

**ENVIRONMENTAL ASSESSMENT  
LIVESTOCK GRAZING AUTHORIZATION**

**EA Number      CA 170-08-50**

**Allotment Number and Name**

**6055   Mono Mills**

**BLM Bishop Field Office**

**Prepared**

**July 2008**

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## Chapter 1: INTRODUCTION

### A. Summary

This environmental assessment (EA) is prepared to analyze and disclose the environmental consequences of re-authorizing livestock grazing permits for 10-years as proposed on the Mono Mills allotment. The EA is a site-specific analysis of potential impacts that could result from the implementation of the proposed action or one of the alternatives. The EA assists the Bureau of Land Management (BLM) in project planning and in ensuring compliance with the National Environmental Policy Act (NEPA) and other applicable laws and policies affecting the proposed action and alternatives. If the authorized officer determines that this action has “significant” impacts following the analysis in the EA, then an Environmental Impact Statement (EIS) would be prepared for the action. If not, a Grazing Decision will be issued along with a Finding of No Significant Impact (FONSI) statement, documenting the reasons why implementation of the selected alternative would not result in “significant” environmental impacts.

### B. Background

The Mono Mills allotment analyzed in this EA is located in the Granite Mountain Management Area of the BLM Bishop Field Office. The elevation range is between 8,000 to 8,400 feet. Vegetation communities are dominated by a mix of sagebrush and bitterbrush interspersed with alkali meadows in the valley bottoms and pinyon-juniper woodlands on the rockier slopes. Livestock kind, permitted season of use, allocated animal unit months (AUMs), and use type as prescribed in the Bishop Resource Management Plan (BLM 1993) are:

Allotment	Kind	From	To	AUMs*	Use
Mono Mills	Sheep	7/1	10/15	2,142	Perennial

\* Amount of forage a 1,000 lb cow with calf will eat in a month

The approximate public, state, and private land acreages (See Map 1) are:

Allotment Name	Public Land	State Land	Private Land
Mono Mills	32,656	2	1,516

There is no designated critical habitat for any federally listed species and no federally listed species are known to occupy the Mono Mills allotment.

The 10-year grazing permit for the Mono Mills allotment has expired. The interim grazing permit authorizing use on the Mono Mills allotment was issued in accordance with Section 328 of Public Law 107-67. This permit will expire in 2013. Renewing permits under the appropriations acts authorized existing grazing use to continue, while allowing BLM time to complete rangeland health allotment assessments and to meet applicable National Environmental

Policy Act (NEPA) requirements to analyze the environmental consequences of issuing 10-year grazing permits.

### **C. Purpose and Need for the Action**

The purpose of the action is to consider whether or not to authorize grazing for 10-years on the Mono Mills allotment. If authorized, grazing would be in accordance with 43 Code of Federal Regulations (CFR) 4100 and consistent with the provisions of the Taylor Grazing Act (1934), as amended, the Public Rangelands Improvement Act (1978), and the Federal Land Policy and Management Act (FLPMA) of 1976. The purpose of the action is also to ensure that grazing authorizations implement provisions of, and are in conformance with, the Bishop Resource Management Plan (BLM 1993) and the Secretary of the Interior approved Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (July 2000).

The action is needed to respond to the expired 10-year grazing permit and to replace the appropriations act permit with a fully processed 10-year grazing permit.

### **D. Scoping and Issues**

#### ***Public Scoping***

On January 23, 2006, the Bishop Field Manager sent a letter to the permittee who grazes the Mono Mills allotment informing him of the status of the 10-year grazing permits and included a proposed schedule for environmental assessment and permit completion.

On November 20, 2006, the Bishop Field Manager sent a second letter to the permittee who grazes the Mono Mills allotment informing them how the environmental assessment would be prepared and the status of the 10-year grazing permits. Included with the letter was a proposed schedule for environmental assessment completion.

On December 28, 2006, a Notice of Proposed Action (NOPA) was sent to the permittee who grazes the Mono Mills allotment and to interested publics including the Interim Management Policy for Lands under Wilderness Review (IMP) mailing list. The NOPA contained the Need for the Proposed Action, Plan Conformance, the Proposed Action and Alternatives, a schedule for EA completion, and area maps. The NOPA was also posted on the BLM internet site for public review at <http://www.blm.gov/ca/bishop>. The NOPA provided a 30 day comment period on the proposed action and alternatives. No additional issues or alternatives were identified as a result of this public scoping.

On June 11, 2007, a draft EA, CA-170-07-11 which included the Mono Mills allotment was posted for two weeks on the BLM internet site for public review at <http://www.blm.gov/ca/bishop>. The draft EA was developed using the BLM, California State Office Revised Environmental Assessment Template for Consideration of Livestock Grazing Authorizations (Instruction Memorandum No. CA-2007-014). The permittee and the Center for

Biological Diversity were notified that the EA had been posted on the BLM internet site. No comments were received as a result of posting the draft EA.

In June 2007, EA CA 170-07-11 which included the Mono Mills allotment was completed and a Finding of No Significant Impact (FONSI) was signed on June 28, 2007. Three alternatives were analyzed in detail: 1) the proposed action authorizing grazing for 10-years on the Mono Mills allotment with applicable terms and conditions, and other provisions; 2) the current management (no action) alternative involved issuing a new 10-year permit with the same terms and conditions as under the existing authorization; and 3) a no grazing alternative would cancel the permit for the Mono Mills allotment. The EA was posted on the BLM internet site for public review at [http://www.blm.gov/ca/bishop/ea\\_nepa.html](http://www.blm.gov/ca/bishop/ea_nepa.html).

On February 28, 2008, Western Watersheds Project's (WWP) California Office requested to be added to the list of "interested public" with regard to particular allotments and all grazing management decisions from the Bishop Field Office. All correspondence was to be sent to Dr. Michael J. Connor.

On March 4, 2008, a Notice of Field Manager's Proposed Grazing Decision for the Volcanic Tableland allotment, based upon EA CA 170-07-10; and for the Mono Mills allotment, based upon EA CA 170-07-11 was issued to Operator 0401615. The Proposed Decision was mailed to the permittee and interested publics which provided a fifteen (15) day protest period.

On March 15, 2008, BLM Bishop Field Office received one combined protest on the Proposed Grazing Decision for Operator 0401615 on the Volcanic Tableland and the Mono Mills allotments from CBD and WWP. CBD and WWP protested the decision based upon the assertion BLM failed to adequately comply with the National Environmental Policy Act (NEPA), the Federal Land Policy and Management Act (FLPMA), and the Endangered Species Act. Furthermore, the protest alleged that BLM failed to adequately analyze potential effects of the proposed decision on the Fish Slough Milk Vetch, Sierra Nevada bighorn sheep, and sage grouse. The protest also alleged that the BLM's decision failed to consider the potential effects of, and potential effects on, global climate change. CBD and WWP requested that BLM immediately rescind the proposed decision for Operator 0401615 regarding grazing on the Volcanic Tableland and the Mono Mills allotments.

On May 14, 2008, a Notice of Field Office Manager's Final Grazing Decision Vacating the Proposed Decision for Authorization Number 0401615 on the Volcanic Tableland (6007) and the Mono Mills (6055) allotments was issued. The Final Decision was mailed to the permittee and interested publics which provided a thirty (30) day appeal period. No appeals were received.

On July 3, 2008, a draft EA was posted for two weeks on the BLM internet site for public review at <http://www.blm.gov/ca/st/en/fo/bishop.html>. The draft EA was developed using the BLM, California State Office Revised Environmental Assessment Template for Consideration of Livestock Grazing Authorizations (Instruction Memorandum No. CA-2007-014). The permittee, Center for Biological Diversity, and Western Watersheds Project were notified that

the EA had been posted on the BLM internet site.

### ***Issues and Alternatives***

On March 15, 2008, a protest letter was filed on behalf of the Center for Biological Diversity (CBD) and the Western Watersheds Project (WWP). CBD and WWP protested a proposed grazing decision to issue a 10-year grazing permit to Operator 0401615 for the Volcanic Tableland and the Mono Mills allotments. From the protest, three issues were raised which have relevance and have been addressed within this environmental assessment. The three issues are habitat for sage grouse within the South Mono Population Management Unit (PMU), the federally endangered Sierra Nevada bighorn sheep, and global climate change following the Department of Interior Order No. 3226.

No additional issues or alternatives were identified as a result of public scoping or draft EA review.

### **E. Tiering to Existing Land Use Plan(s)/Environmental Impact Statement(s)**

The Bishop Resource Management Plan (BLM 1993) provides a comprehensive framework for managing land use authorizations, including grazing permits, for public lands administered by the Bishop Field Office. The Bishop Resource Management Plan replaced the Benton-Owens Valley (BLM 1982) and the Bodie-Colville (BLM 1983) Management Framework Plans. Grazing decisions and changes in grazing decisions from the Benton-Owens Valley and the Bodie-Colville (BLM 1983) Management Framework Plans are summarized in Appendix 4 of the Bishop Resource Management Plan (pages A4-1 through A4-11).

This EA is tiered to the Final Bishop Resource Management Plan and Environmental Impact Statement (BLM 1991). Tiering helps focus this EA more sharply on the significant issues related to grazing on the Mono Mills allotment while relying on the Final Bishop Resource Management Plan and Environmental Impact Statement for the overall analysis of grazing actions throughout the Bishop Field Office. Livestock grazing was analyzed in Chapter 4, Impacts, of the Final Bishop Resource Management Plan and Environmental Impact Statement (pages 4-20 through 4-26).

Impacts associated with adoption of the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (July 2000) were analyzed in Chapter 4 of the Rangeland Health Standards and Guidelines for California and Northwestern Nevada Final Environmental Impact Statement (BLM 1998). The analysis contained in this EA also tiers to that analysis.

### **F. Prevention of Unnecessary or Undue Degradation**

In addition to management prescriptions analyzed in this EA, including all terms and conditions, BLM may use its authority to close any area of an allotment to grazing use or take other measures to protect resources at any time, if needed. Therefore, issuance of a grazing permit

with appropriate terms and conditions is consistent with BLM's responsibility to manage public use, occupancy, and development of the public lands and to prevent unnecessary or undue degradation of those lands (43 USC 1732(b)).

### **G. Relationship to other Statutes, Regulations, and Plans**

The following Statutes, Regulations, and Plans provide additional legal framework for grazing on public lands.

#### ***Air Quality***

Section 176 (c) of the Clean Air Act (CAA), as amended (42 U.S.C. 7401 et seq.), and regulations under 40 CFR part 93 subpart W, with respect to the conformity of general Federal actions to the applicable State Implementation Plan apply to projects within any Federal Air Quality Non-Attainment/Maintenance Areas. Under those authorities, "no department, agency or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license or permit, or approve any activity which does not conform to an applicable implementation plan." Under CAA 176 (c) and 40 CFR part 93 subpart W, a Federal agency must make a determination that a Federal action conforms to the applicable implementation plan before the action is taken.

#### 40 CFR Part 93.153 Applicability.

(c) The requirements of this subpart shall not apply to the following Federal actions:

(ii) Continuing and recurring activities such as permit renewals where activities will be similar in scope and operation to activities currently being conducted.

Where livestock grazing occurs within an area classified as a Federal Air Quality Non-Attainment/Maintenance Area, BLM will make a determination whether the action is in conformance with the applicable State Implementation Plan requirement. The Great Basin Unified Air Pollution Control District (GBUAPCD) has state air quality jurisdiction over parts of Inyo and Mono County.

The Mono Mills allotment occurs within the Mono Basin Federal Air Quality Non-Attainment/Maintenance Area and conforms to the applicable State Implementation Plan requirement.

#### ***Cultural Resources***

California BLM has the responsibility to manage cultural resources on public lands pursuant to the 1966 National Historic Preservation Act, the 1980 Rangeland Programmatic Memorandum of Agreement with the Advisory Council on Historic Places (WO IM 80-369), the 1997

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 BLM will meet its responsibilities under the National Historic Preservation Act, the State Protocol Agreement Between the California State Director of the Bureau of Land Management and the California State Historic Preservation Officer (2004) and other internal policies.

### ***Special Status Plant Species***

Special Status Plant Species are those species that have been listed by the California Native Plant Society as List 1B species, which includes plants that are rare, threatened, or endangered in California and elsewhere. All of the plants constituting List 1B meet the definition of Sec. 1901, Chapter 10 (Native Plant Protection Act), or Secs. 2062 and 2067 (California Endangered Species Act) of the California Department of Fish and Game Code, and are eligible for state listing. The Bishop Resource Management Plan (BLM 1993, p. 17) stipulates year-long protection of sensitive plants (Special Status Plants) and their associated habitats.

Two (2) Special Status Plant Species occur within the extent of the Mono Mills allotment. Refer to Section N for a listing of these species and their associated trend and environmental impact analyses.

### ***Threatened and Endangered Species (T&E)***

Pursuant to Section 7 of the Endangered Species Act, formal consultation with the U.S. Fish and Wildlife Service (FWS) is required on all allotments for which livestock grazing may affect listed species. The stipulations of any grazing permit may be modified to conform to the terms and conditions specified in a FWS biological opinion. In addition, the terms and conditions of any grazing permit may also need to be modified through subsequent land use plan amendments or revisions to conform to decisions made to achieve recovery plan objectives. In August 2003, the Bishop Field Office submitted a Biological Evaluation and requested formal consultation on the Bishop Resource Management Plan under Section 7(a) (2) of the Endangered Species Act to the FWS. The Biological Evaluation analyzed potential effects of six listed species that occur within the Bishop Field Office's jurisdiction. A subsequent request for action on the formal consultation was made to the FWS in September 2005. To date, no action has been taken by the FWS.

No Threatened or Endangered Species are present or likely to occur, based on historical records, field monitoring, and/or habitat suitability in the Mono Mills allotment.

