ENVIRONMENTAL ASSESSMENT
LIVESTOCK GRAZING AUTHORIZATION
EA Number - CA-680-05-82

Allotment Name(s): Johnson Valley, Stoddard Mountain and Shadow Mountain, Gravel Hills, Superior Valley, Buckhorn Canyon, and Goldstone

BLM

Barstow Field Office

BLM/CA/GI-2006-016+1790+4120

Public Lands USA; Use Share, Appreciate

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BARSTOW FIELD OFFICE
APRIL 2006

CHAPTER 1: INTRODUCTION

Background

The analysis contained in the Final Environmental Impact Statement for the West Mojave Plan (WMP) Amendment is incorporated by reference into the analysis contained in this environmental assessment.

In 2000, six grazing leases for ephemeral sheep grazing operations in the Barstow Field Office (BFO) that expired at the end of the 1999 grazing year (2/28/00). Five of these grazing leases (Johnson Valley remained vacant) were renewed under the authority of Public Law 106-113. Grazing leases were for ten-year terms, and contained the same terms and conditions as the expiring grazing lease. Public Law 106-113 required compliance with all applicable laws and regulations, which include the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA). Following the analysis of environmental impacts these grazing leases may be canceled, suspended or modified, in whole or in part, to meet the requirements of such applicable laws and regulations.

On January 29, 2001 the BLM and a consortium of environmental groups enter into a stipulated agreement effective immediately, herein known as the "Settlement Agreement" for the management of livestock grazing under this federal court action. The Settlement Agreement prescribed areas in the Superior Valley, Gravel Hills, Shadow Mountain, Buckhorn Canyon, and Stoddard Mountain to be excluded from sheep grazing. Based on an April 25, 2002 amendment these stipulations are still in affect until the signing of the Record of Decision (ROD) for the West Mojave Plan Amendment to the CDCA Plan. The ROD for the WMP was approved on March 13, 2006.

The Washington Office Instruction Memorandum 2003-071 requires that all grazing permits and leases that expired in 1999 and 2000 be "fully processed" by the end of Fiscal Year 2004 (9/30/04). The term "fully processed" permit/lease refers to the completion of an adequate environmental analysis and issuance of a proposed grazing decision in accordance with 43 CFR 4160, and appropriate consultation in accordance with the ESA.

On September 30, 2004 the Barstow Field Office (BFO) issued Proposed Grazing Decisions to the four ephemeral grazing lessees. The Proposed Decisions proposed that the four grazing leases on the four ephemeral sheep allotments be fully processed and renewed for 10 years, under the stipulations contained the Settlement Agreement.

The Bureau of Land Management (BLM) is proposing to issue a ten-year term length grazing leases on three allotments to authorize ephemeral sheep grazing on public land within the jurisdiction of the Barstow Field Office (see Map 1). The purpose is to authorize ephemeral sheep grazing where it already exists or has existed on the allotments. The three allotments encompasses 334,057 acres of public land and 200,425 acres of private land. The allotments are located in rural San Bernardino County. Elevation range is between 2,300 and 4,300 feet. Vegetation communities are a mix of Creosote Bush Scrub, Mojave Mixed Scrub, and Saltbush Scrub.

Need for the Proposed Action

The proposed action is needed to authorize grazing in accordance with 43 CFR 4100 and is consistent with the provisions of the Taylor Grazing Act, Public Rangelands Improvement Act, and Federal Land Policy and Management Act. Actions may be required to maintain or improve resource conditions including rangeland health. The following plan conformance review summarizes the status of existing permits/leases: Two of the three grazing leases being analyzed in this document (Stoddard Mtn. and Shadow Mtn.) have been renewed for a term of ten-years under PL 106-113.

Plan Conformance

Lease/permit renewals under the same terms and conditions is subject to: The California Desert Conservation Area Plan (CDCA Plan) 1980 as Amended, including the West Mojave Plan (WMP) Amendment, 2006. The proposed action has been determined to be in conformance with the CDCA Plan as required by regulation (43 CFR §1610.5-3(a)). The proposed action would occur in areas identified for livestock grazing as indicated in the Livestock Grazing Element in the CDCA Plan 1980 (1999), pages 56 to 68. The proposed action is consistent with the land use decisions, and goals and objectives listed in the CDCA Plan.

Relationship to Statues, Regulations, and Plans

Endangered Species

All of the allotments being analyzed in this document are within the range of the federally listed threatened species, the desert tortoise. Pursuant to Section 7 of the Endangered Species Act (ESA), formal consultation with the Fish and Wildlife Service (FWS) is required on all allotments for which livestock grazing may affect listed species. In a memorandum dated May 17, 1999 the FWS concurred with BLM that ephemeral sheep grazing would continue under the terms and conditions contained in the Biological Opinion (BO) (1-8-94-F-16) issued March 15, 1994, until the West Mojave Plan is approved. The WMP was approved on March 13, 2006 and a BO (1-8-03-F-58) was issued for the WMP on January 9, 2006. In addition, the terms and conditions of any grazing lease may also need to be modified to conform to decisions made to achieve recovery plan objectives as determined through subsequent land use plan amendments or revisions. The West Mojave Management Plan Amendment (2006) has addressed ESA concerns for the three ephemeral sheep allotments proposed for renewal herein that may affect listed species.

All of the allotments also provide habitat for State listed fish, wildlife, and plant species. According to the MOU between BLM and CDFG, BLM agrees: "to notify the Department of all projects involving impacts to, or manipulation of, State-listed rare (threatened) and endangered fish, wildlife and plants and to obtain State recommendations of the project-specific management of such populations."

Cultural Resources

California BLM has 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, the State Protocol Agreement Between the Nevada State Director of the Bureau of Land Management and the Nevada State Historic Preservation Officer, and other internal policies.

The stipulations of any grazing lease may be modified to reflect the presence of cultural resources. Background site record and literature review will be conducted as a minimum level of review as part of the permit renewal EA. Present inventory will focus on known or suspected areas of historic ground disturbing activities associated with livestock grazing such as water sources, corrals, supplemental feeding areas, bedding areas, salt block stations, cattle grates and fence lines. The results of this analysis will be used to modify grazing leases.

All cultural resources will be subject to review and evaluation for listing in the National Register of Historic Places. Pursuant to the amended California protocol (see Attachment 1) supporting documentation will be submitted to the California Office of Historic Preservation for review and concurrence to be submitted to the Keeper of the National Register. All cultural resources will be afforded protection consistent with law and policy, including appropriate mitigation measures.

Wilderness

There are no ephemeral sheep grazing activities occurring in wilderness or in a wilderness study area. For the purpose of this analysis, the proposed action contains no impacts that are expected to occur beyond those impacts already occurring under current grazing management.

Water Quality

Activities related to ephemeral sheep grazing may degrade the quality of water for natural occurring water sources such as springs or seeps. Any changes in grazing management or soil (surface) disturbing actions would be reviewed further for potential impacts to water quality. Best management practices would be employed to mitigate or avoid these potential impacts.

Air Quality

The proposed action would be performed within an area designated by the U.S. Environmental Protection Agency as being in non-attainment of certain Clean Air Act Standards. This designation resulted in the development of plans and strategies to protect air quality. The

proposed activity is in conformance with relevant State Implementation Plans (SIPs) and Attainment Plans for protection of air quality in the area. The SIPs and attainment plans for these pollutants either have been approved or are currently under review by the U.S. Environmental Protection Agency (EPA). The project area is within the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD) which has overseen the development and implementation of local attainment plans.

Regulations

For livestock grazing purposes, this proposal is subject to BLM regulations at 43 CFR 4100 (grazing regulations).

Plans

West Mojave Plan (Habitat Conservation Plan/CDCA Plan amendment):
This plan amendment was developed in cooperation with BLM, U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), county and city governments, various interest groups, the U.S. military, and a number of public lands stakeholders. The Record of Decision (ROD) was approved on March 13, 2006 as an amendment to the CDCA Plan. The West Mojave Plan (WMP) is a local bio-regional plan addressing State and federally-listed species, specifically the desert tortoise. BLM issued the West Mojave Plan/Final Environmental Impact Statement (WMP-FEIS) in January, 2005.

Management of habitat for the tortoise and over 100 other sensitive species on public lands have been addressed, including implementation of recovery plan actions developed for the tortoise. The management of livestock grazing on public and interspersed private lands are an integral component of the West Mojave Plan. The grazing leases proposed for renewal are subject to the grazing provisions contained in the WMP. The grazing lease authorization terms and conditions would be intended to maintain and achieve the rangeland health standards and guidelines that have been adopted through the WMP.

CHAPTER 2 PROPOSED ACTION AND ALTERNATIVES

Introduction

Two alternatives are carried forth for analysis in this environmental assessment: The first is the West Mojave Plan Alternative, which is the implementation of the plan provisions for ephemeral sheep grazing contained in the plan amendment, and the second is the No Action Alternative, which would initiate action to terminate the leases and eliminate grazing from the allotments.

A. Proposed Action - West Mojave Plan

This alternative was developed after the ROD for the WMP was approved and the requirement to implement the grazing provisions contained therein for all three ephemeral sheep allotments. Monitoring requirements, mitigation measures, and lease terms and conditions contained in the

WMP would be incorporated into this alternative to minimize potential impacts to resources while continuing to provide forage for livestock grazing.

