Proposed Resource Management Plan
and
Final Environmental Impact Statement

May 2007
The Bureau of Land Management

Our Vision
To enhance the quality of life for all citizens through the balanced stewardship of America’s public lands and resources.

Our Mission
To sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

Our Values
To serve with honesty, integrity, accountability, respect, courage, and commitment to make a difference.

Our Priorities
To improve the health and productivity of the land to support the BLM multiple-use mission.

To cultivate community-based conservation, citizen-centered stewardship, and partnership through consultation, cooperation, and communication.

To respect, value, and support our employees, giving them resources and opportunities to succeed.

To pursue excellence in business practices, improve accountability to our stakeholders, and deliver better service to our customers.

BLM/CA/ES-2007-009+ 1790-1600

FES 07-14
Dear Reader:

Enclosed for your review and comment is the Proposed Resource Management Plan (PRMP) and Final Environmental Impact Statement (FEIS) for the Bureau of Land Management’s (BLM’s) Alturas Field Office. This document was prepared by BLM in concert with eight cooperating agencies, as well as from public comments received during the scoping phase and public comment period of this planning effort. The document contains both land use planning decisions and implementation decisions to provide planning structure to facilitate management of the Alturas Field Office. The PRMP is open for a 30-day review and protest period beginning on the date the Environmental Protection Agency publishes the Notice of Availability of the FEIS in the Federal Register.

The geographic planning area includes BLM managed public lands within the counties of Lassen, Modoc, Shasta, and Siskiyou, California. The overall intent of this PRMP is to develop a comprehensive management strategy that will guide the management of public lands administered by the Alturas Field Office into the future. This PRMP replaces ten former land use plans with a single, unified Alturas Field Office PRMP.

This PRMP and FEIS has been developed in accordance with the National Environmental Policy Act of 1969 (NEPA), and the Federal Land Policy and Management Act of 1976. The PRMP is largely based on the Preferred Alternative in the Draft Resource Management Plan/Environmental Impact Statement (RMP/EIS), which was released on April 28, 2006. This document contains the proposed plan, summary of changes made between the Draft RMP/EIS and PRMP/FEIS, predictable impacts of the proposed plan, summary of the written and verbal comments received during the public review period of the Draft RMP/EIS, and responses to the comments received. Public comments resulted in the addition of clarifying text, but did not significantly change proposed management decisions. A Reader’s Guide is included to help you navigate through the chapters of this document, and is located directly after the Abstract.

Any person who participated in the planning process for this PRMP, and has an interest which is or may be adversely affected, may protest approval of this PRMP and land use planning decisions contained within it (see 43 Code of Federal Regulations (CFR) 1610.5-2) during this 30-day period. Only those persons or organizations who participated in the planning process leading to the PRMP may protest. The protesting party may raise only those issues submitted for the record during the planning process leading up to the publication of this PRMP. These issues may have been raised by the protesting party or others. New issues may not be brought into the record at the protest stage.

Protests must be filed with the BLM Director in writing. Regular mail protests should be sent to: Director (210), Attention – Brenda Williams, PO Box 66538, Washington DC 20035. Overnight mail should be sent to: Director (210), Attention – Brenda Williams, 1620 L Street, NW, Suite 1075, Washington DC 20036. Email and fax protests will not be accepted as valid protests unless the protesting party also provides the original letter by either regular or overnight mail postmarked by the close of the protest period. Under these conditions, BLM will consider the email or fax protest as an advance copy and it will receive full consideration. If you wish to provide BLM with such advance notification, please direct emails to Brenda_Hudgens-Williams@blm.gov and faxes to (202) 452-5112 (Attn: BLM Protest Coordinator).
IMPORTANT: In accordance with 43 CFR 1610.5-2, the protest must contain the information described in the following critical elements check list:

- The name, mailing address, and telephone number of the person filing the protest.
- The “interest” of the person filing the protest. (How will you be adversely affected by the approval or amendment of the resource management plan?)
- A statement of the part(s) of the PRMP, and the issue(s) being protested. (To the extent possible, this should reference specific pages, paragraphs, sections, tables, maps, or other items that are believed to be incorrect or incomplete.)
- A copy of all documents addressing the issue(s) that the protesting party submitted during the planning process OR a statement of the date they were discussed for the record.
- A concise statement explaining why the protestor believes the BLM State Director’s proposed decision is incorrect.

*All of these elements are critical parts of your protest.* Take care to document all relevant facts. As much as possible, reference or cite the planning documents, or available planning records (such as meeting minutes or summaries, correspondence).

The BLM Director will make every attempt to promptly render a decision on the protest. The decision will be in writing and will be sent to the protesting party by certified mail, return receipt requested. The decision of the BLM Director shall be the final decision of the Department of the Interior.

BLM’s practice is to make comments, including names and home addresses of respondents, available for public review. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, be advised that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so. All submissions from organizations and businesses, and from individuals identifying themselves as representatives or officials of organizations and businesses, will be available for public inspection in their entirety.

Unlike land use planning decisions, implementation decisions are not subject to protest under planning regulations but are subject to administrative remedies and review, primarily through appeals to the Office of Hearings and Appeals (Interior Board of Land Appeals). Implementation decisions generally constitute BLM’s final approval allowing on-the-ground actions to proceed. Where implementation decisions are made as part of the land use planning process, they are still subject to the appeals process or other administrative review as prescribed by specific resource program regulations after BLM resolves the protests to land use planning decisions and makes a decision to adopt or amend the RMP.

These administrative remedies for final implementation decisions usually take the form of appeals to the Office of Hearings and Appeals, though for certain proposed or non-final implementation decisions, such as proposed grazing decisions, the regulations provide for an internal agency review (usually a protest to the Authorized Officer), which must be completed before the final implementation decision can be appealed to the Office of Hearing and Appeals. This type of protest to the Authorized Officer should not be confused with the protest of land use planning decisions to the BLM Director.

Upon resolution of any protests, an Approved Plan and Record of Decision (ROD) will be issued. The Approved Plan will be available to all parties through the “Planning” page of the BLM national website (http://www.blm.gov) or by mail upon request. The Approved RMP and ROD will include the appeals process for implementing decisions that may be appealed to the Office of Hearing and Appeals following its publication.
FOR FURTHER INFORMATION: For further information or to have your name added to the project mailing list, contact Jeff Fontana, Public Affairs Officer, Bureau of Land Management, 2950 Riverside Dr., Susanville, CA 96130, or email your request to necarmp@ca.blm.gov.

SUPPLEMENTARY INFORMATION: Copies of the PRMP/FEIS documents for the BLM Alturas Field Office have been sent to affected federal, state, and local government agencies and to interested parties. Copies of the PRMP/FEIS documents are available for public inspection at the BLM Alturas Field Office, 2950 Riverside Dr., Susanville, Calif. Interested persons may also review the PRMP/FEIS on the Internet at http://www.blm.gov/ca/st/en/prog/planning.1.html.

BLM would like to thank our cooperating agency partners that have worked so hard to help us complete this document. They have provided support and expertise to facilitate focusing the issues and developing alternatives to help resolve the many compelling resource concerns that face the Alturas Field Office. We would like to particularly recognize Lassen, Modoc, Shasta, and Siskiyou Counties, the Pit River Tribe, the Klamath Tribes, the U.S. Fish and Wildlife Service, California Department of Fish and Game, and California State Historic Preservation Offices as cooperating agencies on this document. Their experience and dedication has made this a better process and BLM looks forward to continuing to work with them to complete this planning effort. We also extend thanks to those individuals and organizations that have provided extensive information and many excellent ideas that have been considered during this process.

Sincerely,

Tim Burke
Field Manager
Alturas Field Office
This page deliberately left blank.
U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

PROPOSED
RESOURCE MANAGEMENT PLAN
AND
FINAL ENVIRONMENTAL IMPACT STATEMENT
ALTURAS FIELD OFFICE
ALTURAS, CALIFORNIA

Prepared by the
Alturas Field Office
May 2007

Mike Pool
State Director, California
This page deliberately left blank.
Abstract:
This Proposed Resource Management Plan/ Final Environmental Impact Statement describes and analyzes the Preferred Alternative for managing the public lands administered by the Alturas Field Office in northeast California. The Preferred Alternative provides management recommendations to guide the multiple use management of all resources. Proposed areas of critical environmental concern, suitable wild and scenic river segments, and cultural resource management areas are also recommended.