### ***Water Quality***

The Mono Mills allotment is within watersheds governed by basin plans subject to California's Clean Water Act. Nationally, Executive Order # 12088 directs federal agencies to comply with state administrative procedures. Recently, Standards and Guidelines reiterated the intent of the

Federal Clean Water Act (CWA) and States' water quality plans. An MOU (BLM Manual Supplement 6521.11) with the California Department of Fish and Game (CDFG) describes how BLM and CDFG will coordinate when activities could affect aquatic or riparian habitat. The Unified Federal Policy to Insure a Watershed Approach in Federal Land and Resource Management (UFP) requires 1) all plans and activity management be conducted on a watershed basis, 2) that all land owners/managers within a watershed be solicited for participation in the planning and management of the watershed, 3) that citizens and officials are better informed of planning and management, and 4) that best science is used. The EA should analyze grazing within the Watershed Concept described in the UFP. Where there is a threat to water quality or where water quality violates state standards, coordination must occur with the regional water quality control board(s) and where aquatic or riparian habitat may be impacted CDFG coordination must occur as well. Any allotment that contains any water bodies (streams, lakes, springs, etc.) must have adopted Best Management Practices (BMP) for all associated livestock management activities that could affect water quality. Pursuant to the decisions affecting water quality in the Bishop Resource Management Plan, BMPs for the Field Office area have been submitted to meet the requirements under the CWA.

### ***Wild and Scenic Rivers***

Wild and scenic river values are described in Appendix 2 of the draft Bishop RMP and EIS dated September of 1990. The Interim Management Guidelines for Study Rivers provides direction for grazing management on eligible creeks until the creek is designated a wild and scenic river or released from the wild and scenic river review process. For further information, see Appendix 3 of the final Bishop RMP and EIS dated August of 1991.

The Mono Mills allotment contains no designated Wild and Scenic Rivers or eligible study river segments.

### ***Wilderness Study Areas***

Livestock grazing on public lands within Wilderness Study Areas (WSAs) must comply with and be managed consistent with BLM's Interim Management Policy Handbook (H-8550-1) For Lands Under Wilderness Review. The law provides for, and the BLM's policy is to allow, continued grazing uses on lands under wilderness review in the manner and degree in which these uses were being conducted on public land when the Federal Land Policy and Management Act (FLMPA) was signed (October 21, 1976). Grazing within WSAs is subject to reasonable regulations, policies, and practices.

Wilderness values are described in the 1979 Final Wilderness Intensive Inventory Report while the WSA's existing range and other improvements are identified in the 1990 California Statewide Wilderness Study Report (WSR). The Interim Management Policy for Lands Under Wilderness Review (IMP) provides direction for grazing management in WSAs until the WSA is designated wilderness or released from the wilderness review process.

The Mono Mills allotment does not occur within any congressionally designated Wilderness Area. However, approximately forty-percent (21,916 acres) of the Granite Mountain WSA (CA-170-010-090) occurs in the Mono Mills allotment.

## **H. Plan Conformance**

### ***Determination***

The proposed action is in conformance with the Bishop Resource Management Plan (RMP) approved on March 23, 1993, as amended by the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (Central California S&Gs) approved on July, 13, 2000.

### ***Rationale***

The proposed action would occur in areas identified as available for livestock grazing in the Bishop RMP (BLM 1993). The proposed action is consistent with the General Policies, Area Manager's Guidelines, Valid Existing Management, Standard Operating Procedures, Decisions, and Support Needs prescribed in the RMP. A summary of key RMP prescriptions specific to the proposed action include: 1) Livestock management decisions from the Benton-Owens Valley and the Bodie-Coleville Grazing Environmental Impacts Statements (EISs) provide the basis for grazing management throughout the Bishop Field Office (RMP, Valid Existing Management, page 10 and Area-Wide Decisions, page 22). Those livestock grazing decisions carried forward are summarized in Appendix 4 (RMP, pages A4-1 through A4-11); 2) Standard Operating Procedures specific to grazing systems, grazing management, and range improvement project development throughout the Bishop Field Office (RMP, pages 10 through 12); and 3) Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (BLM 2000) that amended the Bishop RMP (Central California S&Gs, pages 3 through 12).

## **I. Rangeland Health**

Rangeland health assessments have been completed on the Mono Mills allotment in conformance with the Record of Decision, Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (Decision, pg 12). Qualitative rangeland health field assessments were completed for the Mono Mills allotment in June of 2002.

Geographical Information System (GIS) database information was used to stratify the number of areas (ecological sites) to sample. Field assessments consisted of following protocol established in BLM Technical Reference 1734-6, Interpreting Indicators of Rangeland Health Version 3 (2000). A preponderance of the evidence is the criterion for determining if rangeland health standards are being met at each sample site. Rangeland Health Assessment Determinations, following the Central California Resource Advisory Council assessment protocol, were completed for the Mono Mills allotment. The Mono Mills allotment was found to meet the Secretary of the Interior Approved Rangeland Health Standards.

**Chapter 2:  
PROPOSED ACTION AND ALTERNATIVES**

An environmental assessment (EA) for a livestock grazing permit must consider a reasonable range of alternatives (WO IM No. 2000-022) including 1) issuing a new permit based on the application (the proposed action), 2) issuing a new permit with the same terms and conditions as the expiring permit (no action), and 3) a no grazing alternative. If the application for a permit is the same as the expiring permit (no changes in the terms and conditions), then the proposed action and the no action alternative are the same. In addition, other alternatives may be needed to resolve conflicts or address new conditions or new information. If other alternatives are identified during scoping but are determined by BLM not to reasonably address the purpose and need for action, they may be dismissed from further analyses.

No additional alternatives were identified as a result of livestock operator consultation, cooperation, and coordination or public scoping efforts. The proposed action, no action, and no grazing alternatives are described in detail below.

**A. Alternative 1 - Proposed Action**

The proposed action is to authorize grazing to Operator 0401615 for 10-years on the Mono Mills allotment with applicable terms and conditions and other provisions as described in this section. The proposed action differs from current management (the no action alternative) in that the terms and conditions from both the Bishop Resource Management Plan (BLM 1993) and the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (BLM 2000) are applied specifically to the Mono Mills allotment, with defined implementation guidelines, and tailored to specific vegetation communities and other resources present on this allotment.

Terms and conditions, and provisions related to range improvements and monitoring requirements included in the proposed action are:

**A. Mandatory Terms and Conditions**

Mandatory terms and conditions including livestock number, livestock kind, season of use, percent public land (% P.L.), and allocated animal unit months (AUMs) are required for each allotment in accordance with 43 CFR 4130.3-1.

The proposed mandatory terms and conditions as prescribed in the Bishop Resource Management Plan (BLM 1993) for this allotment are:

Allotment	Number	Kind	From	To	% P.L.	AUMs
Mono Mills	3,045	Sheep	7/1	10/15	100	2,142

B. Terms and Conditions - Bishop Resource Management Plan

No trailing through a neighboring allotment is allowed without prior authorization by the BLM. Prior to trailing through a neighboring allotment, the trailing permittee would notify the BLM and all identified interested parties.

No salt or other nutrient supplement or sheep bedding is allowed within 1/4 mile of sage grouse strutting grounds or special status plant populations.

C. Terms and Conditions - Central California Standards for Rangeland Health and Guidelines for Livestock Grazing

The goal of these terms and conditions is to provide the permittee the opportunity to realize the highest, long-term, agricultural, economic return with the least risk to rangeland health. Livestock would be managed to progress toward maintaining or promoting adequate vegetative ground cover, and maintaining soil moisture storage and soil stability appropriate for the ecological sites within the management units. Maintaining adequate ground cover should allow soil organisms, plants, and animals to support the hydrologic, nutrient, and energy cycles.

Sagebrush Grassland and Pinyon-Juniper Woodland Rangelands: Livestock grazing operations will be conducted so that forage utilization on key perennial species does not exceed 40 percent of the average. Key areas will be selected and utilization on key species will be estimated in accordance with the current BLM technical reference. Utilization monitoring will be conducted by a BLM employee, permittee, and/or trained range consultant. Then, all key area data for the allotment will be averaged and checked by a BLM employee to determine if the term and condition has been met. If utilization guidelines on the average of the upland key areas across the allotment are exceeded for 2 consecutive years or in any 2 years out of every 5 years, BLM will consult with the permittee to address the situation, potentially with a management change (e.g. change in livestock distribution). Because of the potential long-term damage to perennial grass species associated with severe grazing, when grazing utilization exceeds 70% in any upland key area for more than 2 consecutive years, immediate management action will be taken to remedy the problem in the area of the allotment that key area represents.

Riparian Areas & Wetlands: Grazing practices should maintain a minimum herbage stubble height of 4-6 inches on the average 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.

Critical Mule Deer Habitat: Within identified critical Mule Deer winter range and migration habitat (Bishop RMP, 1993) there will be no more than an average of 20 percent utilization of the current year's annual growth on key browse species (bitterbrush) prior to October 1.

#### D. Other Terms and Conditions

No supplemental feeding (i.e. hay, pellets/cubes, or other forages) is allowed at any time on public lands without the BLM's authorization. If authorization is granted, the permittee would be required to obtain "certified weed-free" feed for supplemental feeding of livestock.

Range improvements in each pasture/allotment would need to be functioning properly prior to livestock turnout.

Periodically check livestock for weed seed to minimize or stop the spread of weeds such as perennial pepperweed from private land or other areas where known weed infestations exist. A guide on preventing the spread of weeds along with specific species of concern is described in the Eastern Sierra Weed Management Area Noxious Weed Identification Handbook.

Notify BLM of noxious weed locations when encountered within the allotment.

Use old camps, bedding grounds, and watering sites and do not make new ones.

#### E. Range Improvements

One existing range improvement (trough) on the Mono Mills allotment needs to be moved or removed. The trough located at T1N, R28E, of Section 28, is part of a pipeline (#7503) which was determined to have an effect on an archeological site that was recently recorded during rangeland health field evaluations. The trough will be moved off-site or decommissioned since it no longer appears to be in service. However, existing range improvements under cooperative rangeland improvement agreements for Mono Mills allotment needs to be maintained and properly functioning annually. If, through monitoring, the Bishop Field Office identifies a need to construct a new range improvement to achieve or maintain rangeland health or to address a site-specific resource concern, a subsequent site-specific project level environmental assessment would be completed at that time.

#### F. Monitoring

In general, rangeland allotment monitoring (both upland and riparian) would continue to be conducted annually and/or periodically under three applicable oversight categories. These categories include 1) short-term monitoring, 2) long-term trend monitoring, and 3) compliance assurance. All monitoring would continue to be performed according to BLM policy and following protocols from BLM approved manuals and technical references. Monitoring would be conducted on an annual schedule for Selective Management Category to Improve (I)

allotments and periodically on Selective Management Category to Maintain (M) and Custodial (C) allotments.

The Mono Mills allotment is designated as a Category M allotment in the Bishop Resource Management Plan (Appendix 4, pages A4-5 through A4-7). Consistent with BLM policy, monitoring on this allotment would be conducted periodically.

#### *Short-Term Monitoring*

Short-term monitoring is a tool to gauge the cause and effect of the current grazing management on resource conditions on allotments. This monitoring consists of information addressing current climatic conditions and the collection of utilization data (including stubble height, if appropriate). Monitoring would consist of documenting utilization levels to ensure that forage utilization on key perennial species does not exceed 40 percent on the average. Key areas would be selected and utilization on key species would be estimated in accordance with the current BLM technical reference. This would assure compliance with permit terms and conditions for the Mono Mills allotment.

#### *Long-Term Trend Monitoring*

Trend refers to the direction of change. Rangeland data are collected at different points in time on the same site in accordance with the BLM technical reference and the results are then compared to detect change. Trend data are important in determining the effectiveness of on-the-ground management actions. The Mono Mills allotment does not have established long-term trend plots. There is no plan at this time to establish long-term trend plots in this allotment given current management priorities.

#### *Compliance Assurance*

Allotment compliance would be conducted on the Mono Mills allotment on an annual schedule to assure adherence to permit terms and conditions. Compliance involves assuring that livestock are on/off the allotment according to annual application dates, counting livestock numbers, identifying their location, checking brands, and assuring range improvements function properly.

### **B. Alternative 2 - Current Management (No Action)**

This alternative involves issuing a new 10-year permit with the same terms and conditions as under the existing authorizations. The only difference between this alternative and the proposed action alternative is that under current management the terms and conditions from both the Bishop Resource Management Plan (BLM 1993) and the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (BLM 2000) are applied broadly to this allotment, without defined implementation guidelines, and have not been tailored to specific vegetation communities and resources on this allotment.

A. Mandatory Terms and Conditions

Mandatory terms and conditions would be the same as described in the proposed action alternative.

B. Terms and Conditions - Bishop Resource Management Plan

No salt or other nutrient supplement or sheep bedding is allowed within 1/4 mile of creeks, aspen groves, meadows, sage grouse strutting grounds or special status plant habitat.

No trailing through a neighboring allotment without prior authorization by the BLM.

Burned areas will be rested for a minimum of 3 growing seasons before grazing, to achieve proper functioning condition, recovery of vegetation or desired plant community.

The Bishop RMP Decision for the Desired Plant Community for riparian vegetation along streams is: “riparian vegetation growth is vigorous for woody plants and at least 4-6 inches of residual herbaceous plant height will remain at the end of the growing season or at the time of livestock turnoff, whichever is later.”

C. Terms and Conditions - Central California Standards for Rangeland Health and Guidelines for Livestock Grazing

Comply with the Central California Standards and Guidelines for Livestock Grazing Management.

The maximum forage utilization limit for key perennial species is not to exceed 40% on sagebrush grassland, semi-desert grassland, semi-desert grass and shrubland or pinyon-juniper woodland rangelands. On salt desert shrubland ranges, the maximum utilization limit for key perennial species is not to exceed 35%.

The maximum forage utilization limit in riparian areas and wetlands is not to exceed 45% for herbaceous species or 20% for shrubs and trees.

The maximum utilization limit for bitterbrush in mule deer concentration areas (i.e. migration corridors or winter ranges) is not to exceed 20% of annual growth before October 1.

D. Other Terms and Conditions

No supplemental feeding (i.e. hay, pellets/cubes, or other forages) is allowed at any time on public lands without the BLM's authorization.

Periodically check livestock for weed seed to minimize or stop the spread of weeds such as perennial pepperweed from private land or other areas where known weed infestations exist.

A guide on preventing the spread of weeds along with specific species of concern is described in the Eastern Sierra Weed Management Area Noxious Weed Identification Handbook.