The proposed action would consist of renewing the grazing leases for the Johnson Valley, Stoddard Mountain, and Shadow Mountain Allotments for a period of 10 (ten) years, and termination of the grazing leases on the Gravel Hills, Superior Valley, and Goldstone Allotments. Under the WMP the Buckhorn Canyon Allotment boundaries has been substantially modified to exclude ephemeral sheep grazing from the Fremont-Kramer Desert Wildlife Management Area (DWMA). This modification has resulted in significant reduction in available public land, reducing public land within the allotment boundaries down to approximately 500 acres. The remaining portion of this allotment is not considered a viable grazing allotment and under this alternative would no longer be available for ephemeral sheep grazing. This proposal would incorporate the grazing provisions contained in the ROD for the WMP (see Appendix 1) as terms and conditions. In addition, the standard terms and conditions contained in the existing or expired grazing lease for these allotments would also be incorporated into these lease renewals. The grazing stipulations contained in the Settlement Agreement would no longer be in effect. The Johnson Valley Allotment is currently vacant; however an application for the grazing lease has been submitted. Any future ephemeral sheep grazing on the Johnson Valley Allotment would be subject to the ephemeral sheep grazing prescriptions contained in the WMP.

This authorization would convey all prescriptions, management actions, and terms and conditions related to the management of these three grazing allotments under three grazing leases for a term of 10 (ten) years.

Table 1 gives an indication of the intensity of use on each sheep allotment in the BFO in AUMs. In addition, the current season of use and permitted use, including management actions and stipulations stated in an approved AMP, if applicable, or stipulations directed by existing decision or through an existing agreement would also be included in this grazing lease. Until the Regional Standards and Guidelines contained in the WMP Plan Amendment are approved by the Secretary, conformance with the achievement of fallback standards and guidelines stated in the grazing regulations (43 CFR 4180.2) would also be required to the extent possible.

On all three allotments ephemeral sheep grazing would continue to be actively managed by the lessees, who uses herding and water hauling to manage sheep consistent with forage availability.

Under this alternative, the other requirements discussed and analyzed in this document would also be included. This includes, but is not limited to the requirement for a Section 106 cultural inventory in all of the allotments contained in this document.

1. Allotment Termination

Under the proposed action ephemeral sheep grazing on four allotments would be permanently terminate on public land and the associated grazing leases would not be renewed. The following grazing lease would not be renewed because the ROD for the WMP has directed that ephemeral sheep grazing would not be authorized in a DWMA. The grazing leases for the Gravel Hills, Superior Valley, Buckhorn Canyon, and Goldstone Allotments would be terminated under the

ROD for the WMP. The public land which constituted these allotments would be classified as "no longer available for livestock grazing." No further management actions are being proposed for these allotments under this alternative.

2. Livestock Numbers and Season of Use

Ephemeral sheep grazing leases managed under the BFO do not have specific "livestock numbers" attached to them. Authorizations to graze on a yearly basis are issued by the number of "bands" or flocks of sheep an operator wishes to graze, and the ephemeral production calculated for that grazing year (ephemeral season). Band size varies from 500 to 1000 ewe-lamb pairs and averages 800 ewe-lamb pairs. An AUM is an "animal unit month" and is calculated on the amount of forage a sheep consumes in a month. Lambs are generally not counted as a separate AUM. Cattle set the standard at 1000 pounds of forage per month and sheep are calculated to consume approximately 200 pounds of forage per month. Therefore, there are five sheep per AUM. The season of use in the BFO is normally from 3/15 to 5/31 in years when there is enough ephemeral forage production to sustain grazing. The Table 1 gives an indication of the intensity of use on each allotment in the BFO:

Table 1. Stocking Rates for Ephemeral Sheep Allotments

Barstow Allotments	No. of Years Used, 1991-2004	Range of No. of Bands, 1991-2004	Average No. of Bands/Year of Use	Range of No. of AUMs 1991-2004	Average No. of AUMs per Years of Use
Stoddard Mountain	8	1-4	2	341 - 2,575	1,275
Johnson Valley	1	1	1	75	75
Shadow Mountain	4	1-4	2	234 - 958	467

3. Livestock Management

The Johnson Valley Allotment (see Map 2) is an ephemeral allotment of 118,320 acres comprised of 9,134 acres of private land and 109,186 acres of public lands. This allotment has 118,320 acres of non-critical desert tortoise habitat. In years of adequate ephemeral forage production, sheep grazing is authorized. Ephemeral forage is found on large flats. Ephemeral sheep grazing has not been authorized on this allotment since 1992. Water is hauled to temporary locations and can be moved as sheep are herded through the allotment.

The Shadow Mountain Allotment (see Map 3) is an ephemeral allotment of 121,677 acres comprised of 69,419 acres of private land and 52,258 acres of public lands. This allotment has 17,244 acres of non-critical desert tortoise habitat and 35,013 acres of critical desert tortoise habitat. In years of adequate ephemeral forage production, sheep grazing is authorized. Ephemeral forage is found on large flats. Water is hauled to temporary locations and can be moved as sheep are herded through the allotment.

The Stoddard Mountain Allotment (see Map 4) is an ephemeral allotment of 295,242 acres comprised of 121,956 acres of private land and 173,286 acres of public lands. This allotment has 131,797 acres of non-critical desert tortoise habitat and 41,490 acres of critical desert tortoise habitat. The allotment is divided into three grazing units; west, middle, and east. The western unit of Stoddard Mountain Allotment has been closed to ephemeral sheep grazing since 1991 because it is largely critical desert tortoise habitat. Presently, the eastern and middle sections of the allotment are open to grazing but this situation would change with the approval of the Western Mojave Plan (WMP). The vast majority of public land in Middle Stoddard would not be available for sheep grazing because of the establishment of the Mojave monkey flower Conservation Area. In years of adequate ephemeral forage production, sheep grazing is authorized. Ephemeral forage is found on large flats. Water is hauled to temporary locations and can be moved as sheep are herded through the allotment.

4. Range Improvements

There is no permanent range improvements associated with ephemeral operations authorized in the BFO. Individual sheep operators utilize water trucks, mobile water troughs, and temporary corrals to facilitate their operations.

5. Measures to Maintain or Achieve Standards (Terms and Conditions of Permit)

There are a total of seven ephemeral sheep allotments being analyzed in this document. Under the proposed action only three ephemeral sheep allotments would have the grazing lease renewed and be activity grazed in the future. These three allotments have not be assessed to determine if they are achieving the National Fallback Standards and Guidelines.

6. Monitoring

The rangeland monitoring of the ephemeral sheep allotments in the BFO would be conducted as it is currently. In years when there is sufficient winter moisture to consider spring grazing in the desert, ephemeral forage production studies are done. In some years composition studies are also conducted.

The ephemeral forage production studies are performed using the Comparative Yield Method (Interagency Technical Reference 1734-4, p116-122). The FWS Biological Opinion (1-8-94-F-16) stipulates that there must be a minimum of 200 pounds per acre (air-dry weight) of ephemeral forage in order for sheep to be authorized for grazing. It is a reasonably, foreseeable future action that the threshold for authorizing sheep would be increased to 230 pounds per acre with the approval of the West Mojave Plan Amendment to the CDCA Plan.

B. No Action Alternative

Under this alternative, BLM would continue grazing on three sheep allotments under the existing terms and conditions that were in place prior to interim measures. The primary terms and conditions that were in place prior to interim measures were terms and conditions derived from

biological opinions for the management of livestock in habitat for the desert tortoise (see Appendix 3).

C. Alternative Considered but Dismissed

A. Under this alternative, BLM would seek the voluntary relinquishment (VR) of the remaining three grazing leases. However, this alternative is dismissed from further analysis in this document because the criteria established for VR have not been met for the other three grazing leases (see Attachment 2).

B. Under this alternative, BLM would not renew the three grazing leases and discontinue grazing under all ephemeral sheep grazing leases concerned. As a result, grazing would cease on the allotments affected, and the agency would initiate a process to retire those allotments under provisions of administrative instruments appropriate to the task. This alternative is dismissed because it has been previously analyzed in the FEIS for the WMP.

CHAPTER 3 ENVIRONMENTAL ANALYSIS

This chapter addresses, by resource, the affected environment, environmental consequences, and consultation sections of the EA for 19 resource elements. These elements include the standard critical elements of the human environment (H-1790-1, appendix 5, BLM NEPA Handbook, as amended) and several other resource elements commonly affected by livestock grazing. If a resource is not present or not affected, a negative declaration statement will be included in the Affected Environment section, and the resource element will not be further addressed in the Chapter.

Required Elements:

1. Air Quality
2. Areas of Critical Environmental Concern (ACEC)
3. Cultural Resources
4. Environmental Justice
5. Farmlands, Prime or Unique
6. Flood plains
7. Invasive, Non-native Species
8. Native American Concerns
9. Recreation
10. Social and Economic
11. Soil
12. Waste, Hazardous or Solid
13. Water Quality, Surface and Ground
14. Wetlands/Riparian Zones
15. Wild and Scenic Rivers
16. Wilderness
17. Wildlife

- Threatened or Endangered Species
18. Wild Horses and Burros
19. Vegetation
- Threatened or Endangered Species

A. AIR QUALITY

1. Affected Environment

The project area for the purpose of this analysis is the three ephemeral sheep grazing allotments located in rural San Bernardino County.

