redesignation of routes within an SRMA would require a more extensive level of public involvement than those within an isolated parcel of public land.

A portion of this decision relates to the recordation and documentation of route redesignations, in meeting the intent of this decision the clarification of decisions [CTTM-D-5] and [CTTM-D-6] should be considered.

[CTTM-D-8] Implement the following guidelines for management and maintenance of the travel network:

- (a) Designate routes within newly acquired properties, rights-of-way, and easements at the time of, and in conjunction with, the acquisition;
- (b) Provide designations for newly constructed, modified, or realigned routes and routes missed by the 2009 Digital Inventory.
- (c) Designate routes associated with new authorizations in conjunction with the normal application process and approval. As existing authorizations are renewed, their designation may be altered accordingly. These redesignations would be documented in the associated NEPA documentation, and amended in the route database and GIS. Information on new and redesignations will be available to the public;
- (d) Address route redesignations as physical route conditions change (erosion, washout, etc.);
- (e) Allow for the redesignation of routes as a result of specific requests, subject to site specific analysis (NEPA) and appropriate public involvement; and
- (f) Encourage authorized users to evaluate their transportation network needs and submit a transportation plan to address those needs at an appropriate scale (e.g. Oil Field, lease, portion of lease, etc.).

[CTTM-D-8 Clarification] – *The decision establishing guidelines for management and maintenance of the Transportation System specifically address the triggers for when route designation or redesignation would occur; in summary, new actions and acquisitions, modification or changes to the physical properties of the route, or as a result of a specific request. Many of these actions would require a site specific NEPA compliance document; in these cases the route redesignation should be recorded in these documents and include the application of decisions [CTTM-D-5], [CTTM-D-6] and [CTTM-D-7].*

The final element of this decision (f) encourages authorized users to address their own Transportation System needs. It specifically allows for authorized users to propose to the BLM their travel and transportation needs and make recommendations for the BLM to consider in designating or re-designating routes within these authorized users' area of interest. This consideration would occur and be documented in an appropriate NEPA compliance document following all the procedures outlined by this and other decisions.

[CTTM-D-9] Establish protocols to effectively monitor and gather data on route usage, route condition, and noncompliance with designations. These protocols include:

- (a) Identification of high traffic routes and areas;
- (b) Annual monitoring of a random selection of routes to gauge effectiveness of travel management decisions and identify resource conflicts; and
- (c) Annual review of a minimum of 10% of designated routes, and appropriate updates to the existing route inventory.

[CTTM-D-9 Clarification] - *The decision establishing protocols to effectively monitor and gather data on routes is covered and expanded upon throughout the document and more specifically in the section titled Travel and Transportation Guidance.*

6.2.4.2 Implementation Level Decisions

Implementation level decisions are those decisions that generally result in on-the-ground action without the need for subsequent planning or NEPA compliance documentation. These decisions can be modified through other activity or implementation level processes and do not require a land use plan amendment or revision. These decisions include additional guidance for travel and transportation management and the specific route designations decided upon for each linear transport feature in the current inventory. The text of these decisions is presented here for reference. Additional discussion, explanation and clarification of Land Use Planning level decisions [CTTM-I-1] through [CTTM-I-2] is provided in the italicized text titled "Clarification."

Key Implementation Decisions

[CTTM-I-1] Define secondary route designations as the following (note additional secondary route designations may be implemented by various activity level plans and site specific actions):

- (a) **Authorized Use:** a route restricted to use by authorized users including: permittees, lessees, and any other form of authorization from the BLM for a specific route. Mode of travel restrictions may be applied in the specific BLM authorization.
- (b) **Street Legal Vehicles:** a route restricted to use by vehicles licensed (by any state) for use on any highway.
- (c) **Pedestrian:** a route restricted to use by pedestrians (walking/hiking) only.

[CTTM-I-1 Clarification] - *The definition of "secondary" route designations serves to identify and further refine allowable uses. Unlike primary designations which only affect mode(s) of transport the secondary designation apply restrictions to the type of vehicle, type of users, or any other factor determined necessary for management. Often the secondary designation further refines the designation to ensure impacts are minimized to the greatest extent practicable. The decision provides only three secondary designations, but notes that additional secondary designations may be created as needed. These would be defined in the NEPA compliance decision document associated with their creation. It should also be*

noted that a secondary designation, unlike a primary designation, is not a required component of any decision.

[CTTM-I-2] Designate roads and/or trails as identified on Travel Management Network Map 2.16 A through I and described in the Route Designation Table (Table 6), as summarized by the following mileages:

- (a) Motorized: 1,350 miles
- (b) Motorized - Street Legal Only: 77 miles
- (c) Motorized – Authorized: 183 miles
- (d) Non-motorized: 35 miles
- (e) Non-mechanized: 41 miles
- (f) Non-Mechanized- Pedestrian Only: 4 miles
- (g) Transportation Linear Disturbance: 285 miles

[CTTM-I-2 Clarification] – *This decision is the actual implementation decision providing designations to every linear travel feature documented in the inventory used. The designation for each linear travel feature is provided in the Route Designation Table (Attachment One) and has been recorded in the National GTLF dataset.*

The mileages presented in this decision differ from those provided in previous versions of the RMP. These differences result from improvement of GIS line work from improved aerial photography, changes to incorrectly designated routes – where a previous authorization was discovered, and removal of features determined through field investigation to not be associated with human travel (e.g., fence lines, cattle trails etc.). A summary of these changes is provided in this document under the heading “Modifications to Proposed Decision” above.

Of final note, these mileages and information provided in the Route Designation Table (Attachment One) are correct as of time of writing – but due to the dynamic nature of the Transportation System changes may have occurred between writing and publication, and will continue to change as time progresses. The up-to-date information for route designations will be captured in the National GTLF dataset, although the supporting documentation of each decision may come from a variety of documents. When possible the decision document will be referenced within the National GTLF dataset.

[CTTM-I-3] Ensure existing use of public lands in the Temblor area does not result from inappropriate travel across private property through the acquisition of legal public access routes to the Temblor area. These routes should be numerous enough to allow for reasonable access from the local communities while still facilitating management of visitors through a few key access points. Furthermore, access routes should give consideration to both licensed and “green sticker” vehicles.

[CTTM-I-4] Coordinate current and future route designations/re-designations within the Temblor area with the Carrizo Plain National Monument to ensure appropriate connectivity across the monument boundary to Temblor Ridge Road.

[CTTM-I-5] Strive to acquire legal public access across private property for Rocky Gorge and Tombstone Ridge trails within the Keysville SRMA.

6.2.5 Travel and Transportation Management Guidance

This section provides general guidance on the implementation of the TMP and the continued management of Travel and Transportation in the Bakersfield Field Office Planning Area¹¹.

6.2.5.1 Data / Inventory Management

All data pertaining to linear transportation features would be stored in the National Ground Transportation Linear Features (GTLF) dataset. This dataset would be the daily, up-to-date working version of the BLM Bakersfield's Transportation System.

As changes to the Transportation System occur it will be the responsibility of the authorizing division/program to ensure the GTLF dataset is updated in a timely fashion with new information and/or decisions regarding the linear travel feature. At a minimum these updates should occur quarterly, however, the preferred timeline would be immediately after the decision document is signed. The NEPA compliance decision document's number should be entered or updated as new decisions or changes to decisions are made.

For those features decommissioned and restored, data would remain in GTLF until such time as the evidence of a linear transportation feature could no longer be seen on the ground. At that time, the feature would be moved to a propriety Bakersfield Field Office dataset of restored travel features.

As much of the data for remote parts of the Field Office was collected by interpretation of aerial photography, efforts would be made to populate any incomplete or unknown attributes (e.g., surface type, drivability) in the GTLF through field investigation. In an effort to build a complete and accurate inventory of these features approximately 10% of the Transportation System with missing information would be ground-verified each year; this may also include cultural resource inventory of previously unsurveyed locations. This workload should be completed during routine site visits and patrols, but may also be conducted with more formal Facility Asset Management System (FAMS) condition assessments or with site specific projects.

6.2.5.2 Decommissioning and Restoration

All routes designated by the RMP/TMP as Transportation Linear Disturbances would be scheduled to be decommissioned and restored. Those Transportation Linear Disturbances actively impairing other resource values (through continued regular use) would be the highest priority, followed by any new Transportation Linear Disturbances discovered through routine patrol and monitoring. Beyond this, Transportation Linear Disturbances would be decommissioned and restored based on the following priority list – although advantage will be taken of opportunities for restoration in conjunction with other projects or authorizations. Furthermore, funding for Decommissioning and Restoration would be sought based on this priority list:

- 1) Transportation Linear Disturbances crossing into or adjacent to Congressionally Designated Wilderness, Wilderness Study Areas, Lands Managed for Wilderness Characteristics, or where has been determined that an adverse effect to an eligible historic property or place of traditional importance to tribes has the potential to occur from use;

¹¹ There is a separate TMP for the Carrizo Plain National Monument.

- 2) Transportation Linear Disturbances within SRMAs and other areas of intensive public recreational use;
- 3) Transportation Linear Disturbances within ACECs or other Special Designations (WSR, ONA, etc.);
- 4) Transportation Linear Disturbances within ERMAs; and
- 5) Transportation Linear Disturbances on other BLM-administered public lands.

The standard method of decommissioning would be to remove the route from public access maps (including geographic data, e.g., shape files, KML files) and sign the decommissioned route on the ground using one or more “Red” Fiberglass Markers with “Route Closed” vinyl stickers. The marker(s) would be placed where the Transportation Linear Disturbance intersects with other designated routes; specifically within the disturbed area at sufficient spacing to block passage. The route would then be left to restore naturally over time.

If monitoring of a signed Transportation Linear Disturbances finds the signage insufficient to eliminate use a natural physical barrier (brush, logs, rocks etc.) would be used to block the route – this step may be used initially, in addition to signing, in intensively visited areas. If the natural barrier fails to eliminate use, a separate site specific analysis would be completed identifying alternative methods for decommissioning and restoring the route that at a minimum would explore the use of man-made barricades and active restoration.

Active restoration of any Transportation Linear Disturbance will require development of a specific proposed action and a site specific analysis addressing the restoration activities including implementation of the NHPA Section 106 process, which may require Class III cultural resource inventory and SHPO and tribal consultation. In these cases the proposed action must consider the appropriateness of the restoration technique given the environmental setting (e.g., not appropriate to use heavy-equipment in Wilderness) and specifically identify a monitoring plan for the project. This type of decommissioning and restoration would only be explored for projects where funds exists, or the opportunity for funding exists (e.g., OHMVR Grants).

6.2.5.3 Route Numbering

Currently the Routes in the Travel System have a myriad of names and numbers – most critically, routes have a planning number to distinguish each feature from the next for planning purposes. That said, however, these planning numbers do not always make sense; for instance, linear travel feature number 10 could intersected by linear travel feature number 5836 simply as a result of them being added to the inventory at different times. In order to aid in Education, Outreach, Signing, and Enforcement each route should be given a meaningful number. The following numbering protocol will be used for all routes:

Each Road, Primitive Road, or Trail will be number based on the township in which the most northeasterly point of the route occurs – this number will continue along the route even if it changes township. Beyond this, multiple routes originating with the same township will be originally numbered sequentially from the northeastern most point of the township – numbering sequentially from right to left. After the original numbering is completed any new additions will be number sequentially on from the last number. The numbering format will appear as follows: BLM 26S003, where the middle portion (e.g. 26S) serves to identify the originating township and the end (e.g. 003) the sequential number of the route.

As needed Temporary Roads will be numbered in an identical fashion as Roads, Primitive Roads, and Trails except that a “T” will be appended to the end of the Route Number (e.g., BLM 24S012T).

The following exception to this numbering technique may be used when a route originates from U.S Forest Service with a Forest Service route number: the Forest Service route number would continue onto the BLM with the replacement of the “FS” with “BLM” to indicate the change in jurisdiction.

Transportation Linear Disturbance will not receive a route number. They will continue to be identified by their planning number.

Route numbers will be recorded in GTLF and associated with planning numbers to ensure they can be traced back to this TMP. However, in general, once route numbering as described here is completed, only route numbers will be used to refer to routes on maps, signs, and in other official publications.

6.2.5.4 Education and Outreach

Education and outreach would primarily be achieved through on-the-ground signing (described individually below) and maps. Additional effort would be put into ensuring all appropriate publications and the relevant BLM Bakersfield webpages carried “Tread Lightly”, “Leave No Trace” and/or “Stay on Trails” interpretive information. Furthermore, within SRMAs kiosks with maps and routine BLM patrols (Park Rangers, Volunteers and Law Enforcement Rangers) would serve to educate visitors with regard to the Transportation System.

The planning maps associated with the TMP label the routes with the planning number. Once all routes have been officially numbered these numbers should no longer be used on publically distributed maps – unless this is specifically needed to serve the purpose of the map.

All new maps created for the purpose of identifying routes of travel, if labeling routes, will use the route number at a minimum to identify each route. Maps may include a route name (if produced at sufficient scale) or some other identifying symbols but should also include the route number in parenthesis.

Transportation Linear Disturbances would generally not be mapped on public access maps, but may be mapped on publically available documents created for the purpose of identifying decommissioned and restored routes, or documents relating to projects implementing the decommissioning and restoration of routes.

6.2.5.5 Enforcement

Enforcement for travel management can be broken down into two discrete but interrelated sections: law enforcement and administrative enforcement. Law enforcement primarily deals with the public use of the Transportation Network and, when needed, the authorized uses; whereas administrative enforcement generally deals with only those authorized users.

Law Enforcement over an almost 2,000-mile network of linear travel features spread over a 17-million acre area is a challenge, and it is impractical to believe that enforcement could occur everywhere. As such, although opportune patrols would always (as the officer’s discretion) deal with travel management issues, the following priorities for law enforcement are established;

- 1) Routine patrol and response to issues of decommissioned and restored linear transportation disturbances.
- 2) Routine patrol of Keysville and Temblor SRMAs to monitor public use and swiftly respond to route proliferation issues that arise.
- 3) Routine patrol of easily accessible (adjacent to designated routes) Wilderness, Wilderness Study Areas and Lands Managed for Wilderness Characteristics.

Beyond the three priorities outlined above, and the opportunistic enforcement during other patrol activities, law enforcement will respond as needed to travel management issues and concerns identified during monitoring or by resource specialists.

Administrative enforcement would principally focus on the transportation system within oil fields, ensuring route proliferation from authorized users does not occur – or when found through monitoring, is swiftly dealt with (decommissioned and restored or specifically added to an authorization). Other administrative enforcement would include review, monitoring, and enforcement of rights-of-way and other authorizations as routine monitoring identified issues.

6.2.5.6 Maintenance

Maintenance of routes would reflect the type (asset classification) to which the route is designated (i.e., Roads would be maintained to allow for the continual use by all vehicles and Primitive Roads would be maintained as needed) and the setting in which the road occurs (i.e., limited use of heavy equipment in primitive settings).

Routine maintenance would occur on Roads and Primitive Roads without further site specific review so long as maintenance was limited to the existing roadbed and considered not to be ground disturbing (e.g., dragging and blading to a minimal depth (1”) would not be considered ground disturbing, however removal of a culvert, ditching or trenching would). Any maintenance that would result in a change in character of the road (e.g., surfacing, widening etc.) would require further site specific review that may include implementation of the NHPA Section 106 process and Class III survey in areas identified as potentially sensitive for cultural resources.

The trimming, brushing and/or masticating of roadside vegetation to maintain clearance would occur on both Roads and Primitive Roads to the minimum level needed to keep free passage of the roadway open, eliminate safety hazards, and reduce the risk of fire.

Trails would generally be maintained when needed after an initial site specific review including other resources (unless such a review already exists), and in-partnership with an interested stakeholder group. Exceptions to this are the Pacific Crest National Scenic Trail, and the designated Recreational Trails within the San Joaquin River Gorge SRMA – which would be routinely maintained without further site specific analysis.

Maintenance on any authorized route would occur in conformance with the authorization.

6.2.5.7 Monitoring

The Transportation System would be monitored for usage, route condition, and noncompliance with designations including unauthorized route creation/proliferation. As with other elements of the TMP, monitoring would focus on intensively used areas, SRMAs, and Wilderness boundaries; with incidental

monitoring occurring with all other field visits. As previously mentioned in the Data / Inventory Management section, populating missing route attributes in GTLF would be considered monitoring.

As new aerial photography becomes available monitoring for route proliferation should focus on areas of intensive public use, SRMAs, and Wilderness boundaries (other areas as time allows). Review of new aerial photography is considered monitoring and should be documented appropriately with new information added to GTLF as appropriate – any new linear transportation features added to GTLF as a result of this monitoring should be labeled “Undesignated” until the following monitoring feedback loop has been completed.

With specific regard to monitoring for new unauthorized routes (or route proliferation), no matter the method of monitoring making the discovery, the following procedure should ensue:

- Determine if the route is truly new, or was simply missed in the previous inventories. This determination would be made based on three factors:
 - a. does the linear travel show evidence of prolonged use (i.e., little to no vegetation, heavily compacted soils etc.)?
 - b. does linear travel feature the map appear on old aerial photographs?
 - c. does the route linear travel feature appear on any USGS map for the area?
- If the answer to **any** of the previous question is “yes” the route should be considered “missed by the previous inventory” and included in a project specific analysis including public participation to determine the course of action for the route (i.e., its designation).
- If the answer to **all** three of the previous questions is “no” the route would be automatically designated a “Linear Transportation Disturbance” and signed as such – should addition methods of decommissioning and restoration be needed beyond the standard described previously in this document a site specific NEPA compliance analysis and documentation would be needed.

Monitoring for route condition would specifically identify areas where designated routes need maintenance work – this information could be added or updated in GTLF and may be included in FAMS. Route condition monitoring would aid in the development of site specific projects and lists of maintenance needs.

Monitoring for use and non-compliance would specifically target decommissioned and restored routes (see below) and SRMAs or other areas of intensive public use. This monitoring would provide information to be used in establishing or adapting enforcement procedures to attempt to curtail these issues.

Monitoring for cultural resource impacts would be conducted through:

- Development of a cultural resource adaptive management monitoring strategy according to standards and processes based upon the intensity and type of OHV use, the density and sensitivity of cultural resources in the area, and the potential for adverse indirect and cumulative impacts, including route proliferation.
- Identification measures to avoid, minimize, and mitigate adverse effect to sites from route usage, and when they should be applied. These measures may include data recovery, rerouting, reconstruction, new construction, limitations on vehicle type and time of season of travel, or closure.