E. Range Improvements

Range improvements would be the same as described in the proposed action alternative.

F. Monitoring

Monitoring would be the same as described in the proposed action alternative.

C. **Alternative 3 - No Grazing**

This alternative would cancel the permit for the Mono Mills allotment. As a result, grazing would not be authorized on this allotment. Under this alternative, BLM would initiate the process in accordance with 43 CFR parts 4100 and 1600 to eliminate grazing on this allotment and amend the Bishop Resource Management Plan.

D. **Other Alternatives**

No other alternatives were identified or developed as a result of livestock operator consultation, cooperation, and coordination or public scoping efforts.

## Chapter 3: ENVIRONMENTAL ANALYSIS

### A. LIVESTOCK MANAGEMENT

#### 1. Affected Environment

##### *Past and Present Grazing*

Prior to 1859, the Owens Valley had minimal if any domestic livestock grazing. L. R. Ketcham of Visalia, California in 1859 was documented as the first cattleman to drive cattle into the Owens Valley (Jeff Putman and Genny Smith (editor) 1995). By 1910 the Farm Census had reported 43,000 sheep and 20,000 cows and cattle in the Owens Valley.

After the enactment of the Taylor Grazing Act in the 1934, government began taking an active role in managing public lands in the Owens Valley, creating allotment boundaries and developing grazing management systems. In 1946 the General Land Office and Grazing Service merged to create the Bureau of Land Management.

Over the last forty years, grazing on public and private lands in the eastern Sierra region has generally consisted of optimizing stocking rates when forage production was adequate to support livestock, generally throughout various habitat types. Grazing permits on public lands have incorporated numerous federal laws, regulations, policies, and management guidelines to protect and improve various resource values including rangeland and vegetative/wildlife habitat conditions. Monitoring has also been incorporated into grazing management to ensure compliance with permit stipulations. These grazing management practices have generally lead to improving trend in rangeland health and habitat conditions within the region.

Presently, the Bishop Field Office administers 58 allotments with 25 permittees spanning a geographic distance from Olancha to Topaz, California, a 750,000 acre linear and narrow configuration of public land straddling the edge of the eastern Sierra and Great Basin. The physical environment ranges from Great Basin habitat in the north to Mojave Desert in the south. Subsequently, forage capability is often limited by precipitation and elevation which tends to be more favorable in the northern portion of the field office area.

##### *Allotment Specific*

The Mono Mills allotment is located within the Granite Mountain Management Area as defined in the Bishop Resource Management Plan (RMP) (See Map 1). Livestock kind, livestock class, permitted season of use, and allocated animal unit months (AUMs) for this allotment as prescribed in the Bishop RMP (BLM 1993) are:

Allotment	Number	Kind	From	To	% P.L.	AUMs
Mono Mills	3,045	Sheep	7/1	10/15	100	2,142

There is one permittee (sheep operator) for the Mono Mills allotment. The public land is unfenced from the adjacent private and Inyo National Forest lands. Livestock grazing is permitted from July 1<sup>st</sup> to October 15<sup>th</sup>, although the allotment is most often used from the 1<sup>st</sup> of July to approximately September 30<sup>th</sup>, depending on forage condition with generally 1500 sheep (907 AUMS). The allotment is watered from the Mono Mills Pipeline and Dry Creek Pipeline which extend from the Inyo National Forest and is a dependable water source. Sheep are actively herded the entire time on the allotment and only use established camps, bedding grounds, and watering sites. Timing of spring precipitation has an effect on forage condition resulting in vegetative growth and vigor of perennial species and affecting the abundance of annual species. The operator may adjust their grazing plan depending on the amount of precipitation received and/or annual forage production. These strategies may include adjusting on/off dates around vegetative growth, a slight increase in livestock numbers in wetter years, or decreasing numbers to adjust for drought conditions. These operational changes require prior approval by the BLM.

## **2. Environmental Consequences**

### **a. Impacts of Proposed Action**

Authorizing grazing with revised, allotment-specific terms and conditions would not create negative impacts to livestock operations. Because livestock grazing practices would follow the Bishop RMP guidelines as amended by the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (BLM 2000) and the revised terms and conditions, the permittee would have to manage their livestock (e.g. strategic salt placement or adjustment in livestock distribution) so forage utilization on key perennial species does not exceed utilization levels, as defined in the proposed terms and conditions above. Furthermore, these terms and conditions are designed to help maintain, protect, or improve rangeland health, increasing the probability of long-term economic viability for the permittee.

### **b. Impacts of No Action**

Impacts of the no action alternative would be the same as the proposed action because both alternatives are very similar. The only difference between this alternative and the proposed action alternative is that terms and conditions developed from the Bishop Resource Management Plan (BLM 1993) and the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (BLM 2000), under current management, are applied broadly and uniformly to this allotment. No defined implementation guidelines exist nor are they tailored to address specific vegetation communities and/or resources on this allotment, as in the Proposed Action. For this alternative, there is a possibility under certain situations that BLM and the permittee may need to work together to define allotment-specific applications of the rangeland health standards and guidelines.

### c. Impacts of No Grazing

The cancellation of grazing on this allotment would force the operator to look for alternative forage and may increase the cost of their ranching operation. The permittee may be forced to operate with fewer livestock or sell the entire livestock business. If the business is sold, private lands associated with a ranch have potential to be sold and developed. Ranches build connections between public and private land, and between rural and urban communities. “Private lands are disproportionately important to the maintenance of our region’s natural heritage because they are disproportionately more productive” (Knight 2007). Private lands often contain springs, riparian, rich soils, and/or critical habitat that wildlife depends on. A few of the consequences from development of rural lands are landscape level fragmentation, decrease in biodiversity, and loss of important wildlife habitat.

### **3. Map**

Overview of Allotment (Map 1)

### **4. References**

Knight, R.L. 2007. Ranchers as a Keystone Species in a West That Works. *Rangelands* 29:4-9.

Talbert, C.B., R.L. Knight, and J.F. Mitchell. 2007. Private Ranchlands and Public-Land Grazing in the Southern Rocky Mountains. *Rangelands* 29:5-8.

## **B. AIR QUALITY**

### **1. Affected Environment**

The Mono Mills allotment occurs within the Mono Basin Federal Air Quality Non-Attainment/Maintenance Area and conforms to the applicable State Implementation Plan requirement. The Mono Basin Federal Air Quality Non-Attainment/Maintenance Area is under jurisdiction of the Great Basin Unified Air Pollution Control District (GBUAPCD), federal actions are subject to conformity determinations under 40 CFR 93.

### **2. Environmental Consequences**

#### a. Impacts of Proposed Action

The proposed action would create no new impacts because the proposed terms and conditions are designed to help maintain, protect, or sustain rangeland health including soils, and to keep the ecosystem functioning properly. Support vehicle use on the access roads will generate small amounts of PM<sub>10</sub> emissions throughout the grazing area and could carry soils onto the paved roads which would increase entrainment of PM emissions. The support vehicles emit various

precursor emissions for ozone. Fugitive dust emissions could occur due to the soil disturbance as a result of the trampling action of livestock when soil moisture levels are low. Ruminant animals emit methane gas which is a precursor emission for ozone. Actual emission amounts from this grazing activity are negligible. The proposed action would not measurably change PM<sub>10</sub> emissions within the Mono Basin Federal Air Quality Non-Attainment/Maintenance Area.

b. Impacts of No Action

Impacts of the no action alternative would be the same as the proposed action because both alternatives are very similar. The only difference between this alternative and the proposed action alternative is that terms and conditions developed from the Bishop Resource Management Plan (BLM 1993) and the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (BLM 2000), under current management, are applied broadly and uniformly to this allotment. No defined implementation guidelines exist nor are they tailored to address specific vegetation communities and/or resources on this allotment, as in the Proposed Action. For this alternative, there is a possibility under certain situations that BLM and the permittee may need to work together to define allotment-specific applications of the rangeland health standards and guidelines.

c. Impacts of No Grazing

The no grazing alternative would have little to no impact on air quality since few impacts currently occur. There would be no fugitive dust emissions from livestock trampling or precursor emissions for ozone.

**C. AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC)**

The proposed action, no action, and no grazing alternatives would have no effect on any designated Area of Critical Environmental Concern (ACEC) because the Mono Mills allotment does not occur within or adjacent to any designated ACEC.

**D. CULTURAL RESOURCES**

**1. Affected Environment**

Located on the western fringe of the Great Basin physiographic province the Owens Valley region, incorporated within the Bishop Field Office, contains the highest archaeological site densities within the Great Basin (Basgall and McGuire 1988; Bettinger 1975, 1982). In 1981 and 1982 the BLM completed two Environmental Impact Statements (EIS) addressing grazing on public lands within the Bishop Field Office; “Proposed Livestock Grazing Management for the Benton-Owens Valley Planning Unit”, 1981 and “Proposed Livestock Grazing Management

for the Bodie-Coleville Planning Units”, 1982. In both EIS’s cultural resource reviews are limited to Class I literature searches of existing data.

Using existing survey data (BLM 1978; Busby et al. 1979; Hall 1980; Kobori et al. 1980), site densities were predicted to range from 9 sites per square mile (m<sup>2</sup>) in the Benton Planning Unit to 4 sites/m<sup>2</sup> in the Owens Valley Planning Unit, with an average of 9.54 sites/m<sup>2</sup> in the Bodie/Coleville Planning units.

To evaluate the Mono Mills allotment for cultural resource values a Class I records search was conducted and a GIS utilized to determine previously surveyed acres and sites recorded. Range improvements where cattle congregate (troughs, salt licks, reservoirs, etc.) were mapped. Following the Bishop Field Office research design for grazing allotment assessments (Halford 1999), all areas with a high probability for the congregation of cattle and for the occurrence of significant cultural resources were field evaluated. Inventory was focused on known or suspected areas of historic ground disturbing activities associated with livestock grazing such as water sources, corrals, supplemental feeding areas, bedding areas, and salt block stations. The results of the analyses are used to protect or mitigate impacts to cultural resources. If significant cultural resources are identified, the stipulations of the grazing permit may be modified to reflect the presence and protection of these resources. The following table shows the results of the cultural resource analyses.

<b>Allotment</b>	<b>Previously Surveyed (% of allotment)</b>	<b>Previously Recorded Sites</b>	<b>Newly Surveyed</b>	<b>Newly Recorded Sites</b>
Mono Mills	1600 acres (4.5%)	17	10 acres	1

## **2. Environmental Consequences**

### **a. Impacts of Proposed Action**

Impacts to cultural properties are predicted to be minimal as a result of the proposed action for the following reasons. The allotment in general does not receive heavy use and serves as a fringe allotment to private property and Forest Service leases where more desirable water and suitable vegetation occur. As a result, livestock use on this BLM allotment is generally highly dispersed with light use. However, following the research design (Halford 1999), water improvements and congregation areas have been assessed. Ten water improvements (troughs, springs, windmills, and water tanks) were field evaluated, and most were found to be in disrepair and no longer in use. Only one trough (project #7503) within the Mono Mills allotment was found to have an effect on a site that was newly recorded during the field evaluations. The trough will be moved off-site or decommissioned since it no longer appears to be in service.

### **b. Impacts of No Action**

Impacts of the no action alternative would be the same as the proposed action because both alternatives are very similar. The only difference between this alternative and the proposed

action alternative is that terms and conditions developed from the Bishop Resource Management Plan (BLM 1993) and the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (BLM 2000), under current management, are applied broadly and uniformly to this allotment. No defined implementation guidelines exist nor are they tailored to address specific vegetation communities and/or resources on this allotment, as in the Proposed Action. For this alternative, there is a possibility under certain situations that BLM and the permittee may need to work together to define allotment-specific applications of the rangeland health standards and guidelines.

c. Impacts of No Grazing

This alternative would eliminate all livestock threats of damage to cultural properties.

### 3. Map

No maps are included due to the proprietary nature of the cultural resource information.

### 4. References

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Anthropology-History*. Bakersfield District, California.

- Department of the Interior, Bureau of Land Management. 1978. California Desert Program: Archaeological Sample Unit Records For Owens Valley Planning Unit. Unpublished report on file at the Eastern Information Center, Riverside, California
- Fell, Chuck. 1995. Bodie State Historical Park. Personal Communication, concerning impacts to historic buildings and resources.
- Halford, F. Kirk. 1999. A Research Design for the Bishop Field Office Grazing Allotment Assessments. Cultural Resource Project: CA-170-99-04. On file in the BLM, Bishop Field Office, Bishop, California.
- Hall, M.C. 1980. Surface Archaeology of the Bodie Hills Geothermal Area, Mono County, California. United States Department of the Interior, Bureau of Land Management, Bakersfield District.
- Kobori, Larry S., Colin I. Busby, James C. Bard, and John M. Findlay. 1980. A Class II Cultural Resources Inventory Of The Bureau Of Land Management's Bodie And Colville Planning Units, California. Basin Research Associates, Inc. for the U.S. Department of Interior, Bureau of Land Management, Bakersfield District Office.
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- Roney, John. 1977. Livestock And Lithics: The Effects Of Trampling. On file at the Department of Interior, Bureau of Land Management, Winnemucca District Office. Winnemucca, NV.

## **E. ENVIRONMENTAL JUSTICE**

### **1. Affected Environment**

There are no low-income or minority populations living on the Mono Mills allotment.

There are 11 Native American communities who reside in or in close proximity to the eastern Sierra region administered by the Bishop Field Office. Some members of these communities hunt and some do subsistence collecting of materials from public lands such as, basket weaving materials, medicinal plants, etc. However, this is general use and there are no specific

“traditional use areas” identified at this time by any of the Tribes on this allotment. Any other traditional uses or use areas have not been divulged to this office.

Some Native Americans work in nearby local communities or are employed on their respective reservations. There may be low-income minorities working for the livestock operators on the Mono Mills allotment.

## **2. Environmental Consequences**

### **a. Impacts of Proposed Action**

Continued livestock grazing on the Mono Mills allotment would have no effect upon any low-income or minority populations. If any changes in grazing management are required, there may be a loss of a job to a member of a low-income or minority population. There may also be new jobs created and sustained as a result of the long-term livestock grazing sustainability from rangeland health standards implementation. Any such impacts would be limited to a single job here or there. There would not be a disproportionate impact, either negative or positive, to any low-income minority population.