Air quality throughout the project area, is good much of the time. There are, however, times that the area has not met air quality standards due to pollutants that are either locally generated and/or transported into the county. This has resulted in the current classification of the area as a federal non-attainment areas for ozone and PM_{10} under the National Ambient Air Quality Standards. The project area is within the Mojave Desert Planning Area. A state implementation plan (SIP) has been prepared for the planning area which identifies sources of emissions and control measures to reduce emissions. The Mojave Desert Air Quality Management District (MDAQMD) has state air quality jurisdiction over San Bernardino County

2. Environmental Consequences

a. Impacts of Proposed Action

Under the proposed action, fugitive dust emissions could occur due to the soil disturbance as a result of the trampling action of the sheep when soil moisture levels are low. Support vehicle use on the access roads will generate small amounts of PM_{10} emissions throughout the grazing area and could carry soils onto the paved roads which would increase entrainment PM_{10} emissions. Ruminant animals emit methane gas which is a precursor emission for ozone. The support vehicles emit various precursor emissions for ozone. Actual emissions amounts from this grazing activity are negligible. No significant offsite impacts are anticipated. The proposed project does not exceed the deminimus emission levels and is exempt from conformity determination {(40 CFR Part 93.153 (iii))} which exempts continuing and recurring activities such as grazing lease renewals where activities will be similar in scope and operation to activities currently being conducted. As a result no further conformity analysis or determination is necessary.

b. No Action

Under the no action alternative, impacts to air quality would be the same as the proposed action.

c. Cumulative Impacts

The cumulative effect area for air resources for the proposed action is Southern California. The proposed action is well below deminimus levels for the Mojave Desert PM_{10} planning areas and

the Mojave Desert Ozone non-attainment areas within which it is located. The expected emission levels are within the levels in the attainment demonstrations in the SIPs and the cumulative NAAQS 24 hour and one year PM_{10} emission standards and the one hour ozone emission standards and are not likely to result in or contribute to exceedences of the National Ambient Air Quality Standards. Likewise, the decreases in emissions from elimination of sheep grazing would be negligible relative to total emissions in the Mojave Desert for PM_{10} and ozone.

Within the broader regional context of Southern California, the expected emission levels would be negligible relative to total emissions in the region for either of these pollutants, and would not contribute substantially to any cumulative impacts for these pollutants. These lease renewals are consistent with standards identified to in the state implementation plans for activities on public lands, as outlined within the Mojave Desert planning area for PM_{10} and public lands were not identified as a significant regional source of emissions for ozone pollution. Likewise the decreases in emissions from elimination of livestock grazing would have a negligible cumulative effect on air quality in Southern California.

d. Consultation

The MDAQMD, and the other interested publics will be consulted concerning this analysis.

e. Maps

N/A

f. References:

BLM, Barstow Field Office. February, 1997. Fugitive Dust/PM10 Emissions Control Strategy for the Mojave Desert Planning Area.

B. AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC)

1. Affected Environment

Mojave Fishhook Cactus ACEC
BLM designated the Mojave Fishhook Cactus ACEC in May, 1984 based on the concentrated occurrence of this sensitive species, Mojave fishhook cactus (*Sclerocactus polyancistrus*). The ACEC is a total of 640 acres of public land, encompassing the east half of Section 32 and the north half of Section 4 in San Bernardino County, California. The Mojave fishook cactus range has been identified as encompassing a north-to-south oval broader in western Nevada tapering to a thinner swath in western San Bernardino County, California. The ACEC is at the southern end of its range, east of National Trails Highway, due east of Helendale, California. The ACEC is located just within the western boundary of the Middle Unit, Stoddard Mountain Allotment.

Soggy Dry Lake Creosote Rings ACEC
BLM designated the Soggy Dry Lake Creosote Rings ACEC in 1980 under the CDCA Plan to provide management and protection of this Unusual Plant Assemblage (UPA) and completed a

management plan for the area in September, 1982. The ACEC protects an example of vegetative reproduction of single-parent creosotes. The ACEC is a total of 278 acres of public land, located within the Johnson Valley OHV Area, of which six acres is currently fenced to protect this UPA. These creosote ring clones have been dated at 12,000 years of age, and may be the oldest living plants on earth.

Upper Johnson Valley Yucca Rings ACEC
BLM designated the Upper Johnson Valley Yucca Rings ACEC in 1980 under the CDCA Plan to provide management and protection of this Unusual Plant Assemblage (UPA) and completed a management plan for the area in September, 1982. The ACEC is a total of 320 acres of public land, of which eight acres is currently fenced to protect this UPA. These yucca ring clones are the largest and oldest Mojave yucca rings known, dated at 2,270 years of age.

2. Environmental Consequences

a. Impacts of Proposed Action

These ACECs were designated to protect important botanical values that are uncommon in the desert. The ACECs are located within ephemeral sheep allotments. Based on how ephemeral sheep grazing operations are conducted in the Mojave Desert it is unlikely that any impacts from that activity to the protected resources would have occurred in the past and very unlikely to occur in the future. A representative portion of these populations have been fence to ensure protection from grazing and OHV use. The Mojave fishhook cactus ACEC is located on the edge of the Middle Unit of the Stoddard Mountain Allotment and not in the vicinity of traditionally grazed areas. Due to the designation of the Mojave monkey flower Conservation Area, it is very unlikely that sheep grazing would be authorized on public land in the Middle Unit.

b. No Action

Under the no action alternative, impacts to air quality would be the same as the proposed action.

c. Cumulative Impacts

Cumulative impacts to ACECs can occur from multiple uses and causes within the boundaries of individual ACECs and from impacts to a single resource value that are regional in nature. All of the ACECs within the project area are managed under specific activity plans that identify goals for the sensitive botanical values within each of the ACECs, promote uses that facilitate the accomplishment of ACEC Plan goals, and set parameters on other uses that may conflict with the accomplishment of ACEC goals. While the Mojave Fishhook Cactus ACEC management plan was being developed, a large die-off of this species occurred at several monitored sites in the southern portion its range. The die-off was the result of species of predatory moths, and the ACEC designation was one measure to protect remaining populations.

These ACEC Plans have undergone evaluations through the West Mojave bioregional plan to review progress that has been made to accomplish some of the goals in these ACEC activity

plans. Fencing has been implemented to protect sensitive botanical values in three of the areas. Cumulative impacts from livestock grazing have been analyzed in the previous activity plans in the context of the variety of other activities that are occurring in these sensitive areas and any additional restrictions or strategies necessary to avoid cumulative impacts. Other activities that may overlap ephemeral sheep grazing allotments and ACECs include: general recreation (i. e. picnicking, camping, and rock hounding), off-highway vehicle (OHV) Open Area recreation activities, small mining claims, and OHV activities on designated routes outside of Open Areas.

d. Consultation

Consultation would occur with all interested publics, county governments, and Native American tribes with traditional ties to the lands within the allotments being analyzed.

e. Maps

N/A

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The Mojave Fishhook Cactus ACEC, Barstow Woolly Sunflower ACEC, Soggy Dry Lake Creosote Rings ACEC, and Upper Johnson Valley Yucca Rings ACEC Management Plans are available at the BFO.

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C. CULTURAL RESOURCES

1. Affected Environment

a. Summary

There are 502 documented prehistoric and historic sites within the 6 sheep grazing allotments managed by the Barstow Field Office (see Table 2). Of 53 historic sites, 10.6% of the total sites, 7 are comprised of mining debris while the remainder are various can dumps and house hold debris from early homesteading and railroad activity. One historic grave is indicative of early 1900s pioneer activity. CA-SBR7187 is a possible pioneer grave of an approximately 40-year old man, tentatively identified as Thomas J. Flood. Based on clothing remnants, he died in the early 1900s.

The majority of cultural resources (66%) are lithic sites. Of 332 lithic sites, 32 contained variable combinations of lithics, pottery, petroglyphs, ground stone, and rock shelters. Of these 32 lithic sites, 20 contained bedrock mortars or milling slicks, manos, and/or metates and 12 were associated with petroglyphs.

Of the 40 rock features, 4 were cairns while the remainder were linear or circular rock alignments. All of these sites are of either prehistoric or historic origin. The last four categories of sites include 6 rock shelters, 16 ground stone locations, and 54 petroglyph sites.

Stoddard Mountain Middle (113 sites) and Gravel Hills (112 sites) grazing allotments coincide with a large number of cultural resources. Recorded cultural resources within the remaining four allotments range from 3 to 85. The different frequencies of cultural resources may indicate higher and lower areas of potential occurrence; however, it also may be indicative of differential inventory intensities.

Table 2. Cultural Resource Summary for Sheep Allotments in the Barstow Field Office.

Grazing Allotment	Historic	Grave	Lithic	Rock Feature	Rock Shelter	Sherds	Ground Stone	Petro-glyphs	Total Sites
Johnson Valley			20						20
Shadow Mountain	17		51	3			1		72
Stoddard Mt. East	2		27	11	1		3	1	45
Stoddard Mt. Middle	4		88	20			1		113
Stoddard Mt. West	5		44	2			1		52
Totals	28	0	230	36	1	0	6	1	**302**

2. Environmental Consequences

a. Impacts of Proposed Action

Through previous research ((ASPPN) I-15, 1990; Nielson 1991; Osborn et al. 1987; Roney 1977) and personal experience it has been determined that the areas of highest potential impact will be located around springs, troughs, water courses, and salt licks. These are high-use grazing areas and the former are also areas that tend to have concentrations of cultural sites. Impacts include disturbance to the horizontal distribution of artifacts and obscuring patterns existing in their original deposition, and eventually introduction of new trends in their spatial arrangement. Vertical migration of materials, resulting from grazing, can move artifacts across stratigraphic units and cause the mixing of deposits obscuring the stratigraphic integrity of separate occupational periods. Trodden, artifacts can undergo several types of damage, including breakage, microchipping and abrasion (Nielson 1991:483-484). Collective grazing activity can cause spatial, chronological and functional information to become obscured, causing erroneous temporal, spatial and functional interpretations. The result can be damaged and diminished integrity of a site adversely affecting its potential to meet National Register criteria. These analyses will assess the degree of impact that the grazing has had to cultural properties within the Barstow Field Area and will provide recommendations to mitigate further negative effects to cultural properties potentially eligible to or listed on the National Register of Historic Places.