- In areas where intensive Class III inventory has not occurred, develop historic property identification in accordance with best available methodologies including GIS predictive modeling, systematic sampling, inventories, and landscape level sensitivity analysis.

Transportation Linear Disturbances that have been decommissioned using the standard decommissioning and restoration method as described above would be specifically monitored for unauthorized use annually – incidental monitoring of these disturbances may occur during routine patrol or the monitoring of other resources. Should a natural barrier need to be installed the frequency of monitoring will increase to a minimum of twice a year – more frequently if evidence of use dictates necessity. Monitoring would continue until there are no easily detectable physical signs of the route on-the-ground.

Transportation Linear Disturbances that have man-made barriers and/or have been actively restored will be monitored in the fashion described in the separate decision authorizing the project.

6.2.5.8 *Signing*

Transportation Linear Disturbances would be the first priority for signing based on the priorities listed in the Decommissioning and Restoration section above. The next priority would be routes in SRMAs and other intensively visited areas. Beyond this signing would occur related to specific projects or resource concerns, and would therefore be a consideration in any project proposals that potentially impact routes and/or access.

As previously mentioned Transportation Linear Disturbances would be signed with Red Fiberglass Markers, placed at the intersection of the Transportation Linear Disturbance with other routes. These markers would be placed within the disturbed area at sufficient spacing to block/impede passage by vehicles.

Routes within SRMAs would be signed in a manner consistent with the desired setting for the area (e.g., the frequency of signing is lower in backcountry areas than in front country areas). The materials and methods of signing may vary based on subsequent activity level planning, but the standard would be a Brown Fiberglass Marker placed on the right-hand-side of the route indicating the allowable uses and the route name and a route number (or just route number for unnamed routes).

Routes outside of SRMAs would be signed with the standard method of a Brown Fiberglass Marker placed on the right-hand-side of the route indicating the allowable uses and route number. These signs would be installed in association with or as part of other projects in the areas in which the route occurs.

Roads, Primitive Roads, or Temporary Routes designated as “Motorized – Authorized Use Only” would be signed at their intersection with routes available for general public use. The standard signing method would be one Brown Fiberglass Marker placed on the right-hand-side of the road with an “Authorized Use Only – [Route Number]” vinyl sticker. The responsibility for this signing may rest with the BLM, or may rest with the authorized user depending the type and fashion of authorization provided. Should access along these routes be restricted with a gate, the gate will also be signed “Authorized Use Only” and provide at a minimum the telephone number to the BLM office, but may include a telephone number for the authorized user. There would be no specific priority order for signing these routes, other than as funding becomes available or as authorizations to use the routes were given.

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Appendix Three
Best Management Practices / Standard Operating Procedures

6.3 Appendix 3 – Best Management Practices/Standard Operating Procedures

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6.3.1 Introduction

Best Management Practices (BMPs) are those land and resource management techniques designed to maximize beneficial results and minimize negative impacts of management actions. BMPs are defined as methods, measures, or practices selected on the basis of site-specific conditions to provide the most effective, environmentally sound, and economically feasible means of managing an activity and mitigating its impacts. Interdisciplinary site-specific analysis is necessary to determine which management practices would be necessary to meet specific goals. BMPs include, but are not limited to, structural and nonstructural controls, operations, and maintenance procedures. BMPs can be applied before, during, and after pollution-producing or surface disturbing activities to reduce or eliminate the introduction of pollutants into receiving waters (40 Code of Federal Regulation 130.2(m), Environmental Protection Agency Water Quality Standards Regulation) or to prevent unnecessary or undue degradation of public land resources.

BMPs are identified as part of the National Environmental Policy Act process, with interdisciplinary involvement. Because the control of nonpoint sources of pollution and prevention of damage to other resources is an ongoing process, continual refinement of BMP design is necessary. This process can be described in five steps, which are: (1) selection of design of a specific BMP; (2) application of BMP; (3) monitoring; (4) evaluation; and (5) feedback. Data gathered through monitoring is evaluated and used to identify changes needed in BMP design, application, or in the monitoring program.

BMPs described in this appendix are a compilation of existing policies and guidelines and commonly-employed practices designed to assist in achieving the objectives for maintaining or minimizing water quality degradation from nonpoint sources, loss of soil productivity, providing guidelines for aesthetic conditions within watersheds, and mitigating impacts to soil, vegetation, or wildlife habitat from surface disturbing activities. BMPs are selected and implemented as necessary, based on site-specific conditions, to meet a variety of resource objectives for specific management actions. Therefore, this document does not provide an exhaustive list of BMPs, as additional BMPs or modifications may be identified to minimize the potential for negative impacts when evaluating site-specific management actions through an interdisciplinary process.

In addition, implementation and effectiveness of BMPs need to be monitored to determine whether the practices are achieving resource objectives and accomplishing desired goals. Adjustments will be made as necessary.

Each of the following BMPs are a part of the coordinated development of this Resource Management Plan and may be updated as new information becomes available to ensure objectives are met and to conform to changes in BLM regulations, policy, direction, or new scientific information. Applicants also may suggest alternate procedures that could accomplish the same result. These guidelines will apply, where appropriate, to all use authorizations, including BLM-initiated projects. Any BMP listed may be used in any program wherever it may be effective

6.3.2 General

These measures will be applied to all BLM undertakings and authorizations:

- No construction or surface disturbing activities shall occur without prior written authorization of the authorized BLM officer.
- Surface disturbance will be minimized. Project applicants will be encouraged to utilize previously disturbed sites when feasible.
- Authorizations for new surface-disturbing activities will place priority on avoiding impacts to biological, cultural, and paleontological resources. Avoidance will employ measures such as relocation of project sites, modifying construction techniques, and altering project timing.
- Civil engineering studies or geotechnical studies may be required to determine feasibility prior to road or other construction. Construction in areas of extremely unstable bedrock formations and active landslides will not be permitted or would require special design criteria.
- Delineate work area boundaries with flagging, temporary fencing, or other marking to minimize surface disturbance or impacts on sensitive biological, cultural, or other important resources.
- When necessary to protect sensitive biological, cultural, or other important resources, monitoring by BLM approved biologists and archaeologists shall be required during construction activities.
- Avoid soil-disturbing activities during periods of runoff or when soils are wet and muddy, in order to minimize damage.

6.3.3 Air Quality

6.3.3.1 Roads

- Vehicle speed limits may be applied to reduce fugitive dust emissions from road use.
- Watering, graveling, paving, or the application of surfactant may be used to reduce fugitive dust from road use.

6.3.3.2 Oil and Gas Production

- Projects and activities on BLM lands shall meet applicable Federal, State, Regional Air Quality Control Boards, and other local emissions standards for air quality.
- Operators will be encouraged to directionally drill multiple wells from a single pad to minimize roads, travel, dust, and vehicle emissions.
- Plan road systems to increase efficiency, reduce surface disturbance, which contributes to fugitive dust emissions, and save in construction and maintenance costs.
- Apply water along unpaved access roads and during trenching and earth-moving construction activities.
- Install vapor recovery units to reduce VOC emissions, which contribute to ozone formation.
- Reduce emissions from leaking gas on reciprocating compressor rod packing systems by replacing compressor packing rods at frequent intervals.

- Use solar power at tank setting or facility locations to reduce the number of vehicle trips and methane emissions from the use of pneumatic pumps.
- Replace high-bleed devices with low-bleed devices or retrofit bleed reduction kits on high-bleed devices. This reduces methane and VOCs from pneumatic devices (liquid level controllers, pressure regulators, and valve controllers).
- Use “green completions” to recover product, while reducing methane and VOC emissions that would otherwise result from venting or flaring during well completions.
- Vanpool to reduce the number of vehicles and associated combustion emissions.
- Use enclosed tanks instead of open pits to reduce fugitive VOC emissions.
- Use vapor recovery units on oil, condensate, and produced water storage tanks to reduce fugitive VOCs and recover BTU-rich vapors for sale or use on-site.
- Consider a BLM-approved dust suppressant to control fugitive dust emissions.
- Use cleaner diesel engine power (shift from Tier 1 to Tier 4) as manufacturers phase in newer engines between 2011 and 2014.
- To reduce NOx, SOx, CO, and CO₂, use controls for compressor engines, including closed loop engine control, controlled engines, selective catalytic reduction, system-installed power supply (solar or battery powered), and ultra-low sulfur diesel.
- Complete interim reclamation (post-drilling) and final reclamation of well sites and roadways during abandonment; recontour and revegetate unused or unnecessary areas to reduce fugitive dust emissions from bare or eroded soils and combustion emissions from vehicle travel.
- Reduce emissions that result from glycol over-circulation in glycol dehydrators by optimizing the circulation rate.
- Reduce GHG emissions (CH₄) by installing and using a flash tank separator to capture and recycle methane that flashes from rich glycol in an energy exchange pump.
- Reduce centrifugal wet seal compressor emissions from the seal oil degassing vent by replacing of wet seals with dry seals, which emit less methane and have lower power requirements.
- Install plunger lifts and smart automation systems, which monitor well production parameters to reduce methane emissions from well blowdowns.
- Reduce fugitive gas leaks by implementing a Directed Inspection and Maintenance program, which identifies and cost effectively fixes fugitive gas leaks using leak detection (infrared camera, organic vapor analyzer, soap solution, ultrasonic leak detectors) and measurement (calibrated bagging, rotameters, high volume samplers).

6.3.3.3 Prescribed Burning

- Burn on permissive burn days and coordinate closely with applicable air pollution control district(s) to obtain necessary permits and authorizations prior to ignition.
- Burn when weather conditions will provide good dispersion of emissions; utilize ignition techniques to encourage clean burns to reduce the amount of smoldering.

- Utilize alternatives to burning, such as chipping or masticating, where applicable, to reduce smoke emissions.
- Construct slash or brush piles using the following techniques to encourage a cleaner, hotter, and shorter burn that will minimize overall smoke production:
 - Pile vegetation loosely to facilitate air movement between fuel pieces;
 - Cover a portion of the pile to provide a dry ignition point following rain events;
 - Minimize the amount of dirt in the pile;
 - Ensure fuels are sufficiently dried; and
 - Use proper lighting techniques when igniting the pile to encourage a clean burn.
- Where possible, split larger burn units into several smaller blocks to have more control over the amount of area burned in one operational period to better control smoke production on marginal burn days.

6.3.3.4 Additional Information on BMPs for Air Quality

- BLM Washington Office BMP Web site: <http://www.blm.gov/bmp>
- EPA Natural Gas STAR Program: <http://www.epa.gov/gasstar/tools/recommended.html>
- California Air Resources Board Clearinghouse: <http://www.arb.ca.gov/cc/non-co2-clearinghouse/non-co2-clearinghouse.htm>
- Four Corners Air Quality Group: <http://www.nmev.state.nm.us.aqb/4C/>
- Intermountain BMP Web Site/Database: <http://www.oilandgasbmps.org>
- Fugitive Dust Control: http://www.arb.ca.gov/cap/handbooks/fugitivedust_large.pdf
- Forest Management Burning Handbook:
<http://www.arb.ca.gov/cap/handbooks/forestmngtburnlg.pdf>
- Oil Field Production Handbook:
<http://www.arb.ca.gov/cap/handbooks/oilfieldproductionlarge.pdf>
- Naturally Occurring Asbestos Control:
<http://www.arb.ca.gov/cap/handbooks/asbestosnoafinal.pdf>

6.3.4 Biological Resources

The following measures are Standard Operating Procedures (SOP) typically applied to BLM undertakings or authorizations that are implemented to avoid or mitigate impacts to biological resources.

6.3.4.1 Biological Resource Protection

- No destruction, cutting, or clearing of trees or other vegetation shall occur without prior written approval from the authorized BLM officer.
- Biological surveys will be required prior to any disturbance, unless given project- specific, written clearance from BLM officers.
- Surveys will be conducted at the appropriate time of year to detect sensitive species and important biological resources.
- Surveys will comply with current BLM, USFWS, NMFS and CDFW protocols, to the extent consistent with federal law.

- If it has been longer than 30 days between the last biological survey and the proposed start of construction, BLM biologists may require additional surveys for sensitive species.
- All biological survey data and reports will be sent from the biologist conducting the survey directly to the BLM biology staff. All survey biologists are required to have an updated CV on file in the Bakersfield Field Office. Prior to undertaking a survey, BLM will certify that survey biologists have appropriate training, experience, and permits.
- Exploration, construction, and development activities may have seasonal restrictions imposed within a half-mile radius around raptor nest sites. Seasonal restrictions would allow for undisturbed courtship, nest building, incubation and fledging. This seasonal restriction could last as long as six months, depending upon species. Restrictions could be imposed around high-use areas during other seasons.
- Facilities and structures such as power lines, wind towers and turbines, solar arrays, and communication facilities will conform to BLM-, USFWS- and CDFW-approved wildlife protection guidelines, to the extent consistent with federal law. Such guidelines include, flight diverters, night ambient lighting, tower beacon lights, wind tower design and avoidance measures, raptor protections for power poles, perimeter fencing, and vegetation management.
- Trenches and holes shall be provided with animal escape ramps and not be open longer than one week.
- Pipe ends two inches or greater will be covered.
- Power lines will be constructed to meet raptor protection protocols. Existing power lines will be modified to meet raptor protection protocols where electrocutions occur.
- All troughs shall have an escape ramp. Ensure that troughs allow wildlife access to water and that they are in good repair and function properly.
- Claim stakes made of pipe shall be two inches or less in diameter with sealed tops.
- Vehicles will remain on existing legal roads unless given specific written approval by the authorized BLM officer. Off-road travel will be discouraged.
- In appropriate sites, constraints will be placed on vehicle speeds to reduce potential for roadkill, to minimize dust, and to protect sensitive animals and habitats.

6.3.4.2 Wetland-Riparian Habitats

- Wetlands and riparian areas affected by livestock would be fenced or otherwise protected. Water diversions would divert the minimum volume necessary to maintain livestock or wildlife surface water. Float valves or other devices would be installed to control diversion. To protect riparian areas, water withdrawn for livestock would be piped as far as necessary or would be reconsidered on a case-by-case basis.
- Livestock water sources would be made available for wildlife year-round, as needed and to the greatest extent practicable.
- Stream crossings, if necessary, would be designed to minimize adverse impacts to soils, water quality, and riparian vegetation and provide for fish passage as appropriate.

6.3.4.3 Rehabilitation/ Restoration

- Disturbed sites will be restored to natural conditions using site-appropriate measures and timelines developed in consultation/coordination with BLM resource specialists. Restoration plans and requirements will be developed on a case-by-case basis and include post-project monitoring.
- All unnecessary roads, vehicle paths, and other disturbed areas will be restored to natural conditions.
- Match local genotypes, as close as practical, when choosing seeds and other materials for habitat restoration.
- Adjust grazing prescriptions or eliminate grazing following restoration if necessary to protect populations of vulnerable species and facilitate establishment of newly planted sites.

6.3.4.4 Threatened and Endangered, and Sensitive Species

Many measures to protect threatened and endangered species have been developed as a result of formal consultations between the BLM and USFWS on a variety of BLM actions. BLM has also developed best management practices, standard operating procedures, and conservation measures and design criteria to mitigate specific threats to sensitive species. As additional measures are developed to minimize the adverse effects from future management activities, they are likely to become additional SOPs.

Special status species survey, avoidance, take minimization, mitigation measures, compensation, and monitoring measures required in biological opinions (programmatic and site-specific) will be incorporated into project design, attached as conditions of approval, grant, or lease terms and conditions, or otherwise implemented in all BLM projects and authorizations that may affect listed species. These measures may change due to new information new biological requirements. Current practices are found below.

General Guidelines for Conserving Habitat and Minimizing Project Impacts

- Habitat disturbance will be minimized and conducted in a manner that reduces, as much as possible, the potential for take of individuals of a listed species. Existing roads and routes of travel will be used, to the greatest extent practicable. Natural drainage patterns will be maintained to the greatest extent practicable.
- Avoid large draws and drainages with saltbush to the greatest extent practicable.
- The area of disturbance will be reduced to the smallest practical area, considering topography, placement of facilities, location of burrows, nesting sites or dens, public health and safety, and other limiting factors.
- Work area boundaries will be delineated with flagging, temporary fencing or other marking to minimize surface disturbance associated with vehicle straying.
- To the extent practicable, use previously disturbed areas to stockpile excavated materials, store equipment, dig slurry and borrow pits, locate trailers, park vehicles, and performing other surface-disturbing actions.

- All oil spills will be contained closest to the source site as possible. The USFWS will be notified within 48 hours of any oil spill. The NMFS will be notified within 48 hours if there is potential to impact coastal areas or waters, or steelhead habitats.
- Project employees will be directed to exercise caution when commuting within listed species habitats. The speed limit on unpaved roads not maintained by the county shall be a maximum of 20 MPH, in order to minimize wildlife casualties.
- Cross-country travel by vehicles is prohibited, unless specifically authorized by BLM for the project. The use of all-terrain vehicles (ATVs) may be considered for projects that require cross-country travel (such as project survey staking, geophone placement and retrieval).
- Project employees will be provided with written guidance governing vehicle use restrictions, speed limits on unpaved roads, and fire prevention and hazards.
- A worker education program will be conducted for all employees working on the project sites in listed species habitats. The education program will include identification of listed species and their habitats, project mitigation measures and stipulations, reporting requirements, and penalties for failure of compliance.
- Take measures to prevent the diffuse or point discharge of potential biological toxicants onto the ground surface.
- All spills of hazardous materials within endangered species habitats shall be cleaned up immediately. The NMFS will be notified within 48 hours of hazardous materials spills in known or potential black abalone habitat.
- Unless specified for reducing impacts to blunt-nosed leopard lizards, actions during evening hours when some listed species are active and vulnerable to vehicle or equipment-induced injury or mortality will be minimized.
- Trash and food items will be contained in closed containers and removed daily.
- Firearms will be prohibited from project sites.
- Trenches or holes should have at least one escape ramp for each 1,000 feet of open trench. Escape ramps should be earthen and at a slope no steeper than 1:1. Trenches will be checked in the morning before beginning work and at the end of the work day. Any entrapped animals will be allowed to escape unharmed.
- Pets will not be permitted on construction project sites.
- Listed species shall be protected from the hazards posed by oil sumps. All hazardous exposed oil sumps shall be screened or eliminated (see California Laws for Conservation of Oil and Gas 1995). All screening of sumps shall meet the following specifications: (1) be not greater than 2 inch nominal mesh, (2) be of sufficient strength to restrain entry of wildlife, and (3) be supported in such a manner so as to prevent contact with the sump fluid. Oil sumps shall be designed, constructed, and maintained as to not be a hazard to people, livestock, or wildlife, including birdlife. Oil sumps shall be filled with earth after removal of harmful materials (see California Code of Regulations 1982).
- Biologists and law enforcement personnel from the CDFW and the USFWS shall be given complete access to the project area to review monitoring and mitigation activities.