Protest:
Bureau of Land Management (BLM) planning regulations (43 CFR 1610.5-2) state that any person who participated in the planning process and has an interest which is or may be adversely affected may protest BLM’s approval or amendment of a Resource Management Plan. You must file a protest with 30 days of the date that the Environmental Protection Agency publishes its Notice of Availability in the Federal Register.

For further information contact:

Planning Coordinator
Bureau of Land Management
Eagle Lake Field Office
2950 Riverside Drive
Susanville, California 96130
(530) 257-0456
FAX (530) 257-4831
Readers’ Guide

Introduction
The Alturas Proposed Resource Management Plan (PRMP)/Final Environmental Impact Statement (FEIS) is divided into five chapters, and includes maps (of the planning area and the Preferred Alternative), an executive summary, appendices, an abbreviations list and glossary, and a list of references.

Executive Summary
The Executive Summary addresses the entire document and highlights the key issues brought forth in the Preferred Alternative.

Chapter 1
Chapter 1 identifies the purpose and need for the plan, defines the planning area, and explains public participation in the planning process. This chapter identifies the planning criteria used as guidelines influencing all aspects of the process. These guidelines are based on law, regulation, and policy. Also included in this chapter is a description of the involvement of state, local, federal governments and tribal agencies. The issues developed through public participation and the planning processes are described herein.

Chapter 2
Chapter 2 incorporates the Preferred Alternative from the Draft RMP into the PRMP/FEIS. The PRMP includes a detailed description of the management goals, objectives, allocations and allowable uses, and guidelines for the Preferred Alternative. The actions in this PRMP/FEIS are designed to provide general management guidance in most cases. Specific projects for a given area or resource will be detailed in future activity plans or site-specific proposals developed as part of interdisciplinary project planning or other means. These plans and processes address more precisely how a particular area or resource is to be managed and additional National Environmental Policy Act analysis and documentation would be conducted as needed.

An Alternatives Summary Table is included in this chapter. This table provides the reader a general summary of the key management actions for each of five alternatives, as developed for the Draft RMP.

An Impacts Summary Table is also included at the end of Chapter 2. This table provides the reader a comparison summary of the main adverse and beneficial impacts that would result from implementing each of five alternatives, as developed for the Draft RMP.

Maps are also supplied to assist the reader in comprehending proposed management actions as described in Chapter 2.
Chapter 3
Chapter 3 (Affected Environment) provides an overview of the planning area and describes the existing situation for each of the resource programs. It describes both the biological and physical components that may be affected by the alternatives. Other components of the environment that will not be affected by the proposed actions such as climate are also described. Current management direction is briefly summarized for each program.

Chapter 4
Chapter 4 (Environmental Consequences) analyzes the beneficial and adverse effects of the Preferred Alternative. There are assumptions at the beginning of each specific resource programs to help guide the reader through the thought process. At the end of the analysis of each resource subject, a discussion of the cumulative effects is provided.

Chapter 5
Chapter 5 summarizes key events in the consultation and coordination process prior to and during preparation of the PRMP/FEIS. It also lists those agencies, organizations, and individuals who were contacted or provided input into the planning process. Also listed are the technical specialists and editors who prepared this plan.

Appendices
The appendices include supplemental material referenced in the PRMP/FEIS.

BLM Response to Public Comments
Copies of the public comment letters received can be viewed from the CD located in the back pocket of Volume 2. The BLM response to each comment (or groups of comments) is located in Appendix R, Public Comment Responses. Each comment is summarized as to content by resource subject, and the corresponding BLM response is given. Any changes that have been made to the document resulting from a public comment are also referenced in the appendix.

Changes between the Draft and Final
The Draft Alturas RMP and Draft EIS (DEIS) was published in April 2006. The public had 90 days, until July 27, 2006, to submit comments on the DEIS. All comments received were seriously considered, and many were used to assist in making changes or clarifications to the Draft RMP. Changes made to the Draft RMP / DEIS include the following:

- Changes to the DEIS Preferred Alternative.
- Clarifications, corrections, supplemental analysis, and additional information added to various chapters of the PRMP/FEIS.
- One new map was created and is included with this document. These changes are listed in Chapter 1 under changes to the Preferred Alternative.

A complete list of substantial changes made to PRMP from the Draft RMP is included in Chapter 1.
EXECUTIVE SUMMARY

Introduction
The Bureau of Land Management (BLM) has prepared this Proposed Resource Management Plan (PRMP) and Final Environmental Impact Statement (FEIS) to provide direction for managing public lands within the Alturas Field Office (AFO) planning area and to analyze the environmental effects resulting from implementing the alternatives addressed in this PRMP.

The AFO planning area includes approximately 503,045 acres of BLM-managed surface acres in northeastern California. The geographic area includes public lands within the counties of Lassen, Modoc, Shasta, and Siskiyou, California. BLM’s mission is to sustain the health, diversity, and productivity of the public lands it manages for the use and enjoyment of present and future generations. The AFO PRMP was developed in coordination with the Eagle Lake and Surprise Field Office Resource Management Plans (RMPs) to provide a consistent framework for managing public lands and resource uses in northeast California and northwest Nevada.

The PRMP is being prepared using BLM’s planning regulations and guidance issued under the authority of the Federal Land Policy and Management Act (FLPMA) of 1976. An EIS is also included in this document to meet the requirements of the National Environmental Policy Act (NEPA), Council on Environmental Quality regulations for implementing NEPA (40 Code of Federal Regulations (CFR) 1500-1508), and requirements of BLM’s NEPA Handbook, H-1790-1.

Purpose and Need
The purpose of the Alturas PRMP is to provide guidance in the management of the lands and resources administered by the AFO of BLM that will address major resource issues identified during scoping, and through internal and cooperating agency meetings. The Alturas PRMP is meant to be comprehensive in nature, providing guidance for management of all uses and resources administered by BLM in the planning area.

Current management direction for the AFO is contained in ten land use plans or amendments that were developed from 1973-2002. New information, changed circumstances and resource conditions since these plans were prepared require the revision of these existing plans into a single updated RMP.

Population growth in the vicinity of Fall River Valley in Lassen and Shasta Counties, California and the metropolitan areas of Klamath Falls, Oregon; Reno, Nevada; and Redding, California has caused an increased demand for use of public lands to support community needs and low impact recreation. The AFO has experienced a substantial increase in requests for land tenure decisions or adjustments and for land use permits and authorizations, including those for renewable energy development.

Vegetation communities continue to be threatened by both the encroachment of western juniper into sagebrush-grasslands and from the invasion of annual exotic grasses and noxious weeds. The number of plant and animal species recognized by California as special status species has increased. In addition, the decline of sage-grouse populations in the western United States has triggered BLM national, state, and local strategies with new guidance to address habitat requirements of the species.
New protocol agreements between BLM and the State Historic Preservation Office guide the protection, inventory, and conservation of cultural resources as they relate to other resources and land uses. Emphasis is being placed on finding and managing traditional cultural properties in accord with local tribes.

Planning and Scoping Process
BLM officially initiated the planning process for the Alturas RMP with publication of a Notice of Intent in the Federal Register on July 22, 2003 (Volume 68, Number 140). Issues related to resource management in the Alturas planning area were assembled during the scoping process consisting of public scoping meetings, field tours, socioeconomic workshops, and interactions with federal, state, tribal, and county collaborators.

BLM hosted six public scoping meetings in August and September 2003. A total of 205 people attended these meetings. Four meetings were held within the planning area. Other meetings were held in Redding, California, and Reno, Nevada, to ensure that BLM heard the concerns of user groups residing outside the planning area. BLM also conducted a scoping meeting in the field in August 2003. A community workshop was conducted to discuss economics and social values in December 2003.

The scoping process generated 15 key issues to be addressed in the RMP. These issues, listed below, and summarized in Chapter 1, were used to develop alternatives and are addressed in other sections of the resource management plan (e.g., effects on local economies).

1. How should upland ecosystems be managed?
2. How should forest resources be utilized and forestry issues resolved?
3. How and where should water be utilized and managed?
4. How will visual resources be managed and preserved?
5. How should riparian areas and wetlands be managed?
6. How should wildland and prescribed fire be managed and utilized?
7. How should motorized access and vehicular recreation be managed on public lands?
8. How should public lands be managed to support traditional practices and preserve traditional cultural properties of Native Americans?
9. How should public lands be managed to support the needs of local communities?
10. How should rangelands and livestock grazing be managed?
11. What lands should be made available for energy and mineral development?
12. What lands should be identified for retention, exchange, disposal and acquisition?
13. How should recreation opportunities be managed?
14. How should fish, wildlife, and special status species be managed?
15. How should special resource values and special management areas be designated and managed?
16. How will air quality be managed?
17. How will paleontological resources be protected and managed?
18. How will the RMP planning process be organized?
EXECUTIVE SUMMARY

The Draft Alturas RMP and Draft Environmental Impact Statement (DEIS) was published in April 2006. The public had 90 days, until July 27, 2006, to submit comments on the DEIS. During this period, BLM held seven public comment meetings.