### **b. Impacts of No Action**

Impacts of the no action alternative would be the same as the proposed action because both alternatives are very similar. The only difference between this alternative and the proposed action alternative is that terms and conditions developed from the Bishop Resource Management Plan (BLM 1993) and the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (BLM 2000), under current management, are applied broadly and uniformly to this allotment. No defined implementation guidelines exist nor are they tailored to address specific vegetation communities and/or resources on this allotment, as in the Proposed Action. For this alternative, there is a possibility under certain situations that BLM and the permittee may need to work together to define allotment-specific applications of the rangeland health standards and guidelines.

### **c. No Grazing**

If there were no grazing allowed on this allotment, there may be a loss of some jobs to members of a low-income or minority population. Any such impacts would be limited to a single job here or there. There would not be a disproportionate impact to any low-income minority population.

There might be a slight positive impact to some groups (e.g. Native American) through increased availability of some vegetative resources that are collected on public lands. This would however vary by area and type of resource, and would probably be minimal on this allotment.

## **F. ESSENTIAL FISH HABITAT**

The proposed action, no action, and no grazing alternatives would have no effect on essential fish habitat because there are no anadromous fish species or designated essential fish habitats present on the Mono Mills allotment.

## **G. FARMLANDS, PRIME OR UNIQUE**

The proposed action, no action, and no grazing alternatives would have no effect on farmlands, prime or unique, because none are present on the Mono Mills allotment.

## **H. FLOOD PLAINS**

The proposed action, no action, and no grazing alternatives would have no effect on flood plains because none are present on the Mono Mills allotment.

## **I. GLOBAL CLIMATE CHANGE**

### **1. Affected Environment**

United States Department of Interior, Order Number 3226, signed January 19, 2001, Evaluating Climate Change Impacts in Management Planning, is an order to ensure that climate change impacts are taken into account in connection with planning and decision making. Climate change refers to any significant change in measures of climate (e.g. temperature or precipitation) lasting for an extended period of time (decades or longer). Climate change may result from: natural processes, such as changes in the sun's intensity; natural processes within the climate system (e.g. changes in ocean circulation); human activities that change the atmosphere's composition (e.g. burning fossil fuels) and the land surface (e.g. urbanization) (IPCC, 2007).

Rising greenhouse gas (GHG) levels are likely contributing to global climate change. In the Bishop Field Office area, climate change is typically expected to result in warmer, drier conditions, and potentially more extreme weather events. Natural processes such as volcanic eruptions contribute to the increasing levels of GHGs in the atmosphere (IPCC, 2007). Livestock grazing related to the proposed action and no action alternatives, also contribute GHGs in the form of methane (USEPA #430-R-08-005, April 2008).

### **2. Environmental Consequences**

The assessment of GHG emissions and climate change remains in its formative phase. The lack of scientific tools designed to predict climate change on regional or local scales limits the ability to quantify potential future impacts of climate change on resources within the Bishop Field

Office. In addition, while the proposed action and no action alternatives may involve some future contribution of GHGs, these contributions would not have a noticeable or measurable effect, independently or cumulatively, on a phenomenon occurring at the global scale believed to be due to more than a century of human activities.

### 3. References

Intergovernmental Panel on Climate Change. IPCC Fourth Assessment Report: Climate Change 2007. Available at: <<http://www.ipcc.ch/ipccreports/assessments-reports.htm>>

U.S. Environmental Protection Agency. April 2008. U.S. Greenhouse Gas Inventory Reports Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2006. USEPA #430-R-08-005.

## J. INVASIVE, NON-NATIVE SPECIES

### 1. Affected Environment

The following table represents invasive weed species that occur within the Mono Mills allotment:

Allotment	Invasive Weed Species	Estimated % Cover (Rangeland Health Assessments 2001 and 2002)
Mono Mills	<i>Bromus tectorum</i>	<10%

Rangeland Health Assessments documented low occurrences of invasive species primarily due to the sandy substrates that are the dominant soil types within the Mono Mills allotment. Populations of these weed species are generally confined to roadsides where roadside fill exhibits different substrate textures and types than the surrounding soils. Current densities are not affecting overall ecological function such as reductions in native species composition or increases in fire frequency.

Arid ecosystems have been predicted to be one of the most responsive ecosystem types to elevated atmospheric CO<sub>2</sub> and associated global climate change (Strain and Bazzar 1983, Melillo 1993, Smith, Monson and Anderson 1997). Net increases in above-ground non-native annual grass production and seed rain increases at elevated CO<sub>2</sub> levels have been demonstrated (Smith, et. al 2000) which could lead to increased risk of species composition in favor of exotic annual grasses and commensurate declines in biodiversity and ecosystem function in the arid regions of North America.

## **2. Environmental Consequences**

### a. Impacts of Proposed Action

The proposed action would benefit site conditions and native vegetation because the proposed terms and conditions are designed to help reduce the spread of weeds and maintain or improve rangeland health. Early season grazing, normally before seed set, of these annual grasses may help reduce weed invasion (Olson 1999, Mosley and Roselle, 2006, and Taylor 2006) by reducing inputs into the seed bank of particular sites. Provisions for grazing before seed set of these species has been included in allotment grazing stipulations. Potential long-term and landscape impacts of increased weed densities will be more of a function of increased CO<sub>2</sub> levels than the effects of the proposed action. Currently, the cover values for weed species is low and continued implementation of grazing timing stipulations may reduce weed spread. Implementation of the Rangeland Health Standards and Guidelines that identify the need to keep non-native species at “acceptable” levels will require frequent monitoring since weed densities are likely to increase given their life histories and affects of global climate change.

### b. Impacts of No Action

Under current management with the mandatory terms and conditions, there would not be any additive effect to existing weed densities separate from the effects of increased CO<sub>2</sub> levels.

### c. No Grazing

Under the no grazing alternative, impacts from invasive weed species on native plant communities may increase and be greater than the proposed action. There would no longer be herbivory of invasive weed species prior to seed dissemination which could potentially increase seed bank densities. However, the no grazing alternative would reduce the chances that weed seed from roadsides, and other disturbed locations are spread to new areas. Even this alternative is unlikely to off-set the effects of increased CO<sub>2</sub> on spread and production of non-native annual grass species.

## **3. References**

- Evans, R.D. and J.A. Young. 1972. Microsite requirements for establishment of annual rangeland weeds. *Weed Science*. 18:154-161
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Smith, Stanley D., Huxman, Travis E., Ziter, Stephen F., Charlet, Therese N., Housman, David G., Coleman, Lynn K. Fenstermaker, Seemann, Jeffrey R., and Nowak, Robert S. 2000. Elevated CO<sub>2</sub> increase productivity and invasive species success in an arid ecosystem. Nature Vol. 408. Pages 79-81.

## **K. NATIVE AMERICAN CULTURAL VALUES**

### **1. Affected Environment**

There are 11 Native American communities who reside in or in close proximity to the eastern Sierra region administered by the Bishop Field Office. None of these communities are living on the Mono Mills allotment. There are no treaty rights (hunting, fishing, etc.) associated with any of the communities or this allotment.

Some members of these communities hunt and some do subsistence collecting of materials from public lands such as, basket weaving materials, medicinal plants, etc. However, this is general use and there are no specific “traditional use areas” identified at this time by any of the Tribes on this allotment. Any other traditional uses or use areas have not been divulged to this office.

Some general concerns associated with Native American cultural values identified by the Tribes during consultation are:

- They have general concerns with overgrazing and want BLM to control overgrazing to protect the ecosystem and ensure that it is functioning properly.
- They have concerns that water (or other) developments not impact cultural sites and that they not affect deer habitat (through de-watering streams / springs, or trampling of habitat around new troughs, etc.).
- They do not want cattle grazing on top of individual burials or grave sites or within known Native American cemeteries.
- They do not want sheep bedding on top of cultural sites.
- They do not want BLM to use herbicides on plants that they might collect.
- They do not want BLM to cut / remove pinyon for grazing habitat improvement.

### **2. Environmental Consequences**

#### **a. Impacts of Proposed Action**

The proposed action is not expected to have any impacts on Native American concerns described above. The rangeland health assessment showed the Mono Mills allotment currently meets rangeland health standards. The proposed terms and conditions are designed to help protect and sustain rangeland health, keep the ecosystem functioning properly, and thereby maintain or improve the natural environment on which Native American cultural values depend. Monitoring

would continue and any impacts that affect Native American sites from high congregation and concentration of livestock use would be corrected.

b. Impacts of No Action

Impacts of the no action alternative would be the same as the proposed action because both alternatives are very similar. The only difference between this alternative and the proposed action alternative is that terms and conditions developed from the Bishop Resource Management Plan (BLM 1993) and the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (BLM 2000), under current management, are applied broadly and uniformly to this allotment. No defined implementation guidelines exist nor are they tailored to address specific vegetation communities and/or resources on this allotment, as in the Proposed Action. For this alternative, there is a possibility under certain situations that BLM and the permittee may need to work together to define allotment-specific applications of the rangeland health standards and guidelines.

c. No Grazing

Removing grazing would generally result in fewer impacts to the natural environment, thus alleviating Native American concerns with overgrazing, water project development, and grazing impacts to cultural resources/burial sites, etc.

## **L. RECREATION**

### **1. Affected Environment**

Recreation activities and facilities in the Mono Mills allotment are limited. Access is from approximately 30 miles of primitive four-wheel drive and single track motorized vehicle routes and trails. This access, coupled with no developed recreational facilities currently precludes intensive recreation activity. Activities that take place consist of motorized four-wheel drive touring, motorcycle riding, hunting, hiking, horse-back riding, and dispersed camping. Encounters with livestock occur infrequently.

### **2. Impacts of Alternatives**

The proposed action, no action, and no grazing alternatives would have no effect on recreation because proposed facilities or management practices that could potentially alter existing recreation uses or use patterns do not exist on this allotment. Recreationists would continue to encounter livestock infrequently under the proposed action and no action alternatives.

## **M. SOCIAL AND ECONOMIC VALUES**

### **1. Affected Environment**

Regionally, livestock operations involve use of BLM, Forest Service (USFS), or Los Angeles Department of Water and Power (LADWP) lands. The Mono Mills allotment has one permittee. There is a careful balance of livestock numbers and seasons of use for grazing this allotment, such that any substantial change of use, would negatively affect their overall operation by reducing available forage and management flexibility required for a profitable operation.

The local economy is benefited by this grazing allotment from monies spent to establish and maintain a ranching operation and contributions to the labor force. This is true of any privately owned business. In Mono County for 2006, agriculture was the second largest industry and is an integral part of the county's economy (Counties of Inyo and Mono Agriculture Department 2006). Beef and alfalfa production is the primary production crops. Of a 100% total in agricultural values, livestock production accounted for 60% in Mono County. This amounted to \$17,497,050 or 60% of the total \$29,336,050 agricultural production.

### **2. Environmental Consequences**

#### **a. Impacts of Proposed Action**

This grazing operation benefits the Mono County economy from monies spent to establish and maintain a ranching operation and contributions to the labor force. Sustaining this operation, would have a positive economic effect on the stability of the permittee's overall livestock operation. The social value of retaining a rural, agricultural lifestyle would be preserved and would keep with the public's perception of the eastern Sierra western culture. The proposed action would not adversely impact the social and economic stability of these ranching operations.

#### **b. Impacts of No Action**

Same as the proposed action.

#### **c. No Grazing**

If grazing were terminated on this allotment, there would be adverse impacts to the livestock operator. The grazing capacity of their other federal permits or private leases may not be enough to accommodate the increased use or meet land management requirements. The permittees may be forced to operate with fewer livestock. There could be unauthorized grazing use onto BLM lands, since their private and permitted Forest Service lands are unfenced. Livestock trespass or drift onto BLM land would result in administrative costs to the agency. The BLM may also receive criticism of this decision from its local constituency because of potential agricultural economic losses.

### **3. References**

Annual Crop and Livestock Report. 2006. Inyo- Mono Counties (prepared June 14, 2007)

## **N. SOILS**

### **1. Affected Environment**

The soil classifications for the Mono Mills allotment have been mapped in detail by the Natural Resource Conservation Service (NRCS). Two general soil types exist on the Mono Mills allotment. The first soil type is soils of the mountainous region which are shallow to very deep, well drained sandy loams to loams. The second soil type is soils of the intermountain valleys which are moderate to very deep, well to somewhat excessively drained ashy loamy sands. Soils of these types tend to limit the establishment of seeds and seedling development because of the sand structure. Furthermore, the very shallow soils may restrict water infiltration and plant rooting. These soils primarily occur on slopes and ridges. Ash loamy sands are inclusions occurring within depressions or valleys between the slopes. These soils are well drained, which provide a more favorable habitat for both grasses and mixed desert shrub species.

Erosion potential of these soils range from slight to moderate on the valley floor due to wind erosion and can be somewhat attributable to the effects of livestock hoof action which disturbs the soil surface. Valley floor soils may also have inclusions of calcareous loam along remnant river terraces that exhibit duripans which inhibit water infiltration and restrict shrub rooting depths. The erosion potential on the alluvial fans is low due to the gravelly surface texture and low occurrence of cattle use compared with the valley floor. There are no identified erosional problems on this allotment.

BLM assessed the Mono Mills allotment in 2002 to determine if the rangeland health standards were being met. Specific soils standards relate to permeability and infiltration. All sites examined within the Mono Mills allotment were found to meet the standards for soils.

### **2. Environmental Consequences**

#### **a. Impacts of Proposed Action**

The proposed action would create no new impacts because the proposed terms and conditions are designed to help maintain, protect, or sustain rangeland health including soils, and to keep the ecosystem functioning properly. For example, improvements in ecological attributes would be a result of less intensive forage utilization levels which would lead to increases in plant biomass production resulting in adequate soil protection (e.g. wind erosion).

b. Impacts of No Action

Impacts of the no action alternative would be the same as the proposed action because both alternatives are very similar. The only difference between this alternative and the proposed action alternative is that terms and conditions developed from the Bishop Resource Management Plan (BLM 1993) and the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (BLM 2000), under current management, are applied broadly and uniformly to this allotment. No defined implementation guidelines exist nor are they tailored to address specific vegetation communities and/or resources on this allotment, as in the Proposed Action. For this alternative, there is a possibility under certain situations that BLM and the permittee may need to work together to define allotment-specific applications of the rangeland health standards and guidelines.

c. No Grazing

The no grazing alternative would have little to no impact on soils since few impacts currently occur.