- Project activities that are likely to cause the amount or extent of take to be exceeded shall cease immediately.
- The protective measures being implemented for listed species shall be extended to candidate and proposed species in the project area to the maximum extent practicable.
- Restoration will be required on unused portions of the project area, or oil and gas lease when deemed necessary by the BLM to maintain or improve habitat values. Restoration will be required when a project or lease is abandoned. The BLM will be contacted for specific restoration requirements upon project completion.

Disturbance Levels

- Surface disturbance on public lands in Reserves (Red Zones) will not exceed 10% of any 640-acre section, aliquot section, or aggregate of adjacent aliquot sections.
- Surface disturbance on public lands in Corridors (Green Zones) will not exceed 25% of any 640-acre section, aliquot section, or aggregate of adjacent aliquot sections.

Survey Requirements

- The Conserved Lands area of ecological importance (Reserves and Corridors) will be presumed to be occupied habitat for listed animal species. Wildlife surveys will determine listed species presence and/or important habitat features for listed species. Surveys will be conducted within 30 days prior to the onset of ground breaking actions and will include daytime line transect surveys which will be conducted by walking the project area and appropriate buffer at 30 to 90 feet intervals. Transect width will be adjusted based on vegetation height, topography, etc. Surveys will include areas of surface disturbance, appropriate buffers, access routes, and cross-country travel routes. Surveys will be designed to identify habitat features such as burrows, dens, and precincts, and not species presence or absence.
- If non-BLM lands are also involved in a project, an applicant may choose to comply with some other USFWS- and CDFW-approved program (such as the Metro Bakersfield HCP or the proposed Kern County Valley Floor HCP). If an alternative program were selected, the survey requirements for the alternative program may be substituted at the USFWS's and BLM's discretion.

San Joaquin Kit Fox – Survey for natal, known, occupied, and potential dens in the project area and a 200-foot buffer.

Blunt-Nosed Leopard Lizard – Survey for burrows that may be used by blunt-nosed leopard lizards in the area to be disturbed by the project and a 50-foot buffer.

Giant Kangaroo Rat – Survey for precincts in the area to be disturbed by the project and a 50-foot buffer.

Tipton Kangaroo Rat – Survey for burrows in the area to be disturbed by the project and a 50-foot buffer.

Federal Proposed and Federal Candidate and State Listed Animal Species – Survey for important habitat features in the area to be disturbed by the project and a 50-foot buffer.

Kern Mallow, California Jewelflower, and San Joaquin Woolly-Threads – Survey during the appropriate season in the area to be disturbed by the project and a 50-foot buffer. Conduct reconnaissance-level surveys to determine habitat suitability using meandering walk-over surveys. Conduct site-specific surveys in appropriate habitat by walking transects with 50-foot spacing.

At the discretion of an approved BLM botanist, existing information may be used to conclude that the site is not occupied and surveys are not required or that project impacts are acceptable without detailed surveys.

Hoover's Woolly-Star – Survey for species in the area to be disturbed by the project and a 50-foot buffer, if season is appropriate. If season is inappropriate to detect species or skeletons, use surveys to evaluate potential of a site to support the species. Reconnaissance level surveys to determine habitat suitability will be conducted using meandering walk-over surveys. Site-specific surveys in appropriate habitat will be conducted by walking transects at 50-foot intervals.

At the discretion of an approved BLM botanist, existing information may be used to conclude that the site is not occupied and surveys are not required or that project impacts are acceptable without detailed surveys.

Bakersfield Cactus – Bakersfield cactus is known to occur on one section of split estate land within the Green Zone. Bakersfield cactus is not known to occur elsewhere in either the Red or Green Zone. Survey project sites in potential habitat using meandering walk-over surveys.

State-Listed and Federally Proposed and Candidate Plant Species – Survey in the area to be disturbed by the project and a 50-foot buffer, if season is appropriate. If extant populations or high potential habitat is known to occur in the project area, the BLM may require surveys during the appropriate season. At the USFWS/BLM's discretion, existing information may be used to conclude that the site is not occupied and surveys are not required.

Measures for Minimizing Take

San Joaquin Kit Fox

San Joaquin kit fox dens will be protected, to the maximum extent practicable. Known, occupied, and potential non-natal dens will be buffered by 100 feet. Unoccupied natal dens will be buffered by 200 feet to protect the physical den site. If an active natal den is encountered, the USFWS will be contacted immediately, before any action is taken.

The project construction area will be delineated with a temporary fence, flagging, or other barrier. Actions within the buffer zone shall be limited to vehicle and equipment operation on existing roads.

Non-fatal disturbance, such as above ground blasting, vibroseis, and shothole, shall not occur within 500 feet of an active San Joaquin kit fox natal den between November 1 and August 15 to reduce disruption of kit fox breeding.

Potential dens will be monitored and temporarily blocked. Den monitoring will follow the guidelines described below. In the event that a den is encountered that needs to be excavated, the following will apply:

Non-natal dens within a construction area may be carefully excavated at any time of the year by USFWS-approved biologists or under the supervision of a USFWS-approved biologist. Prior to the destruction of the den, the den will be monitored for at least three consecutive days to determine its current status. Activity at the den will be monitored by placing tracking medium at the entrance and by spotlighting. If no kit fox activity is observed during this period, the den will be destroyed immediately to preclude subsequent use. If kit fox activity is observed at the den during this period, the den will be monitored for at least five consecutive days from the time of observation to allow any resident animal to move to another den during its normal activities. Use of the den can be discouraged during this period by partially plugging the entrance(s) with soil in such a manner that any resident animal can escape easily. Destruction of the den may begin when, in the judgment of the USFWS-approved biologist, the animal has moved to a different den. If the animal is still present after five or more consecutive days of plugging and monitoring, the project biologist shall contact the BLM or the USFWS to obtain permission to excavate the den when it is temporarily vacant, for example, during the animal's normal foraging activities.

Destruction of the den will be accomplished by careful excavation until it is certain that no kit foxes are inside. The den will be fully excavated and then filled with dirt and compacted to ensure that kit foxes cannot reenter or use the den during the construction period. If, at any point during excavation a kit fox is discovered inside the den, the excavation activity will cease immediately and monitoring of the den will be resumed. The BLM and the USFWS will be notified immediately. Destruction of the den may be resumed, when in the judgment of the USFWS-approved biologist, the animal has escaped from the partially destroyed den.

If an unoccupied natal den cannot be avoided, the den will be carefully excavated by a USFWS-approved biologist with permission from the USFWS or the BLM. Excavation of unoccupied natal dens will be allowed only between August 15 and November 1.

Pipes and culverts will be searched for kit fox prior to being moved or sealed, to ensure that kit foxes are not being entrapped. Any kit fox found will be allowed to escape unimpeded. Pipes and culverts with a diameter greater than 4 inches will be capped or taped closed after searching them.

Occupied pipe dens will be protected to the maximum extent practicable. Pipe dens will be buffered to protect the physical den site and kit fox activity. Removal of pipe dens will follow the monitoring and plugging procedure described above for natural dens.

Blunt-Nosed Leopard Lizard

If a blunt-nosed leopard lizard is observed in the project area or along the access route BLM will be immediately contacted. BLM will provide additional measures that must be complied with to avoid impacts to blunt-nosed leopard lizards.

Avoid burrows that may be used by blunt-nosed leopard lizards, to the greatest extent practicable.

The biological monitor shall check the project area and access route daily during the blunt-nosed leopard lizard active season to determine the presence or absence of lizards in the work area. If blunt-nosed leopard lizards are observed in the project area or along the access route BLM will be immediately contacted. BLM will provide additional measures that must be complied with to avoid impacts to blunt-nosed leopard lizards. As part of the post-construction report, a map showing the location, date and time of the observation will be submitted.

If blunt-nosed leopard lizards are known or likely to occur in the general project area:

Avoid burrows that may be used by blunt-nosed leopard lizards.

Locations of activities with potential to collapse or block burrows (sleeper placement, stockpile, storage and parking areas, trenching) will be approved by the biological monitor.

The biological monitor may allow certain activities in burrow areas if, in his or her judgment, the combination of soil hardness and activity impact is not expected to collapse burrows. Activities authorized by the biological monitor in burrow areas will be documented and included in any report.

Roadway sections where blunt-nosed leopard lizards have been observed or are likely to occur should be clearly marked to prevent workers from driving off the road and over burrows. Barriers, such as fencing, may also be installed.

A brief description of measures taken to avoid burrow collapse will be included in any report, including the post-construction report.

In addition, for project activities that occur during the blunt-nosed leopard lizard active season (approximately April 15 to October 15) the following will apply:

- Notify the BLM that blunt-nosed leopard lizard active season measures are being implemented;
- When possible, conduct project activities at night or during blunt-nosed leopard lizard inactivity periods (generally when temperatures are below 77 degrees F and above 99 degrees F);
- All personnel will be advised to reduce speeds on sections of the access/egress route with potential to support blunt-nosed leopard lizards.
- All vehicle operators will check under vehicles and equipment prior to operation.

- Any trenches or pits will be inspected by the biological monitor in the morning, late afternoon, at the end of the work day and prior to backfilling to free any blunt-nosed leopard lizards that may become entrapped. Trenches or holes should have at least one escape ramp for each 1,000 feet of open trench. Escape ramps should be earthen and at a slope no steeper than 1:1.

A flashing barrier may be installed around the work area to prevent blunt-nosed leopard lizards from entering the work area. The flashing barrier will be constructed of 18-inch or wider flashing, buried 6-inches in depth and reinforced with rebar or fence posts. Silt fencing will be used to isolate areas inside the exclusion fence. If a blunt-nosed leopard lizard is subsequently found within the fenced area, the fence will be removed (in that area) and the lizard will be allowed to leave the exclusion zone. Surveys will continue until blunt-nosed leopard lizards are no longer observed inside the flashing barrier (i.e. no evidence for one to two weeks dependent upon the discretion of the biologist). Barrier installation should occur prior to emergence of blunt-nosed leopard lizards or by April 15. Locate flashing so that no burrows are destroyed and avoid burrows during barrier construction. Surveys will occur when temperatures are sufficient for leopard lizards to be above ground. The flashing barrier will remain in place until drilling and sump closure activities have been completed.

Burrows that cannot be avoided may be destroyed under the following circumstances:

- Burrows inside a barrier may be destroyed after the survey and monitoring requirements described above for flashing barriers has been met. Burrows should be carefully excavated under the supervision of a qualified biologist to verify that it is unoccupied and then destroyed.
- If any burrows are destroyed, the following information will be included in the post construction compliance report: the dimensions of the of the area impacted by burrow destruction/excavation; number of burrows destroyed/excavated; results of burrow excavation, including any observations of wildlife in excavated burrows; and any other information deemed useful by the consulting biologist.
- If a blunt-nosed leopard lizard were observed exiting a burrow, the burrow should be carefully excavated, under the supervision of a qualified biologist to verify that it is unoccupied and immediately destroyed.

The biological monitor shall check the project area and access route daily during the blunt-nosed leopard lizard active season to determine the presence or absence of lizards in the work area. If blunt-nosed leopard lizards are observed in the project area or along the access route, the biological monitor will take action to avoid impacts on lizards.

If a blunt-nosed leopard lizard is observed at the project site or along the access/egress route, the biological monitor will notify the BLM of the actions being undertaken. Initial notification may be by phone message. Written documentation, including GPS coordinates of lizard observations, will be included in any reports. The post-construction report will include a map showing the location, date, and time of any blunt-nosed leopard lizard observations.

Roadway sections where blunt-nosed leopard lizards have been observed should be clearly marked to prevent workers from driving off the road into blunt-nosed leopard lizard habitat or over burrows. Barriers, such as fencing, may also be installed.

The biological monitor must be on-site during appropriate temperatures for blunt-nosed leopard lizard activity. The biological monitor will escort all traffic through any area where blunt-nosed leopard lizards have been observed. Biological monitors will complete daily compliance reports, which will be summarized and included in the weekly report sent to the BLM.

Large vehicles (tankers, water trucks, drilling rigs) must be escorted to and from the worksite by a biological monitor during appropriate temperatures for blunt-nosed leopard lizard activity.

The biological monitor will provide the BLM with a brief weekly report describing any actions taken to avoid blunt-nosed leopard lizard impacts. This report may be submitted by e-mail to the BLM.

All reports must be submitted by the biological monitor conducting the work in the field or be reviewed by the field biological monitor. Alternately, the original report prepared by the field biological monitor may be attached to the report.

When the biological monitor determines that temperature patterns at the project site no longer support blunt-nosed leopard lizard activity for the season and with receipt of the BLM's concurrence, these active season measures may be discontinued.

If blunt-nosed leopard lizards have been observed in the project area or along the access route, and operations and maintenance will continue into the next blunt-nosed leopard lizard active season, an operations and maintenance plan (O&M Plan) will be submitted to BLM. The O&M Plan will outline the practices and mitigation measures that will be implemented to avoid impacts on blunt-nosed leopard lizards.

Giant Kangaroo Rat and Tipton Kangaroo Rat

Avoid active precincts by a buffer of 50 feet. Actions within the buffer zone will be limited to vehicle and equipment operation on existing roads. Actions within buffer zones will be confined to daylight hours.

Annually, the USFWS will advise the BLM if applicants should be required to implement the following capture and release program:

- If active precincts cannot be avoided, the area will be trapped no greater than seven days before ground-disturbing activities for five consecutive nights. On the day following the fifth trap night, burrows will be carefully excavated. Captured animals will be marked and may be released into enclosed artificial burrow systems outside the work area the following night. All work will be supervised by a USFWS-qualified biologist. At any time during the year, the USFWS and the BLM may adjust or decide to discontinue the capture and release program.

Kern Mallow, California Jewelflower, San Joaquin Woolly-Threads, and Hoover's Woolly-Star

Extant populations will be avoided, to the greatest extent practicable. The locations of listed plants will be avoided and temporarily fenced or prominently flagged to prevent inadvertent encroachment by vehicles and equipment during the activity. If California jewelflower populations and individuals are discovered in the Kern or Kings counties, they will be avoided by a 50-foot buffer.

If extant populations of Kern mallow, San Joaquin woolly-threads or Hoover's woolly-star cannot be avoided, surface disturbance should be scheduled after seed set and before germination. Collection of seed, with reseeding undertaken at the site following the activity, during seasonal time-frames and weather conditions favorable for germination and growth, may also be required. Topsoil may be stockpiled and replaced after project completion. Topsoil will not be required to be stockpiled for greater than one year.

Impacts on extant populations may be considered minimized when (a) the number of plants lost is cumulatively less than 3 percent of the impacted population and disturbance is temporary, or (b) the amount of habitat lost is less than 3 percent of the occupied habitat for the impacted population.

Plants that are considered waifs or incidental, biologically marginal occurrences due to their presence on chronically disturbed habitat and a small population size (less than 50 individuals) may be disturbed at the USFWS/BLM's discretion.

The following guidelines shall be used to determine thresholds for facilities operation and maintenance activities that are within the scope of certain programmatic biological opinions:

- Estimated loss of individuals of plants from project activities will amount to no more than 3 percent of the individuals of the impacted population;
- Estimated extent of habitat disturbance amounts to no more than 3 percent of the estimated acreage of occupied habitat for the impacted population;
- Formal consultation shall be reinitiated if chronic and cumulative habitat loss and disturbance adversely affects a population that does not qualify as a waif or an incidental, biologically marginal occurrence by virtue of its presence on chronically disturbed habitat or small population size (less than 50 individuals);
- Herbicide use will not be permitted within 300 feet of listed plant populations identified during pre-project surveys.

Kern Mallow

The BLM and the USFWS may delineate a Kern Mallow Specialty Preserve, where special measures to conserve Kern mallow will be required. Delineation will include mapping the current distribution of Kern mallow, particularly the outer boundaries of core and satellite populations. Special measures may include:

- Completely avoiding areas occupied by Kern mallow;

- Conducting all surface-disturbing work after seed set and before germination, regardless of the presence or absence of Kern mallow;
- Compensating impacts with lands inside the specialty preserve;
- Stockpiling topsoil and replacing after project completion; and
- Using modified compensation ratios.

Bakersfield Cactus

Bakersfield cactus populations or individuals will be avoided by a 50-foot buffer in all areas where they are located.

San Joaquin Antelope Squirrel

To the maximum extent practicable, the measures described above for blunt-nosed leopard lizards will be applied to San Joaquin antelope squirrel in the project area and along the access/egress route.

In areas where antelope squirrels are suspected to occur and when temperatures are suitable for antelope squirrel activity, all personnel will be advised to check below parked vehicles and equipment before moving such vehicles or equipment. Caution will be taken when driving through areas where antelope squirrels may occur.

The applicant should refer to CDFW and CDFW-approved San Joaquin antelope squirrel take avoidance measures to minimize or eliminate the likelihood “take” of San Joaquin antelope squirrel in order to comply with the California Endangered Species Act.

California Condor Best Management Practices for Oil and Gas Operations

The following measures have been developed by BLM and USFWS and applied to past oil and gas projects near condor roosting and nesting areas.

- Drilling and well completion activities may be restricted to certain time periods to reduce impacts to condors. For example, activities near the Bitter Creek National Wildlife Refuge may be restricted to the period between mid-October and early May when condors make less use of the general area. Alternately, activities near the Hopper Mountain Wildlife Refuge may be restricted to the period between March 1 and September 30, to avoid the period when chicks would be fledging. The specific dates may be modified to reflect actual conditions for a given year. the general time periods may be modified should the USFWS recommend a different time period.
- Operators will designate a representative (Designated Representative) who will be responsible for overseeing compliance with the California Condor Protection Measures. The operator will provide BLM with the name, phone number and email of the Designated Representative. The operator will promptly notify BLM of any changes to the Designated Representative.