To address the impacts of grazing on cultural resources within the Barstow Field Area, a sampling strategy has been devised which focuses efforts on congregation areas where it has been shown that the greatest levels of impact occur (e.g., springs, perennial water courses, troughs, and salt licks). Cultural assessments of allotments will be prioritized by 1) the number of eligible properties to be relocated, 2) sites occurring at or near water sources, and 3) sites located at or near salt licks. These investigations will only address public lands, and will occur over the next five years, beginning in 2006. Private, State, and County in-holdings will not be evaluated.

A Class I records search will be conducted for each allotment to ascertain previously recorded site locations. Sites located within bedding and lambing areas and sites previously determined eligible will be visited to evaluate grazing impacts. Trough locations which have not been surveyed will be completely inventoried within a 100 meter diameter area of the trough. Perennial spring locations will also be fully inventoried within a 100 meter diameter of the spring. A sample survey will be conducted along all perennial water courses. A 100 meter corridor on each side of the water course will be evaluated utilizing zig zag transects. Water courses over one mile long will be sampled along a minimum of 50% of the stream course. The water course will be segmented into 1/2 to 3/4 mile sample areas and a 100 meter corridor as described above will be inventoried.

All unrecorded site locations will be recorded. An exception will be instances where numerous sites occur in a sample area which is not receiving noticeable grazing impacts. In these cases a sample of sites will be fully recorded and evaluated. The unrecorded site (URS) locations will be mapped using a GPS and a brief description of each site will be provided in the allotment report. URS locations will be maintained in the data base for future recordation. A full report of findings for each allotment will be completed and mitigation measures, if needed, recommended.

This approach addresses the potential affects of ephemeral sheep grazing to cultural properties and the strategies to evaluate on the ground effects of six allotment renewals, encompassing 771,638 acres of public land administered by the BLM, Barstow Field Office. Livestock grazing is determined a federal undertaking, as such, the BLM is taxed with determining the potential effects of this action (i.e., renewal of grazing leases) to historic properties that are eligible to or are listed on the National Register of Historic places. Due to the large geographic scope of this project a sampling strategy has been presented here that focuses on areas where sheep congregation occurs and where, subsequently, the greatest impacts to cultural properties are predicted to occur.

In general, mitigation will address grazing congregation areas and the primary and secondary impacts to cultural properties resulting from the intensive use of specific areas (e.g., troughs, springs, etc.). Mitigation measures will vary from location to location, designed for site specific and potentially larger scale habitat wide impacts (e.g., fencing an entire stream corridor where a high density of cultural properties are known to occur). Actions may take the form of trough removal and/or placement to disperse grazing from known cultural properties and can include actions such as the following: - riparian or spring/stream corridor fencing or extensions to incorporate cultural properties within the protected zone; fencing of individual cultural properties if dispersal of grazing from an impacted site is untenable; and placement of salt licks

away from known sites and high probability areas. The desired future condition is for a viable grazing program which minimizes impacts by recognizing use patterns and adjusting these trends to address the negative affects to cultural properties potentially eligible to, or listed on, the National Register of Historic Places.

b. No Action

Under the no action alternative, impacts to cultural resources would be the same as the proposed action.

c. Cumulative Impacts

Sensitive historic and prehistoric cultural resources within the California Desert District would continue to be impacted by grazing and associated activities. Grazing involves herding, loading, and transport of animals as well as congregation at bedding and watering sites, and travel along existing routes by the herder and lessee. There would be an incremental loss of cultural resources from these activities. Overall, grazing would have a negligible cumulative effect on cultural resources on public lands within the California desert.

d. Consultation

Consultation with SHPO is on-going.

e. Maps

N/A

f. References:

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D. ENVIRONMENTAL JUSTICE

1. Affected Environment

The ephemeral sheep grazing allotments being analyzed are located in rural San Bernardino County. The rural areas of these counties are typically occupied by moderate to low-income households. The lessees that hold the grazing leases for the allotments being analyzed typically have moderate incomes and live outside of San Bernardino County. Seasonal herders that are hired by the lessees generally come from South America and support low-income households in their native country.

2. Environmental Consequences

a. Impacts of Proposed Action

The implementation of the proposed action would have an affect, but not a disproportionate affect on low-income or minority populations living on or near the allotments being analyzed.

The ephemeral grazing of sheep in rural San Bernardino County has been a common practice for over 100 years. Sheep ranching has been typically performed by persons of low to moderate income, and are typically owned by Basque emigrants or their decedents that may or may not be considered a minority. The herders hired by these Basque lessees are considered minorities in America. There are no Native American communities on or near any of the allotments being analyzed.

b. No Action

Under the no action alternative, impacts to environmental justice would be the same as the proposed action.

c. Cumulative Impacts

There are no known cumulative impacts to low-income or minority populations as a result of current grazing practices (proposed action). The no grazing alternative may have some cumulative present and future impacts to a very small component of low-income, minority populations.

d. Consultation

All affected Native American tribes with traditional ties to the lands within the allotments being analyzed would be consulted. San Bernardino and Inyo Counties would also be consulted.

e. Maps

N/A

f. References: N/A

E. FARMLANDS, PRIME OR UNIQUE

1. Affected Environment

The proposed action would have no affect on prime or unique farmlands because no prime or unique farmlands are present in the allotments.

2. Environmental Consequences

a. Impacts of Proposed Action

b. No Action

c. Cumulative Impacts

There would be no cumulative impacts from the proposed action, or any alternative.

d. Consultation

e. Maps

N/A

f. References: N/A

F. FLOOD PLAINS

1. Affected Environment

The proposed action would have no affect on floodplains because no floodplains are present in the allotments.

2. Environmental Consequences

a. Impacts of Proposed Action

b. No Grazing

c. Cumulative Impacts

There would be no cumulative impacts from the proposed action, or any alternative.

d. Consultation

e. Maps

N/A

f. References: N/A

G. INVASIVE, NON-NATIVE SPECIES

1. Affected Environment

The allotments being analyzed in this document contains varying densities of invasive and non-native species. Red brome (Bromus madritensisi ssp. rubens), schismus (Schismus arabicus), filaree (*Erodium cicutarium*), and several mustard species are the four most widespread invasive species present in the allotments. In ephemeral sheep operations that occur in the Mojave Desert these species represent the bulk of forage species used by sheep in the spring. These species compete with native herbaceous species, especially annual species, for available moisture, nutrients, and spatial occupation of available upland habitat. Densities of these species vary widely. Since the three active sheep allotments are within OHV Open Areas, ground disturbance is common. This type of ground disturbance creates ideal habitat for invasive and non-native species. The relative densities of invasive and non-native species is generally much greater than native forbs in these types of settings.

2. Environmental Consequences

a. Impacts of Proposed Action

Under the proposed action, the re-establishment of native herbaceous vegetation is unlikely in these areas of the allotments due to other ground disturbing activities like OHV. Overall, the current densities of non-native invasive species on these allotments are considered moderate to heavy. Annual fluctuations in densities are directly influenced by the amounts of late winter and early spring precipitation, however these species are concentrated in the seed banks also and therefore their populations only increase with flowering non-native plants. The termination of four ephemeral sheep allotments would have no real affect on the spread of non-native invasive species because those allotment have been in a non-use status since 1991 due to desert tortoise.

b. No Action

Under this alternative the impacts would be the same as the proposed action.

c. Cumulative Impacts

The spread and establishment of non-native invasive species occurs through a variety of mechanisms. The BLM's multiple use mission typically results in a variety of activities that are authorized to occur on the same lands. Other activities that may overlap grazing allotments include: utility corridors (including electrical towers and natural gas pipelines), general recreation (i. e. hunting, picnicking, camping, and rock hounding), scientific study, and off-highway vehicle (OHV) activities. All of these activities, past, present, and future contribute to the spread and establishment of non-native invasive plant species.

d. Consultation

Consultation would occur with all lessees, interested publics, county governments, and Native American tribes with traditional ties to the lands within the allotments being analyzed.

e. Maps

N/A

f. References: N/A

H. NATIVE AMERICAN CONCERNS

1. Affected Environment

Six Native American tribes live near, or have interests in, one or more of the three ephemeral sheep grazing allotments within the Barstow Field Office (see Table 3). Prior to Section 106 evaluation of these allotments, consultation with the tribes will be initiated. Comments and concerns regarding cultural and religious values within the allotments that may be affected by ephemeral sheep grazing will be solicited and incorporated into the cultural evaluation.

Table 3. Contacts for Section 106 Consultation.

Name	Tribal Affiliation	Address
Edward Tito Smith	Chemehuevi	1990 Palo Verde Road, P.O. Box 1976, Havasu Lake, CA 92363
Daniel Eddie, Jr.	Colorado River Indian Tribes	Route 1, Box 23B, Parker, AZ 85344
Elda Butler	Fort Mojave	P.O. Box 5990, Mohave Valley, AZ 86440
Chad Smith	Fort Mojave	P.O. Box 5990, Mohave Valley, AZ 86440
Nora Helton	Fort Mojave	500 Merriman Avenue, Needles, CA 92363-2229
Curtis Anderson	Las Vegas Piute	1 Piute Drive, Las Vegas, NV 89106
Georgia Kennedy	Timbisha Shoshone	P.O. Box 206, Death Valley, CA 92328
Shirley Summers	Timbisha Shoshone	P. O. Box 786, Bishop, CA 93515
Ann Brierty	San Manuel	P.O. Box 266, Patton, CA 92369

2. Environmental Consequences

a. Impacts of Proposed Action

Prior to Section 106 evaluation of these allotments, consultation with the tribes will be initiated. Comments and concerns regarding cultural and religious values within the allotments that may be affected by ephemeral sheep grazing will be solicited and incorporated into the cultural evaluation and the site-specific mitigation measures for the proposed action.

b. No Action

Under the no action alternative, impacts to Native American values would be the same as the proposed action.

c. Cumulative Impacts

Cumulative impacts would be similar to those anticipated for invasive species, except that the effects on Native American values would result indirectly from loss of traditionally used native herbs and plants.

d. Consultation

See Table 3.

e. Maps

N/A

f. References: N/A

I. RECREATION

1. Affected Environment

The Johnson Valley Grazing Allotment lies within the Johnson Stoddard Special Recreation Management Area (SRMA). This SRMA contains the Johnson and Stoddard Valley Off-Highway Vehicle Recreation Areas (OHV Areas) and the Ord Mountain Area that lies between them. The SRMA was established because of the historic high recreation opportunity and use in the OHV Areas. Both Johnson and Stoddard have management plans that identify how the areas will be managed with the emphasis being on off-highway vehicle uses and certainly recreation. The central and southern portions of the Johnson Valley OHV Recreation Area are within the boundary of this grazing allotment.