The public comment period generated approximately 4,997 submissions of 1 form letter and 33 additional unique comment submissions from individuals and groups. The approximate number of comments that BLM analyzed and responded to was 402. These are summarized in Appendix Q of this document.

All comments received were seriously considered, and many were used to assist in making changes or clarifications to the Proposed RMP. Changes made to the DEIS include the following:

- Changes to the Draft EIS Preferred Alternative.
- Clarifications, corrections, supplemental analysis, and additional information added to various chapters of the FEIS/PRMP.
- Creation of one new map that is included with this document.

A complete list of substantial changes made to PRMP from the Draft RMP is included in Chapter 1.

Collaboration

BLM approaches planning with community-based collaboration, in which interested groups and people—often with varied or opposing interests—work together to devise solutions with broad public support for managing BLM-administered lands. Cooperating local, state, tribal, and federal agencies have been part of the planning team for the RMPs to the fullest extent possible. During plan implementation, BLM will continue partnerships with these public and local, state, and tribal governments and agencies to select high priority projects and to resolve emerging issues.

The Council on Environmental Quality defines a cooperating agency as any agency that has jurisdiction by law or special expertise for proposals covered by NEPA (40 CFR 1501.6). Any federal, state, or local government jurisdiction with such qualifications may become a cooperating agency by agreement with the lead agency. The following are formal cooperating agencies for this RMP:

- Modoc County;
- Lassen County;
- Shasta County;
- U.S. Fish and Wildlife Service;
- California Department of Fish and Game;
- California State Historic Preservation Offices; and
- Pit River Tribe.

The Northeast California Resource Advisory Council contributed issues and reviewed goals, objectives, and management alternatives. Other groups that participated in the planning process include the Klamath Tribes, Alturas Rancheria, Siskiyou County, and the Modoc-Washoe Experimental Stewardship Group.
**Management Alternatives**

BLM developed management alternatives for the AFO Draft RMP using input and comments from public scoping meetings, written comments, as well as from staffs of BLM and other cooperating agency partners. NEPA regulations and BLM resource management planning regulations require the formulation of a reasonable range of alternatives that seek to address identified planning issues and management concerns. Each alternative must be evaluated to ensure that it would be consistent with resource goals and objectives, and current laws, regulations, and policy.

Alternatives are developed to establish a framework to evaluate the potential impacts on the planning area that might occur as a result of implemented management decisions. The five management alternatives developed for the Alturas Draft RMP are detailed in this section, including:

**No Action Alternative** (required by NEPA): Retains current management through guidance and direction from current policies, and existing management plans.

**Alternative 1. Resource / Economic Development:** Emphasizes commodity production from BLM resources in accordance with local economies and land use plans from local communities and counties.

**Alternative 2. Ecosystem Restoration or Protection:** Maximizes efforts to maintain, restore, or improve components of the ecosystem using natural ecosystem processes.

**Alternative 3. Traditional or Historical Uses:** Emphasizes traditional community uses of resources and/or emphasizes historical uses and values.

**Preferred Alternative:** The Preferred Alternative was “crafted” from all of the other alternatives and combines management actions from all four of the above-listed alternatives. This alternative has been designed and selected to best meet the purpose and need of the plan as described in Chapter 1; and to meet desired future conditions, goals, and objectives of individual and combined resources and resource uses.

Each alternative listed above has a somewhat different concept and emphasis on how natural resources and resource uses would be managed. The Alturas Draft RMP provided a detailed description of alternative management actions for 21 resource subjects. The desired future condition, goals, objectives, and management actions for each major resource area are discussed in detail in Chapter 2. The highlights of management actions under the Preferred Alternative for each resource subject are listed below.

**Preferred Alternative Management Actions**

**Air Quality**

- Manage prescribed fire on 75 to 10,000 acres/year and wildland fire use to reduce impacts on air quality.

**Cultural and Paleontological Resources**

- CRMPs will be developed for Rocky Prairie/South Graves, Tule Mountain, Likely Tablelands/Yankee Jim Ranch, and Beaver Creek, and the three interpretive sites.
- Designate one archaeological area of critical environmental concern (ACEC): Likely Tablelands/Yankee Jim/Fitzhugh Creek (1,400 acres).
- Nominate Yankee Jim Ranch to the NRHP.
EXECUTIVE SUMMARY

- Develop 3 cultural resource interpretive sites: Descent into Goose Lake, Bayley Reservoir, and Coyote Ridge.
- Exclosure fences (2,750 total acres) would be used (in consultation with permittees and tribes) to protect important cultural sites from damage by off-highway vehicles (OHVs) and livestock.

Energy & Minerals

- Manage 445,997 acres as 'Open' to mineral leasing under standard terms and conditions.
- Manage 470,052 acres as 'Open' to locatable mineral development.
- Manage 435,385 acres as 'Open' to saleable mineral development (i.e., mineral material pit establishment & decorative rock collecting).
- Manage 435,385 acres as 'Open' to renewable energy development.

Fire Management

- The NorCal Fire Management Plan identifies aggressive, full suppression as the appropriate management response (AMR) under conditions of severe fire intensity, especially in the wildland urban interface. However, exceptions may be made where resource objectives could be safely achieved.
- Under conditions of low fire intensity, a less aggressive AMR (typically containment) would be implemented, according to resource management objectives for the area.
- Manage wildland fires using AMR according to the following guidelines:
  - Full range of AMR options on 486,047 acres
  - Wildland fire use on 16,998 acres

Forestry Resources

- Manage 13,800 acres of commercial and low-site forests for multiple-use objectives using appropriate methods of silviculture.
- Manage 40% of commercial timberlands as late-succession forests and maintain a substantial area of late-succession forests on low-site forestlands.
- Timber harvesting would not be allowed on Mount Dome to preserve a bald eagle roosting area.
- Implement fuel reduction and stand improvement using prescribed fire on 13,800 acres.
- Implement timber production and mechanical harvest of commercial and low-site forestlands on 12,000 acres.
- Implement reforestation of 8,000 acres.
- Authorize 10 miles of new permanent roads and 50 miles of temporary roads for timber management and harvesting activities.

Fuels Management

- Implement fuels treatments using prescribed fire--as well as mechanical, chemical and biological methods--to reduce hazardous fuel accumulation, provide fuel breaks, and create defensible space around at-risk communities according to the following schedule:
  - Prescribed fire: 75–10,000 acres/year
  - Mechanical treatment: 75–10,000 acres/year
  - Biological treatment: 0–1,250 acres/year
  - Chemical treatment: 50–2,000 acres/year
EXECUTIVE SUMMARY

- Create fuel breaks and defensible space around the wildland urban interface and communities. Fuels treatments would be prioritized on degraded forest and rangeland (especially where encroached by western juniper), important wildlife habitats, and important archaeological or historic sites.

Lands and Realty

- The 2002 Alturas Land Tenure Adjustment Plan (LTAP) would be the basis for future land tenure adjustments (but modified to include conservation easement projects and the Madeline retention/acquisition area).
- A priority list of land tenure adjustments would be developed from the LTAP and this RMP.
- Public access would be secured to BLM-administered lands, resources, and facilities—including road construction around private lands where access is desirable and easement acquisition isn’t feasible.
- All ACECs, research natural areas (RNAs), and wild and scenic river (WSR) corridors (a total of 32,993 acres) would be recommended for withdrawal from mineral entry.

Rights-of-Way

- Continue authorization of current rights-of-way (ROWs) and communication sites. Any new development would be restricted to existing corridors and sites wherever feasible.
- Identify lands potentially available for telecommunications sites and utility ROWs on 435,385 acres.
- New utility corridors, pipelines or electrical transmission lines, or communication sites would not be permitted in any designated ACEC, in wilderness study areas (WSAs), or in the (proposed) Lower Pit River WSR corridor (excluded areas total 67,660 acres).
- Utility corridors would not exceed 500 feet in width.
- Additional utility corridors may be designated as future needs dictate, subject to on-site environmental reviews and clearances, in accordance with The West-wide Energy Corridor Programmatic EIS, 2005.