**3. References**

Bishop Resource Management Plan and Environmental Impact Statement. August 1991.  
Benton-Owens Valley Planning Unit, Draft Environmental Impact Statement

United States Department of Agriculture, Natural Resource Conservation Service. 1996. Soil Survey of Benton-Owens Valley Area, California, Parts of Inyo and Mono Counties.

**O. VEGETATION/THREATENED AND ENDANGERED**

*Plant Communities*

**1. Affected Environment**

Uplands

A baseline range inventory for this allotment was completed in 1977 and correlated to the recently completed 1999 NRCS soil/vegetation inventory to document plant cover and composition as well as to develop updated ecological site descriptions. The allotment occurs in the Great Basin Floristic Province. The dominant plant communities are sagebrush/bitterbrush and pinyon woodland. The sagebrush/bitterbrush communities are dominated by sagebrush (*Artemisia tridentata* ssp. *tridentata*, *A. tridentata* ssp. *vaseyana*, *A. tridentata* ssp. *wyomingensis* and *A. tridentata* ssp. *parishii*) and bitterbrush (*Purshia tridentata* var. *glandulosa* and *P. tridentata* var. *tridentata*). Understory grasses such as Indian rice grass (*Achnatherum hymenoides*), desert needlegrass (*Achnatherum speciosum*), needle and thread (*Hespirostipa*

*comota*), western needlegrass (*Achnatherum occidentale*), and Thurber's needlegrass (*Achnatherum thurberianum*) can make up 15-20% of the cover at the higher elevations (Barbour and Major 1977). Additional species include, but are not limited to, hop sage (*Grayia spinosa*), horsebrush (*Tetradymia canescens*), Nevada and green ephedra (*Ephedra nevadensis*. and *E. viridis*), yellow and curly-leaved rabbitbrush (*Chrysothamnus nauseosus* and *C. viscidiflorus*), and currant species (*Ribes cereum* and *R. velutinum*). During years of high precipitation annual forbs are abundant and include species from the following genera: *Astragalus*, *Cryptantha*, *Eriogonum*, *Phacelia*, as well as genera in the Asteraceae Family.

The pinyon woodland communities are dominated by an overstory (15-20% cover) of singleleaf pinyon pine (*Pinus monophylla*) with a sagebrush/bitterbrush understory. Perennial forbs include species from the following genera: *Astragalus*, *Cryptantha*, *Eriogonum*, and *Phlox*.

The majority (80-90%) of the upland plant communities within this allotment have been lightly to moderately impacted by livestock grazing. Overall, the Mono Mills allotment is lightly grazed due to restricted access/availability of water. Generally, utilization of key forage species, (e.g. needlegrass species and bitterbrush) is slight to moderate and occurs during late spring and summer. Forage capacity on this allotment is moderate and the plant communities are incapable of sustaining large numbers and frequent livestock use which has been shown to be detrimental to the various attributes of ecological function including plant vigor, seedling recruitment and recovery (Clary and Holmgren 1987; Holcheck 1983; Sneva 1980).

## **2. Environmental Consequences**

### **a. Impacts of Proposed Action**

Under the proposed action, grazing impacts such as weed presence and localized soil disturbance would affect very small portions (< 1-2 acres in size) of this allotment and be associated primarily with bedding grounds, watering facilities and roadsides. These impacts would not contribute to a large-scale reduction in ecological function of the plant communities that occur within the allotment, but would require periodic (2-5 years) monitoring to determine impact thresholds.

The terms and conditions outlined in the proposed action would sustain and improve the following key floristic and ecological attributes within this allotment (BLM 1998);

- Increased cover of perennial grasses
- Better root distribution
- Increased species diversity
- Increased photosynthetic period
- Increased vegetation structure
- Increase in episodic recruitment of shrubs, grasses, and forbs

Such improvements in floristic and ecological attributes would be a result of less intensive forage utilization levels and range improvements which would lead to commensurate increases in annual below and above ground grass and forb biomass production. The implementation of the proposed terms and conditions on the Mono Mills allotment would enhance and sustain the large-scale ecological function of these plant communities especially during non-drought years (BLM 1999, 2000) and when stocking rates are low.

b. Impacts of No Action

Impacts of the no action alternative would be the same as the proposed action because both alternatives are very similar. The only difference between this alternative and the proposed action alternative is that terms and conditions developed from the Bishop Resource Management Plan (BLM 1993) and the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (BLM 2000), under current management, are applied broadly and uniformly to this allotment. No defined implementation guidelines exist nor are they tailored to address specific vegetation communities and/or resources on this allotment, as in the Proposed Action. For this alternative, there is a possibility under certain situations that BLM and the permittee may need to work together to define allotment-specific applications of the rangeland health standards and guidelines.

c. No Grazing

Under this alternative, livestock grazing on the Mono Mills allotment would cease. Individual plant populations within the communities that are commonly grazed would have an opportunity to complete all phenological stages. Slight increases in weed densities could occur due to a reduction of early season grazing on these target species. Impacts to the ecological function of these plant communities would be confined to natural disturbances (e.g. fire, insect damage, drought, and other non-anthropogenic induced effects).

### **3. Map**

California Natural Diversity Database GIS coverage (not included in EA).

### **4. References**

Barbour, M.G., Major J. 1977. Terrestrial Vegetation of California. John Wiley and Sons. Pages 853-854.

California Department of Fish and Game. 1997. California Natural Diversity Database.

Clary, W.B. and R.C. Holmgren. 1987. Difficulties in interpretation of long-term vegetation trends. IN: Proceedings of the Symposium on Plant-Herbivore Interactions. General Technical Report INT-222. U.S. Forest Service, Intermountain Research Station, Ogden, Utah.

Cook, C. Wayne. 1977. Effects of Season and Intensity of Use on Desert Vegetation. Utah Agricultural Experiment Station. Bulletin 483.

Department of the Interior, Bureau of Land Management. 1998. Riparian area management: a user guide to assessing proper functioning condition and the supporting science for lotic areas. Technical Reference 1737-15, U.S. Department of the Interior, Bureau of Land Management, Denver, CO.

Department of the Interior, Bureau of Land Management. 1998. Rangeland health standards and guidelines for California and northwestern Nevada: Final EIS. California State Office, U.S. Department of the Interior, Bureau of Land Management, Sacramento, CA.

Department of the Interior, Bureau of Land Management. 1998. Rangeland Health Standards and Guidelines for California and Northwestern Nevada. BLM/CA/ES-98/005+4100.

Department of the Interior, Bureau of Land Management. 1999, 2000. Rangeland Health Assessments. Technical Reference 1734-6, 2000, Interpreting Indicators of Rangeland Health (Version 3).

Hughes, L.E. 1982. A grazing system in the Mohave Desert. Rangelands 4, 256-257.

Laycock, W.A. 1994. Implications of grazing vs. no grazing today's rangelands. In: M. Vavra, W. Laycock and R. Pieper, eds. Ecological implications of livestock grazing in the West. Society for Range Management. Denver, CO.

### ***Threatened and Endangered Plant Species***

The proposed action, no action, and no grazing alternatives would have no effect on threatened or endangered vegetation species because no federally listed threatened or endangered species are present on the Mono Mills allotment based on historical records, field monitoring, and/or habitat suitability.

### ***Special Status Plant Species***

#### **1. Affected Environment**

A summary of California Native Plant Society (CNPS) List 1B species as well as other plants of limited distribution occurring within the Mono Mills allotment is provided below:

Allotment	Plant Species	Population Trend
Mono Mills	Mono milk-vetch <i>Astragalus monoensis</i> Mono lake lupine <i>Lupinus duranii</i>	Decreasing – Likely due to increased competition from native Douglas sedge – decreases within enclosure – Static outside enclosure. Static

Grazing impacts to the above-mentioned Special Status Plant population have been minimized by avoidance of these sites during key reproductive periods. In addition, no Special Status Plant populations occur in the vicinity of watering or supplement locations on the Mono Mills allotment.

## 2. Environmental Consequences

### a. Impacts of Proposed Action

The status of Special Status Plant populations on the Mono Mills allotment would not notably change under the proposed action due to the infrequent and low intensity movement and use of livestock in the vicinity of these populations.

### b. Impacts of No Action

Impacts of the no action alternative would be the same as the proposed action because both alternatives are very similar. The only difference between this alternative and the proposed action alternative is that terms and conditions developed from the Bishop Resource Management Plan (BLM 1993) and the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (BLM 2000), under current management, are applied broadly and uniformly to this allotment. No defined implementation guidelines exist nor are they tailored to address specific vegetation communities and/or resources on this allotment, as in the Proposed Action. For this alternative, there is a possibility under certain situations that BLM and the permittee may need to work together to define allotment-specific applications of the rangeland health standards and guidelines.

### c. No Grazing

The no grazing alternative would have minimal effect on Special Status Plant populations the Mono Mills allotment due to the infrequent and low intensity movement and use of livestock in the vicinity of the populations.

### **3. Map**

California Natural Diversity Database and Bureau of Land Management Special Status Plant Species GIS coverages (not included in EA).

### **4. References**

California Department of Fish and Game. 2007. California Natural Diversity Data Base.

California Native Plant Society. 2001. Inventory of Rare and Endangered Plants of California. Sixth Edition. Sacramento, CA

Department of the Interior, Bureau of Land Management. 1999, 2000. Rangeland Health Assessments, Technical Reference 1734-6, 2000, Interpreting Indicators of Rangeland Health (Version 3).

### **P. WASTE, HAZARDOUS OR SOLID**

The proposed action, no action, and no grazing alternatives would not generate hazardous or solid waste on the Mono Mills allotment.

### **Q. WATER QUALITY, DRINKING-GROUND**

#### **1. Affected Environment**

Perennial surface water occurs in the form of three natural springs in the Mono Mills allotment. The allotment also contains one well. Two springs have been sampled for their water quality constituents. The source for Indian Spring occurs in the Mono Mills allotment with the outflow of 12 gallons/minute (gpm) continuing for approximately 2000 linear feet in a channel in to the Mono Lake allotment. The source location of Indian Spring and approximately 1800 feet of the channel is protected by a fence enclosure that prevents livestock access to the water. The second source is Finch Spring which was a perched seep with a flow of 2 gpm. This source was altered sometime in the mid 1980's due to unauthorized excavation of the seep and construction of a reservoir. The site is not a dependable source and currently there is no surface water. For both springs, at the time of their one time inventory in 1980, water quality was generally good with the concentration of total dissolved solids (tds) at 125 milligrams/liter (mg/l) and a pH of 7.4 for Indian Spring and a tds of 130 mg/l and a pH of 6.8 at Finch Spring. The concentrations for other constituents, like CO<sub>2</sub>, Ca, Mg, Cl and Na, were low enough to categorize both springs as drinking water standard quality. A third spring source (project file 7540), approximately 2 miles east of Indian Spring, was also altered due to unauthorized excavation of the seep and construction of a small reservoir. No water quality information is known for this site and it, also, is currently without surface water. The well (project file 7555) is located northeast of Indian

Spring and was another unauthorized excavation to develop water for livestock use. At the time of construction, the well was approximately 14 feet deep, enclosed in a wood collection box, and had a capacity sufficient to fill a 2800 gallon storage tank. The water source is not dependable year to year. No water quality information is known for this well.

## **2. Environmental Consequences**

### a. Impacts of Proposed Action

Indian Spring, the only perennial water source currently with surface water, would maintain its good water quality with implementation of the proposed action. Water quality would be maintained due to the fence enclosure protecting the source and channel from livestock use.

### b. Impacts of No Action

Impacts of the no action alternative would be the same as the proposed action because both alternatives are very similar. The only difference between this alternative and the proposed action alternative is that terms and conditions developed from the Bishop Resource Management Plan (BLM 1993) and the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (BLM 2000), under current management, are applied broadly and uniformly to this allotment. No defined implementation guidelines exist nor are they tailored to address specific vegetation communities and/or resources on this allotment, as in the Proposed Action. For this alternative, there is a possibility under certain situations that BLM and the permittee may need to work together to define allotment specific applications of the rangeland health standards and guidelines.

### c. No Grazing

Under this alternative livestock grazing on the Mono Mills allotment would cease. All potential for livestock induced affects on the water quality of Indian Spring would be eliminated.

## **3. References**

Department of the Interior, Bureau of Land Management, Bishop Field Office. June 1978.  
Adobe Creek Stream Inventory. File.

Stefferd, Sally. 1980. An inventory of water sources on public lands in the Mono Basin. File.

## **R. WETLANDS/RIPARIAN ZONES**

### **1. Affected Environment**

Indian Spring provides approximately 2 acres of riparian vegetation composed mainly of sedges, bluegrass, and willows. With the entire riparian corridor at the spring source and downstream for approximately 1900 feet enclosed within a fence to prevent livestock access to the water, riparian vegetation has developed to the extent possible along the stream edge within the limits of the landform configuration. There is no viable riparian vegetation at Finch Spring or at the silted in reservoir of project 7540. No other wetland or riparian zones occur within the Mono Mills allotment.

### **2. Environmental Consequences**

#### **a. Impacts of Proposed Action**

The fence enclosure at Indian Springs will be maintained to prevent impacts to the riparian vegetation condition. No other wetland or riparian vegetation is found within the allotment. The proposed action would have no affect on wetland or riparian vegetation.

#### **b. Impacts of No Action**

Impacts of the no action alternative would be the same as the proposed action because both alternatives are very similar. The only difference between this alternative and the proposed action alternative is that terms and conditions developed from the Bishop Resource Management Plan (BLM 1993) and the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (BLM 2000), under current management, are applied broadly and uniformly to this allotment. No defined implementation guidelines exist nor are they tailored to address specific vegetation communities and/or resources on this allotment, as in the Proposed Action. For this alternative, there is a possibility under certain situations that BLM and the permittee may need to work together to define allotment-specific applications of the rangeland health standards and guidelines.