- Prior to conducting work on-site, employees and contractors shall be made aware of the protected species, and how to avoid and minimize impacts to them. Special emphasis will be placed on keeping the well pad site free of “microtrash” and other hazards.
- Direct contact with California condors shall be avoided.
- All work areas shall be kept free of trash and debris. Particular attention shall be paid to “microtrash.” All construction debris and trash (including such small items as screws, nuts, washers, nails, coins, rags, small electrical components, small pieces of plastic, glass or wire, and any debris or trash that is colorful or shiny) shall be covered, kept in closed containers, or otherwise removed from the project site at the end of each day or prior to periods when workers are not present at the site.
- All food items and associated trash shall be placed in covered containers. This would include small bits of trash and debris, such as soda can pull tabs, electrical connectors, broken glass, and pieces of rubber, plastic and metal.
- All equipment and work-related materials (including loose-wires, open containers or other supplies or materials) shall be contained in closed containers either in the work area or placed inside vehicles. Loose items (e.g., rags, hose, etc.) shall be stored within closed containers or enclosed in vehicles.
- All hoses or cords that must be placed on the ground due to drilling operations that are outside of the primary work area (immediate vicinity of the drilling rig) shall be covered to prevent California condor access. Covering may take the form of burying or covering with heavy mats, planks, or grating that would preclude access by California condors.
- All liquids shall be in closed, covered containers. Any spills of hydrocarbon/hazardous liquids shall not be left unattended until clean-up has been completed. No open drilling mud, water, oil or other liquid storage or retention structures will be allowed. All such structures will be required to have some sort of netting or other covering that precludes entry or other use by condors or other listed avian species.
- Where practical, ethylene glycol based anti-freeze or other ethylene glycol based liquid substances will be avoided, and propylene glycol based antifreeze will be encouraged. Equipment or vehicles that use ethylene glycol based anti-freeze or other ethylene glycol based liquid substances shall be inspected daily for leaks. While at the site, areas below vehicles and equipment using ethylene glycol based substances will be checked for leaks and puddles. Standing fluid (i.e., a puddle of anti-freeze) shall be remediated (e.g., cleaned-up, absorbed, or covered) without unnecessary delay. Vehicles using ethylene glycol based substances will be inspected before and after field use for obvious leaks and puddles. Leaks will be repaired before the vehicle is allowed back into the general area. No changing of antifreeze of any type will be allowed within the oil and gas development area.
- A not-to-exceed 20 mile-per-hour speed limit shall be implemented and enforced during all activities.
- All construction equipment, staging areas, materials, and personnel shall be restricted to disturbed areas that are not habitat for listed species.

- To prevent injury to wildlife, habitat degradation, erosion, and fires, driving off of disturbed areas without a pre-activity survey and implementation of appropriate measures is prohibited, except in the case of an emergency.
- Firearms and pets are prohibited.
- No feeding of wildlife shall be permitted.
- The potential for human-caused wildfires should be minimized by use of shields, mats, or other fire-prevention methods when grinding or welding. Fire watch, including water, extinguishers, and shovels shall be available for fire suppression.
- Approval from the FWS will be obtained prior to 1) the use of any aircraft in the drilling, operation or monitoring of the wells, and 2) flaring of natural gas or other flammable gases or substances at the project site.
- Any use (perching, landing) of a well site and its associated facilities by California condors shall be recorded and reported to the operator's Designated Representative and BLM.
- Any take (harm, harassment, injury, killing, etc., or any attempt to engage in these activities) shall be reported to the operator's Designated Representative. The Designated Representative shall immediately notify BLM and USFWS as appropriate. The activity that caused the take to occur shall be ceased immediately.
- Should a well prove productive, the following additional measures will be implemented:
 - Barriers (such as welded wire fabric or hardware cloth) will be installed around well cellars and on secondary containment pans to prevent condor access.
 - Stainless steel lines, rather than poly chemical lines will be used to preclude condors from obtaining and ingesting pieces of poly lines.
 - Landing deterrents, such as Daddi Long Legs or porcupine wire, will be attached to the walking beams on pumping units.
 - Should condors continue to make use of the ground near the proposed pad, perimeter fence will be installed to discourage condor access.
 - Information signs regarding micro-trash will be posted.
 - Power lines will not span canyons or be located on ridgelines. The distance between power lines will be sufficient to prevent electrocution of condors and other raptors. Bird deflectors will be installed.

Guadalupe Fur Seal Best Management Practices for Oil and Gas Operations

The following measures have been developed by BLM and NMFS to be applied to all oil and gas operations occurring in or near areas used by Guadalupe fur seals (i.e.: intertidal areas and haulouts). NMFS will be consulted on all projects occurring in or near areas of Guadalupe fur seals prior to project authorization.

- No ocean going vessels may be used, either along the shoreline or in intertidal areas, for onshore oil and gas operations (such as drilling, producing, and well abandonment). Ocean going vessels may be used for the transportation of equipment, personnel, and produced oil and gas using established ports and piers.

- Proposed project areas requiring new construction will be sited inland to the greatest extent practical, particularly in areas near potential or known haulouts.
- No new construction, where the nearest edge of disturbance is within 150-ft of a drainage, stream bed or bank, or riparian area that drains to known or potential haulouts.
- Containment berms will be constructed on the perimeter of all pad locations to ensure no materials or liquids (such as hydrocarbons or hazardous liquids) with the potential for contamination of streams, ocean, rookeries and/or haulouts (leaks, spills, contaminated rainwater, etc.) leave the pad location.
- Operators will designate a representative (Designated Representative) who will be responsible for overseeing compliance with the Pinniped Protection Measures. The operator will make provide BLM with the name, phone number, and email of the Designated Representative. The operator will promptly notify BLM of changes to the Designated Representative.
- Operators will create an environmental education program/pamphlet that shall be distributed to all project personnel entering the work area. The educational program will include illustrations, habitat (habitat illustrations; spawning beds), and what to do if the species is observed. This pamphlet must be approved by BLM.
- Drilling, well completion, work-overs, and abandonment activities may be restricted to certain time periods to reduce impacts to pinnipeds (i.e.: vehicle & equipment traffic, vibrations/noise/light pollution due to drilling, spills, etc.). The specific dates may be modified to reflect a given year. In addition, the time periods may also be modified should NMFS recommend a different time period.
- An operations plan will be required outlining measures in place during all phases of operations (drilling, well completion, work-overs, maintenance, production, and abandonment activities) in areas near known haulouts. This plan will specifically outline measures to reduce noise and nighttime light pollution.
- A spill revention plan must be submitted to BLM prior to project approval for new wells, well completion or work-overs, installation of new facilities (buildings, tanks, pipelines, production equipment, etc.), routine maintenance activities and well abandonments. The prevention plan must identify a Spill Response Team, comprised of state and federal emergency response agencies and provides contact numbers for each representative or representative agency. An Incident Commander will be identified and designated promptly after spill notification. The Incident Commander must be a representative of a state or federal agency. The Designated Representative will promptly notify BLM of changes to the Spill Response Team.
- All liquids shall be in closed, covered containers. Any spills of hydrocarbons/hazardous liquids shall not be left unattended until clean-up has been completed. No earthen sumps or pits will be allowed for drilling, completion, workover, or abandonment activities. No open drilling mud, water, oil, or other liquid storage or retention structures will be allowed. Secondary containment will be required around all liquid storage containers and have a plastic membrane/liner to prevent leaking from leaving the secondary containment.

Black Abalone Best Management Practices for Oil and Gas Operations

The following measures have been developed by BLM and NMFS to be applied to all oil and gas operations occurring on San Nicholas Island or along the California coastline where offshore

vessels would be required. NMFS will be consulted on all projects occurring on San Nicholas Island and along the California coastline in areas of known or potential black abalone habitat prior to project authorization.

- Proposed project areas requiring new construction will be sited inland to the greatest extent practical, particularly in areas near black abalone habitat.
- In areas of known or potential black abalone habitat a monitoring plan will be developed in coordination with NMFS. The monitoring plan will include provisions for pre-project, as-needed, and post-project monitoring to be completed.
- Transportation of supplies related to drilling, well completion, work-overs, and abandonment activities will be restricted to the use of existing piers and ports.
- All vessel traffic and equipment would be required to avoid intertidal areas along the California coast line as well as that of San Nicholas Island.
- No vessels are permitted to dump ballast water while in port. To prevent the spread of invasive species, all dumping and/or exchange of ballast water shall occur in open ocean.
- Containment berms will be constructed on the perimeter of all pad locations to ensure no materials or liquids (such as hydrocarbons or hazardous liquids) with the potential for contamination of streams, ocean, and intertidal areas (leaks, spills, contaminated rainwater, etc.), leave the pad location.
- A spill prevention plan must be submitted to BLM prior to project approval for new wells, well completion or work-overs, installation of new facilities (buildings, tanks, pipelines, production equipment, etc.), routine maintenance activities and well abandonments. The prevention plan must identify a Spill Response Team, comprised of state and federal emergency response agencies and provides contact numbers for each representative or representative agency. An Incident Commander will be identified and designated promptly after spill notification. The Incident Commander must be a representative of a state or federal agency. The Designated Representative will promptly notify BLM of changes to the Spill Response Team.

Blue Whale, Fin Whale, and Humpback Whale Best Management Practices for Oil and Gas Operations

The following measures have been developed by the BLM and NMFS to be applied to all oil and gas operations occurring on San Nicholas Island or along the California coastline. NMFS will be consulted on all projects occurring on San Nicholas Island and along the California coastline where off-shore vessels would be required.

- Vessels shall use caution and consider reducing speeds when whales are sighted in an area, as well as adhere to the National Marine Fisheries Service Whalewatching Guidelines.
 - Vessels should always attempt to stay at least 100 yards away from a whale
 - If vessels cannot avoid a whale or whales by 100 yards, they should not:
 - Move into the path of a whale;
 - Move faster than a whale (operate at no wake speed)
 - Make rapid speed or erratic directional changes UNLESS to avoid collision with a whale
 - Get between two whales, particularly a cow and her calf
 - Vessels should do nothing that causes a whale to change directions.

- Aircraft should not fly lower than 1,000 feet while within a horizontal distance of 100 yards from a whale.
- Marine mammal observers are required to be posted on all vessels. All whale sightings will be documented and a report summarizing sightings submitted BLM and to NOAA by emailing: whales@NOAA.gov. All reports must be submitted with-in 60-days of project completion. Any projects lasting longer than 1 year will require an annual report.
- The operator will provide education and outreach to ship personnel specifically addressing the threat of ship strikes to whales. Any whales struck by the ship will be immediately reported to BLM and NOAA.
 - If possible, any pictures or videos of the whale shall be submitted to NOAA.
 - If possible, a sample of sloughed skin floating in nearby waters should be collected and sent to NOAA.
- Prior to project approval the operator (their contractors) will provide BLM an overlay of their proposed routes with whale sightings, and plot alternative routes where vessels could expect to encounter fewer whales. Vessels may be required to re-route to reduce the co-occurrence of ships and whales to reduce the risk of strikes.
 - The shipping industry provides NOAA with maps of whale distributions during times of high use. The operator shall work with BLM and NOAA to receive weekly plots.
- While vessel lighting is required for navigational and aeronautical safety, all deck lighting may be down-shielded to illuminate the deck, and not intentionally illuminating the surrounding water.
- A spill response plan must be submitted to BLM prior to project approval. The plan will identify a Spill Response Team, comprised of state and federal emergency response agencies and provides contact numbers for each representative or representative agency.

Steelhead Best Management Practices for Oil and Gas Operations

The following measures have been developed by BLM and NMFS to be applied to all oil and gas operations occurring in or near areas used by steelhead or containing their critical habitat. NMFS will be consulted on all projects occurring in or near steelhead critical habitat prior to project authorization.

- Operators will designate a third party biological monitor who will be responsible for overseeing compliance with the Steelhead Protection Measures. The operator will provide BLM with the name, phone number, email, and resume of the third party salmonid biological monitor for BLM approval. The biologist must be knowledgeable on salmonid life history and ecology, and have experience monitoring impacts to salmonids. The operator will promptly notify BLM of changes to the third party biological monitor.
- The third party biologist is responsible for providing a pre-project environmental education training to all personnel working in the project area focusing on steelhead and their critical habitat. The biological monitor will be onsite during the construction process and available throughout the entire project.
 - The pre-project education training will include a pamphlet that shall be distributed to all project personnel entering the work area. The educational program will be site specific and include steelhead illustrations, habitat (habitat illustrations; spawning beds), extent of critical habitat, and what to do if the species is observed. This pamphlet must be approved by BLM.

- Drilling, well completion, work-overs, and abandonment activities may be restricted to certain time periods to reduce impacts to steelhead (i.e.: vehicle & equipment traffic, vibrations/noise/light pollution due to drilling, spills, etc.). Drilling and well completion work will be restricted to the period from between June 1st to November 30th. The specific dates restricting construction activities may be modified to reflect a given year (i.e.: wet years with higher flows later in the season). In addition, the time periods may also be modified should NMFS recommend a different time period.
- A spill prevention plan must be submitted to BLM prior to project approval for new wells, well completion or work-overs, installation of new facilities (buildings, tanks, pipelines, production equipment, etc.), routine maintenance activities and well abandonments. The prevention plan must identify a Spill Response Team, comprised of state and federal emergency response agencies and provides contact numbers for each representative or representative agency.
 - The Incident Commander will be identified and designated promptly after spill notification. The Incident Commander is responsible for coordinating with all federal, state, and local agencies throughout the spill clean-up.
 - The Incident Commander must be a representative of a state or federal agency. The Designated Representative will promptly notify BLM of changes to the Spill Response Team.
 - The spill prevention plan must also identify spill response materials, locations of materials, containment protocols, and containment/clean-up strategy.
- In the unlikely event of an oil spill within 500-ft of steelhead critical habitat BLM must be notified immediately. Any spill with potential to enter a stream within steelhead CH shall require immediate response from the spill response team.
- All liquids shall be in closed, covered containers. Any spills of hydrocarbons/hazardous liquids shall not be left unattended until clean-up has been completed. No earthen sumps or pits will be allowed for drilling, completion, workover, or abandonment activities. No open drilling mud, water, oil, or other liquid storage (such as acids, KCL solution, or other chemical solutions for well drilling and completions activities) or retention structures will be allowed. Secondary containment will be required around all liquid storage containers and have a plastic membrane/liner to prevent leaks from leaving the secondary containment.
- For projects that require earthen stream crossings for site access, all stream crossings must be identified and an estimate of use (types of vehicles, number of trips, etc.) during the lifetime of the entire project prior to project approval. Prior to start of any drilling or well-completion projects where site access has earthen stream crossing with water present, the third party salmonid biologist is required to survey for the presence of active redds or juvenile salmonids. No work may proceed if active redds or juvenile salmonids are observed.
- Temporary structures (steel plates, concrete bridges, wooden platforms, etc.) may be required to span stream crossings in areas to protect waterways with steelhead presence and/or spawning gravels were practical. These temporary structures would allow vehicles and equipment to cross streams without impacts to salmonid CH.
- No new construction where the nearest edge of disturbance is below the 100 year flood line within steelhead critical habitat.
- Existing pad locations within steelhead critical habitat may be used as long as certain criteria are met

- The surface of the pad location is above the 100 year flood line, and
- Any portions of the pad below the 100 year flood line have established vegetation on both cut and fill slopes, and no apparent signs of erosion.
- Containment berms will be constructed on the perimeter of all new pad locations and new authorizations to ensure no materials or liquids (such as hydrocarbons or hazardous liquids) with the potential for contamination of streams (leaks, spills, contaminated rainwater, etc.) leave the pad location and enter steelhead critical habitat or a tributary with potential to enter steelhead critical habitat.
- Work areas will be kept free of trash and debris. All chemicals, spoils, equipment, and wastes will be removed from the well pad at the completion of drilling, workover, and maintenance operations and prior to November 30th.
- Any structures, chemicals, and materials with potential to discharge pollutants if the facility were inundated will not be allowed to remain on the pad location during periods of potential high flows, during the salmonid spawning run and juvenile out-migration (December 1st thru May 31st), or during unseasonably high flows.
- All new pipelines needing to cross streams within steelhead critical habitat will be suspended above the 100 year flood line.
- Spoils remaining after the completion of the well pad shall not be stored below the 100 year flood level and in a location where spoils cannot be washed into a stream, where it could cover aquatic vegetation or spawning areas.
- No materials shall be stored in seasonally dry portions of streams that could be washed downstream.
- A not-to-exceed speed limit of 20 mile-per-hour speed limit shall be implemented and enforced for all roads. A not-to-exceed speed limit of 5 mile-per-hour will be implemented and enforced for all earthen stream crossings to reduce the potential for increased sedimentation.
- All construction equipment, staging areas, materials, and personnel shall be restricted to disturbed areas, and no storage shall occur in drainages and stream channels.
- To prevent injury to wildlife, habitat degradation, erosion, and fires, driving off of disturbed areas without a pre-activity survey and implementation of appropriate measures is prohibited, except in the case of an emergency. In addition, no driving in stream channels is authorized except at existing approved road crossings.
- The potential for human-caused wildfires should be minimized to the greatest extent practicable by using shields, mats, or other fire prevention methods when grinding or welding. Fire watch including: water, extinguishers, and shovels shall be available for fire suppression.
- Firearms and pets are prohibited.
- No feeding of wildlife shall be permitted.

Project Monitoring

Each project will have a field contact representative (FCR), who will be responsible for overseeing compliance with protective stipulations for listed species. The FCR may be a project manager, project representative, BLM employee, or contract biologist. The FCR will have the authority to halt all actions that are in violation of the stipulations. The FCR will have a copy of all appropriate stipulations when surface-disturbing actions are being conducted on the site. The BLM and USFWS will be notified of the

name and telephone number of the FCR prior to project construction. The NMFS will also be notified when projects involve NMFS species or habitats.

Biological monitoring will be accomplished by a USFWS-qualified biologist. Black abalone surveys and monitoring will be accomplished by a NMFS-qualified biologist. The biologist will be responsible for field crews to be in compliance with protection measures, performing surveys in front of crews as needed to locate and avoid sensitive species and habitat features, and monitoring project mitigation compliance. The biological monitor will have the authority to halt all non-emergency actions should danger to a listed species arise. Work will proceed only after hazards to the listed species are removed, the individual(s) is no longer at risk, or the individual(s) has been removed by the biologist.

The BLM will be provided with the name, phone number, and e-mail of the field biological monitor prior to construction. If not already on file at the Bakersfield FO, a copy of the field biological monitor's resume or curriculum vitae will be submitted to the BLM prior to the commencement of construction.

Biological monitors will be required to be on-site during initial surface-disturbing actions to minimize direct take of listed species. Subsequent to initial surface disturbing activities, biological monitors are not required to be present but must be available within 24-hour notice from the applicant, the BLM, or the USFWS in order to troubleshoot potential take situations.

Biological monitors will be required to be on-site during placement of sleepers and pipe to minimize direct take of listed species.

At the BLM's/USFWS's discretion, on-site biological monitors may not be required if exclusion zones or surface disturbance areas are prominently marked with lath, flagging, or fencing, as necessary.