Johnson and Stoddard Valleys receive over 100,000 off-highway vehicle visits per year. These visitors are involved in a large number of activities including over 50 events that are issued Special Recreation Permits. The permitted events in the Johnson Valley OHV Recreation Area include six car/truck races, thirty-five + motorcycle races, six rock crawling events, and other

assorted events from time to time. The number of Special Recreation Permits is fairly stable, except for an increased interest in rock crawling.

Casual use of the OHV areas by individuals and family groups is widespread, particularly on weekends. The OHV areas also receive some use for non-OHV recreation. The most common of these is upland game hunting (in season), rockhounding, and general touring around the areas. There is a great deal of camping that takes place associated with OHV use.

The Shadow Mountains Grazing Allotment contains the El Mirage Special Recreation Management Area (SRMA). El Mirage Off-Highway Vehicle Recreation Area was established on El Mirage Dry Lake and the surrounding area and has a management plan completed for it. The OHV area is entirely fenced and cabled off to restrict movement in and out of the area. Casual use of this area by individuals and family groups is high, especially on weekends. The most common recreation uses are motorcycle riding, visiting old mines, shooting, upland game hunting (in season), camping, and general touring and exploring of the area. Conflicts between sheep and users of El Mirage would be none.

The Stoddard Mountain Grazing Allotment East Unit lies within the Johnson Stoddard Special Recreation Management Area (SRMA). This SRMA contains the Johnson and Stoddard Valley Off-Highway Vehicle Recreation Areas (OHV Areas) and the Ord Mountain Area that lies between them. The SRMA was established because of the historic high recreation opportunity and use in the OHV Areas and the additional recreation values and uses found in the Ord Mountain area. Both Johnson and Stoddard have management plans that identify how the areas will be managed with the emphasis being on off-highway vehicle uses and certainly recreation. The entire Stoddard Valley OHV Recreation Area is within the boundary of this East Unit.

Johnson and Stoddard Valleys receive over 100,000 off-highway vehicle visits per year. These visitors are involved in a large number of activities including over 50 events that are issued Special Recreation Permits. Most of these permitted events take place in other areas, but Stoddard Valley does host six car/truck races, a few motorcycle races, and other assorted events from time to time. The number of Special Recreation Permits is fairly stable.

Casual use of the OHV areas by individuals and family groups is widespread, particularly on weekends. The OHV areas also receive some use for non-OHV recreation. The most common of these is upland game hunting (in season), rockhounding, and general touring around the areas. There is a great deal of camping that takes place associated with OHV use. Recreational use in the East Unit area outside Stoddard Valley revolves around mostly non-OHV related activities like hunting, hiking, equestrian use, camping, picnicking, and photography. Some visitors use the area to cross from one OHV area to the other and return.

2. Environmental Consequences

a. <u>Impacts of Proposed Action</u>

Potential impacts between sheep grazing and recreational use of in the Johnson Valley Off-Highway Vehicle Recreation Area could be high, but there have been no conflicts documented

between these two uses. Communication between the BLM and both grazers and permitted event sponsors has eliminated any conflicts.

Potential impacts between sheep grazing and recreational use would be greatest in the Stoddard Valley Off-Highway Vehicle Recreation Area. There have been no conflicts documented between these two uses. Communication between the BLM and both grazers and permitted event sponsors has eliminated any conflicts.

There are localized conflicts between recreationalist and campers related to the presence of sheep dung, especially near current and past bedding and watering sites.

b. No Action

Under the no action alternative, impacts to recreation would be the same as the proposed action.

c. Cumulative Impacts

Since ephemeral sheep grazing has not affected overall recreational opportunities, and impacts are often subjective, any cumulative affects from the proposed action on recreation would be nominal.

d. Consultation

Historically discussions have taken place between the event permit holders and BLM regarding possible conflicts in Johnson Valley and Stoddard Valley. There have been no conflicts.

e. Maps

N/A

f. References: N/A

J. SOCIAL AND ECONOMIC VALUES

1. Affected Environment

The ephemeral sheep allotments being analyzed under the proposed action are located in rural San Bernardino County. All of the allotments are primarily operated by the lessee, who primarily resides in Kern County. They hire herders on a yearly basis from South America. This labor typically consists of two to four persons.

The contribution of these allotments to the goods and services of the area is nominal. The sale of lambs at the stock yard by the lessee benefits the financial needs of the lessee, as any small business would, and allows them to purchase goods and services for their grazing operation and personal household. These operations are generally small and there affects on the general economy of both San Bernardino and Kern Counties is minor.

2. Environmental Consequences

a. Impacts of Proposed Action

Under the proposed action, grazing would continue at current levels. These levels are at there lowest point when compared to historic levels, and are expected to continue to decrease. These grazing operations would continue to have a nominal influence on the local and regional economy of both San Bernardino and Kern Counties.

b. No Action

Under the no action alternative, impacts to social and economic values would be the same as the proposed action.

c. Cumulative Impacts

There would be no meaningful, cumulative impacts to the local or regional economies of San Bernardino or Kern Counties from the implementation of either the proposed action, or the no grazing alternative. The past, present, or future contributions of these operations to the local or regional economy would be nominal.

d. Consultation

Consultation would occur with all lessees, interested publics, county governments, and Native American tribes with traditional ties to the lands within the allotments being analyzed.

e. Maps

List any maps included as part of this EA

f. References:

USDI, Office of Hearings and Appeal. 2001. Richard Blincoe and Blinco Farms, Inc. et al v Bureau of Land Management. CA-690-01-01. Administrative Law Judge Sweitzer.

K. SOILS

1. Affected Environment

Of the three allotments being analyzed in this document, two allotments, Stoddard Mountain (Middle and East Units) and Johnson Valley Allotments have had an Order III soils survey conducted by the NRCS. The classification of soils on the Shadow Mountain Allotment has not yet been mapped and is not available.

The three sheep allotments have not yet been assessed for the achievement of fallback standards, however due to the manner in which sheep are herded throughout the allotments there is a high probability that the soil standard is not being affected by ephemeral sheep grazing.

The Stoddard Mountain Allotment (Middle and East Units) is dominated by 11 soils, complexes and associations: 1) Cajon Gravelly Sand - very deep, somewhat excessively drained, with a slight erosion potential; 2) Cajon–Arizo Complex - gravelly sand to gravelly loamy sand, very deep and excessively well drained, with a slight to moderate erosion potential; 3) Cajon – Wasco, Cool, Complex - sand to sandy loam, very deep and somewhat excessively drained to well drained, with a slight to moderate erosion potential; 4) Helendale–Bryman Association - loamy san, very deep and well drained, with a slight erosion potential; 5) Joshua Loam 2 to 5 %: sandy clay loam to sandy loam, moderately deep and well drained, with a slight erosion potential; 6) Joshua Loam 9 to 15 % - sandy clay loam to gravelly sandy loam, well drained, with a slight erosion potential; 7) Mirage Sandy Loam 2 to 5 % - sandy loam to sandy clay loam, very deep and well drained, with a slight erosion potential; 8) Mirage – Joshua Complex 2 to 5 % - sandy clay loam to gravelly sandy loam moderate to very deep and well drained, with a slight erosion potential; 9) Rock outcrop–Lithic Torriorthents Complex - sandy loam to very gravelly sand, shallow and well drained, with a high erosion potential; 10) Sparkhaul – Rock Outcrop Complex 15 to 50% - gravelly sandy clay loam, shallow and well drained, with a slight to moderate erosion potential; and 11) Yermo–Kimberlina, Cool, Association - cobbly sandy loam to gravelly sandy loam, very deep and well drained, with a slight to moderate erosion potential.

The Johnson Valley Allotment is dominated by six soils , complexes and associations: 1) Haplosalids-Haplocalcids-Bluepoint - very deep, fine to sandy, salt-affected soils formed in lacustrine deposits with alluvial influence over lacustrine deposits; 2) Arizo-Cajon - very deep, sandy and sandy-skeletal soils formed in alluvium; 3) Gravesumit-Daisy - very deep, coarse-loamy soils formed in older mixed alluvium. Recent alluvial fan material overlies older alluvial material; 4) Ironped-Rock Outcrop-Haplocalcids - vary shallow to shallow to soft bedrock, sandy to loamy soils formed in granitic alluvium and residuum; 5) Dalvord-Rock Outcrop - very shallow to shallow to bedrock, loamy-skeletal soils formed in residuum and colluvium from granite and/or metamorphic sources; 6) Haleburu-Noble Pass - very shallow to shallow to bedrock, loamy-skeletal soils formed in residuum and colluvium from mainly volcanic sources.