#### **c. No Grazing**

Under this alternative livestock grazing on the Mono Mills allotment would cease. The no grazing alternative would have little to no impact on wetland or riparian vegetation since few impacts currently occur.

### **3. References**

Barbour, M.G., Major J. 1977. Terrestrial Vegetation of California. John Wiley and Sons.  
Pages 853-854.

Department of the Interior, Bureau of Land Management, Bishop Field Office. 1978. Adobe Creek Stream Inventory. File.

Department of the Interior, Bureau of Land Management, Bishop Field Office. 1986. Water Supply Inventory. File.

## **S. WILD AND SCENIC RIVERS**

The proposed action, no action, and no grazing alternatives would have no effect on wild and scenic rivers because there are no designated wild and scenic rivers or eligible study river segments on the Mono Mills allotment.

## **T. WILDERNESS**

### **1. Affected Environment**

The Mono Mills allotment does not occur within any congressionally designated Wilderness Area. However, approximately forty percent (21,916 acres) of the Granite Mountain WSA occurs in the Mono Mills allotment.

Wilderness values are described in the 1979 Final Wilderness Intensive Inventory Report while the WSA's existing range and other improvements are identified in the 1990 California Statewide Wilderness Study Report (WSR). The Interim Management Policy for Lands Under Wilderness Review (IMP) provides direction for grazing management in WSAs until it is designated wilderness or released from the wilderness review process. In general, BLM is required to maintain the wilderness characteristics of each WSA until Congress decides whether it should either be designated as wilderness or released for other purposes. The general standard for interim management is that lands under wilderness review must be managed so as not to impair their suitability for preservation as wilderness, also referred to as the non impairment standard.

Grazing existed on the Mono Mills allotment at the time the WSA was designated by BLM in the 1980's and is a use grandfathered by Section 603(c) of FLPMA. Grazing may continue in the same manner and degree as took place in 1976. The IMP provides specific guidance for implementation of grazing systems.

Historically, sheep have used the Mono Mills allotment within the WSA depending on the forage availability. All pipelines and water troughs are located outside the WSA. Any future livestock authorizations would be required to operate under particular terms and guidelines to maintain rangeland health as described in Chapter 2 above.

There are virtually no physical vegetative impacts in the WSA's naturalness other than immediately around old bedding grounds where vegetation continues to reinvade and reestablish in the areas. In concert, other wilderness resource based values i.e. wildlife habitat, cultural resources, outstanding opportunities for solitude, primitive/unconfined recreation etc. incur no impact.

## **2. Environmental Consequences**

### **a. Impacts of Proposed Action**

Future grazing authorizations would maintain the WSA's wilderness values of naturalness because the proposed terms and conditions (e.g. 40% utilization) assure that vegetative habitats maintain their range of phenological stages, composition, and vigor. Overall, habitat quality of the allotment would be maintained since implementation of the proposed terms and conditions are designed to protect and sustain rangeland health.

Wilderness values of outstanding opportunities for solitude and a primitive or unconfined type of recreation would remain unaffected. For additional information regarding special features such as cultural values, wildlife, plants, etc., refer to specific narratives addressing these values in other sections of this document.

Continuance of proposed grazing on the Mono Mills allotment within the Granite Mountain WSA would conform with the BLM IMP and would not impair Congress's ability to designate the WSA as Wilderness should they choose to do so. Additionally, since grazing was occurring at the time the WSA was inventoried, and those impacts did not disqualify the area or any portion of the area from being designated as a WSA, they would not do so now.

### **b. Impacts of No Action**

Impacts of the no action alternative would be the same as the proposed action because both alternatives are very similar. The only difference between this alternative and the proposed action alternative is that terms and conditions developed from the Bishop Resource Management Plan (BLM 1993) and the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (BLM 2000), under current management, are applied broadly and uniformly to this allotment. No defined implementation guidelines exist nor are they tailored to address specific vegetation communities and/or resources on this allotment, as in the Proposed Action. For this alternative, there is a possibility under certain situations that BLM and the permittee may need to work together to define allotment-specific applications of the rangeland health standards and guidelines.

### **c. Impacts of No Grazing**

Ecological wilderness values of plant and wildlife habitat would be maintained as under the present situation described above. Natural processes would completely dominate, maintaining

the wilderness value of naturalness. Wilderness values of outstanding opportunities for solitude and primitive or unconfined types of recreation would remain.

### **3. Map**

Overview of Allotment (Map 1)

### **4. References**

Department of the Interior, Bureau of Land Management. 1990. California Statewide Wilderness Study Report.

Department of the Interior, Bureau of Land Management. 1979. Final Intensive Inventory.

Department of the Interior, Bureau of Land Management. 1987. Benton-Owens Valley and Bodie-Coleville Study Areas Final Environmental Impact Statement.

Department of the Interior, Bureau of Land Management. 1995. H-8550-1 Interim Management Policy for Lands Under Wilderness Review.

## **U. WILDLIFE/THREATENED AND ENDANGERED**

### *Wildlife*

#### **1. Affected Environment**

##### Upland

In the Mono Mills allotment, the dominant plant communities identifying wildlife habitat types are big sagebrush/bitterbrush, valley bottom sagebrush and pinyon pine woodland. A 1978 wildlife species inventory in these vegetation communities documented a variety of non-game small mammals, passerine songbirds, and reptiles.

Within the three principal wildlife habitat types, a total of 14 individual species of small mammals were recorded. Some species of small mammals, like the Panamint kangaroo rat (*Dipodomys panamintinus*), deer mouse (*Peromyscus maniculatus*) and Great Basin pocket mouse (*Perognathus parvus*), were recorded in all three habitat types. The deer mouse (*Peromyscus maniculatus*) was the species encountered in the greatest numbers, often exceeding the next most recorded species by several orders of magnitude when compared under equal trapping effort. The sagebrush/bitterbrush plant community had the highest number of species not recorded in the other vegetation types; long tail pocket mouse (*Perognathus formosus*), Merriam shrew (*Sorex merriami*), northern pocket gopher (*Thomomys talpoides*) and Ord kangaroo rat (*Dipodomys ordii*).

The potential reptile fauna was not well represented in the inventory in the three habitat types. Only a type of spiny lizard (*Sceloporus* sp.) was recorded from the valley bottom sagebrush habitat. Other reptiles that are likely to occur within one or more of the habitat types are the side blotched lizard (*Uta stansburiana*), Great Basin whiptail (*Cnemidophorus tigris*), gopher snake (*Pituophis melanoleucus*), and sidewinder (*Crotalus cerastes*).

Passerine bird species recorded in the sagebrush/bitterbrush habitat type were the Brewer's sparrow (*Spizella breweri*), green-tailed towhee (*Pipilo chlorurus*), gray flycatcher (*Empidonax wrightii*), sage sparrow (*Amphispiza belli*), house finch (*Carpodacus mexicanus*), and blue-gray gnatcatcher (*Poliophtila caerulea*). The Brewer's sparrow and sage sparrow are species of interest due to them being sagebrush obligates and may be declining in number range-wide due to a loss of sagebrush habitat. Bird species recorded in the valley bottom sagebrush habitat, distinct from the sagebrush/bitterbrush habitat, were the sage thrasher (*Oreoscoptes montanus*) and vesper sparrow (*Pooecetes gramineus*).

Sage grouse (*Centrocercus urophasianus*) are known to occur within the Mono Mills allotment. Sage grouse locations and their seasonal use of habitat within the South Mono Population Management Unit (PMU) are known from monitoring strutting grounds during the breeding period, from individual radio collared grouse monitored as part of studies undertaken by different investigators since 1984, and from field surveys. Two breeding populations are recognized in the PMU, Long Valley and Parker Meadows. The Granite Mountain area, located within and adjacent to the Mono Mills allotment, is treated as a breeding complex within the larger context of the Long Valley breeding population, but it is unknown if sage grouse using the active lek on Inyo National Forest Lands near Gaspipe interact with grouse using the leks in Long Valley proper, or the adjacent Parker or Bodie Hills breeding populations. Locational information from numerous individual telemetered sage grouse captured within Long Valley, which occurs in the southern portion of the PMU, have not been documented to use other potentially suitable areas out of that basin with the exception of one radioed bird that moved into the Adobe Meadows area southeast of the Mono Mills allotment. Radio collared sage grouse in the Parker area have been found to move between Parker Meadows and east to the western aspect of the Mono Craters. Similar to sage grouse captured in Long Valley, movement by these sage grouse into potentially suitable areas to the north near Mono Lake or south into Long Valley has not been documented. The Gaspipe lek in the Granite Mountain area is located on USFS land adjacent to the Mono Mills allotment. As the only currently known active strutting ground east of Mono Lake in the Cowtrack Mountain area of the Mono Basin, it has averaged around seven males at peak occupancy since 1990 with an average of eleven males since 2000. After several attempts, no sage grouse from this apparently small population have been captured and therefore little is known about seasonal movement and habitat use by sage grouse use within the Mono Mills allotment or the larger Mono Basin.

The Mono Mills allotment, as well as the majority of the Mono Basin with the exception of Parker Meadows and Conway Ranch, is essentially devoid of meadows and riparian habitat unlike the Long Valley portion of the South Mono PMU. Results from the rangeland health

assessment conducted in 2002 on the Mono Mills allotment found that shrub (sagebrush/bitterbrush) canopy cover was well within the guidelines (Connelly et al. 2004) required to meet sage grouse cover requirements for both nesting and winter habitat when compared to other occupied sage grouse habitats across the western states and in the region. Shrub communities within the allotment are dominated by later seral stages and generally have low native bunch grass cover which is likely the result of dense shrub cover (up to 60%) and an extremely xeric environment, and possibly the result of drought effects and historically (turn of the century) heavy sheep grazing in some parts of the allotment. Current habitat information suggests that while the Mono Mills allotment and the majority of the Mono Basin may provide suitable nesting and winter habitat for sage grouse, a general lack of meadows for breeding and late brood-summer habitat is likely the primary factor limiting sage grouse use both within the allotment and the greater Mono Basin. As a result, sagebrush habitats within the Mono Mills allotment and the larger Mono Basin likely serve primarily as potential winter, connectivity or refugia habitat for breeding populations within the Bodie and South Mono PMUs; however, as stated above telemetry studies and field surveys to date have not detected such movements or use.

Without specific information on sage grouse use of the allotment over different years, there is no reliable method to determine if domestic sheep grazing is influencing sage grouse presence or seasonal habitat use within the allotment. Domestic sheep are typically grazed on less than 50 % of the allotment during July for approximately 30 to 45 days, a time when sage grouse nesting and early brood rearing have already occurred in the South Mono PMU. In addition, grazing operations are conducted to ensure forage utilization does not exceed 40% of annual production, on average, of key forage species and 20% on bitterbrush (a shrub important to overall canopy cover for nest site selection). This level of grazing is also employed in all other allotments where sage grouse occur in the PMU. Based on the best available information, BLM is unaware of any evidence of direct or indirect negative impacts to sage grouse resulting from domestic sheep grazing in the Mono Mills allotment.

Mule deer (*Odocoileus hemionus*) use the Mono Mills allotment as a migration route when moving to and from the Sierra Nevada for summer and winter habitat. Mule deer may use portions of this allotment throughout the winter where the sagebrush/bitterbrush and pinyon pine woodland vegetation communities provide the necessary forage and/or thermal cover during mild weather conditions. Ensuring sufficient annual leader growth is maintained on bitterbrush after livestock grazing is essential for maintaining good habitat quality for migrating and resident winter mule deer.

Livestock grazing in this allotment has been minimal over the past several years and there is no indication that past livestock grazing had a substantial material negative affect on any of the wildlife habitats. The most habitat altering events that have affected the condition and quality of the sagebrush/bitterbrush and valley bottom sagebrush vegetation communities have been wildfire in the Mono Mills allotment.

## Riparian

Indian Spring is the only riparian sites of any significance within this allotment. The riparian vegetation of Indian Spring is located in one of the driest areas of the eastern Sierra and the songbird species recorded there are instructive as regards the biological productivity of the site. A 1978 bird survey conducted from May 31 to June 2 recorded seven species as likely to be breeding within the riparian corridor of Indian Spring. A more intensive effort at determining breeding bird presence at Indian Spring riparian occurred from 1998 – 2000 (Heath, et al. 2001). Sixteen (16) species were confirmed breeding or likely breeding in this habitat with an additional 16 species either possibly breeding or using the site for some other purpose (e.g. water source or foraging). The increase in the number of breeding species using Indian Spring may be attributable to the improvement made in the fence enclosure in 1990 when the project was increased in size from 1000 to 1800 linear feet of riparian and a complete exclusion of livestock.

With the riparian at Indian Spring protected from livestock grazing, the condition of the important riparian locations should retain their current level of productivity in to the future.

## **2. Environmental Consequences**

### a. Impacts of Proposed Action

The attributes of the vegetation communities defining wildlife habitats in this allotment should be slightly improved from their historic conditions with implementation of the proposed action. Seed eating species guilds of rodents and birds should gain the most immediate benefit from improvement in the availability of food resources and cover. Mule deer habitat quality for thermal and hiding cover and bitterbrush leader growth should be slightly improved in the Mono Mills allotment where livestock utilize the sagebrush/bitterbrush community. Sagebrush habitat cover and composition would be maintained over the long-term and there would be no negative impacts to sage grouse populations or nesting, wintering, refugia or migration habitat as a result of the proposed action.