Biological monitors are required for kit fox den excavations.

In previously unsurveyed areas, biological monitors are required for routing cross-country travel to minimize impacts on habitat features.

Biological monitors may be required, if, on project inspection by the BLM or USFWS, noncompliance of project stipulations are observed and documented.

All reports must:

- Be signed and submitted by the biological monitor conducting work in the field, OR
- Be reviewed and signed by the biological monitor conducting work in the field, OR
- Include, as an attachment, the original report prepared and signed by the field biological monitor.

An e-mail report originating from the field biological monitor may be accepted as a signature.

Within 60 days of completion of construction, a brief post-construction compliance report will be provided to the BLM that addresses:

- Any revisions to habitat disturbance estimates;
- Any observed impacts on listed species, including take;

- A brief description of significant actions taken to comply with the provisions listed above;
- An overall evaluation of compliance with the provisions and any suggestions for changes to the provisions;
- Any information required due to the sighting of an additional species, such as a blunt-nosed leopard lizard.

Compensation

The compensation ratio for San Joaquin Valley species will be 3:1 for permanent impacts and 1.1:1 for temporary impacts except as follows:

- The compensation ratio for Kern mallow will be 9:1 for permanent impacts and 6:1 for temporary impacts on known populations.
- Within the western Kern County kit fox core area the compensation ratio will be 4:1 for permanent impacts.
- The compensation ratio for vernal pool habitat will be 5:1 with a replacement element.

If a new compensation ratio becomes established for a county or species, the BLM and USFWS may decide to modify compensation ratios.

For protected lands (such as federal lands, state wildlife areas, conservation banks, Lokern area) a replacement component will be added to the compensation ratio.

Compensation of habitat must be in kind. Land used for compensation must be of equal value or better than the land impacted. The same species must be present and habitat must be of an equal or greater value. Lands used for compensation for project impacts on Kern mallow, San Joaquin woolly-threads, blunt-nosed leopard lizards, and the kangaroo rats must support these species or be approved by the USFWS for these species. Lands used to compensate for impacts on a kit fox natal den must support breeding populations of kit foxes.

If compensation is required for a project involving federal land or mineral estate, ownership of compensation lands will be transferred prior to any surface disturbance to one of the following: the BLM; an entity acceptable to the BLM, USFWS, and CDFW that can effectively manage listed species and their habitats; the CDFW; or the USFWS for dedication to listed species habitat management. The USFWS will be informed before the actual transfer when land is transferred.

Areas preapproved to serve as compensation areas are the Lokern Road area, Buena Vista Valley, Semitropic Ridge, Allensworth, Kettleman Hills, Kern Water Bank, Carrizo Plain Natural area, or any Specialty Preserve agreed to by the BLM and the USFWS. Habitat linkage areas and small specialty preserves determined by the BLM, CDFW, and USFWS to be important for species conservation and to promote recovery of species will be acceptable as compensation habitat.

As an alternative to the above standard compensation method, applicants may provide a letter agreeing to dedicate existing mitigation credits or purchase additional mitigation credits at a USFWS-approved mitigation bank to compensate for any impacts.

The final compensation acreage will be adjusted on completion of construction, based on the actual amount of acreage temporarily and permanently disturbed.

The applicant may propose to conduct construction in a manner that results in no surface disturbance. The biological monitor will document surface conditions before and after construction to verify the lack of disturbance. The biological monitor will take before and after photographs of the construction corridor every 1,000 feet or as necessary to document the lack of disturbance. The same photo point locations and directions will be used for the before and after photos. GPS coordinates for each photo point will be provided to the BLM.

The USFWS, NMFS and CDFW protocols will be employed to conduct special status species surveys.

6.3.4.5 Control of Non-native Species

- Projects and activities on BLM lands will include measures to minimize the introduction and spread of weeds.
- Weed control methods will follow integrated pest management principles.
- Use of pesticides shall comply with applicable federal and state laws. BLM policy requires project-specific NEPA analysis and the issuance of a pesticide use permit before the use of pesticides. Only products on the California BLM's list of approved pesticides may be used.
- The release of nonnative animal species will be prohibited, other than those legally introduced for biological control, or those released during legal hunts as regulated by CDFW.

6.3.5 Soils

- Minimize soil disturbance by limiting developments to the smallest area possible and by using previously disturbed areas and existing roads to the extent practicable.
- Minimize surface disturbance and design disturbed areas on steep slopes to prevent surface water from concentrating to reduce erosion and sedimentation.
- Restrict access and suspend authorized projects during wet weather when soil resources will be detrimentally affected by rutting, compaction, and increased erosion.
- Minimize fire control lines, both handline and dozerline, to the width necessary to effectively stop fire spread. Rehabilitate lines by smoothing out berms and installing waterbars prior to the rainy season.
- Assess the need for soil stabilization following wildfires. Use the Emergency Stabilization and Rehabilitation process to determine and implement needed actions.
- Follow guidelines for site reclamation in the Oil and Gas BMP section to protect soils, including topsoil conservation, scarifying or disking soil, recontouring the area, redistributing topsoil and providing ground cover through seeding or other methods.
- Actively patrol public lands to prevent unauthorized off-road travel. If unauthorized routes are found, block access to minimize further soil disturbance and reduce the potential for erosion through rehabilitation action.

6.3.5.2 *Additional Information on BMPs for Soils*

- Erosion and sediment control: <http://www.cabmphandbooks.org>
- OHV BMP Manual for erosion and sediment control:
<http://www.watchyourdirt.com/erosion-control-files/>

6.3.6 Water Resources

California's Non-Point Source (NPS) Program Plan (adopted by SWRCB in December 1999) identifies 61 Management Measures (MMs) which constitute the State's BMPs for controlling NPS pollution. MMs applicable to BLM program and management actions include, but are not limited to, those that pertain to livestock grazing management, chemical management (pesticide and herbicide use), road construction and management, erosion and sediment control, hydro-modification, wetlands, and riparian areas. The BLM demonstrates compliance with the Clean Water Act and state water quality objectives by implementing BMPs that are consistent with the State's MMs. A suite of BMPs have been developed by various agencies, including the BLM, to address non-point source pollution on federal lands. These include, but are not limited to: those found in various RAC-approved rangeland health standards, BLM developed BMPs for renewable energy development, BMPs identified in the "Gold Book" for oil and gas development, and BMPs developed by the Forest Service Region 5 for various land management activities and authorized activities for lands in California. BLM activities authorized under this RMP will implement those most applicable for the local situation.

6.3.6.1 Water Resources Protection

- Employ erosion and sediment control measures during watershed restoration activities to reduce or eliminate erosion and sediment transport or incidental sediment discharge.
- Erosion control measures include mulching, placement of hay bales and other drainage control features, construction of rolling dips, and seasonal limits on operations.
- Protect the existing water quality improvement functions of wetlands and riparian areas as a component of NPS programs. Damaged wetlands or riparian areas should be restored where restoration of such systems will abate polluted runoff.
- Protect sensitive areas (including streambanks, lakes, wetlands, estuaries, and riparian zones) by reducing direct loadings of animal wastes and sediment. This may include restricting or rotationally grazing livestock in sensitive areas by providing fencing, livestock stream crossings, and by locating salt, shade, and alternative drinking sources away from sensitive areas.
- Take measures to prevent the diffuse or point discharge of potential water pollutants onto the ground surface.
- Upland erosion can be reduced by, among other methods: (1) maintaining the land consistent with the California Rangeland Water Quality Management Plan or Bureau of Land Management and Forest Service activity plans or (2) applying the range and pasture components of a Resource Management System (NRCS FOTG). This may include prescribed grazing, seeding, gully erosion control, such as grade stabilization structures and ponds, and other critical area treatment.
- Road construction/reconstruction shall be conducted so as to reduce sediment generation and delivery. This can be accomplished by, among other means, following designs for road systems, incorporating adequate drainage structures, properly installing stream crossings, avoiding road construction in streamside management areas, removing debris from streams, and stabilizing areas of disturbed soil such as road fills.

- Manage roads to prevent sedimentation, minimize erosion, maintain stability, and reduce the risk that drainage structures and stream crossings will fail or become less effective. Components of this measure include inspections and maintenance actions to prevent erosion of road surfaces and to ensure the effectiveness of stream-crossing structures. This measure also addresses appropriate methods for closing roads that are no longer in use.
- Confine runoff onsite to reduce impacts of mechanical site preparation and revegetation operations—particularly in areas that have steep slopes or highly erodible soils, or where the site is located in close proximity to a water body.
- Conduct prescribed fire practices for site preparation and methods to suppress wildfires in a manner that limits loss of soil organic matter and litter and that reduces the potential for runoff and erosion.
- Addresses the rapid revegetation of areas disturbed during road construction—particularly road systems where mineral soil is exposed or agitated (e.g., road cuts, fill slopes, landing surfaces, etc.).
- Do not apply chemicals within 100 feet of perennial streams or channels with beneficial use(s) recognized by the state.
- Do not apply chemicals directly into intermittent streams or channels with beneficial use(s) recognized by the state.
- Avoid aerial application of chemicals when wind speeds would cause drift.
- Avoid aerial application of wildland fire chemicals within 300 feet of waterways and any ground application of wildland fire chemicals into waterways.
- To minimize water quality degradation and maintain soil productivity while achieving rapid and safe suppression of wildfire, limit use of heavy equipment near streams and on steep slopes when possible. Where fire trail entry into a riparian area is essential, angle the approach rather than have it perpendicular to the stream.
- Construction activities that disturb one or more acres of soil or less than one acre but are part of a larger common plan of development or sale having the potential to disturb one or more acres (includes clearing, grading, and ground disturbances such as stockpiling or excavation) are required to obtain coverage under the General Permit for Discharges of Stormwater Associated with Construction Activity (Construction General Permit, Order 2009-0009-DWQ) and manage construction in accordance with permit requirements.

6.3.6.2 Mineral Exploration and Development

- Require that operators obtain all required state and federal permits for the protection of groundwater and surface water quality. Additional measures to protect water resources that may be included as Conditions of Approval (COAs) are described in Section 3.8.2 below. COAs specifically designed to protect groundwater include zone isolation, general casing depth and cement requirements, pressure testing, casing integrity testing, fluid surveys, and/or wellhead monitoring.
- Design roads, well pads, and facilities for exploratory wells to impact and fragment the least acreage practicable. New facilities shall be designed to maintain natural drainage and runoff

patterns. Noncommercial wells shall be restored as soon as appropriate using BLM restoration methods.

- Prevent and repair soils subject to water erosion.
- Timely plugging and abandonment of depleted wells will be required. This includes plugging the well bore with cement, removing all materials and equipment, and recontouring/revegetation as specified in the conditions of approval.
- Sufficiently impervious secondary containment, such as containment dikes, containment walls, and drip pans, should be constructed and maintained around all qualifying petroleum facilities, including tank batteries and separation and treating areas consistent with the Environmental Protection Agency's Spill Prevention, Control, and Countermeasure regulation (40 CFR 112).
- The appropriate containment and/or diversionary structure would be sufficiently impervious to oil, glycol, produced water, or other fluid and would be installed so that any spill or leakage would not drain, infiltrate, or otherwise escape to the ground, surface, or navigable waters before clean-up is completed.
- Proper containment of oil and produced water in tanks, drilling fluids in reserve pits, and locating staging areas away from drainages would prevent potential contaminants from entering surface waters.
- Chemical containers should not be stored on bare ground or exposed to the sun and moisture. Labels must be readable. Chemical containers should be maintained in good condition and placed within secondary containment in case of a spill or high velocity puncture. All secondary containment must be designed to preclude entry from wildlife and livestock.
- Set and cement surface casings to sufficient depths to protect water bearing zones outside of the production zone(s).
- Consider the use of a closed loop drilling system. In the absence of a closed loop system, tanks and pits must be designed to preclude the entry of wildlife and livestock.
- Produced water from oil and gas operations would be disposed of in accordance with the requirements of Onshore Oil and Gas Order #7.

6.3.6.3 Additional Information on BMPs for Water Resources

- BLM Water Quality Law Summary: <http://www.blm.gov/nstc/WaterLaws/Chap5.html>
- Example BMPs from Pinedale, WY BLM Field Office:

http://www.blm.gov/wy/st/en/programs/Planning/rmps/pinedale/feis_prmp.html
- Proposed Grazing Management Practices for Water Quality in California, from Rangeland Health Standards and Guidelines for California and Northwestern Nevada Final EIS:
http://www.blm.gov/style/medialib//blm/ca/pdf/pa/rangeland_management/final_rangeland_health.Par.537ebc11.File.pdf/APPENDIX_10.pdf
- Policy for Aerial Delivery of Wildland Fire Chemicals near Waterways:
http://www.fs.fed.us/rm/fire/wfcs/Application_Policy-MultiAgency_042209-UPDATE.pdf.

- USDA Forest Service Water Quality Management BMPs:
http://www.fs.fed.us/r5/publications/water_resources/waterquality/water-best-mgmt.pdf
- http://www.waterboards.ca.gov/water_issues/programs/stormwater/bmp_database.shtml
- http://www.waterboards.ca.gov/water_issues/programs/nps/cammpr.shtml
- <http://www.cabmphandbooks.com/>

6.3.7 Cultural Resources

- Prior to the implementation of all proposed actions, cultural resource compliance with the National Historic Preservation Act, Section 106 and 110, will be coordinated pursuant to the current and any subsequent versions, supplemental procedures and amendments of the *National Programmatic Agreement Among the Bureau of Land Management, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers Regarding the Manner in Which the BLM Will Meet its Responsibilities Under the National Historic Preservation Act* and the *State Protocol Agreement Among the California State Director of the Bureau of Land Management and the California State Historic Preservation Officer and the Nevada Historic Preservation Officer Regarding the Manner in Which the Bureau of Land Management Will Meet its Responsibilities Under the National Historic Preservation Act and the National Programmatic Agreement Among the Bureau of Land Management, the Advisory Council on Historic Preservation, and the National Conference of State Historic Preservation Officers*. Should either of these agreements be terminated, the BLM would comply with requirements under Sections 106 and 110 of the National Historic Preservation Act (NHPA) through the implementation of procedures put forth in 36 CFR 800.
- Archaeologists, law enforcement rangers, resource staff specialists, Native Americans, or designated volunteer stewards will patrol and monitor selected significant cultural resources on public lands in the Bakersfield FO to reduce threats from human and natural disturbances.
- The BLM will coordinate with Native Americans, cultural resource specialists, interdisciplinary specialists, conservationists, and interested public, as appropriate, to apply the best available science to determine the amount and type of maintenance desired at cultural sites that are threatened by human or natural causes and how best to mitigate identified problems.
- The Bakersfield FO will continue to support access by the Native Americans to traditional material collecting and gathering locations and ceremonial places. It is a federal policy to protect and preserve for the American Indian, the inherent right of freedom to believe, express, and exercise their traditional religions, including access to religious sites, use and possession of sacred objects, and freedom to worship through ceremonies and traditional rites (American Indian Religious Freedom Act of 1978). Executive Order 13007, Indian Sacred Sites (1996), directs federal agencies to manage federal lands in a manner that accommodates Indian religious practitioners' access to and ceremonial use of Indian sacred sites and that avoids adversely affecting the physical integrity of such sacred sites, to the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions.
- Continue open dialogue and share information with Native Americans and ethnic groups that have cultural ties to lands managed by the Bakersfield FO.

- Conduct cultural resource inventory and evaluations for all projects that require soil disturbance or cause a visual intrusion on a historic property. The presence or absence of cultural properties would be determined prior to the approval of any surface-disturbing activity. When cultural properties are present, the project would be redesigned or modified to safely avoid impacting cultural sites or steps would be taken to adequately mitigate impacts through project redesign or data recovery.
- Soil erosion can severely impact surface and subsurface cultural resource integrity. Potential secondary impacts on cultural resources caused by erosion would be analyzed during project planning. Residual impacts on cultural resources outside the project area would be carefully considered in surface-disturbing projects.
- Identification, safe avoidance, or mitigation of potential adverse effect on cultural properties shall be required as a condition of a lease, permit, license, and other federal undertakings for both external and internal projects.
- Any late discovery of a cultural or paleontological resource during a project would be reported to the authorized officer. All activity in the immediate discovery area associated with the project would be suspended until an evaluation of the discovery is made by the archaeologist to determine appropriate actions to prevent the loss of significant cultural, paleontological, or scientific values. A written authorization to resume the project, or to take appropriate mitigation action, would be issued by the authorized officer.
- Sensitive cultural resource records, site location information, and traditional cultural properties and values would be held confidential from the public as deemed appropriate to protect historic properties (NHPA, Section 304 [a], Archaeological Resource Protection Act [ARPA], Section 9[a]).
- It is the policy of the BLM to 1) avoid impacts on significant cultural resources and traditional properties and values whenever possible; 2) to retain a representative example of the full array of cultural resource site types; and 3) to avoid inadvertent loss or destruction of cultural and paleontological resources by BLM actions or authorizations.
- Additional archaeological surveys would be required in the event a proposed project or its location were changed or modified after the initial survey is completed. This survey, associated documentation, and necessary compliance would be completed prior to project approval.
- Apply necessary measures to protect and preserve National Register-eligible historic and prehistoric resources by sustaining integrity, physical form, and materials associated with cultural resources. This could include installation of protective barriers, fences, or site capping; using regulatory and informational signs, kiosks, and brochures; limiting visitor access to sensitive sites; taking preventive measures to reduce erosion and other natural disturbances to sites, conducting data recovery to preserve a site's informational potential; providing visitor educational and awareness information by various means, such as interpretive exhibits, workshops, and tours; patrolling and monitoring the condition of historic properties; and identifying cultural resources through proactive field inventory, oral history, and archival records data compilation.
- Pursue identification and nomination of cultural properties to the NRHP.

6.3.8 Oil and Gas Standard Operating Procedures, Implementation Guidelines and Conditions of Approval

Leasing fluid mineral resources does not confer on the lessee the right to conduct any ground disturbing activities related to exploring for or developing the resources until a subsequent environmental analysis of the actual proposed operations for the site is conducted. There are various stages of fluid minerals resource development within a lease, such as exploration, development, production, and reclamation/closeout. These activities all require additional BLM authorization. All proposed drilling or production operations for fluid minerals production proposed to be conducted on an existing lease must be approved before surface disturbance is allowed. Surface disturbance is proposed in APDs, ROWs, and Sundry Notices. During BLM NEPA review of these applications, site specific appropriate mitigation/environmental protection measures are developed and approved prior to conducting ground disturbing activities.