The Shadow Mountain Allotment is dominated by three soils, complexes and associations: 1) Hesperia-Rosamond Association – moderately well drained and well drained, moderately to moderately rapidly permeable, very deep sandy loam. Developed from stratified sandy loam and loam alluvium. MohaveVarient - Sunrise Association - moderately well drained and well drained, moderately slowly permeable, loamy fine sands, shallow to deep to caliche. Developed from stratified clay loam and fine sandy loam alluvium. Rock Land Association – excessively drained, very stony or very rocky, sandy loams to sands. Developed from bedrock.

2. Environmental Consequences

a. <u>Impacts of Proposed Action</u>

Under the proposed action, livestock grazing in the three active allotments would continue to have a negative affect on soils associated with congregation areas such as bedding and watering sites through compaction. The vast majority of soils in these active allotments would probably continue to achieve the soils standard.

b. No Action

Under the no action alternative, impacts to soils would be the same as the proposed action.

c. Cumulative Impacts

Under the proposed action, past, present and future ephemeral sheep grazing operations will continue to have a cumulative impact on soils resulting in compaction in congregation areas such as bedding and watering sites.

d. Consultation

Consultation would occur with all lessees, interested publics, county governments, and Native American tribes with traditional ties to the lands within the allotments being analyzed.

e. Maps

N/A

f. References:

National Resource Conservation Service. 1986. Soil Survey of San Bernardino County, California, Mojave River Area.

National Resource Conservation Service. 2004. Interim Report for the Soil Survey of Johnson Valley Off-Highway Vehicle Area, Part of the Mojave Desert Area, West Central Part, California.

L. WASTE, HAZARDOUS OR SOLID

1. Affected Environment

Detailed surveys of hazardous or solid wastes have not been undertaken on these allotments. BLM maintains records of reportable spills on public lands, but these records are not yet entered into a searchable database. Some previous sites and current sites that are awaiting cleanup are known to exist within the allotments. These are primarily associated with historic mining activities, illegal disposals on public lands, occupancy trespass, wire burns, and drug production activities. No sites are specifically associated with livestock operations, although use of motorized vehicles and equipment by the livestock operator may have resulted in low volume, periodic and scattered spills or releases of fuel and petroleum products in the allotment. None have been documented that have exceeded deminimus levels to be considered a release.

2. Environmental Consequences

a. Impacts of Proposed Action

As a result of implementing the proposed action low volume, periodic and scattered spills or releases of fuel and petroleum products in the active allotments would continue. These spills and releases are more likely to occur at bedding and watering sites on public land where facilities and vehicles used in the livestock operations most often congregate. No increases in low volume, periodic and scattered spills or releases of fuel and petroleum products above what has been discussed is anticipated in the allotments being analyzed.

b. No Action

Under the no action alternative, impacts to waste, hazardous and solid would be the same as the proposed action.

c. Cumulative Impacts

Localized cumulative impacts to ground water may have occurred and may continue to occur at bedding and watering sites on public land from 20 to 80 years of presence. The congregation of facilities at these sites may be a point sources for very low levels of ground water pollution on a very localized scale, depending on the types of fuels used by lessees.

d. Consultation

Consultation would occur with all lessees, interested publics, county governments, and Native American tribes with traditional ties to the lands within the allotments being analyzed.

e. Maps

N/A

f. References: N/A

M. WATER QUALITY, SURFACE AND GROUND WATER

1. Affected Environment

The proposed action would have no affect on water quality or ground water because ephemeral sheep grazing operations do not used surface or ground water in the allotments.

2. Environmental Consequences

a. Impacts of Proposed Action

Same as above.

b. No Action

Same as above.

c. Cumulative Impacts

There would be no cumulative impacts from the proposed action, or any alternative.

d. Consultation

e. Maps

N/A

f. References: N/A

N. WETLANDS/RIPARIAN ZONES

1. Affected Environment

The proposed action would have no affect on wetlands or riparian zones because none are present on the ephemeral sheep allotments.

2. Environmental Consequences

a. Impacts of Proposed Action

Same as above.

b. No Action

Same as above.

c. Cumulative Impacts

There would be no cumulative impacts from the proposed action, or any alternative.

d. Consultation

e. Maps

N/A

f. References: N/A

O. WILD AND SCENIC RIVERS

1. Affected Environment

The proposed action would have no affect on wild and scenic rivers because none are present on the ephemeral sheep allotments.

2. Environmental Consequences

a. Impacts of Proposed Action

Same as above.

b. No Action

Same as above.

c. Cumulative Impacts

There would be no cumulative impacts from the proposed action, or any alternative.

d. Consultation

e. Maps

N/A

f. References: N/A

P. WILDERNESS

1. Affected Environment

There would be no affect to wilderness or WSAs because there are no designated wilderness areas or WSAs that are within or overlap any of the affected ephemeral sheep allotments.

2. Environmental Consequences

a. Impacts of Proposed Action

Same as above.

b. No Action

Same as above.

c. Cumulative Impacts

There would be no cumulative impacts from the proposed action, or any alternative.

d. Consultation - N/A

e. Maps - N/A

f. References: N/A

Q. WILD HORSES AND BURROS

1. Affected Environment

The proposed action would have no affect on wild horses and burros because none are present on the ephemeral sheep allotments.

2. Environmental Consequences

a. Impacts of Proposed Action

Same as above.

b. No Action

Same as above.

c. Cumulative Impacts

There would be no cumulative impacts from the proposed action, or any alternative.

d. Consultation

N/A

e. Maps

N/A

f. References: N/A

R. WILDLIFE

1. Affected Environment

Common Animals:

Common species of animals identified below can be found in most vegetation communities found in the allotments (see Vegetation, Affected Environment). Woodrats (*Neotoma* spp.), kangaroo rats (*Dipodomys* spp.), white-tailed antelope ground squirrels (*Ammospermophilus leucurus*), black tailed hares (*Lepus californicus*), kit foxes (*Vulpes macrotis*), and coyotes (*Canis latrans*) are some of the more common animals found on most of the sheep allotments. Common bird species include mourning doves (*Zenaida macroura*), black-throated sparrows (*Amphispiza bilineata*), common ravens (*Corvus corax*), and horned larks (*Eremophila alpestris*). Some common reptiles include the side-blotched lizard (*Uta stansburiana*), western whiptail (*Cnemidophorus tigris*), gopher snake (*Pituophis melanoleucus*), and the Mojave rattlesnake (*Crotalus scutulatus*).

Sensitive Wildlife Species

Several sensitive species occur within the allotments. Their regulatory status and habitat type are listed in Table 4. Most of these species are avian and include golden eagle (*Aquila chrysaetos*), LeConte's thrasher (*Toxostoma lecontei*), Bendire's thrasher (*Toxostoma bendirei*), Burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), long-eared owl (*Asio otus*). One mammalian species occur in portions of lands proposed of the proposed action. A portion of the Stoddard Mountain (East Unit) allotment includes habitat used by bighorn sheep (*Ovis Canadensis nelsoni*). The Mojave fringe-toed lizard (*Uma scoparia*) occurs in the Shadow Mountain allotment and is the only sensitive reptile that occurs within a sheep allotment.

Table 4. **Sensitive Wildlife Species Within Sheep Allotments**

Species Name	Regulatory Status	Preferred Habitat
Bighorn Sheep (*Ovis Canadensis nelsoni*)	BLM Sensitive	Steep Mountainous Terrain
Mojave Fringed-toed Lizard (*Uma scoparia*)	California Species of Special Concern	Wind-blown Sand
Golden Eagle (*Aquila chrysaetos*)	BLM Sensitive; California Fully Protected	Mountainous Terrain, Cliffs
Priarie Falcon (*Falco mexicanus*)	California Species of Special Concern	Mountainous Terrain, Cliffs
LeConte's Thrasher (*Toxostoma lecontei*)	California Species of Special Concern	Creosote Bush Scrub, stands of cholla, Joshua trees, and thorny shrubs
Burrowing Owl (*Athene cunicularia*)	California Species of Special Concern	Creosote bush scrub
Gray Vireo (*Vireo vicinior*)	BLM Sensitive; California Species of Special Concern	arid slopes dominated by short, densely branched, stiff-twigged shrubs

Threatened or Endangered Wildlife Species:

Desert Tortoise

The desert tortoise (*Gopherus agassizii*) was listed as threatened in 1990 by the Fish and Wildlife Service and has been listed as threatened by the California Department of Fish and

Game since 1989. The USFWS designated four critical habitat units (CHU) within the planning area in 1994.

All sheep allotments occur within or border critical habitat. The Stoddard Mountain Allotment (West Unit) occurs almost entirely within a DWMA/CHU. The Shadow Mountain, Stoddard Mountain (East Unit) and Johnson Valley allotments overlap a portion of a CHU.

The tortoise is widely distributed across the California desert and is known to occur on all allotments. Field surveys of tortoise presence/absence and density have been conducted throughout the California Desert and the results have been reported in the WMP. Tortoise concentration areas have been identified within all allotments with the greatest concentrations reported in the Superior and Stoddard Mountain (West Unit) allotments.

Mohave Ground Squirrel
A discussion of current range, status and potential impacts to the Mojave ground squirrel (*Xerospermophilus mojavensis*) (MGS) has been discussed in detail in Chapter 3 of the WMP. Only a brief summary of that discussion has been provided below.