Livestock Grazing

- Maintain 145 grazing allotments for livestock use with 454,649 acres available to grazing.
- Initial active animal unit month (AUM) levels would be set at 54,881 AUMs. This level could be adjusted based on land health considerations. Additional AUMs may be available in the future as vegetation treatments are accelerated under the Sagebrush Steppe Restoration Strategy.
- Grazing practices will be modified to achieve compliance on allotments failing to meet land health standards.
- Decisions to resume livestock grazing on areas that have been mechanically treated or burned by wild or prescribed fire would be based on assessment of monitoring data. Generally, grazing would not resume for a minimum of two growing seasons. However, mechanically treated areas may be assessed for potential resumption of livestock grazing following one growing season of rest.
- Maintain the long-term health and productivity of rangelands when dealing with drought through implementation of the BLM Drought Management Policy for the Alturas and Surprise Field Offices.
- Establish forage reserves in cooperation with other federal, state, and private agencies.
- Implement rangeland improvements to benefit wildlife and watersheds, in addition to livestock.
- Livestock salting would not be allowed within ¼ mile of springs, meadows, NRHP-quality archaeological sites, streams, and aspen areas. Location of salting stations would be determined by BLM in consultation with livestock permittees.
EXECUTIVE SUMMARY

Recreation and Visitor Services

- Manage lands not designated as SRMAs, WSAs, or ACECs as extensive recreation areas.
- Designate the Infernal Caverns/Rocky Prairie SRMA and the Pit River SRMA to improve visitor services.
- Limit camping to 14 consecutive days at a single location and 28 days annually, and prohibit camping within 200 feet of creeks, springs, rivers, lakes, and reservoirs unless posted otherwise.
- Issue special recreation permits to meet demand while ensuring protection of natural and cultural resources and operating within reasonable public safety parameters.
- Acquire from Pacific Gas and Electric Company (PG&E) segments of the Pit River (13 total miles) that support significant coldwater and warmwater fisheries. Also acquire a 5-mile stretch of Hat Creek (also from PG&E) to preserve world-class trout fishing.
- Designate Pit River (i.e. a 16-mile stretch in the Pit River SRMA) for non-motorized boating. Designate Delta Lake, Moon Lake, Nelson Corral and Bayley Reservoirs in the Infernal Caverns/Rocky Prairie SRMA for limited motorized boating.
- Develop 7 to 9 improved parking areas in recreational sites for improved visitor services.
- Apply recreation opportunity spectrum classes to all lands in order to provide a diversity of recreational experiences:
  - ‘Primitive’ 55,594 acres
  - ‘Semi-Primitive, Non-Motorized’ 63,472 acres
  - ‘Semi-Primitive Motorized’ 273,539 acres
  - ‘Roaded Natural’ 110,440 acres

Soils

- Implement measures to achieve recovery of 10,154 acres of degraded upland soils.
- Ensure that management activities do not result in a net loss of soil productivity or productive potential.
- Minimize management activities within perennial and intermittent drainages where watershed function would be adversely affected.
- Employ bio-engineering projects to improve soil condition and achieve ‘Proper Functioning Condition’ on 200 acres of degraded soils.
- Apply sediment intrusion buffer zones of 50 feet around sensitive resources, as indicated.
- Prevent damage to high shrink-swell soils by limiting compacting activities (livestock grazing and OHVs) to periods when soils are sufficiently dried to resist compaction.
- Treat invasive plants and noxious weeds (or modify management) on sites where soil function and integrity are compromised.
EXECUTIVE SUMMARY

Special Designations:
Areas of Critical Environmental Concern

- Maintain the Ash Valley ACEC (1,322 acres); and manage the Baker Cypress Natural Area (1,448 acres) as part of the new Timbered Crater ACEC.

- Designate six new ACECs (29,171 total acres):
  - Timbered Crater—17,896 acres
  - Emigrant Trails—1,750 acres
  - Mountain Peaks—3,500 acres
  - Old-Growth Juniper—3,115 acres
  - Mount Dome—1,510 acres
  - Likely Tablelands/Yankee Jim/Fitzhugh Creek—1,400 acres

- Livestock grazing would be managed according to permit stipulations, allotment management plans, and ACEC management plans.

- Noxious weeds would be aggressively controlled in ACECs.

- ACECs would be ‘Closed’ or restricted to no surface occupancy restrictions for leasable energy development; ACECs would be ‘Closed’ to locatable and salable mineral development. Where ACECs overlap WSAs, further constraints on mineral activities apply under the Wilderness Interim Management Policy.

- All ACECs would be ROW exclusion zones.

- ACECs would be managed under visual resource management (VRM) Class II criteria, or Class I criteria where subject to the Wilderness Interim Management Policy.

National Historic Trails

- Protect and maintain approximately 29 miles of national historic emigrant trails.

- Develop a “Historic Sites Scenic Byway” with off-site interpretive locations.

- Develop recreation development packages for 7 or 8 sites of historic significance.

- Designate an Emigrant Trails ACEC to protect and intensively manage 1,750 acres of historic trail remnants and associated historical artifacts.

Scenic Byways

- Designate and manage the following proposed scenic byways:
  - U.S. Highway 395 - Alturas to Reno 190 miles
  - State Highway 139 - Canby to Susanville 90 miles
  - State Highway 299 - Adin to Redding 110 miles
  - State Highway 139/Canby to U.S. Highway 395/Nevada state line 170 miles
  - Total 560 miles

- Continue work to add additional segments and interpretive locations to the Emigrant Trails Scenic Byway (U.S. Highway 395 and State Highways 299 and 139).

- Cooperate with the Northern California Resource Center for interpretive planning and development on the Applegate and Lassen National Historic Emigrant Trails, and at the Descent to Goose Lake. Develop a 0.25-mile interpretive walking trail and a 1-mile hiking trail.

- Designate the Clark’s Valley Road Driving Route for 21 miles.
EXECUTIVE SUMMARY

Wild and Scenic Rivers

- Recommend 13 miles of Upper Pit River as suitable for WSR designation, with a ‘wild’ classification.
- Recommend 3 miles of Lower Horse Creek Canyon as suitable for WSR designation, with a ‘wild’ classification.
- Recommend 2.5 miles of Lower Pit River Canyon as suitable for WSR designation, with a ‘scenic’ classification.

Wilderness Study Areas

- Four WSAs and one instant study area (ISA) would continue to be governed by the Wilderness IMP until such time as Congress makes a determination regarding wilderness designation. These include:
  - Pit River Canyon WSA (10,984 acres)
  - Lava WSA (10,770 acres)
  - Timbered Crater WSA and Baker Cypress ISA (17,896 acres)
  - Tule Mountain WSA (16,998 acres)

Travel Management

- OHV travel would be ‘Limited to Existing Roads and Trails’ year-round, except where further restrictions are specifically assigned (e.g., ‘Open,’ ‘Closed,’ ‘Seasonally Closed,’ or ‘Limited to Designated Routes’).
- Where travel on an existing road is creating sufficient adverse impacts, the road may be closed (on a temporary or permanent basis) through plan maintenance.
- Travel restrictions on the Nelson Corral Reservoir Road would be a year-round ‘Limited to Existing Roads and Trails’ designation.
- The Cinder Cone OHV Management Area (80 acres) would be ‘Open’ to year-round OHV travel. However, organized off-highway vehicle events would only be permitted in this location or on designated routes in other specially approved locations.
- Assign off-highway vehicle use area designations:
  - ‘Open’ 80 acres
  - ‘Limited to Existing or Designated Routes’ 498,140 acres
  - ‘Closed’ 4,825 acres
- Manage three areas, and certain routes, specifically for recreational driving:
  - Cinder Cone OHV Management Area (near Cassel),
  - Fall River Trail (near Fall River Mills), and
  - Barnes Grade/Crowder Flat OHV Management Area (near Alturas).
- Construct approximately 66 miles of new motorized and non-motorized trails, including the 40-mile stretch of the abandoned Modoc Line railbed.
- Motorized boating would be unrestricted on West Valley Reservoir.
- On Delta Lake and the Nelson Corral Reservoir (in the Infernal Caverns/Rocky Prairie SRMA), only electric trolling motors and non-motorized use would be allowed.
- Propulsion on Bayley Reservoir would be limited to small outboards (i.e., 4-cycle engines [phased in by 2012], electric trolling motors, or non-motorized craft).
- A special recreation permit would be required for commercial sport-fishing and whitewater rafting in the lower Pit River Canyon.
EXECUTIVE SUMMARY

- There would be no restrictions on motorized snow travel to the Nelson Corral high-country or the Dead Horse Loop area.
- Implement annual road maintenance, using a priority system, on 28 miles of routes.