This sequential approval process (leasing, operations plan approval, etc.) allows BLM to consider application of restrictions at the appropriate action level. Restrictions are formulated at the proper stage when site specific information is available. This ensures that restrictions are not applied prematurely to avoid “potential” effects that might unnecessarily identify areas as being off-limits to leasing.

The following SOPs and implementation guidelines will be employed on all existing federal leases and private mineral developments, subject to the limits of BLM authority and the right of the owners/lessees to have reasonable access and development.

6.3.8.1 Implementation Guidelines

- All oil field activities that occur on land where the BLM has an interest, whether mineral or surface estate, should be conducted with the least impact practicable to sensitive resources.
- Wells that are not commercially developed should be reclaimed to natural contours and revegetated as soon as appropriate; i.e., restoration methods should consider timing of planting, acceptable species and evaluation criteria, and should be tailored to area-specific resource conditions and be compatible with the monument proclamation.
- Applications for permit to drill (APDs), sundry notices (leasehold activities requiring surface disturbance), and final abandonment notices will be reviewed using the existing NEPA approval process.
- Timely plugging and abandonment of depleted wells will be required. This includes plugging the well bore with cement, removing all materials and equipment, and recontouring/revegetation as specified in the conditions of approval.
- Design roads, well pads, and facilities for exploratory wells to impact and fragment the least acreage practicable. New facilities shall be designed to maintain natural drainage and runoff patterns, reduce visual impacts, and reduce hazards to wildlife, especially California condors. Noncommercial wells shall be restored as soon as appropriate using BLM restoration methods.

- Good housekeeping requirements will be enforced (i.e., operators will be required to maintain a neat and orderly appearance of sites, remove junk and trash, and otherwise minimize landscape intrusions).
- Sufficiently impervious secondary containment, such as containment dikes, containment walls, and drip pans, should be constructed and maintained around all qualifying petroleum facilities, including tank batteries and separation and treating areas consistent with the Environmental Protection Agency's Spill Prevention, Control, and Countermeasure regulation (40 CFR 112).
- Chemical containers should not be stored on bare ground or exposed to the sun and moisture. Labels must be readable. Chemical containers should be maintained in good condition and placed within secondary containment in case of a spill or high velocity puncture. The secondary containment must preclude entry from wildlife.
- Pipelines should be placed within existing disturbed rights-of-way, such as road shoulders, whenever possible.
- Roads shall be designed to an appropriate standard no higher than necessary to accommodate their intended functions.
- New wells and roads should be located in areas where cut and fill shall be minimized to the extent practicable.
- Operators will be encouraged or required to place multiple wells on a single pad where feasible in order to minimize unnecessary disturbance.
- Operators shall be required to maintain clean well locations and to remove trash, junk, and other materials not in current use.

6.3.8.2 Conditions of Approval

Conditions of Approval (COAs) are site-specific requirements included in an approved Application for a Permit to Drill (APD) or Sundry Notice that may limit or amend the specific actions proposed by the operator. COAs minimize, mitigate, or prevent impacts to public lands or other resources. Best Management Practices may be incorporated as a COA.

The standard fluid minerals lease is used to provide an overall framework for regulation of operations. This framework is built upon by adding stipulations to the lease and, later if operations are proposed, by adding site appropriate COAs. These additional protection and mitigation measures are developed and applied during BLM's review and approval of individual APDs, rights-of-way, Sundry Notices, etc. The measures are developed and assessed in a site-specific NEPA document and are made conditions of approval of any subsequent operational approvals.

6.3.8.3 Bakersfield Field Office Specific SOPs and COAs

The BLM will inspect and monitor oil field activity in the following phases of oil and gas development:

- Geophysical/Seismic Operations;
- Drilling a New Well;
- Interim Reclamation of a Producing Well;

- Regular Production and Environmental Surface inspections;
- Temporary Abandonment of a Producing Well (idle well);
- Plugging and Abandonment of a Well;
- Surface Reclamation.

The following describes the SOPs and COAs applicable to each of the oil and gas development phases on existing federal oil and gas leases.

6.3.8.3.1 Geophysical Exploration

There are two primary methods of generating seismic data. The first involves a group of several large vehicles (vibroseis, or “thumper trucks”) traveling along specific paths both on and off-road throughout the study area, frequently stopping to place a metal pad in contact with the ground, and then vibrating the pad to send soundwaves down into the earth. The second involves placing a small explosive charge in a series of shallow holes a few inches in diameter. The explosives are detonated simultaneously, sending soundwaves into the ground. Regardless of which method is used (and sometimes a combination is used), the soundwaves reflect off of underground strata and return to the surface. At the surface, the signals are received by an array of very sensitive microphones that are laid on the surface in pre-designated areas. The electronic signals are processed by proprietary programs, and the resulting data can be interpreted by geophysicists, geologists, and engineers, providing an idea of where zones may be that could contain oil or gas. Historically, there were many 2-D seismic shoots, where only a single line of data is gathered. During the past few years, however, the trend is towards large scale 3-D seismic surveys. These surveys are comprised of a series of closely spaced lines in one direction, followed by another series of lines perpendicular to the first set. These large 3-D projects can involve thousands of miles of surveys.

Project Reconnaissance

A general reconnaissance of the project area will be conducted to describe the project area and to determine the extent of listed species presence and habitat. This information will be used to identify areas where listed species are likely to occur, land uses that preclude listed species use, topography that may preclude listed species use, habitat types that support listed species, and the extent of small mammal burrowing activity along source lines, receiver lines, travel routes, and staging areas. Reconnaissance surveys will be supplemented by conducting general field visits of the project area, obtaining aerial images of the project area, land ownership, slope and topographic features, general habitat or vegetation mapping, and land use maps using GIS, California Natural Diversity Data Base, and other information for the project area.

Avoidance Criteria

Source Points: Vibroseis, Shot Hole, and Staging Areas

Vibroseis and shothole drilling and vehicle staging avoidance criteria for off-road locations (minimum exclusion zone radius):

- 200 feet from occupied San Joaquin kit fox natal or pupping dens;
- 150 feet from known San Joaquin kit fox natal or pupping dens;
- 100 feet from occupied San Joaquin kit fox dens;

- 100 feet from known San Joaquin kit fox dens;
- 50 feet from potential San Joaquin kit fox dens;
- 50 feet from giant kangaroo rat burrow systems;
- 30 feet from potential or known San Joaquin antelope squirrel burrows;
- 30 feet from potential or known blunt-nosed leopard lizard burrows;
- 50 feet from badger dens;
- 50 feet from burrowing owl burrows;
- 50 feet from populations of listed plants; and
- Natural vernal pools and natural ponded waters will be avoided by 300 feet (Table 1 – above).

Travel Routes

- Where seismic lines cross natural areas, the survey corridor within which testing and ancillary vehicles operate shall be limited to a maximum width of 25 feet (12.5 feet on either side of the centerline).

Receiver Lines

- Receiver lines will be walked if necessary to avoid direct impacts on features such as dens or burrows, vernal pool areas, or listed plants.
- Where receiver lines are driven by ATVs/UTVs, avoidance buffers will be enforced.

Geodetic Surveys

Geodetic surveys of the source and receiver points in listed species habitat shall be completed in a manner to avoid impacts on listed species.

- Surveys may be conducted without biological monitors where all cross-country activities in listed species habitat will be conducted on foot, with ATVs/UTVs confined to existing roads and two-track trails.
- Where ATVs/UTVs are used traveling cross-country in potential listed species habitat, biological surveys to identify travel routes and avoidance zones shall be completed before, or concurrent with, conducting the geodetic surveys.
- ATVs/UTVs may be used outside of potential listed species habitat without biological surveys where speeds are not in excess of 10 miles per hour in cross-country travel. All habitat features (e.g., burrows, dens, listed plant populations) shall be avoided. If this is not possible, biological monitors shall accompany survey crews using ATVs/UTVs.
- If ATVs/UTVs are observed to collapse burrows, compact or disturb soil, uproot plants, or cause mortality to native shrub species, activities shall be conducted on foot.

Source Point Activities

Geophysical surveys of the source points and all associated travel in listed species habitats shall be completed in a manner to avoid impacts on listed species.

- Before commencement of seismic testing activities, an agency-approved biologist shall conduct pre-activity surveys of proposed vibrator, shot hole, source point travel paths, and staging areas in listed species habitats.
- Where seismic lines cross threatened or endangered species habitat, the survey corridor within which testing and ancillary vehicles operate shall be limited to a maximum width of 25 feet (12.5 feet on either side of the centerline). These activity zones shall be reduced, where possible, to avoid endangered species sites such as occupied kit fox dens or kangaroo rat burrows.
- All cross country vehicle travel will remain on the flagged routes and will avoid marked burrows.
- Small shot hole drilling vehicles, such as tractor-mounted drill rigs or ATV/UTV-pulled drill trailers, are suggested for use on conserved lands (CDFW, some BLM, CNLM, other lands with threatened and endangered conservation easements, HCP conservation management areas, etc.) and in likely blunt-nosed leopard lizard habitat.
- San Joaquin kit fox dens and giant kangaroo rat, San Joaquin antelope squirrel, and blunt-nosed leopard lizard burrows shall be flagged for avoidance. As necessary to protect these species, additional habitat features shall be identified and flagged for avoidance.
- Project effects will be monitored for species impacts as work progresses at source points, along travel routes, and at staging areas.
- Biological monitors will work with equipment operators to avoid burrows, dens, and features where biological surveys were conducted before seismic survey activities.
- If biological surveys are conducted within 14 days of source point activities, survey routes do not need to be resurveyed ahead of source point vehicle travel.
- If biological surveys were conducted greater than 14 days before source point activities, biological monitors will be required to actively monitor and resurvey as necessary travel routes and point locations to ensure that avoidance buffers are applied to any new listed species occurrences.
- Pre-activity surveys will be conducted immediately ahead of seismic vehicle and drill rig deployment where previous surveys were not completed, providing that all avoidance buffers will be met.
- All project vehicles shall observe travel avoidance routes described in the biological pre-activity survey notes that provide for avoidance of sensitive wildlife and special status plant resources.
- If avoidance distances cannot be met, a qualified biologist may request permission to flag a rerouted travel corridor that avoids direct damage to burrows, dens, shrubs, or other habitat features.
- Source points may be skipped or moved to meet avoidance buffer criteria.
- The applicant shall make every reasonable effort to prevent collapse of dens and burrows by relocating source points to avoid dens and burrows or other means such as establishing exclusion zones as described above.
- Damage to shrubs will be minimized to the maximum extent practicable.
- Project related vehicles will be confined to existing primary or secondary roads or to specifically delineated project areas that have had biological surveys to avoid listed species.

- Vibroseis vehicles may be used on existing roads within avoidance buffer distances provided that biological monitors shall accompany vibroseis crews to avoid direct impacts on listed species in roads where disturbance will occur.

Receiver Line Activities

Geophysical surveys of the receiver points and all associated travel in listed species habitats shall be completed in a manner to avoid impacts on listed species.

- Before deployment of receiver lines, geophones, and related equipment, a qualified biologist shall conduct pre-activity surveys of proposed geophone travel paths and receiver points. This may be done after the geodetic survey, but before the receiver line deployment.
- All San Joaquin kit fox dens, giant kangaroo rat, San Joaquin antelope squirrel, blunt-nosed leopard lizard burrows, and listed plant populations within the immediate vicinity of receiver lines, and points shall be prominently staked or flagged to alert project personnel to their presence.
- All project-related flagging shall be collected and removed after completion of the project.
- Damage to shrubs will be minimized to the maximum extent practicable.
- Vehicles traveling cross-country will remain on flagged routes and will avoid marked burrows. A biologist will assist project-related receiver line cross-country travel, geophone placement, and staging areas to avoid listed species and their habitat features.

Habitat Mitigation Measures

Geophysical surveys of the source and receiver points and all associated travel in listed species habitats shall be completed in a manner that minimizes impacts to listed species habitats.

- During geophone deployment, work crews shall make every reasonable effort to avoid damaging shrubs, washes, drainage banks, and cryptogamic crusts.
- Small shothole drilling vehicles, such as tractor-mounted drill rigs or ATV/UTV-pulled drill trailers, are suggested for use in listed species habitats.
- Off-road travel corridors shall be clearly delineated to contain project-related vehicles within marked travel routes to reduce impacts on large shrubs and washes.
- Damage to shrubs will be minimized to the maximum extent practicable.
- Project-related vehicles shall be restricted to approved travel routes and paths/roads.
- Large shrubs shall be avoided by carefully selecting travel paths/roads to avoid crushing shrubs.
- Washes shall be avoided by all vehicular activity to the maximum extent practicable. Washes will be crossed to minimize project impacts. Washes shall not be used as travel routes.

Additional Species-Specific Mitigation Measures

Blunt-Nosed Leopard Lizard

When the project area is within the known range of blunt-nosed leopard lizards, the following measures will be implemented:

- Shrubs will be avoided to the maximum extent practicable.
- All potential burrows that may be used by blunt-nosed leopard lizards will be avoided.
- Project activities will be conducted during daylight when lizard activity is likely, but no daytime temperature criteria are required.
- Small shothole drilling vehicles, such as tractor-mounted drill rigs or ATV/UTV/UTV-pulled drill trailers, are suggested for use in likely blunt-nosed leopard lizard habitats.
- ATVs/UTVs may be used where avoidance criteria can be met.
- Vibroseis vehicles may be used on existing roads within buffer distances provided that biological monitors shall accompany vibroseis crews to avoid direct impacts on blunt-nosed leopard lizards.
- Biological monitors will look for active leopard lizards aboveground within and directly adjacent to the seismic cross-country travel corridors.
- Vehicles parked in blunt-nosed leopard habitat for greater than one hour shall be inspected under and around the vehicle for BNLL. Vehicles will not be moved until any BNLL observed have moved a safe distance to avoid being crushed.
- All potential burrows of this species will be flagged for avoidance within avoidance buffer zones.
- Potential habitat will be considered suitable for blunt-nosed leopard lizards within the range of the species by the following criteria:
 - Slope is less than 30%, most favorable less than 10%,
 - Vegetation density is open to allow blunt-nosed lizard movements, and
 - Burrows are available and suitable for BNLL use.

San Joaquin kit fox

If damage or destruction to a known or occupied San Joaquin kit fox den cannot be avoided during project activities, the BLM and USFWS shall be contacted immediately for guidance.

Listed Plant Species

- Vibroseis units and drill buggies/tractors/ATV/UTV/UTV-trailers will follow flagged routes around areas of listed plants. A 50-foot avoidance zone for special-status plant species will be enforced.
- Avoid populations of Hoover's woolly-star to the maximum extent practicable in the growing season. Populations of special-status plants will be avoided by relocating and/or reconfiguring source points, receiver points and travel routes. If it becomes necessary to locate a project in an area where Hoover's woolly-star is known or thought to be present, every reasonable effort shall be made to wait until after seed set before beginning ground disturbances.
- Seismic surveys may be delayed until after seed set of listed plant species (generally after May 1).
- Avoid special-status plant species by relocating source points, travel routes, and receiver points to avoid listed plant populations by 50 feet.

Other Mitigation Measures

- Before the onset of ground disturbing project activities, a qualified wildlife biologist shall provide an employee orientation program to project personnel on the occurrence and distribution of listed species in the project area, measures being implemented to protect these species during project actions, reporting requirements should incidental take occur, and applicable definitions and prohibitions under the Endangered Species Act.
- Qualified biologists shall accompany seismic survey vehicles and crews in areas with the potential to affect listed species.
- At least one qualified biologist shall accompany each vibrator set or drill rig crew working within endangered species habitat.
- Qualified biologists will be responsible to implement survey, take avoidance, monitoring, and reporting activities and shall perform the following:
 - Aid seismic crews in satisfying avoidance criteria and implementing project mitigation.
 - Aid seismic crews in relocating source points and receiver lines as necessary.
 - Observe and note all pertinent information concerning project effects on listed species.
 - Avoid the take of blunt-nosed leopard lizards and destruction of associated burrows.
 - Assist the seismic contractor in conducting the proposed project in such a manner as to avoid adverse effects on endangered and threatened species.
- Biological monitors are expressly empowered to order cessation of seismic activities if take avoidance and mitigation measures are violated.
- Biological monitors or the project environmental representative shall notify the BLM and USFWS before or as soon as possible after biological compliance measures are violated.
- At least one biological monitor shall accompany vibroseis and shot hole crews while working within endangered species habitat.
- Project biologists shall keep an accurate running tally of the number of dens and burrows damaged, destroyed, or otherwise affected by project activities. Such tallies shall be combined and totaled at the end of each workday to determine proximity to take limits and the need for subsequent project modifications to prevent impacts upon dens and burrows in excess of take limits. Total number of dens and burrows affected by the project shall be reported in the post-activity compliance report.
- One biologist exclusive of biologists observing vibrator crew activities shall oversee activities of receiver line deployment crews where cross country vehicle travel occurs in listed species habitat.
- Pets shall not be permitted on the project site during project activities.
- All food-related trash such as wrappers, cans, bottles, and food scraps shall be disposed of in closed containers only and regularly removed from the project site.
- Although highly unlikely to occur, all spills of hazardous materials within endangered species habitats shall be cleaned up immediately according to applicable federal, state, and local laws and regulations.

- Daily preparation and end of day maintenance will be conducted no earlier than two hours before sunrise and not later than two hours after sunset. These activities include refueling of vibroseis and other project related vehicles, moving some vehicles to staging areas, etc. These activities, however, will not include significant vehicle travel in listed species habitat. No off-road vehicle travel shall be conducted within sensitive species habitat until there is sufficient natural light for resource avoidance.
- All project-related vehicles shall observe a speed limit of 10 mph or less on all routes that traverse endangered species habitat, except on State and County highways and roads.
- To prevent the inadvertent entrapment of vertebrates, all project-related open steep-walled holes, or trenches more than 2 feet deep shall be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals. If at any time a trapped or injured kit fox is discovered, the BLM and USFWS shall be contacted immediately for guidance.
- If during any phase of the seismic operation any oil or other pollutant is discharged from project related vehicles or from containers, the control, cleanup, and disposal of such oil or other pollutant shall be the responsibility of the permit holder, regardless of fault. Upon failure of permit holder to control, cleanup, or dispose of such discharge on or affecting federal lands or to repair all damages to federal lands resulting from, the authorized officer may take such measures as he/she deems necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the permit holder. Such action by the authorized officer shall not relieve the permit holder of any liability or responsibility.