The MGS is a relatively small squirrel with few close relatives. Almost the entire range of the MGS is included within the West Mojave planning area. The squirrel is listed under CESA as Threatened throughout its range but is not afforded protection under FESA. The MGS is closely associated with perennial shrubs such as winterfat (*Krascheninnikovia lanata*), spiny hopsage (*Grayia spinosa*), and saltbush (*Atriplex* sp.). With the exception of Stoddard Mountain (East Unit) and Johnson Valley allotments, all other allotments occur within the range of the MGS.

2. Environmental Consequences

a. Impacts of Proposed Action

Common Animals
Most wildlife species are mobile and can avoid being trampled by sheep. Impacts to wildlife are typically indirect. Sheep may impact wildlife indirectly by modifying habitat on which wildlife depend. Sheep can modify habitat by disrupting soils and damaging vegetation. Soils are impacted through hoof shearing and by soil compaction. Vegetation can be removed if trampled or overgrazed. Impacts identified above typically occur near bedding and watering sites where sheep congregate.

Desert Tortoise
Literature regarding direct and indirect impacts of livestock grazing to rangeland and desert tortoise habitat has been critically reviewed in an unpublished document by the U. S. Geological Survey (USGS) (Boarman 2002). The impacts of grazing were evaluated by reviewing anecdotes, and technical papers. A brief summary of that review, as it applies to sheep grazing in the desert, follows below. The critical review analysis reported a paucity of information available on the effects of grazing on the Mojave ecosystem.

Indirect impacts to tortoise habitat were evaluated by reviewing anecdotes and technical papers. Indirect impacts mentioned in the text include: uprooting vegetation, trampling vegetation, a reduction in annual forbs, an increase in soil compaction and a reduction in soil infiltration.

Little information was reported describing direct impacts to tortoises except that some accounts reported that sheep may step on and crush juvenile tortoises. Also, it has been reported that sheep have crushed tortoise burrows resulting in injured tortoises or a damaged burrow. In-depth research on the direct impacts of livestock grazing on tortoise appears to be lacking.

There are only three sheep allotments that are presently active, Shadow Mountain, Stoddard Mountain (East and Middle Units) and Johnson Valley. Desert tortoises are known to occur in each of these allotments.

Mojave Ground Squirrel
Potential impacts of grazing to MGS habitat is discussed in the WMP. Impacts identified include direct competition for food, trampling of burrows, and changes to vegetative structure. The food preferences of MGS overlap with those plants preferred by livestock. Drought is also thought to exacerbate competition for food. Three active allotments occur in the range of the MGS: Shadow Mountain, Stoddard Mountain (West Unit) and Stoddard Mountain (Middle Unit). The

Sensitive Wildlife Species
Direct impacts to sensitive species are not anticipated. All sensitive species listed above are mobile and can avoid being stepped on and some of these species are too large to be injured by sheep.

Sheep grazing can impact sensitive species indirectly by modifying habitat. Competition for food would not occur for most sensitive species listed above since their diets do not overlap with domestic sheep. Bighorn sheep may have overlapping food preferences but they can also browse in steep terrain where domestic sheep cannot. Bighorn sheep occur in the southern portion of the Stoddard Mountain allotment (East Unit) on steep terrain. Domestic sheep grazing typically occurs in the northern portions of the allotment on alluvial fans and among OHV activity where bighorn sheep are not likely to be found.

b. No Action

Under the no action alternative, impacts to wildlife would be the same as the proposed action.

c. Cumulative Impacts

The BLM's multiple use mission typically results in a variety of activities that are authorized to occur on the same lands. Other activities that may overlap grazing allotments include: utility corridors (including electrical towers and natural gas pipelines), general recreation (i. e. hunting, picnicking, camping, and rock hounding), scientific study, and off-highway vehicle (OHV) activities. These activities may indirectly impact wildlife by degrading vegetation at various intensities, in localized areas, for parking, camping or construction work areas.

Boarman (2002) reported that human access to tortoise habitat is the most important threat to tortoise populations. Roads are typically the means for intrusion into tortoise habitat. Vehicle operation within tortoise habitat has the potential to impact tortoise habitat directly by crushing vegetation or by facilitating activities that result in a tortoise injury or mortality.

The three active sheep allotments occur in OHV open areas. In designated open areas, off-trail, cross-country travel is allowed. Cross-country travel may result in vegetation disturbance, soil compaction, injured wildlife, and erosion. Typical off-road activity results in the establishment of favorite trails and numerous single cross-country events which occur over the entire area of the OHV boundary. In comparison, sheep grazing is typically conducted in herds or bands over localized areas. Some overlap of impacts of these two activities is anticipated to occur.

The cumulative impacts of sheep grazing in the West Mojave Bioregion are currently under review in conjunction with analysis of DWMA alternatives for the recovery of the species.

d. Consultation

The BLM has formally consulted with the FWS on two occasions regarding ephemeral sheep grazing in desert tortoise habitat. The BLM is proposing to issue grazing leases under the terms and conditions contained in the Biological Opinion (1-8-94-F-16) issued March 15, 1994.

e. Maps

N/A

f. References:

Boarman, W. I. 2002. Threats to desert tortoise populations: A critical review of the literature. Unpublished report prepared for the West Mojave Planning Team, Bureau of Land Management. U. S. Geological Survey, Western Ecological Research Center. San Diego, CA.

Fish and Wildlife Service. 1994. Biological opinion for Ephemeral Sheep Grazing in the California Desert District (1-8-94-F-16). March 15, 1994. Ventura Fish and Wildlife Office, Ventura, California.

S. VEGETATION

1. Affected Environment

The vegetative communities within the allotments vary with elevation, available water, soils, slope and annual precipitation. Terrestrial natural communities have been mapped using the classification used by the California Natural Diversity Database of the Natural Heritage Division in the California Department of Fish and Game (Robert F. Holland, Ph.D., 1986) and the California Native Plant Society's A Manuel of California Vegetation (Keeler-Wolf, Sawyer, 1995). The primary plant community occurring within the affected area is Mojave Creosote Bush Scrub which is the characteristic plant community of the Mojave Desert. Other

communities include Desert Saltbush Scrub (Allscale Series) and Mixed Mojave Scrub. Following is a description of the key plant species or plant communities which may be affected by the proposed action.

The Mojave Creosote Bush Scrub - This community occurs from 75 meters below sea level to 1000 meters above sea level, in well drained soils found on alluvial fans, bajadas and upland slopes. The dominant perennial species in a Creosote Bush Scrub plant community is the creosote bush (*Larrea tridentata*) which is also the most abundant shrub in the California Desert. A Creosote Bush Scrub plant community diversity is characteristically low to medium. Some associated plant species in this community include white bursage (*Ambrosia dumosa*), Ephedra species (*Ephedra* sp.), and desert senna (*Senna armata*). Desert washes that occur within this community support additional species, the most common being the catclaw acacia (*Acacia greggii*) and desert willow (*Chilopsis linearis*).

The Desert Saltbush Scrub (Allscale Series) - This community occurs between 75 meters below sea level to 1500 meters elevation on old lake deposits, dissected alluvial fans and rolling hills. The Allscale Series is comprised primarily of the dominant Atriplex species (*Atriplex ploycarpa* and *Atriplex spinifera*) and associated species like bladderpod (*Isomeris arborea*), bush buckwheat (*Eriogonum fasciculatum*), California ephedra (*Ephedra californica*), cheesebush (*Hymenoclea salsola*), and paleleaf goldenbush (*Isocoma acradenia*).

The Mixed Mojave Scrub - This community occurs between 300-1500 meters elevation on all slopes in shallow and deep soils that are occasionally rocky. The Mixed Mojave Scrub community is comprised primarily of the dominant Yucca species (*Yucca schidigera*, *Yucca bacata*) and associated species like winter fat (*Kraschenninnokovia lanata*), boxthorn species (*Lycium* sp.), spiny menodora (*Menodora spinescens*), spiny hopsage (*Grayia spinosa*) and cacti species (*Opunita sp., Mammallaria sp., Echinocactus sp., Ferocactus sp., Echinocerus sp.*).

Sensitive Plant Species

Several sensitive plants are known to occur on lands proposed for sheep grazing. Several of these plants are annuals; one is a herbaceous perennial and one a grass. These species, their regulatory status, and habitat are listed in Table 5. These species occur within allotments where appropriate habitat can be found.

Table 5. Sensitive Plant Species Within Sheep Allotments

Species Name	Regulatory Status	Habitat
Mojave Monkey Flower	BLM Sensitive	Granitic soils, gravelly banks of desert washes
Desert Cymopterus	BLM Sensitive	Sandy soils

2. Environmental Consequences

a. Impacts of Proposed Action

Sensitive plants typically have limitations in habitat needs and occur in localized areas. How sheep may impact these species would likely depend on access to habitat where these species occur as well as the intensity of grazing in those locals. Sheep may impact individual plants by consuming them or trampling them. Indirect impacts may occur to sensitive plants if habitat becomes modified by a large concentration of animals in habitats where sensitive species occur.

b. No Action

Under the no action alternative, impacts to vegetation would be the same as the proposed action.

c. Cumulative Impacts

The BLM's multiple use mission typically results in a variety of activities that are authorized to occur on the same lands. Other activities that may overlap grazing allotments include: utility corridors (including electrical towers and natural gas pipelines), general recreation (i. e. picnicking, and camping), scientific study, and off-highway vehicle (OHV) activities.

The three active sheep allotments occur in OHV open areas. In designated open areas, off-trail, cross-country travel is allowed. Vehicle operation within an OHV open area has the potential to result in a range of intensities from a rather benign single driving event to the establishment of routes.