Vegetation

- Employ natural disturbance processes—particularly prescribed fire and wildland fire use—as the preferred method of restoring shrub communities, along with thinning (using mechanical and manual methods) to stimulate seeding and sprouting.
- Designate Timbered Crater, Mount Dome, Mountain Peaks, and Old-Growth Juniper ACECs (26,021 total acres) also as research natural areas to protect unique plant species and communities.
- Incorporate recommendations developed in the Sagebrush Steppe Restoration Strategy to manage juniper encroachment.
- Prioritize restoration treatment methods for removal of invasive juniper in shrub–steppe communities:
  - Prescribed fire/ Wildland fire use: 75–10,000
  - Manual: 50–5,000
  - Biological: 75–2,000
  - Chemical: 50–2,000
  - Mechanical: 75–10,000
  - Seeding: 50–10,000
- Construct 10 miles of permanent roads and 50 miles of temporary roads to facilitate juniper reduction and forestry treatments.
- Protect 38,000 acres of old-growth western juniper from timber harvesting and firewood cutting.
- Incorporate guidelines from the Sage-Grouse Conservation Strategy to restore sage-grouse habitat in Wyoming and mountain big sagebrush ecosystems.
- Implement management actions to create healthy, multi-aged stands of bitterbrush, on up to 500 acres per year.
- Exclude livestock from aspen stands using:
  - Permanent fencing - 200 acres
  - Temporary fencing - 300 acres
- Rejuvenate or maintain stands of curlleaf mountain mahogany through selected treatments on up to 1,000 acres per year.
- Rejuvenate or maintain oak woodlands with abundant saplings and in mixed age classes through selected treatments on up to 5,000 acres per year.

Riparian/Wetland Associations

- Assess riparian areas for ‘Proper Functioning Condition’, existing—or potential—natural community, and ecological site description.
- Implement measures to make progress toward ‘Proper Functioning Condition’ on 15 miles of streams, 22 acres of springs, and 46 acres of wetlands.
- Protect riparian areas from grazing using exclosure fencing (up to 500 acres) and alternative water sources.
- Use bio-engineering projects, such as planting riparian vegetation for vegetation manipulation and streambank stabilization.
- Locate livestock salting sites ¼ mile from riparian areas to discourage damage by livestock.
EXECUTIVE SUMMARY

- Re-route roads through Little Buck Meadows and Big Buck Meadows; rehabilitate existing roads with native herbaceous vegetation.

Noxious Weeds & Invasive Species

- Implement integrated weed management (IWM) procedures on BLM lands. Review project proposals determine necessary IWM actions and coordinate treatment with local agencies.
- Conduct periodic inventory of noxious weeds to detect new infestations and monitor the condition of existing infestations. The highest priority for noxious weed inventory would be critical wildlife habitat, at-risk plant communities, high-use areas, and recreation sites.
- Monitor treated sites to determine treatment effectiveness and impacts on non-target vegetation.
- Educate the public regarding noxious weed infestation and introduce practical measures to minimize infestations through public awareness and cooperation.
- Hay, straw, and mulch used for any purpose must be certified noxious weed free.

Special Status Plants

- Manage habitats for special status plants so that BLM actions do not contribute to the need to ‘list’ these species (as threatened or endangered) under federal law.
- Reduce or eliminate adverse impacts on special status plants (and their habitats) during ground-disturbing activities.
- Acquire lands (from willing sellers) that support unprotected populations of special status plants.
- Protect ‘special interest’ plants (and their habitats) to prevent them from becoming special status plants.
- OHVs would be ‘Limited to Designated Routes’ in the Ash Valley ACEC/RNA and the Westside Grazing Allotment to protect special status plants.

Visual Resources

- Manage wilderness study areas as VRM Class I.
- Assign VRM Class designations to BLM-administered lands and manage according to class requirements in order to protect scenic quality:
  - VRM Class I 56,648 acres
  - VRM Class II 157,177 acres
  - VRM Class III 104,006 acres
  - VRM Class IV 185,214 acres
- Areas of critical environmental concern (ACECs), Wild and Scenic Rivers (WSRs), Historic Trails, or other Special Designations would be managed as VRM Class II, unless the area is managed as Class I under other resource prescriptions.
- All developments, land alterations, and vegetation manipulations would be designed to minimize visual impacts. All projects would be designed to maximize scenic quality while minimizing scenic intrusions.

Water Resources

- Establish ‘Proper Functioning Condition’ on 15 miles of streams, 22 acres of springs, and 46 acres of wetlands. Achieve state water quality standards and the needs of beneficial users on 17 miles of streams.
- Implement bioengineering practices on 25 miles of perennial, intermittent, and ephemeral streams to improve streambank stabilization.
EXECUTIVE SUMMARY

- Implement restorative measures to improve water quality and make significant progress toward achieving state standards. Emphasize natural recovery processes, livestock exclosures, planting of woody riparian vegetation, and construction of in-stream structures.
- Maintain existing and develop 75 new water sources to improve livestock distribution and extend seasonal availability for wildlife.
- Consider withdrawal of state-appropriated water rights on waters that are not “waters of the state”.
- Assert riparian rights on all perennial and important intermittent streams.
- Coordinate projects that involve inter-basin transfer of water with local and regional governments.

Wild Horses

- Continue to protect and manage wild horses within the Red Rock Lakes herd management area (HMA) at the established appropriate management level (AML) of 16 to 25 horses. Horses would be periodically removed to maintain the appropriate management level.
- Cooperate with the U.S. Department of Agriculture Forest Service in periodic removal, adoption, and holding of animals from the Devil’s Garden Wild Horse Territory to keep horse numbers within AML for the Emigrant Herd Management Area.

Wildlife and Fisheries

**Federally Listed Species**

**Bald Eagle**
- Conduct nesting and population surveys and implement seasonal protective measures and buffer zones for permitted activities.
- Develop habitat management plans for the Conrad Ranch and Timbered Crater nesting areas, as well as the Juniper Creek roosting site.
- Manage suitable forest habitat to retain potential nest trees.

**Northern Spotted Owl**
- Northern spotted owl and its habitat (where and when found) will be managed per existing terms and conditions contained in plan and program-level biological opinions.

**Modoc, Shortnose, and Lost River Suckers, and Shasta Crayfish**
- These species and their habitats (where and when found) will be managed according to existing recovery plans and the terms and conditions of plan and program-level biological opinion.

**Yellow-Billed Cuckoo and Oregon Spotted Frog**
- These species have not been found in the management area. However, the AFO will contribute to appropriate survey efforts and – if a population of either species is discovered – would develop conservation and action plans.

**State- and BLM-Listed Sensitive Species**

- Cooperate with partners to obtain information on occurrence, abundance and distribution. Develop a geographic information system database to document and track information.
- Use seasonal protective measures and buffer zones for permitted activities in critical habitats for these species.
- Restore critical habitats of state-listed and BLM sensitive species in degraded sagebrush associations.
EXECUTIVE SUMMARY

Ungulates

- Focus management on priority habitat areas for mule deer and black-tailed deer on 128,000 acres to maintain and improve ecological conditions.
- Prioritize management areas for improvements to pronghorn habitats by maintaining healthy low sagebrush habitat. Focus management on priority habitat areas (60,145 acres), and identified high quality habitat (130,000 acres).
- Construct exclosures and fences to protect important ungulate habitats: aspen, bitterbrush, oaks, mahogany, riparian areas, and springs, on up to 1,000 acres.
- Control invasive juniper and noxious weeds to improve or reestablish native habitats.
- Use seeding, planting, and other vegetation treatments to improve terrestrial and aquatic habitats.
- Assign OHV designations to protect wintering ungulates. Assign seasonal road closures to protect wintering ungulates on the following areas:
  - Likely Tablelands
  - Barnes Grade
  - Day Bench
- If Rocky Mountain elk become established in the management area, coordinate with state wildlife agencies and other stakeholders—including livestock owners—to develop and implement a management plan.
- Coordinate with California Department of Fish and Game in the development of a management plan prior to reintroduction of California bighorn sheep.
- Provide artificial water sources (e.g., guzzlers) in areas with high wildlife potential, especially were natural sources are depleted or limited.

Sagebrush Ecosystems and Sagebrush-Obligate Species

- Implement juniper reduction to enhance sagebrush ecosystems; focus on providing diversity in shrub age class and composition and healthy understory vegetation.
- Restore natural disturbance processes (such as fire) by implementing fuels treatments, including prescribed fire and thinning projects, in accordance with conservation strategies for Sage-Grouse.
- Avoid practices that convert sagebrush habitats to non-native grassland or agricultural land.