Vegetation and Habitat Types

Project related vehicles should be restricted to approved travel routes and paths/roads. Large shrubs shall be avoided in an effort to minimize impact on wildlife habitat. Large shrubs shall be avoided by carefully selecting travel paths/roads to avoid crushing individuals. In addition, washes represent a fragile habitat type and function as seasonally productive sources of annual vegetation for animals, as dispersal corridors, and as areas affording favorable burrow construction habitat. Washes shall be avoided by all vehicular activity as feasible.

Post-Project Reporting

- Within 45 calendar days after completion of the project, the seismic contractor shall submit to the USFWS and BLM a post-activity compliance report that details the following information:
 - Dates that seismic testing occurred.
 - Pertinent data concerning the seismic contractor's success in meeting project mitigation measures.
 - Known project effects on San Joaquin kit foxes, blunt-nosed leopard lizards, giant kangaroo rats and San Joaquin antelope squirrels, if any (including specific number of dens and small mammal burrows damaged or destroyed).
 - Occurrences of incidental take of state or federally listed species.

- An assessment of the extent and severity of project impacts on all sensitive wildlife habitats, a summary of rehabilitation plans, if any; and other pertinent information.
- BLM, USFWS and CDFW shall be notified in writing within three (3) working days in the event of an accident death or injury of a San Joaquin kit fox, giant kangaroo rat, or blunt-nosed leopard lizard, or of the finding of any dead or injured kit fox, giant kangaroo rat, or leopard lizard during the proposed seismic survey. Notification shall include the date, time, and location of the incident or of the finding of a dead or injured animal, and any other pertinent information. The USFWS contact for this information is the Chief of the Division of Endangered Species, Sacramento Field Office, 3310 El Camino Avenue, Suite 130, Sacramento, CA 95821-6340, (916) 979-2725. The CDFW contact information is the California Department of Fish and Wildlife, Fresno Regional Headquarters, Environmental USFWSs Division, 1234 E. Shaw Ave., Fresno, CA (559) 243-4014. Any dead or injured kit fox, giant kangaroo rat, or blunt-nosed leopard lizard shall be turned over to the California Department of Fish and Wildlife.

6.3.8.3.2 Drilling A New Well

After an APD has been received by the Bakersfield FO, a review of engineering design and potential effects on sensitive resources will be undertaken. During the review stage of an APD, either the operator or the BLM will note site-specific concerns on the application. Modified proposals will be developed cooperatively with the applicant to ensure that the modified project still meets the applicant's objective. The applicant will be informed within ten days of receipt of the APD if there are deficiencies that need to be corrected. Any special conditions will be attached to the APD by the BLM as COAs. In addition to BLM-wide regulations, the Bakersfield FO has developed its own local procedures, as follows:

Pits. The BLM encourages the use of closed-loop or semi closed-loop mud systems whenever possible. If pits are utilized, they must remain free of any hydrocarbons. Hydrocarbons should be removed from pits upon discovery. If the natural topography is sloping, the pit will be constructed on the cut side of the well pad. Pits must preclude wildlife entry after all boring wastes have been discharged. Netting or other effective methods will be utilized to preclude wildlife entry. Flagging of pits is no longer considered an effective means to prevent wildlife entry to pits.

Steam Injectors. All steam injection wells within a 300-foot radius of a new location must be shut in a minimum of three days before the spudding (beginning drilling operations) of a new well.

Conductor Pipe. A minimum of 50 feet of conductor pipe is to be set and cemented to the surface. The conductor pipe must be equivalent to or exceed the properties of A-25-grade line pipe.

Diverter. Before spud, a diverter system will be installed on the conductor pipe and function tested. The test shall be recorded in the drilling log. The diverter system, at a minimum, shall consist of an annular type preventer (minimum working pressure 1,000 psi), 2-inch (minimum ID) kill lines, and 6-inch (minimum ID) diverter lines with no internal restrictions or turns. A full opening, hydraulically controlled valve shall be installed in the diverter line that will automatically open when the annular preventer is closed. The accumulator system should have sufficient capacity to close the annular preventer and open the hydraulically controlled valve.

Remote controls for the diverter system shall be located on the rig floor and readily accessible to the driller. Remote controls shall be capable of closing the annular preventer and opening the

hydraulically controlled valve. Master controls shall be located at the accumulator and should be capable of closing and opening the annular preventer and opening the hydraulically controlled valve. The diverter system shall be function-tested daily and the test recorded in the drilling log.

General Casing and Cementing. A Subsequent Report (Form 3160-5) detailing the size, weight, and grade of the casing; the amount and type of cement, including additives; and a copy of the service company's materials ticket and job log shall be submitted to the BLM within five business days following the cementing of the casing string. Each casing string (except conductor pipe) shall be pressure tested, before drilling out the casing shoe, to 0.22 psi/ft of casing string length or 1,000 psi, whichever is greater, but not to exceed 70% of the internal yield pressure of the casing. The casing pressure test shall be recorded in the drilling log. The wait-on-cement time for each casing string shall be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe before drilling out.

Drilling Fluids. Sufficient quantities of drilling fluid (mud and water) shall be maintained at the well site, at all times, for the purpose of controlling steam kicks.

6.3.8.3.3 Temporary Abandonment of a Producing Well (Idle Well)

Oil and gas exploration and development are cyclical businesses, with periods of high and low levels of activities. On occasion, an operator may decide to temporarily “shut in” producing wells and wait for conditions to improve. The highly viscous nature of most Kern County crude oil, typical low well head pressures, and the relatively low corrosive properties of the fluids (low sulfur crude) make the known dangers of shutting in a well for long periods and then bringing it back online less of a mechanical problem in the Bakersfield FO than in other producing regions of the country. Monitoring and correcting the problem has been successfully undertaken by the California Division of Oil, Gas, and Geothermal Resources and the Bakersfield FO.

The following additional conditions *may* be required before the temporary abandonment of a producing oil/gas well, service well, or an injection well.

Zone Isolation. The requirement to isolate the producing interval (General Requirement #4) is waived. This waiver is based on the information submitted with the application and the geologic data in *Volume II - California Oil and Gas Fields*, (field name) which indicates the absence of usable water aquifers above the producing horizon in (section in which well is located).

Mechanical Integrity of Casing. The mechanical integrity of the casing may be determined using the ADA pressure test method.

Fluid Surveys. In accordance with the requirements of the State of California Idle Well Program, a fluid level survey will be performed at two- to five-year intervals while the well is temporarily abandoned. A copy of the survey will be submitted to the BLM within five business days of the survey.

Monitoring of Wellhead Pressures and Temperatures. Wellhead pressure and temperature will be continuously monitored while the well is temporarily abandoned. Any pressure/temperature change will be promptly reported to the BLM.

Isolation of the Producing Interval. The producing interval shall be isolated by setting a plug in the casing within 100 feet above the producing interval if a rising fluid level, an increasing wellhead pressure, or an increasing wellhead temperature is detected. The plug could be either a retrievable or drillable-type bridge plug or a cement plug of at least 100 feet in length.

6.3.8.3.4 *Plugging and Abandonment of a Well*

Onshore orders describe the plugging procedure. Final abandonment would normally be witnessed by the BLM. No final surface site marker is required by the Bakersfield FO, but a permanent buried marker is required.

6.3.8.3.5 *Surface Reclamation (Interim or Final)*

Reclamation is required of any disturbed surface that is not necessary for continued production operations. Conditions for the recovery of an oil well site are unique to each area's ecosystem and habitat. The following examples of COAs have been developed for use within the Bakersfield FO. The applicability of any or all of these COAs will be determined based on site-specific conditions.

General:

- The operator (or holder) shall prepare a seedbed by scarifying the disturbed area, distributing topsoil uniformly, and possibly disking the topsoil, as directed by the BLM authorized officer.
- The operator shall recontour the disturbed area and obliterate all earthworks by removing embankments, backfilling excavations, and grading to reestablish the approximate original contours of the land in the area of operation.
- The operator shall uniformly spread all topsoil over all unoccupied disturbed area. Spreading should not be done when the ground or topsoil is frozen or wet.
- The operator shall seed all disturbed area, using an agreed on method suitable for the location. Locally collected seed should be used. Additional restoration efforts will be required if a satisfactory stand is not obtained, as determined by the BLM authorized officer upon evaluation after the first growing season.
- The operator shall arrange to have a biologist available to assist the construction workers in the identification and avoidance of endangered species.

Producing Wells:

- Interim site reclamation for producing wells shall be accomplished for portions of the site not required for continued operation of the well. The following measures are typical reclamation requirements:
 - Production facilities and equipment placed to maximize room for interim reclamation;
 - Closing drilling fluid pit (mud pit) if present;
 - Recontouring the pad, leaving only enough level ground for possible future workover operations;
 - Cut and fill slope vegetation;
 - Interim reclamation of access roads;
 - Site fencing;
 - Berm removal and site grading;
 - Polluting substances and contaminated materials disposed of properly.

- The Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development “The Gold Book” (Current Edition) should be referenced for more detailed information.

Non-producing Wells.

- Rehabilitation on the entire site shall be required and should begin as soon as practical, depending on prevailing weather conditions. Cut and fill slopes shall be reduced and graded to blend to the adjacent terrain.
- Drilling fluids held within pits may be allowed to dry for up to six months. Fluids that will not dry must be removed. All polluting substances or contaminated materials, such as oil, oil-saturated soils, and gravels, shall be removed to an approved site.
- Drainages shall be reestablished, and temporary measures will be required to prevent site erosion until vegetation is established.
- After final grading and before replacement of topsoil, the entire surface of the site shall be scarified to eliminate slippage surfaces and to promote root penetration. Topsoil should then be spread over the site to achieve an approximate, uniform stable thickness consistent with the established contours.

Final Reclamation:

- Plug the well and remove all associated infrastructure.
- Recontour the well site to the original contour or a contour blend with the surrounding landform; evenly redistribute stockpiled topsoil; and revegetate the site.
- If roads are not needed for other purposes, recontour the road back to the original contour and seed to promote revegetation.

6.3.9 Visual Resources

Visual Resource BMPs provide a variety of tools to address the visual impacts of projects on the landscape. They are applied to reduce or eliminate visual contrast in order to maintain or achieve Visual Resource Management (VRM) objectives. BMPs for visual resources include a variety of techniques from proper site selection for projects, to minimizing long-term surface disturbance and correct color selection for painting structures. Not all techniques are appropriate for all locations and would be implemented as appropriate. As with all BMPs the science and technology; specifically camouflaging techniques, behind the management is continually evolving as such new BMPs are developed and replace other concepts. More information on BMPs for visual resource management can be found in several BLM publications and websites including the 2007 Visual Resource Management for Fluid Minerals self-study guide found at:
http://www.blm.gov/wo/st/en/prog/energy/oil_and_gas/best_management_practices/technical_information.html.

Appendix Four
Biological Resources Conservation Strategy

6.4 Appendix 4 – Biological Resources Conservation Strategy

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6.4.1 Introduction

This appendix contains a strategy for how BLM intends to manage public lands in order to contribute to the conservation of special status species in the Bakersfield Field Office (FO) Decision Area in general and in the Southern San Joaquin Valley specifically. Also, a list of the species and critical habitats addressed in the BA provided to USFWS is included.

6.4.2 Conservation Strategy

The scattered pattern of public lands in the Decision Area provides numerous opportunities for public lands to contribute to local and regional conservation programs. The BLM will seek out partnerships with other public and private entities to conserve and recover landscapes, natural communities, special status species, and other important biological resources as appropriate. Examples of focal areas for specific special status species and their habitats are Los Osos, Hopper Mountain, Bitter Creek, South Fork of the Kern River, Table Mountain and Kennedy Table, Atwell Island, Lokern-Buena Vista Valley, Kettleman Hills, Caliente Creek, and Cyrus Canyon. Other efforts focus on natural landscapes, assemblages of species and communities, and biological resources of regional importance. Areas with these focuses are the Irish Hills, the Tulare Lake Basin, the Salinas River, and the Tehachapi Linkage. The BLM will manage public lands to contribute to the objectives of local and regional conservation plans, where external objectives are consistent with the management objectives of this plan.

6.4.2.1 Background

Public land in the San Joaquin Valley portion of the Bakersfield FO constitutes a substantial amount of the remaining natural land in the southern San Joaquin Valley. These natural lands provide important habitat for several federal and state listed plant and animal species, as well as many other species that are endemic to the region.

The Endangered Species Act of 1973 mandates that federal agencies, including the BLM, utilize their authorities to further the purposes of the ESA by carrying out programs for the conservation and recovery of threatened and endangered species. BLM policy, as stated in the BLM Manual 6840, and policy statements, such as BLM's Fish and Wildlife 2000, further guides how BLM will manage public lands to meet the mandate for conservation programs and multiple uses of public land resources.

The Endangered Species Act also directs the USFWS to develop recovery plans for threatened and endangered species. These recovery plans provide the strategy that all agencies and organizations can implement to ensure a coordinated and comprehensive approach to species conservation and recovery. In 1998 the USFWS completed *the Recovery Plan for Upland Species of the San Joaquin Valley, California*. This multispecies recovery plan provides a framework for recovery efforts within the San Joaquin Valley. Local governments, industry, private landowners and local offices of state and federal agencies determine how the regional recovery and conservation framework could be implemented for their jurisdiction. Part of the concept is to develop local plans, such as for the Southern San Joaquin Valley, for consistent application by local, state, and federal governments within the local planning area. BLM managed public land in the Southern San Joaquin Valley plays a key role in the promotion of recovery efforts for species in many of these recovery and conservation plans. This section describes the San Joaquin Valley recovery plan strategy and addresses how BLM will strive to implement the regional recovery and conservation framework in coordination with these local plans.

6.4.2.2 San Joaquin Valley Recovery Plan Conservation Strategy

The *Recovery Plan for Upland Species of the San Joaquin Valley, California*, uses an ecosystem-level strategy to address recovery and conservation of 11 listed species and 23 additional special status species. The discretionary strategy includes several elements that relate to the management of public land:

- The primary focus of recovery should be on publically owned lands;
- Conservation efforts should focus on fewer larger blocks of land rather than smaller more numerous parcels;
- Blocks of conservation lands should be connected by natural land or land with compatible uses that allow for movement between blocks;
- Emphasis should be placed on the San Joaquin kit fox as an umbrella species. Since most other species require less habitat, fulfilling the management and habitat needs of the San Joaquin kit fox will also meet the needs of many other species;
- The giant kangaroo rat and San Joaquin kangaroo rat are keystone species in their communities. Protection of these keystone species should be a high priority since they provide an important or essential function for many other listed and special status species;
- Uses and actions on public land, such as livestock grazing, oil, gas, and mineral exploration and extraction, hunting, and recreation should occur so as to minimize degradation of habitat for special status species;
- Use specialty preserves or small reserves to manage species with highly restricted geographic ranges or specialized habitat requirements or that are vulnerable to traditional land uses;
- Target existing natural lands occupied by special status species over unoccupied natural land and retired farm land for conservation;
- Coordinate carefully agricultural land retirement with endangered species recovery for species where sufficient occupied natural land does not exist, but where it is needed to increase population size or promote movement between populations;
- Enhance landscape features that allow successful survival and movement from population centers on the valley floor to the valley perimeter for species such as the kit fox that can live in or move through the farmland matrix; and
- Implementing the recovery plan should be complementary to existing and future habitat conservation plans.

The foundation of the regional conservation strategy is a system of reserves and connecting corridors. Through assessments of remaining natural land habitats, a reserve system concept was developed to conserve the best remaining habitats of the San Joaquin Valley natural communities. Several large keystone reserves, several small specialty reserves, and connecting corridors linking many of the reserves have been established or proposed. The large reserves are intended to maintain and conserve multiple plant and animal listed species as a natural community, while the small reserves are designed to conserve a particular species or unique natural feature. These reserves would be managed for long-term conservation of the listed plants and animals and the natural communities on which they depend, but would allow for a variety of land uses managed in a compatible manner. Both large and small reserves are necessary to conserve the valley's biological resources.

Reserves include both large multispecies reserves and small specialty reserves that would be managed *primarily* for listed plants and animals. While other compatible resource uses could occur, habitat quality and species' populations would be maintained through implementing specific design features for these resource uses. Management of the reserves would be assured by fee acquisition by federal, state, or local agencies, chartered conservation organizations, conservation easements under state law for private lands, or long-term cooperative agreements with landowners. The goal is to maintain a certain percentage of the native lands as high quality habitat and to rehabilitate lands with nonnative species as they become available for purchase, easement, or agreement. A threshold for habitat disturbance from energy mineral development, roads, and facilities would be established. Reserves and connecting corridors would have different thresholds for habitat disturbance. Compensation for new habitat disturbance within the threshold would be at a standard rate for uses that are considered permanent habitat loss and at another standard rate for temporary habitat loss. Compensation is generally in the form of preserving additional habitat to make up for the loss of habitat associated with approved projects.

Connecting corridors are composed of native and agricultural lands to be managed for maintaining interchange and gene flow between the primary reserves and for maintaining supplemental populations between reserves. Emphasis is to maintain a certain percentage of native lands as moderate- to high-quality habitat and to maintain a certain percentage of the agricultural lands in agricultural production or fallow. A certain percentage of these lands would be available for urban, industrial, or other land uses that are considered permanent or long-term habitat loss. Land use design would maintain corridor integrity as extant habitat and for wildlife movements. Permanent or long-term habitat loss from urban-industrial uses would not sever wildlife corridors. Compensation for habitat loss in corridors would be directed to the reserve areas; however, limited compensation could be directed back to the corridor. The compensation ratio is the same as for reserves. Corridors would not normally involve purchase but would be secured through conservation easements and agreements. However, some parcels essential to maintain corridors or buffers may need to be purchased.

As part of the recovery plan, a generalized reserve system map has been developed that identifies the keystone reserves, small specialty reserves, and connecting corridors. A number of reserves and connecting corridors are targeted for protection in the recovery plan; several of which contain or are next to public lands within the Decision Area: Elk Hills and Buena Vista Valley, Western Kern County (including Lokern), Pixley National Wildlife Refuge (NWR)/Allensworth Natural Area, Kettleman Hills, Kern NWR/Semitropic Ridge Natural Area, Upper Cuyama Valley/Santa Barbara Canyon, Bitter Creek NWR, Devil's Den, Lost Hills-Buena Vista Slough, and Caliente Creek.

On native lands outside the reserve and corridor system, management for the retention of habitat values has not been the focus. Most of these lands have some habitat value, and many of these areas may be valuable sources of plant and animal populations in the short term. Most of these values will continue to exist, unless there are dramatic changes in current land uses.