### b. Impacts of No Action

Impacts of the no action alternative would be the same as the proposed action because both alternatives are very similar. The only difference between this alternative and the proposed action alternative is that terms and conditions developed from the Bishop Resource Management Plan (BLM 1993) and the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (BLM 2000), under current management, are applied broadly and uniformly to this allotment. No defined implementation guidelines exist nor are they tailored to address specific vegetation communities and/or resources on this allotment, as in the Proposed Action. For this alternative, there is a possibility under certain situations that BLM and the permittee may need to work together to define allotment-specific applications of the rangeland health standards and guidelines.

c. No Grazing

Under this alternative livestock grazing on the Mono Mills allotment would cease. Barring a catastrophic event (e.g. wildfire), the total annual production of the plant communities would be available and habitat conditions for all wildlife species would change with the natural interaction of climate, soil and vegetation. The loss of the grazing permit would likely lead to the transfer of base property to development interests. This would result in both the direct loss of habitat on private lands to development as well as the indirect effects of disturbance on adjacent public lands associated with development, particularly in the Cowtrack Mountain vicinity. These habitat loss impacts would likely be concentrated on, or immediately adjacent to, the limited mesic/meadow habitats that are extremely important to a wide variety of species including small mammals, songbirds, mule deer and sage grouse.

### 3. References

Department of the Interior, Bureau of Land Management, Bishop Field Office. 1980. Benton Planning Unit. Unit Resource Analysis. Step III.

Heath, S.K., G. Ballard and C. McCreedy. 2001. Eastern Sierra Riparian Songbird Conservation 1998-2000 Final Report. Point Reyes Bird Observatory, Contribution No.1002. Stinson Beach, California, USA.

Kondolf, G.M., J.W. Webb, M.J. Sale, and T. Felando. 1987. Basic hydrologic studies for assessing impacts of flow diversions on riparian vegetation: examples from streams of the eastern Sierra Nevada, California, USA. *Environmental Management* 11:757-769.

#### ***Threatened or Endangered Species:***

No federally listed threatened or endangered species are known to occupy habitat within the Mono Mills allotment.

A high priority recovery action for management of Sierra Nevada bighorn sheep (SNBS), listed as federally endangered, is to prevent physical contact between wild and domestic sheep since that contact increases the likelihood of bighorn sheep potentially incurring significant population mortality through pneumonia related die-offs (USFWS, 2007). The western portion of the Mono Mills allotment is within 23 kilometers of the boundary of the Northern Recovery Unit for SNBS; a distance used in the Recovery Plan (USFWS, 2007) to narrow the focus for analysis when considering potential physical contact between domestic and wild sheep. The nearest population of SNBS is found in the Mt. Gibbs herd unit in the Sierra Nevada Mountains, approximately 18 kilometers west of the western most boundary of the Mono Mills allotment. Sierra Nevada bighorn sheep (SNBS) do not occur in, nor are they likely to be attracted near to, the Mono Mills allotment due to a complete lack of favorable habitat that might serve as an attractant to wild sheep. The distance between the Mono Mills allotment and the Mt. Gibbs herd unit along with numerous impediments to wild sheep moving in the direction of the allotment,

like Highway 158, Highway 395 (four lanes), Mono Lake, Highway 120, Rush Creek, highway fences and other fences on USFS and private land, conifer trees and large expanses of fire scarred terrain between Highway 120 and Mono Lake combine to provide a substantive deterrent to wild sheep moving toward or into the Mono Mills allotment. The BLM is aware of one instance when a male bighorn (ram) is reported to have crossed Highway 395 from the Mt. Warren herd unit from west to east during the fall of 2003, in the vicinity of Conway Summit, north of Mono City, California. It is unknown how long this ram spent east of the highway. Reportedly, the ram was struck by a vehicle attempting to return to the Sierra Nevada Mountains and ultimately died several weeks later. There are no reported instances of wild sheep wandering from the Mt. Gibbs herd unit into the Mono Basin.

Conversely, the above obstacles and a lack of natural watering locations serve as significant barriers to any fugitive domestic sheep moving west from the Mono Mills allotment toward the wild sheep herd unit areas. The Mono Mills allotment is typically used for domestic sheep grazing for approximately 30 days during the summer and/or early fall, a time when male bighorn are less likely to roam from their herd unit area. Domestic sheep are a herding animal and while on the Mono Mills allotment are under the control of a herder and herding dogs. Grazing occurs primarily in the vicinity of hauled in watering sites and Indian Spring, the only available natural water source which is located in the center of the Mono Mills allotment. No domestic sheep grazing occurs in the western one-third of the allotment due to the Crater Fire destroying all available forage in 2001 with essentially little recovery in the native vegetation community to date. The location and timing of domestic sheep presence on the Mono Mills allotment along with 1) the terms and conditions of the grazing permit, 2) the location of the Mt. Gibbs SNBS unit area in relation to the Mono Mills allotment, 3) the characteristic behavior of wild sheep to exhibit group living, a strong preference for rocky escape terrain, occupation of alpine ranges (females) and lower elevation subalpine habitat west of the Sierra Nevada crest (males) in the summer and, 4) the reluctance of wild sheep to disperse from their home range (USFWS, 2007) combine to ensure sufficient safeguards are in place to prevent physical contact between the two species.

## **2. Environmental Consequences**

Since no threatened or endangered species or their associated habitat occur within the Mono Mills allotment, the proposed action, no action, and no grazing alternatives would have no effect on threatened or endangered species or their associated habitat.

## **V. WILD HORSE AND BURROS**

### **1. Affected Environment**

The Montgomery Pass Wild Horse Territory (MPWHT) established in 1971 encompasses land within the Bishop Field Office. The boundary of the territory is poorly defined, but does not include land within the Mono Mills allotment. However, horses have been documented within

the vicinity of this allotment and use is believed to be increasing. The Inyo National Forest is the lead agency for the management of the MPWHT.

A Coordinated Resource Management (CRM) Plan was approved in June 1988 which documented present and potential issues, identified management objectives (wild horses and habitat), and determined monitoring needs. Rather extensive censuses, which document use areas and population dynamics (adults, yearlings, and foals) have been conducted annually since the approval of the CRM. John W. Turner, PhD, has been the principal researcher of these censuses.

The 2001 Census and Comments Report of Mr. Turner identified several important changes in wild horse numbers, distribution and use that have occurred since 1988. Important excerpts from this report are presented below:

“Since 1992, horse numbers have steadily increased in non-lion use areas and have gradually decreased in lion-use areas. This redistribution may also have been influenced by other factors, including changes in availability of water and preferred feed, climatic changes, and intensive outfitter presence in the summer range area in May/June (foaling/breeding period) since 1986. The latter may be of little current consequence since the horse bands intolerant of human presence vacated these areas years ago. A potential benefit of these changes is the habitat/feed recovery in the key summer range area, which has historically experienced some overgrazing. A potential disadvantage is that some recently established areas of at least seasonal (spring/summer) horse use lie outside of the designated MPWHT” (Emphasis added).

“In summary, changes in MPWHT horse distribution have occurred during the past 9 years, and assessment of how this will influence the future of horse numbers, distribution, range utilization, and the predator-prey relationship is warranted. The ratio of summertime horse numbers in historic summer range vs. other range areas has shifted from approximately 1.5 to 0.8 across the past 9 years. This is a very large shift” (Emphasis added).

Within the last couple of years, there has been a shift of wild horse use into the vicinity of the Mono Mills allotment. Although the BLM’s Management Framework Plan signed in June 1982, set aside forage in animal unit months (AUMs) for some allotments within the Bishop FO, the Mono Mills allotment was not recognized as part of the MPWHT. The acknowledged shift in use areas, period of use, and number of wild horses observed by Turner, as well as BLM, Bishop Field Office staff may result in a potential for overgrazing and reduced ecological condition on the allotment.

## **2. Environmental Consequences**

### **a. Impacts of Proposed Action**

There would be no negative impacts to wild horses by implementation of the proposed action. The proposed terms and conditions are designed to help maintain, protect, or sustain rangeland

health to keep the ecosystem functioning properly. However, should wild horse numbers increase, period of use increase, and/or expansion of their use within this allotment occur, there would likely be a reduction in the amount of forage available to both livestock and wild horses. There is potential for future degradation of ecological conditions of vegetation communities within the Mono Mills allotment without management of the Montgomery Pass Wild Horses.

b. Impacts of No Action

Same as the proposed action.

c. No Grazing

No livestock grazing would potentially have a positive affect on the wild horse herd by eliminating a competitor of forage. Currently, horses roam at will, utilize steeper and more remote areas, travel greater distances to and from water than livestock, and are able to use rangelands at any time. Presently, wild horses have expanded their use areas beyond what has occurred since 1992. This could pose some negative impacts to other resources and livestock operators. The wild horse population number may potentially increase as additional amounts of forage become available to them.

### **3. References**

Benton-Owens Valley Planning Unit (Draft Environmental Impact Statement) 1981.

Montgomery Pass Wild Horse Territory (Coordinated Resource Plan) June, 1988. MPWHT  
Wild Horse Census Summary and Comments, 2001.

## **W. CUMULATIVE IMPACTS**

### ***Introduction***

Current conditions in the project area result from a multitude of natural events and human actions that have taken place over many decades. Cumulative effects are defined as the “impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions” (40 CFR § 1508.7). A description of current conditions inherently includes the effects of past actions and serves as a more accurate and useful starting point for a cumulative effects analysis than by “adding up” the effects of individual past actions. “Generally, agencies can conduct an adequate cumulative effects analysis by focusing on the current aggregate effects of past actions without delving into the historical details of individual past actions.” (CEQ Memorandum ‘Guidance on the Consideration of Past Actions in Cumulative Effects Analysis’ June 24, 2005.) By comparing the “no action” alternative (current condition) to the action alternatives, we can discern the “cumulative impact” resulting from adding the “incremental impact” of the proposed action to

the current environmental conditions and trends. The geographic scope of the cumulative impact analysis for this environmental assessment encompasses the public lands administered by the Bishop Field Office. This geographic scope was chosen because of the unique ecotone of public lands composing two distinct habitat types of Great Basin and Mojave Desert rangelands along the eastern Sierra front range. It is expected that the geographic scope of impacts would be confined to this region.

### ***Regional Impacts***

At a regional level, numerous resource disturbing activities in the Owens Valley and throughout the Bishop Field Office area have created impacts similar to or greater than livestock grazing. These activities include paved and unpaved road development, Off Highway Vehicle (OHV) activities, residential and commercial development, and fire.

The development of roads and trails throughout the region originates from the area's historic settlement at the turn of the twentieth century when access was needed to develop the area's resources and transport goods/services. Settlers, miners, ranchers, merchants, etc. developed a region of small communities and road networks to meet daily sustenance needs. Throughout the latter 20<sup>th</sup> century, the region evolved from an agrarian economy to its present day tourism. This altered traditional access use from survival and necessity to one that became recreation based, mostly motorized, although mountain biking, hiking and horseback riding may use similar routes. The thousands of miles of paved and unpaved roads in the region tend to be permanent conversions of sites and constitute a total loss of the site productivity. Associated infrastructure needs i.e. power lines, rest areas, etc. expand the permanency and loss of rangeland habitat. Recreation use, such as OHV activities can be short duration, but are generally repeated throughout the year reflecting the tourist value access continues to provide. Sometimes unauthorized routes are created near the rural communities by horses and/or vehicles.

The BLM and the Inyo National Forest have embarked on motorized access efforts throughout the 1990s to implement route designations to manage for environmental issues and recreation needs. These efforts have led to localized rehabilitation projects improving various habitats and scenic vistas, mostly on BLM land. Additionally, BLM works with the counties to reduce and control private subdivision proliferation and trespass onto adjoining public lands.

The dozen or so communities that occupy the Bishop Field Office area have generally been stable and small, although the Mammoth Lakes community has built high end homes and increased their housing density in the last decade. Obviously, these permanent alterations have irreversibly committed land to housing development, fragmenting plant/animal habitat, altering scenic vistas, etc. Overall, the greatest potential development impact to habitat would occur from housing development on remaining scattered private land tracts throughout the region. Increased property values and a housing shortage have created a strong real estate market in the eastern Sierra. This has prompted landowners to pursue subdivision development, reducing small acreages of habitat in several locations.

Construction activities, road maintenance, vehicle transport, and livestock use operations are common vectors or site modifications that can move invasive/non-native species. Potential long-term cumulative impacts of the proposed action if weed densities increase, include a reduction in native plant cover and vigor (below and above ground production), increased erosion leading to increased germination of invasive weed seed (Evans and Young 1972), a reduction in mycorrhizal populations, and increased fire frequency. Eastern Sierra plant communities have experienced increased weed invasions in the past five years due to increased precipitation levels and likely increases in atmospheric nitrogen deposition (Dukes and Mooney, 1999). If this trend continues without commensurate control methods including using early season grazing (pre-seed set), weed proliferation could be exacerbated.

There would not be substantive cumulative impacts to the local or regional economy of Inyo or Mono County from the implementation of the proposed action. Cumulative impacts to low income or minority populations from past, present, and reasonably foreseeable public or private actions including any actions on non federal lands would be extremely low and would not have disproportionate impacts on other segments of the population.

Unpredicted wild or arson fire can have large-scale impacts to the environment, wildlife, and to persons that use public land. These impacts include permanent changes to vegetation communities due to slow fire recovery, increasing non-native invasive populations, and loss of wildlife habitat. Fire that occurs in grazing allotments have the potential to devastate the vegetation and forage base for livestock. Therefore, BLM may temporarily close an allotment until determined appropriate for livestock grazing. If this were the case, livestock operators may be forced to find alternative forage, affecting their economic operations adversely depending on local circumstances.

The addition of the Proposed Action to existing and future regional activities and impacts would not add to or cross a threshold of impact that would result in a significant impact on the human environment.

### ***Site Specific Impacts***

For the Mono Mills allotment in this assessment, grazing issues and impacts have been minimal due to low livestock use and few facilities to attract and concentrate the use. The low occurrence of sensitive resources such as riparian areas, etc., reduces the likelihood of future adverse impacts as well.

The physical structure and ecological function of plant communities on the Mono Mills allotment are expected to maintain or improve resulting from the lower vegetation utilization standard on key forage species. Improved condition of native bunch grasses and forbs would provide an increased forage base for rodents and passerine birds across the allotment. Populations of these smaller animals should increase in average to above average precipitation years which provide an improved food base for predators. Habitat conditions, both forage quality/quantity and plant physical structure for mule deer and other large mammals, would be improved from the current situation.