Sage-Grouse:

- Implement locally developed strategies found in Conservation Strategies for Sage-Grouse and Sagebrush Ecosystems within the Buffalo-Skedaddle, Likely Tablelands/Rocky Prairie and Devil’s Garden/Clear Lake Population Management Units. Utilize translocation to augment low populations in conjunction with habitat management projects.

Burrowing Owl:

- Inventory and map suitable habitat. Develop a conservation strategy to protect identified nesting burrows and other seasonal habitats.

Pygmy Rabbit:

- Inventory and map suitable habitat and determined species abundance. Develop a conservation strategy to protect occupied habitat.

Other Sagebrush-Obligate and Associated Species:

Survey to determine use of sagebrush habitats by sagebrush-obligate and associated species. Determine demographic trends and habitat utilization for these species for utilization in medium and large-scale area, regional, and national strategies for managing sagebrush-obligate species.
EXECUTIVE SUMMARY

Other Native Wildlife Species

- Coordinate reintroductions, augmentations, and translocations of native species with state wildlife agencies.
- Create brush piles and water sources for upland game birds and small mammals in important habitats where cover or water is depleted or unreliable.
- Maintain waterfowl nesting islands on 12 reservoirs and create additional islands on 26 reservoirs. Construct island or reservoir fences on 31 reservoirs.
- Current meadow and riparian habitat enhancement projects will continue, and an additional 500 acres of riparian habitats will be fenced. Permanent fencing will protect 200 acres of high-risk aspen and 300 additional acres will be protected with temporary fencing.

Native and Non-Native Fish and Other Aquatic Species

- Restore proper functioning condition to springs and streams by installing and maintaining riparian fencing, maintaining or improving minimum pool depths, augmenting clean spawning gravels, and stabilizing stream banks.
- Coordinate with state agencies when implementing management actions—especially proposed stocking of fish.
- Implement habitat improvements for warm-water fish at the following reservoirs: Iverson, Lower Roberts, Coyote, Romero, Little Juniper, Knox Gulch, Popcorn #1, Antelope, West Valley and Moon Reservoirs.

Non-Native Terrestrial Species

- Manage to reduce or eliminate populations of non-native or invasive species that are impacting native species and/or habitats in a manner consistent with state and federal policies, procedures, and regulations.

Environmental Consequences

The potential environmental consequences (or impacts) of the five alternatives were analyzed for each natural resource, resource use, and social and economic conditions. Detailed descriptions of the direct and indirect impacts of resource management under all five alternatives are provided in Chapter 4, along with a discussion of the possible cumulative impacts that could result from actions taken in this PRMP. A comparison summary of these impacts is described in the Impacts Summary Table at the end of Chapter 2.

The Preferred Alternative would enhance the ability of BLM to achieve the purpose and need of this document, as outlined in Chapter 1, as well as meet desired future conditions, goals and objectives of specific resources as outlined in Chapter 2. Alternatives 1, 3 and No Action lack the degree of management emphasis required to restore degraded sagebrush steppe communities and habitats, in relation to the encroachment of juniper.

The Preferred Alternative would result in overall minor to moderate adverse impacts to resources, and these impacts would continue to be mitigated. Management actions under the Preferred Alternative would result in moderate to major beneficial impacts to native vegetation communities from restoration efforts, and the use of prescribed fire to remove invasive juniper. Improvements to riparian areas, water bodies, and other special habitats would improve soil and water resources, and wildlife habitat. The designation of six areas of critical environmental concern, three wild and scenic river segments, and an increased emphasis on cultural resource protection and management would have beneficial impacts to these important and unique resources.
# TABLE OF CONTENTS

## VOLUME 1

### Chapter 1. Purpose and Need
1.1 Purpose and Need for the Plan ................................................................. 1-1
1.2 Changed Circumstances ........................................................................... 1-1
1.3 Planning Area ........................................................................................... 1-2
1.4 Planning and Scoping Processes ................................................................. 1-5
1.5 Issues Raised During the Scoping Process ............................................... 1-6
1.6 Issues Considered but Not Furthered Addressed ..................................... 1-14
1.7 Planning Criteria ...................................................................................... 1-15
1.8 Collaboration ............................................................................................ 1-16
1.9 Public Comment Process .......................................................................... 1-16
1.10 Coordination and Consistency with Other Plans .................................... 1-17
1.11 Changes between Draft RMP/EIS and PRMP/Final EIS......................... 1-17
1.12 Changes to the Preferred Alternative ..................................................... 1-18

### Chapter 2. Management Actions for the Proposed RMP
Introduction .................................................................................................... 2-1
2.1 Air Quality ................................................................................................ 2-4
2.2 Cultural and Paleontological Resources ................................................. 2-6
2.3 Energy and Minerals ............................................................................... 2-13
2.4 Fire Management ...................................................................................... 2-19
2.5 Forestry ..................................................................................................... 2-26
2.6 Fuels Management .................................................................................. 2-29
2.7 Lands and Realty ..................................................................................... 2-32
2.8 Livestock Grazing ..................................................................................... 2-37
2.9 Recreation and Visitor Services ............................................................... 2-42
  2.9.6 Recreation Opportunity Spectrum ..................................................... 2-46
2.10 Soil Resources ......................................................................................... 2-51
2.11 Special Designations – Areas of Critical Environmental Concern ......... 2-54
2.12 Special Designations – National Historic Trails .................................... 2-62
2.13 Special Designations – Scenic Byways .................................................. 2-65
2.14 Special Designations – Wild and Scenic Rivers .................................... 2-68
2.15 Special Designations – Wilderness Study Areas .................................... 2-71
2.16 Travel Management .............................................................................. 2-75
2.17 Vegetation ............................................................................................... 2-88
Chapter 3. Affected Environment

Introduction ...................................................................................................................... 3-1
3.1 Air Resources ............................................................................................................. 3-2
3.2 Cultural Resources and Paleontology ....................................................................... 3-6
3.3 Economic Conditions ................................................................................................. 3-12
3.4 Energy and Minerals ................................................................................................. 3-17
3.5 Environmental Justice ............................................................................................... 3-21
3.6 Fire and Fuels ........................................................................................................... 3-23
3.7 Forestry ...................................................................................................................... 3-31
3.8 Lands and Realty ....................................................................................................... 3-33
3.9 Livestock Grazing ...................................................................................................... 3-37
3.10 Recreation and Visitor Services ................................................................................. 3-41
3.11 Social Conditions .................................................................................................... 3-45
3.12 Soil Resources .......................................................................................................... 3-49
3.13 Special Designations – Areas of Critical Environmental Concern ....................... 3-53
3.14 Special Designations – Historic Trails ................................................................. 3-54
3.15 Special Designations – Scenic (Backcountry) Byways ....................................... 3-57
3.16 Special Designations — Wild and Scenic Rivers .................................................. 3-58
3.17 Special Designations – Wilderness Study Areas .................................................. 3-60
3.18 Travel Management ................................................................................................ 3-62
3.19 Vegetation ................................................................................................................. 3-67
3.20 Noxious Weeds and Invasive Species .................................................................... 3-82
3.21 Special Status Plants ............................................................................................... 3-87
3.22 Visual Resources ...................................................................................................... 3-94
3.23 Water Resources ...................................................................................................... 3-95
3.24 Wild Horses and Burros .......................................................................................... 3-103
3.25 Wildlife and Fisheries ............................................................................................... 3-105
## List of Tables and Figures