6.4.2.3 Bakersfield FO Conservation Program

Land use plan decisions in this RMP are designed to be consistent with BLM's mandate to utilize its authorities to conserve and promote the recovery of listed species, and to be consistent with the objectives and recommended actions in approved recovery plans (including the *Recovery Plan for Upland Species of the San Joaquin Valley*), conservation strategies, MOUs, and applicable biological opinions to the extent consistent with federal law. To promote consistency, BLM has taken into

consideration and adopted certain terms and concepts from the San Joaquin Valley recovery plan and its regional conservation strategy.

Within the landscape of the San Joaquin Valley regional conservation strategy, some BLM-administered lands are located within the boundary of a number of reserve areas, habitat corridors, and specialty preserves. While BLM land management authorities do not recognize these terms, based on direction in the BLM Land Use Planning Handbook (H-1610-1, Appendix C), the BLM-administered lands currently found within the boundaries of reserves and corridors are identified as ecologically important areas in this RMP (labeled “Conserved Lands”). In addition, some of these areas are proposed for designation as Areas of Critical Environmental Concern (ACECs): Ancient Lakeshores, Compensation Lands, Kettleman Hills, Lokern-Buena Vista, and Upper Cuyama Valley, based on the relevance and importance values of public land resources and need for special management attention.

The BLM will manage its public lands in the reserves and corridors (Map 2.3) for the long-term conservation of listed plants and animals and the natural communities on which they depend, while still allowing compatible land uses, to the extent consistent with federal law. Also, the BLM will retain and manage additional lands acquired for conservation, whether by appropriations, donation, exchange, transfer, or compensation in a manner consistent with the terms of the acquisition or consistent with surrounding BLM land management, again to the extent consistent with federal law. If compensation lands are acquired by BLM, such as through donation or transfer, they would be recommended for ACEC consideration if there is evidence that the area meets the relevance and importance criteria expressed by regulation. Upon completion of NEPA, public review and a plan amendment, they would become part of the Compensation Lands ACEC.

A key component of the reserve and corridor linkage strategy is to maintain suitable amounts of habitat that are largely undisturbed by development activities. Habitat disturbance thresholds are criteria for maintaining long-term suitability of reserve areas (red zones) and habitat corridors (green zones). Limiting the amount of habitat (and ground) disturbance will allow sufficient habitat to remain intact, keep ecosystem processes functioning properly, and connect viable species populations across the landscape. Within the reserve areas (generally Lokern-Buena Vista ACEC and portions of Compensation Lands and Upper Cuyama Valley ACECs), habitat disturbance is limited to 10% of the surface area of individual BLM parcels or 10% of adjoining BLM parcels. Parcels that adjoin only at one corner are considered separate parcels. Most remaining public lands within the southern San Joaquin Valley have been identified in the regional conservation strategy as connecting corridors. The BLM would manage public lands in these corridors as links between reserve areas. In the corridor areas, habitat disturbance is limited to 25% of the surface area of individual BLM parcels or 25% of adjoining BLM parcels.

In addition to limiting habitat disturbance, BLM’s goal is to maintain or add to the amount of lands within the reserve or corridor system so that species can be downlisted or delisted. In order to meet this goal, the BLM requires the following compensation ratios:

- Permanent or long-term habitat loss = 3:1
- Temporary habitat loss = 1.1:1
- Within the western Kern County kit fox core area = an additional 1:1
- Vernal pool habitat = 5:1, with a replacement element

In addition to compensation, BLM requires an additional 1:1 replacement of habitat when ground disturbance occurs on public land within reserves or corridors. This replacement is in addition to any

compensation that is required as a result of permanent, long-term, or temporary habitat loss. BLM's compensation ratios are consistent with compensation ratios established by USFWS and CDFW for the San Joaquin Valley listed species. BLM may modify compensation ratios and requirements in coordination with USFWS and CDFW.

Over time, BLM, in collaboration and cooperation with the wildlife agencies, may need to reconfigure the reserve and corridor design and boundaries based on new information or changing environmental conditions. This new information or these changing environmental conditions and any potential resulting reconfiguration may require additional land use planning and RMP amendment. BLM may also identify certain areas of high intensity oil and gas development within reserves and corridors and manage them separately. The Bakersfield FO's policy is to conserve lands outside the reserve and corridor system because they serve as important remnants of listed species habitat and natural communities and, therefore, may manage areas outside the reserve and corridor system as corridors.

The BLM has been an active partner in striving to implement the *Recovery Plan for Upland Species of the San Joaquin Valley, California*. The BLM has contributed toward inventorying and monitoring, conducting research, enhancing habitat, acquiring and restoring land, and protecting habitat. When authorizing, funding or carrying out activities, BLM's policy is to first apply on-site mitigation to avoid or minimize project impacts to biological resources, especially special status species. When on-site mitigation alone is insufficient, off-site mitigation, such as compensation, is also required. The BLM has been responsible for over fifteen hundred acres of off-site habitat that has been acquired and protected. In collaboration with the USFWS, CDFW, species experts, and other biologists, BLM has cooperatively developed a number of survey, avoidance, mitigation, compensation, monitoring, and reporting protocols. BLM has determined that implementation of these protocols is in the best interest of public land management.

6.4.3 Species and Habitats addressed in BA provided to USFWS

Listed Species and Critical Habitat addressed in the Biological Assessment provided to FWS

| Listed Plant Species & Critical Habitat | Listed Animal Species and Critical Habitat |
|--|---|
| 1. Morro manzanita | 1. Morro shoulderband snail & Critical Habitat |
| 2. Marsh sandwort | 2. Conservancy fairy shrimp & Critical Habitat |
| 3. Braunton's milk-vetch & Critical Habitat | 3. Longhorn fairy shrimp & Critical Habitat |
| 4. Ventura Marsh milk-vetch & Critical Habitat | 4. Vernal pool fairy shrimp & Critical Habitat |
| 5. Mariposa pussy-paws | 5. Vernal pool tadpole shrimp & Critical Habitat |
| 6. Succulent owl's-clover & Critical Habitat | 6. Valley elderberry longhorn beetle & Critical Habitat |
| 7. California jewelflower | 7. Kern primrose sphinx moth |
| 8. Hoover's spurge & Critical Habitat | 8. Tidewater goby & Critical Habitat |
| 9. Purple amole & Critical Habitat | 9. Unarmored threespine stickleback |
| 10. Camatta Canyon amole & Critical Habitat | 10. Lahontan cutthroat trout |
| 11. Salt marsh bird's-beak | 11. Paiute cutthroat trout |
| 12. Chorro Creek bog thistle | 12. Little Kern golden trout & Critical Habitat |
| 13. La Graciosa thistle & Critical Habitat | 13. California tiger salamander |
| 14. Pismo clarkia | - Santa Barbara DPS & Critical Habitat |
| 15. Springville clarkia | - Central CA DPS & Critical Habitat |
| 16. Gaviota tarplant & Critical Habitat | 14. Arroyo toad & Critical Habitat |
| 17. Santa Monica Mountains live-forever | 15. California red-legged frog & Critical Habitat |
| 18. Marcescent dudleya | 16. Blunt-nosed leopard lizard |

| Listed Plant Species & Critical Habitat | Listed Animal Species and Critical Habitat |
|--|---|
| 19. Conejo dudleya 20. Verity's dudleya 21. Kern mallow 22. Indian Knob mountainbalm 23. Lompoc yerba santa & Critical Habitat 24. Southern mountain buckwheat & Critical Habitat 25. Contra Costa goldfields & Critical Habitat 26. Beach layia 27. Nipomo Mesa lupine 28. San Joaquin woolly-threads 29. Gambel's watercress 30. Spreading navarretia & Critical Habitat 31. Bakersfield cactus 32. San Joaquin Valley Orcutt grass & Critical Habitat 33. Hairy Orcutt grass & Critical Habitat 34. Lyon's pentachaeta 35. Hartweg's golden sunburst 36. San Joaquin adobe sunburst 37. Keck's checkerbloom & Critical Habitat 38. California seablite 39. Greene's tuctoria & Critical Habitat | 17. Island night lizard 18. Giant garter snake 19. California condor & Critical Habitat 20. Light-footed clapper rail 21. California clapper rail 22. Western snowy plover (Pacific coastal population) & Critical Habitat 23. California least tern 24. Marbled murrelet & Critical Habitat 25. Southwestern willow flycatcher & Critical Habitat 26. Least Bell's vireo & Critical Habitat 27. Coastal California gnatcatcher & Critical Habitat 28. Buena Vista Lake shrew & Critical Habitat 29. Morro Bay kangaroo rat & Critical Habitat 30. Giant kangaroo rat 31. Fresno kangaroo rat & Critical Habitat 32. Tipton kangaroo rat 33. Island fox 34. San Joaquin kit fox 35. Southern sea otter (Threatened and Experimental Population) 36. Sierra Nevada bighorn sheep & Critical Habitat Species with Re-Proposed Critical Habitat: 1. Tidewater goby 2. Western snowy plover (Pacific coastal population) 3. Southwestern willow flycatcher 4. Buena Vista Lake shrew |

Two additional species, El Segundo blue butterfly and yellow-billed cuckoo (western distinct population segment), and proposed critical habitat for the yellow-billed cuckoo, were added to the Endangered Species Act consultation during the consultation period.

Appendix Five
Piedras Blancas Light Station Outstanding Natural Area

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6.5.1 Introduction

The Bakersfield Resource Management Plan (RMP) includes the Piedras Blancas Light Station Outstanding Natural Area (ONA), designated by Congress under the Consolidated Natural Resources Act and signed by the President on May 8, 2008. With this designation, Congress also added the Piedras Blancas Light Station to the BLM's National Landscape Conservation System. Furthermore, the following eight congressional findings were made to guide future management of the ONA:

- (1) The publicly owned Piedras Blancas Light Station has nationally recognized historical structures that should be preserved for present and future generations.
- (2) The coastline adjacent to the Light Station is internationally recognized as having significant wildlife and marine habitat that provides critical information to research institutions throughout the world.
- (3) The Light Station tells an important story about California's coastal prehistory and history in the context of the surrounding region and communities.
- (4) The coastal area surrounding the Light Station was traditionally used by Indian people, including the Chumash and Salinan Indian tribes.
- (5) The Light Station is historically associated with the nearby world-famous Hearst Castle (Hearst San Simeon State Historical Monument), now administered by the State of California.
- (6) The Light Station represents a model partnership where future management can be successfully accomplished among the Federal Government, the State of California, San Luis Obispo County, local communities, and private groups.
- (7) Piedras Blancas Historic Light Station Outstanding Natural Area would make a significant addition to the National Landscape Conservation System administered by the Department of the Interior's Bureau of Land Management.
- (8) Statutory protection is needed for the Light Station and its surrounding Federal lands to ensure that it remains a part of our historic, cultural, and natural heritage and to be a source of inspiration for the people of the United States.

Piedras Blancas is on California's central coast, north of San Simeon. The area is named for white rock outcrops just off the end of the point. In the early 1870s, this location was chosen to fill the gap between the lighthouses at Point Conception and Point Sur. Prior to the construction of the lighthouse, Piedras Blancas had cultural significance to Native Americans; these values are present in the form of archaeological sites and the desire for access from Native American communities for traditional cultural and religious purposes.

The lighthouse and a two-story Victorian dwelling were completed in 1875. The original tower was 110 feet tall and housed a first-order Fresnel lens. A fog signal building and an additional keeper's dwelling were added in 1906. Employees of the US Lighthouse Service operated the facility until 1939, when the Coast Guard assumed control. New automated technology eventually replaced many of the functions of the lighthouse keepers. The Coast Guard relinquished control and management of the Piedras Blancas Light Station to the BLM on October 12, 2001.

The light station is currently managed in accordance with several activity level plans: the Piedras Blancas Light Station Management Plan (BLM 2007c), the Piedras Blancas Business Plan 2009-2013 (BLM 2008d), and the Piedras Blancas Interpretative Plan (BLM 2008e); however this RMP will serve as the land use plan for this area. Through these plans the Light Station historic structures are being restored, repurposed, and rebuilt with the goal of presenting the area in its early twentieth century appearance. All work is subject to SHPO concurrence through an existing Memorandum of Agreement (2007).

The interpretive program provides routine public access through guided tours of the Light Station. These tours currently run three times a week with annual attendance of approximately 5,000 visitors. In addition to the educational experiences provided by the historic setting, an accessible trail circumvents the site providing wildlife viewing opportunities.

The Light Station is adjacent to lands managed by California State Parks whom through an agreement provide access for administrative purposes and public tours.

The land use plan decisions for the Piedras Blancas Light Station ONA are contained throughout the Bakersfield Approved RMP. They are listed below to provide a consolidated reference for BLM managers and the public of the RMP decisions applying directly to this area. Broader landscape resource goals, objectives, and decisions may also apply to resources at the Piedras Blancas Light Station ONA, and the approved RMP should be used as the comprehensive RMP for the Bakersfield plan area, including the Piedras Blancas ONA.

6.5.2 Cultural Resources

Decisions

[CR-D-1] Allocate evaluated cultural resources within the decision area as “scientific use” for study, determination of eligibility and appropriate recordation, pending assignment to another use category, with the exception of the following:

- (a) Allocate the Huasna Peak as Traditional Use.
- (b) Allocate the Keyesville historic sites of Walker Cabin, Keyes Mine, and Keyes Cemetery as Conserve for Future Use, until such time as stabilization and restoration work allows for public use.
- (c) Allocate the Piedras Blancas Light Station ONA as Public Use.
- (d) Allocate all rock art sites, known and projected to occur, as Conserve for Future Use.
- (e) Allocate the Walker Pass NHL as Public Use.

6.5.3 Lands and Realty

Decisions

[LR-D-2.3] Utility-scale renewable energy rights-of-way will be excluded on 262,340 acres, including: all ACECs, the Piedras Blancas Light Station ONA, SRMAs, VRM Class I and II, designated Wilderness areas and the PCNST corridor. Of this acreage, all other types of rights-of-way will be excluded on 118,860 acres: designated Wilderness and the PCNST corridor. (Map 2.18 and Map 2.19)

[LR-D-2.4] Proposed rights-of-way will be avoided on 103,510 acres, except where a specific type of right-of-way is excluded (**LR-D-2.3**): all ACECs, WSAs, lands managed for wilderness characteristics, the Piedras Blancas Light Station ONA, and suitable Wild and Scenic River corridors. (Map 2.18 and Map 2.19)

Decisions

[LR-D-3.2] Continue the existing withdrawal from settlement, sale, location, or entry under the general land laws, including the United States mining laws, 30 U.S.C. Ch. 2 (1994), mineral leasing laws, 30 U.S.C. 181 *et seq.* (1994) and mineral material sale laws 30 U.S.C. 601-604 (1994), of Piedras Blancas Light Station (20 acres) as shown on Map 2.20 (Public Land Order 7501).

6.5.4 Minerals Management

Decisions

[MM-D-1.1.3] Identify 149,600 acres (Map 2.22) as closed to fluid mineral leasing:

- Non-discretionary closures – Wilderness, WSAs, Piedras Blancas Light Station ONA, and the PCNST
 - Discretionary closures – Bitter Creek ACEC, Blue Ridge ACEC, Erskine Creek ACEC, Piute Cypress ACEC, and Point Sal ACEC; lands with wilderness characteristics; segments of the Lower Kern River, North Fork of the Kaweah River, San Joaquin River, and Chimney Creek determined to be suitable as Wild and Scenic Rivers; and Deer Spring area of ecological importance.

6.5.5 Interpretation and Environmental Education

Decisions

[IE-D-1] Identify San Joaquin River Gorge, Piedras Blancas Light Station, and Keyesville Historic Mining District as important cultural and historic resources available for interpretation and educational programs.

[IE-D-2] Identify Atwell Island and Piedras Blancas Light Station as important biological resource areas available for interpretation and educational programs.

6.5.6 Outstanding Natural Areas

Goal

[ONA-G-1] Protect, conserve, and enhance, for the benefit and enjoyment of present and future generations, the Piedras Blancas Light Station ONA for its unique and nationally important historical, natural, cultural, scientific, educational, scenic, and recreational values.

Objectives

[ONA-O-1] Reconstruct, preserve and interpret the Piedras Blancas Light Station to during the period of its greatest historic significance (1875 and 1940), while providing for resource protection and managed use by the visiting public.

[ONA-O-2] Provide support for international research of coastal ecosystems surrounding the Piedras Blancas Light Station.

[ONA-O-3] Protect and coordinate the interpretation of the important archaeological sites with the affected Native American communities.

[ONA-O-4] Coordinate and collaborate management of the Piedras Blancas Light Station ONA with California Department of Parks and Recreation, San Luis Obispo County, local communities, and other interested entities.

Decisions

[ONA-D-1] The following features and structures would be restored or reconstructed to provide an accurate representation of what Piedras Blancas looked like in its early years:

- (a) Lighthouse
- (b) Fog Signal Building
- (c) Fuel/Oil House
- (d) Tank Storage Building
- (e) Fuel and Storage Building
- (f) Laundry
- (g) Watchroom
- (h) Keeper's Triplex
- (i) Head Keeper's Residence
- (j) Barn
- (k) Historic Landscape

[ONA-D-2] Close, prohibit, or otherwise make unavailable the Piedras Blancas Light Station to the following:

- (a) All forms of entry, appropriation, or disposal under the public land laws;
- (b) Operation of the mineral leasing and geothermal leasing laws and the mineral materials laws;
- (c) Livestock grazing;
- (d) Public access except for BLM tours, permits, and other specific authorizations;
- (e) Equestrian use; and
- (f) Authorization of commercial communications transmission equipment.

[ONA-D-3] Continue the withdrawal of the Piedras Blancas Light Station ONA from location, entry, and patent under the public land mining laws beyond the legislatively provided 20-year withdrawal to extend for the life of this RMP.

[ONA-D-4] Manage the Piedras Blancas ONA as VRM Class I, in accordance with its special designation, with special consideration of the importance of the cultural modifications and to restoring the historic lighthouse and facilities. This VRM Class I is adjusted to consider these cultural artifacts as an important facet of the visual landscape and to allow for the maintenance, repair, and continued restoration to preserve the outstanding visual landscape of the area.

[ONA-D-5] Provide access to Native Americans for traditional cultural and religious purposes. The site may be closed to the general public to protect the privacy of traditional cultural and religious activities in such areas by the Native American religious community.

[ONA-D-6] Acquire water supply conveyance rights on a corridor between the Light Station boundary and a nearby spring or water source and acquire an appropriative water right from the State of California for all water use.

[ONA-D-7] Acquire access rights on a corridor between the Light Station boundary and the nearest public road. Add and administer as part of the ONA any additional lands or interest in lands next to the O acquired by the United States.

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