The Montgomery Pass Wild Horse Territory population and historic use areas (especially the “key summer range”) have expanded from that recognized in 1971 (passage of the Wild Free Roaming Horse and Burro Act). Grazing by wild horses occur unregulated as to basic principles of range management i.e. proper time/season, amount of use, duration of use, and area of use. Livestock grazing is regulated and more closely follows acknowledged principles and practices of the science/art of rangeland management. Given the increased wild horse population and their expansion of use areas, it is reasonable to conclude that rangeland vegetative resources have been impacted by horse use over time on the Mono Mills allotment. That is not to say that livestock grazing has also not been a factor, however, livestock grazing use of this have diminished considerably from 1992 to the present. If a reduction of wild horse numbers through capture and subsequent adoption or placement in a wild horse sanctuary does not occur in the near term, the overall condition and amount of range vegetation could diminish which may affect both wild horses and livestock grazing in the future.

Within this allotment, wildland fires and other natural events changing landscape conditions are expected to continue. Grazing permits would be adjusted to maintain minimal rangeland health standards when fire, drought, and other uncontrollable natural events require it. Future grazing authorizations would maintain the Wilderness Study Area wilderness values of naturalness because the proposed terms and conditions assure that vegetative habitats maintain their range of phenological stages, composition, and vigor.

### ***Conclusion***

The addition of the Proposed Action to the existing environment at the site-specific allotment location addressed in this EA and within the eastern Sierra region as a whole would not contribute to significant impacts on the human environment. The cumulative impacts of conducting allotment assessments and issuing a grazing permit for this EA’s allotment with the proposed terms and conditions would help to maintain or improve rangeland health conditions incrementally and positively. In effect, the addition of the Proposed Action would beneficially improve rangeland health conditions at a local level and further BLM’s objective to complete its rangeland condition improvement strategy for the remainder of public lands as well. As a result, improvements in plants and animal habitat, water quality, cultural resources, etc. would occur at local and regional levels creating overall positive cumulative impacts.

## **1. References**

- Dukes, J.S. and Mooney, H.A. 1999. Does global change increase the success of biological invaders? *Trends in Ecology and Evolution*. 14:4:135-139.
- Evans, R.D. and J.A. Young. 1972. Microsite requirements for establishment of annual rangeland weeds. *Weed Science*. 18:154-161
- Jeff Putman and Genny Smith (editor). 1995. *Deepest Valley: Guide to Owens Valley, Its Roadsides and Mountain Trails* (2nd Edition). University of Nevada Press, Reno, NV. pp. 231-268.

## **Chapter 4: CONSULTATION AND COORDINATION**

### ***Livestock Operator Consultation, Cooperation, and Coordination***

The following timeline summarizes actions BLM has taken to consult, cooperate, and coordinate with affected livestock operators on the proposed action and alternatives:

On January 27, 1997, the Bishop Field Manager sent a letter to the permittee that grazes the allotment. The letter stated, “as a requirement of implementing the Bureau’s Healthy Rangeland Standards, regulations require that mandatory terms and conditions and other terms and conditions (43 CFR Subpart 4100, Section 4130.3-1 and Section 4230.3-2 respectively) are to be included in all permits.” The letter also stated, “Another requirement of the regulations are Standards and Guidelines (S&Gs). As of this date, the BLM in California has not completed development of statewide S&Gs and has requested that the Secretary of the Interior grant a 6 month extension to allow their completion and adoption. Therefore the Fallback Standards and Guidelines, as stated in the regulations, will not go into effect on February 12, 1997 if the extension is granted.”

On January 14, 1998, the Bishop Field Manager sent a letter to the permittee who grazes the allotment. It stated, “enclosed is a copy of the National Fallback Standards and Guidelines (S&Gs). These S&Gs will remain in effect until the California BLM Healthy Rangelands Environmental Impact Statement is completed in 1998.” Enclosures with the letter included Background, Fundamentals of Rangeland Health, S&Gs Basic Concepts, and Fallback S&Gs.

On December 15, 1998, the Bishop Field Manager sent a letter to the permittee who grazes the allotment which explained the rangeland health allotment assessment requirements.

On December 11, 2000, the Bishop Field Manager sent a letter to the permittee who grazes the allotment and included a copy of the Central California Standards and Guidelines. The letter invited the permittees to two scheduled meetings to ask any questions or present concerns they may have had with the Central California Standards and Guidelines.

### ***Personal Communication***

Belenky, Lisa T., Staff Attorney, Center for Biological Diversity (CBD). January 30, 2007, Ms. Lisa Belenky requested by telephone to be notified when draft environmental assessments for grazing permit renewals were posted on the Bishop BLM website. On May 15, 2007, BLM spoke with Ms. Belenky of CBD via telephone. Ms. Belenky requested that BLM send her all proposed decisions on the grazing allotment renewals from the Bishop Field Office via email. On June 11, 2007, BLM received a phone message from Ms. Belenky. Ms. Belenky again requested to be informed when draft EAs are posted on the BLM website. Ms. Belenky stated she would specifically request proposed decisions on particular allotments to be sent to her. BLM replied via email to Ms. Belenky, acknowledging her requests. However Ms. Belenky did

not provide BLM with a listing of specific allotments that CBD was interested in becoming an “interested public” in accordance with 4100.5. On January 18, 2008, per Ms. Belenky’s request, BLM sent her via postal mail a copy of the Bishop RMP 1993, RMP EIS Volume I & II, Bodie-Coleville Draft Wilderness Recommendation Final EIS 1987, and the Vehicle Access Strategy Plan.

Burke, Thomas D. 1998. Owner and principal investigator of Archaeological Research Services, Inc. BLM and Thomas discussed grazing impacts to archaeological resources. Refer to Chapter 3, Cultural Resources for further information and results.

California Native Plant Society, Bristlecone Chapter. 1999. BLM invited the Bristlecone Chapter to the Rangeland Health Assessments that began in 1999. Members from the Chapter participated at different times between 1999 through 2003. BLM and Bristlecone Chapter also discussed livestock grazing and invasive, non-native species.

Connor, Michael J. California Science Director, Western Watersheds Project (WWP). On February 29, 2008, BLM responded via e-mail to Dr. Connor of WWP confirming the addition to the BLM list of interested public. BLM sent Dr. Connor a link to the BLM Bishop website to locate the total list of grazing allotments. On March 6, 2008, Dr. Connor of WWP sent a follow-up letter to the February 28, 2008 letter and requested to be added to the list of “interested public” for all grazing allotments and grazing management decisions from the Bishop Field Office. Dr. Connor also requested electronic copies of EA CA 170-07-10 and EA CA 170-07-11, and wanted to discuss the Sierra Nevada bighorn sheep. BLM sent Dr. Connor both EAs via e-mail. BLM also spoke with Dr. Connor via telephone about the Bishop Field Office Range Program and issues regarding Sierra Nevada bighorn sheep and sage grouse habitat. On March 14, 2008, BLM spoke over the phone with Dr. Connor of WWP briefly about EA CA 170-07-10. Dr. Connor called to notify the BLM Bishop that WWP was planning to protest the proposed decision for the Volcanic Tableland and Mono Mills allotments. Dr. Connor asked if BLM Bishop was planning to issue a proposed decision to the other permittee which shares the Volcanic Tableland allotment. BLM told Dr. Connor that BLM Bishop had already issued that proposed decision on October 2, 2007 to Operator 0401649, as referenced above.

Fell, Chuck. 1995. Bodie State Historical Park. BLM and Chuck discussed grazing impacts to historic buildings and resources. Refer to Chapter 3, Cultural Resources for further information and results.

Iturriria, Paco. 2008. Livestock Operator. In 2007, BLM and Paco discussed livestock grazing on the Mono Mills allotment. Paco explained the livestock management for the allotment. On January 10, 2008, BLM and Paco had a meeting to discuss the environmental assessment process, proposed terms and conditions, and mitigation measures for Sierra Nevada bighorn sheep. In April and May of 2008, BLM informed Paco of the protest received for the the Volcanic Tableland and Mono Mills allotments and BLM’s plan to address the protest points

Milovich, George. 1999 through 2007. Agricultural Commissioner Inyo-Mono Counties. BLM and George discussed the process for issuing the full processed 10-year grazing permits. Also, BLM explained the general changes in terms and conditions to the expiring grazing permits due the incorporation of the Central California Standards for Rangeland Health and Guidelines for Livestock Grazing (USDI 2000). Annual Crop and Livestock Reports were obtained annually by visiting the Counties of Inyo and Mono Agriculture Department located in downtown Bishop.

Parker, Jim and Slates, Mike. 2000 and 2007. Great Basin Unified Air Pollution Control District (GBUAPCD). BLM and Jim discussed the environmental assessment (EA) livestock grazing authorizations to be conducted in the future. BLM received language from the GBUACD to be included within the EA along with map of the federal non-attainment/maintenance areas. BLM received an updated federal non-attainment/maintenance area map from Mike in 2007.

### *Native American Communities*

There are 11 Native American communities in the Eastern Sierra region, eight of whom are federally recognized, which reside near or inhabited aboriginal homelands within the Bishop Field Office.

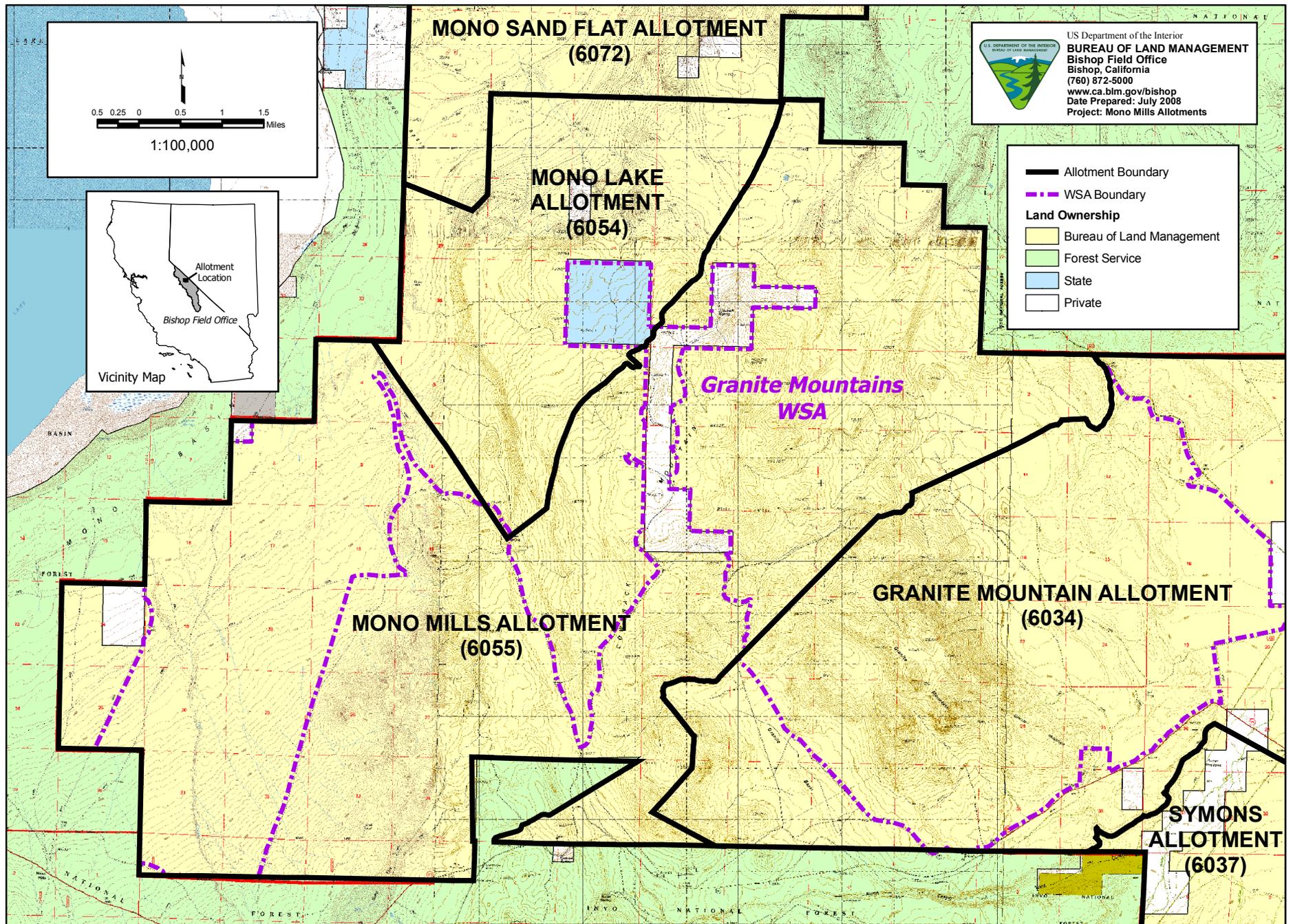
During the initialization of the allotment assessment process in FY 1999, seven Native American communities residing within the area administered by the Bishop Field Office– Bridgeport, Mono Lake, Benton, Bishop, Big Pine, Ft. Independence, and Lone Pine – were contacted by letter (January 11, 1999), with a follow-up phone call, to determine if there were any Native American concerns with the grazing program and if they would like to participate in the allotment assessment process. The communities either said that there were no impacts or decided not to comment/participate. None indicated a desire or need to participate in the assessment process. (Consultation log available for FY 1999)

Each of the local tribal offices was contacted again by phone on 11/30/00 and the letter of January 1999 was sent to them again (fax). Several phone calls were made to each Tribe to follow up after they received the letter. Various individuals stated some general concerns which are addressed in Chapter 3, Native American Cultural Values; but again, they stated that there are no direct specific impacts to their communities or to their community members by the grazing program. (Consultation log available for FY2001)

***Environmental Assessment Preparers***

Jeff Starosta	Rangeland Management Specialist
Anne Halford	Botanist
Steve Nelson	Wildlife Biologist/GIS Coordinator
Diana Pietrasanta	Recreation/Wilderness
Kirk Halford	Archeologist
Terry Russi	Supervisory Wildlife Biologist
Joe Pollini	Assistant Field Manager

**Chapter 5:  
APPENDICES**



Map 1. Overview of the Mono Mills Allotment, Mono County, California. Bureau of Land Management, Bishop Field Office, Granite Mountain Management Area.