<table>
<thead>
<tr>
<th>Table/Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.3-1</td>
<td>Land Ownership within the AFO Boundary</td>
<td>1-2</td>
</tr>
<tr>
<td>1.3-2</td>
<td>Land Status</td>
<td>1-5</td>
</tr>
<tr>
<td>1.3-3</td>
<td>BLM-Administered Lands in the Four-County Alturas Planning Area</td>
<td>1-5</td>
</tr>
<tr>
<td>1.4-1</td>
<td>Public Scoping Meetings for the Alturas, Surprise, and Eagle Lake Planning Process</td>
<td>1-5</td>
</tr>
<tr>
<td>1.6-1</td>
<td>Issues Beyond the Scope of the Alturas Resource Management Plan</td>
<td>1-14</td>
</tr>
<tr>
<td></td>
<td>Public Comment Meetings</td>
<td>1-16</td>
</tr>
<tr>
<td></td>
<td>Substantive Changes Made to the Preferred Alternative</td>
<td>1-18</td>
</tr>
<tr>
<td>2.2-1</td>
<td>Use Categories for Cultural Resources</td>
<td>2-8</td>
</tr>
<tr>
<td>2.2-2</td>
<td>Proposed Cultural Resource Interpretive Sites</td>
<td>2-8</td>
</tr>
<tr>
<td>2.2-3</td>
<td>Cultural Site Exclosures</td>
<td>2-9</td>
</tr>
<tr>
<td>2.3-1</td>
<td>Proposed Areas ‘Open’ to Mineral Leasing with No Surface Occupancy Requirements</td>
<td>2-15</td>
</tr>
<tr>
<td>2.9-1</td>
<td>Recreation Opportunity Spectrum Classes</td>
<td>2-50</td>
</tr>
<tr>
<td>2.11-1</td>
<td>Relationship between Wilderness Study Areas, Areas of Critical Environmental Concern, and Instant Study Areas</td>
<td>2-56</td>
</tr>
<tr>
<td>2.11-2</td>
<td>ACECs Outside of WSA Boundaries</td>
<td>2-56</td>
</tr>
<tr>
<td>2.11-3</td>
<td>Management Summary for Proposed Areas of Critical Environmental Concern</td>
<td>2-61</td>
</tr>
<tr>
<td>2.15-1</td>
<td>Relationship between Wilderness Study Areas, Areas of Critical Environmental Concern, and Instant Study Areas</td>
<td>2-72</td>
</tr>
<tr>
<td>2.16-1</td>
<td>Existing and Proposed Routes for Motorized and Non-Motorized Travel</td>
<td>2-81</td>
</tr>
<tr>
<td>2.16-2</td>
<td>Annual Guiding Permits Issued for Pit River Waterways</td>
<td>2-85</td>
</tr>
<tr>
<td>2.17-1</td>
<td>Proposed Annual Restoration Treatments for Sagebrush Sites Encroached by Western Juniper</td>
<td>2-91</td>
</tr>
<tr>
<td>2.17-2</td>
<td>Proposed Annual Vegetation Treatments for Woodland Communities</td>
<td>2-97</td>
</tr>
<tr>
<td>2.20-1</td>
<td>Visual Resource Management Classes</td>
<td>2-109</td>
</tr>
<tr>
<td>2.24-1</td>
<td>Juniper Management Strategy for Wildlife Habitat</td>
<td>2-127</td>
</tr>
<tr>
<td>2.24-2</td>
<td>Travel Designations and Closures to Protect Big-Game Habitats</td>
<td>2-128</td>
</tr>
<tr>
<td>2.24-3</td>
<td>Seasonal Restrictions and Distance Buffers for Wildlife</td>
<td>2-133</td>
</tr>
<tr>
<td>2.24-4</td>
<td>Waterfowl Management Areas and Proposed Actions</td>
<td>2-134</td>
</tr>
<tr>
<td>3.1-1</td>
<td>Ambient Air Quality Monitoring Data at the Alturas West 4th Street Monitoring Station (1999–2001)</td>
<td>3-3</td>
</tr>
<tr>
<td>3.1-3</td>
<td>Attainment Status for Criteria Pollutants of Concern in the Modoc County Air Pollution Control District</td>
<td>3-3</td>
</tr>
<tr>
<td>3.1-2</td>
<td>Ambient Air Quality Standards Applicable in California</td>
<td>3-5</td>
</tr>
<tr>
<td>3.3-2</td>
<td>Population Projections and Percent Change for California and Lassen, Modoc, Shasta, and Siskiyou Counties (2000–2020)</td>
<td>3-13</td>
</tr>
<tr>
<td>Table</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>3.3-3</td>
<td>Employment Sectors for Lassen, Modoc, Shasta, and Siskiyou Counties (1990 and 2000)</td>
<td>3-14</td>
</tr>
<tr>
<td>3.3-4</td>
<td>Per Capita Income Levels for Lassen, Modoc, Shasta, and Siskiyou Counties and California (1990 and 2000)</td>
<td>3-14</td>
</tr>
<tr>
<td>3.5-1</td>
<td>Population Characteristics of Lassen, Modoc, Shasta, and Siskiyou Counties (2000)</td>
<td>3-22</td>
</tr>
<tr>
<td>3.5-2</td>
<td>Economic Characteristics of Lassen, Modoc, Shasta, and Siskiyou Counties (2000)</td>
<td>3-22</td>
</tr>
<tr>
<td>3.6-1</td>
<td>Fire Regime Condition Classes</td>
<td>3-23</td>
</tr>
<tr>
<td>3.6-2</td>
<td>Annual Number of Large Fires (&gt; 100 Acres) in the Alturas Field Office Area (1980–2003)</td>
<td>3-28</td>
</tr>
<tr>
<td>3.7-1</td>
<td>Forestland and Woodland Area by Watershed in the Alturas Field Office Area (acres)</td>
<td>3-31</td>
</tr>
<tr>
<td>3.8-1</td>
<td>Land Ownership in the Alturas Field Office Area</td>
<td>3-33</td>
</tr>
<tr>
<td>3.9-1</td>
<td>Allotments by Rangeland Health Assessment Category in the Alturas Field Office Area</td>
<td>3-38</td>
</tr>
<tr>
<td>3.9-2</td>
<td>Grazing Allotments by Management Category in the Alturas Field Office Area</td>
<td>3-39</td>
</tr>
<tr>
<td>3.10-1</td>
<td>Recreation Opportunity Spectrum Designations for the Alturas Field Office Area</td>
<td>3-41</td>
</tr>
<tr>
<td>3.17-1</td>
<td>Suitability of Areas for Designation as Wilderness in the Alturas Field Office Area</td>
<td>3-60</td>
</tr>
<tr>
<td>3.18-1</td>
<td>Existing Travel Designations in the Alturas Field Office</td>
<td>3-62</td>
</tr>
<tr>
<td>3.19-1</td>
<td>Vegetation Types and Acres Mapped in the Alturas Field Office Area</td>
<td>3-69</td>
</tr>
<tr>
<td>3.20-1</td>
<td>Summary of Known Noxious Weeds in the Alturas Field Office Area</td>
<td>3-84</td>
</tr>
<tr>
<td>3.21-1</td>
<td>Special Status Plants Known or Suspected to Occur in the Alturas Field Office Area</td>
<td>3-89</td>
</tr>
<tr>
<td>3.22-1</td>
<td>Visual Resources Management Inventory in the Alturas Field Office Area</td>
<td>3-94</td>
</tr>
<tr>
<td>3.23-1</td>
<td>Water Quality Conditions for Key Streams in the Alturas Field Office Area</td>
<td>3-99</td>
</tr>
<tr>
<td>3.24-1</td>
<td>Wild Horse Herd Management Areas in the Alturas Field Office Area</td>
<td>3-103</td>
</tr>
<tr>
<td>3.25-1</td>
<td>Correlation between Plant Community Types and Wildlife Habitat Types</td>
<td>3-107</td>
</tr>
<tr>
<td>3.25-2</td>
<td>Annual Midwinter Bald Eagle Census (Conducted January 7-13)</td>
<td>3-113</td>
</tr>
<tr>
<td>3.25-3</td>
<td>Special Status and Important Game Species, and Associated Habitat Types, in the Alturas Field Office Area</td>
<td>3-126</td>
</tr>
<tr>
<td>4.3-1</td>
<td>Estimated Changes in Employment and Income from Management Actions in the Alturas Field Office Area</td>
<td>4-22</td>
</tr>
<tr>
<td>4.3-2</td>
<td>Cumulative Effects on Income and Employment in the Alturas Field Office Region</td>
<td>4-23</td>
</tr>
<tr>
<td>5.1-1</td>
<td>Intergovernmental Agency Representatives Who Participated in Preparation of the Draft RMP/EIS</td>
<td>5-2</td>
</tr>
<tr>
<td>5.1-2</td>
<td>Northeast California Resource Advisory Council Membership Roster</td>
<td>5-3</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS

Abbreviations and Glossary ................................................................................................................................. G-1
Abbreviations and Acronyms ................................................................................................................................. G-1
Glossary ................................................................................................................................................................. G-5

List of Maps

<table>
<thead>
<tr>
<th>Map</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACEC-1</td>
<td>ACECS AND PROPOSED ACECS</td>
</tr>
<tr>
<td>FIRE-1</td>
<td>FUELS TREATMENT</td>
</tr>
<tr>
<td>FIRE-2</td>
<td>FIRE MANAGEMENT</td>
</tr>
<tr>
<td>EN-1</td>
<td>WIND ENERGY POTENTIAL</td>
</tr>
<tr>
<td>LAND-1</td>
<td>LAND TENURE ADJUSTMENT PLAN</td>
</tr>
<tr>
<td>GRAZ-1</td>
<td>ALLOTMENT MANAGEMENT PRIORITY (28&quot; x 28&quot; map in back cover pocket)</td>
</tr>
<tr>
<td>SRMA-1</td>
<td>SPECIAL RECREATION MANAGEMENT AREAS</td>
</tr>
<tr>
<td>ROS-1</td>
<td>RECREATION OPPORTUNITY SPECTRUM</td>
</tr>
<tr>
<td>SOIL-1</td>
<td>SOIL STABILITY</td>
</tr>
<tr>
<td>HT-1</td>
<td>HISTORIC TRAILS</td>
</tr>
<tr>
<td>SB-1</td>
<td>SCENIC BYWAYS AND VISTA POINTS</td>
</tr>
<tr>
<td>WSR-1</td>
<td>WILD AND SCENIC RIVERS</td>
</tr>
<tr>
<td>WSA-1</td>
<td>WILDERNESS STUDY AREAS</td>
</tr>
<tr>
<td>TRAVEL-1</td>
<td>(28&quot; x 28&quot; map in back cover pocket)</td>
</tr>
<tr>
<td>TRAVEL-2</td>
<td>ROUTE INVENTORY</td>
</tr>
<tr>
<td>VEG-1-28&quot; x 28&quot; map in back cover pocket</td>
<td>OFF-HIGHWAY VEHICLE DESIGNATIONS</td>
</tr>
<tr>
<td>VEG-1-28&quot; x 28&quot; map in back cover pocket</td>
<td>VEGETATION TYPES</td>
</tr>
<tr>
<td>VEG-2</td>
<td>NOXIOUS WEEDS</td>
</tr>
<tr>
<td>VEG-3</td>
<td>SPECIAL STATUS PLANTS</td>
</tr>
<tr>
<td>VRM-1</td>
<td>VISUAL RESOURCE MANAGEMENT</td>
</tr>
<tr>
<td>WATER-1</td>
<td>WATER QUALITY AND RIPARIAN FUNCTIONAL ASSESSMENT</td>
</tr>
<tr>
<td>WATER-2</td>
<td>WATERSHED BOUNDARIES WITHIN THE ALTURAS FIELD OFFICE</td>
</tr>
<tr>
<td>WHB-1</td>
<td>WILD HORSE &amp; BURRO</td>
</tr>
<tr>
<td>WILD-1</td>
<td>OCCUPIED AND DESIGNATED CRITICAL HABITAT FOR MODOC Sucker</td>
</tr>
<tr>
<td>WILD-2a</td>
<td>WATERFOWL MANAGEMENT</td>
</tr>
<tr>
<td>WILD-2b</td>
<td>WATERFOWL MANAGEMENT (CONTINUED).</td>
</tr>
<tr>
<td>WILD-3</td>
<td>DEER RANGE</td>
</tr>
<tr>
<td>WILD-4</td>
<td>ANTELOPE RANGE</td>
</tr>
<tr>
<td>WILD-5</td>
<td>WILDLIFE MANAGEMENT AREAS</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS

## Chapter 4. Environmental Consequences

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>4-1</td>
</tr>
<tr>
<td>4.1 Potential Effects on Air Resources</td>
<td>4-4</td>
</tr>
<tr>
<td>4.2 Potential Effects on Cultural and Paleontological Resources</td>
<td>4-8</td>
</tr>
<tr>
<td>4.3 Potential Effects on Economic Conditions</td>
<td>4-17</td>
</tr>
<tr>
<td>4.4 Potential Effects on Energy and Minerals</td>
<td>4-24</td>
</tr>
<tr>
<td>4.5 Potential Effects on Environmental Justice</td>
<td>4-34</td>
</tr>
<tr>
<td>4.6 Potential Effects on Fire and Fuels</td>
<td>4-36</td>
</tr>
<tr>
<td>4.7 Potential Effects on Forestry</td>
<td>4-43</td>
</tr>
<tr>
<td>4.8 Potential Effects on Lands and Realty</td>
<td>4-47</td>
</tr>
<tr>
<td>4.9 Potential Effects on Livestock Grazing</td>
<td>4-55</td>
</tr>
<tr>
<td>4.10 Potential Effects on Recreation Resources</td>
<td>4-61</td>
</tr>
<tr>
<td>4.11 Potential Effects on Social Conditions</td>
<td>4-69</td>
</tr>
<tr>
<td>4.12 Potential Effects on Soils Resources</td>
<td>4-72</td>
</tr>
<tr>
<td>4.13 Potential Effects on Special Designations – Areas of Critical Environmental Concern</td>
<td>4-82</td>
</tr>
<tr>
<td>4.14 Potential Effects on Special Designations – National Historic Trails</td>
<td>4-91</td>
</tr>
<tr>
<td>4.15 Potential Effects on Special Designations – Wild and Scenic Rivers</td>
<td>4-97</td>
</tr>
<tr>
<td>4.16 Potential Effects on Special Designations – Wilderness Study Areas</td>
<td>4-105</td>
</tr>
<tr>
<td>4.17 Potential Effects on Travel Management</td>
<td>4-109</td>
</tr>
<tr>
<td>4.18 Potential Effects on Vegetation</td>
<td>4-116</td>
</tr>
<tr>
<td>4.19 Potential Effects on Noxious Weeds and Invasive Species</td>
<td>4-130</td>
</tr>
<tr>
<td>4.20 Potential Effects on Special Status Plants</td>
<td>4-138</td>
</tr>
<tr>
<td>4.21 Potential Effects on Visual Resources</td>
<td>4-146</td>
</tr>
<tr>
<td>4.22 Potential Effects on Water Resources</td>
<td>4-152</td>
</tr>
<tr>
<td>4.23 Potential Effects on Wild Horses</td>
<td>4-163</td>
</tr>
<tr>
<td>4.24 Potential Effects on Wildlife and Fisheries</td>
<td>4-167</td>
</tr>
</tbody>
</table>

## Chapter 5. Consultation and Coordination

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultation and Coordination</td>
<td>5-1</td>
</tr>
<tr>
<td>5.1 Federal Register Notice</td>
<td>5-1</td>
</tr>
<tr>
<td>5.2 Public Meetings and Field Trips</td>
<td>5-1</td>
</tr>
<tr>
<td>5.3 Plan Updates</td>
<td>5-1</td>
</tr>
<tr>
<td>5.4 Collaborative Planning</td>
<td>5-1</td>
</tr>
</tbody>
</table>
5.5 Agencies and Organizations Consulted.................................................................................. 5-3
5.6 List of Preparers......................................................................................................................... 5-6

Appendices
A: Applicable Laws and Management Guidance ........................................................................ A-1
B: Record of Decision Northeastern California and Northwestern Nevada, Standards for Rangeland Health and Guidelines for Livestock Grazing Management ............................................................................ A-7
D: Energy and Minerals Reasonably Foreseeable Development in the Alturas Field Office .......... A-41
E: Relevance and Importance Criteria for Areas of Critical Environmental Concern in the Alturas Field Office .................................................................................................................. A-52
F: Noxious Weed Prevention Schedule for the Alturas Field Office ........................................... A-68
G: List of Species Known to Occur in the Alturas Field Office Area ............................................. A-75
H: Management of Lands with Wilderness Characteristics ......................................................... A-80
I: Livestock Grazing Allotments .................................................................................................... A-85
J: Wild and Scenic River Eligibility and Suitability ..................................................................... A-93
K: Energy and Minerals Surface Use and Occupancy Requirements .......................................... A-128
L: Alturas Land Tenure Adjustment Plan ..................................................................................... A-132
M: Interim Flat Rock Policy for the Alturas Field Office. ............................................................ A-144
N: BLM Drought Management Policy Alturas and Surprise Field Offices ..................................... A-147
Q: List of Range Improvements in the Alturas Field Office Area ................................................ A-299
Q: Public Comment Responses .................................................................................................. A-316

Bibliography ................................................................................................................................ B-1

Maps (28” x 28”)

GRAZ-1—
(28” x 28” map in back cover pocket) .................................................................................. ALLOTMENT MANAGEMENT PRIORITY
TRAVEL-1—(28” x 28” map in back cover pocket) .................................................................. ROUTE INVENTORY
VEG-1—
(28” x 28” map in back cover pocket) ................................................................................... VEGETATION TYPES
Proposed Resource Management Plan and Final Environmental Impact Statement

May 2007