The Bureau has drafted a Environmental Impact Report for the West Mojave Plan (WMP), a plan amendment for the California Desert Conservation area. The WMP proposes new management strategies to protect sensitive and T&E plants and animals through habitat conservation. Of the sensitive plant species listed above, an ACEC would be established for the Mojave monkey flower in the Stoddard Mountain (Middle Unit) allotment.

d. Consultation

No federally listed plants would be affected by the proposed action. Obligations per the Endangered Species Act of 1973, as amended, would not be necessary for this critical element.

e. Maps

N/A

f. References:

Boarman, W. I. 2002. Threats to desert tortoise populations: A critical review of the literature. Unpublished report prepared for the West Mojave Planning Team, Bureau of Land Management. U. S. Geological Survey, Western Ecological Research Center. San Diego, CA.

4. CONSULTATION AND COORDINATION

A. Participating Staff

Remijio Chavez	Rangeland Mgmt. Specialist
Lorenzo Encinas	Natural Resource Specialist
Amy Lawrence	Archaeologist
Edy Seehafer	Environmental Coordinator
Lynnette Elser	Recreation Branch Chief

B. Consultation

Affected grazing lessees and interested publics.

FINDING OF NO SIGNIFICANT IMPACTS

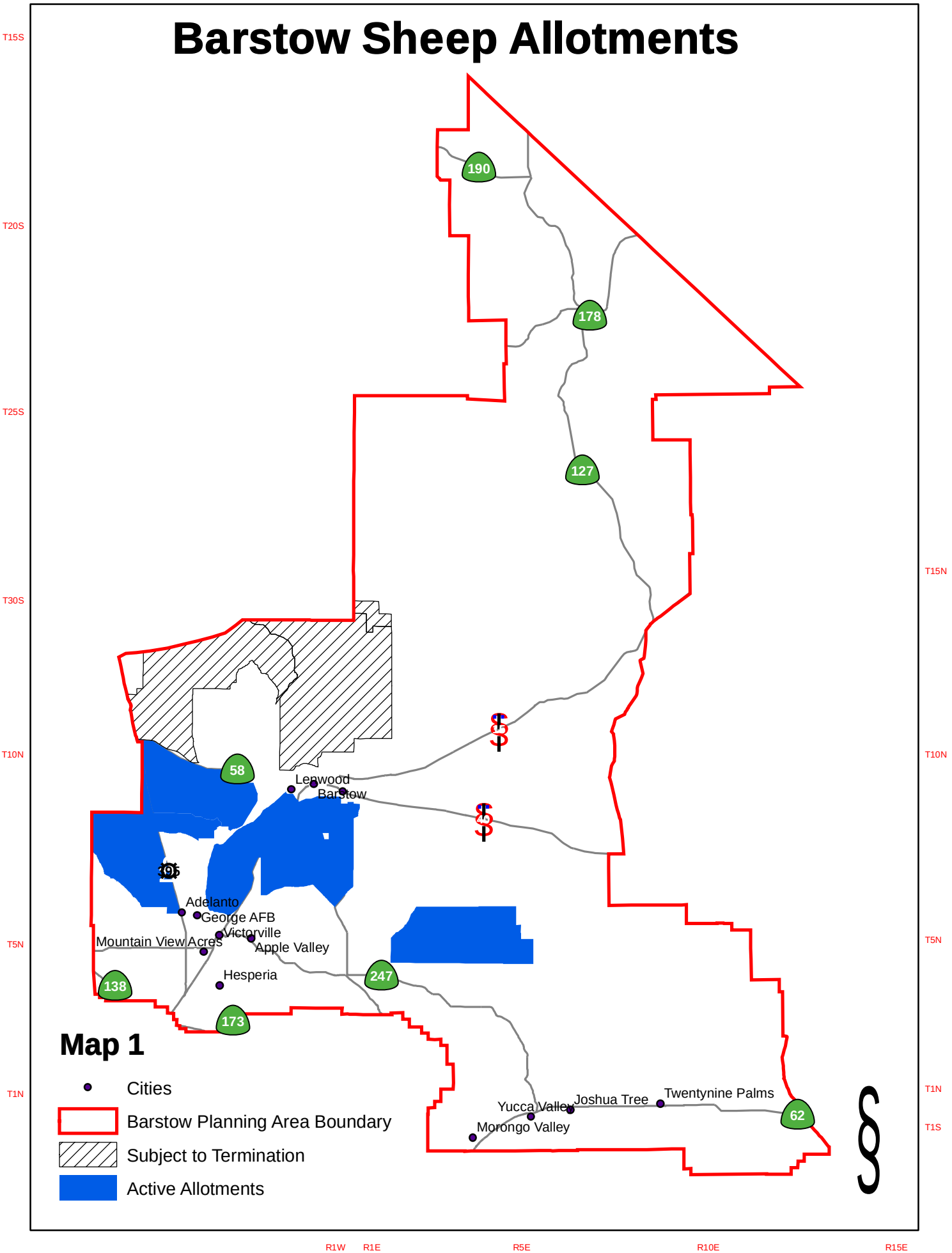
Finding of No Significant Impact: Environmental impacts associated with the proposed action and alternatives have been assessed. Based upon the analysis provided in the attached EA (CA-680-05-82), I conclude that the proposed action of the West Mojave Plan Alternative will have no significant impacts on the environment under the criteria in Title 40 of Federal Regulations Subpart 1508 and is not a major federal action. Preparation of an Environmental Impact Statement pursuant to Section 102(2)(c) of the National Environmental Policy Act of 1969 is not required.

This action is in conformance with existing applicable state implementation plans for the maintenance and improvement of air quality and will not cause or contribute to any new or increased violations of any air quality standards in the area. It does not exceed de minimus levels, is not regionally significant; and is exempt from conformity determination (40 CFR Part 93.153 (iii).

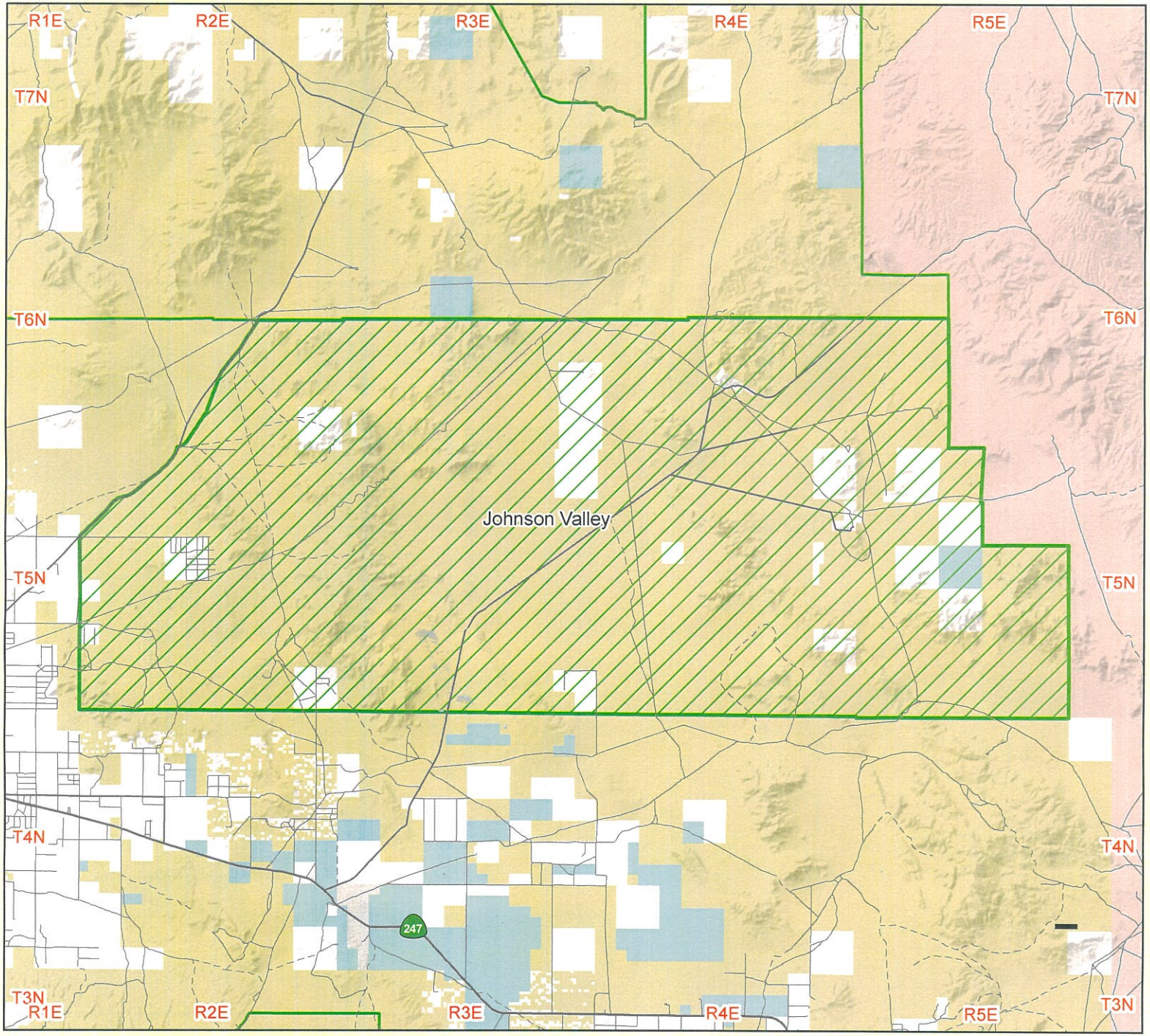
Approved: _____ _____

Field Manager Date

Barstow Sheep Allotments



Johnson Valley Grazing Allotment



Legend

- Other Grazing Allotments
- Johnson Valley

Land Ownership

- Private
- US Bureau of Land Management
- Military
- State Lands
- Unknown

Map 2

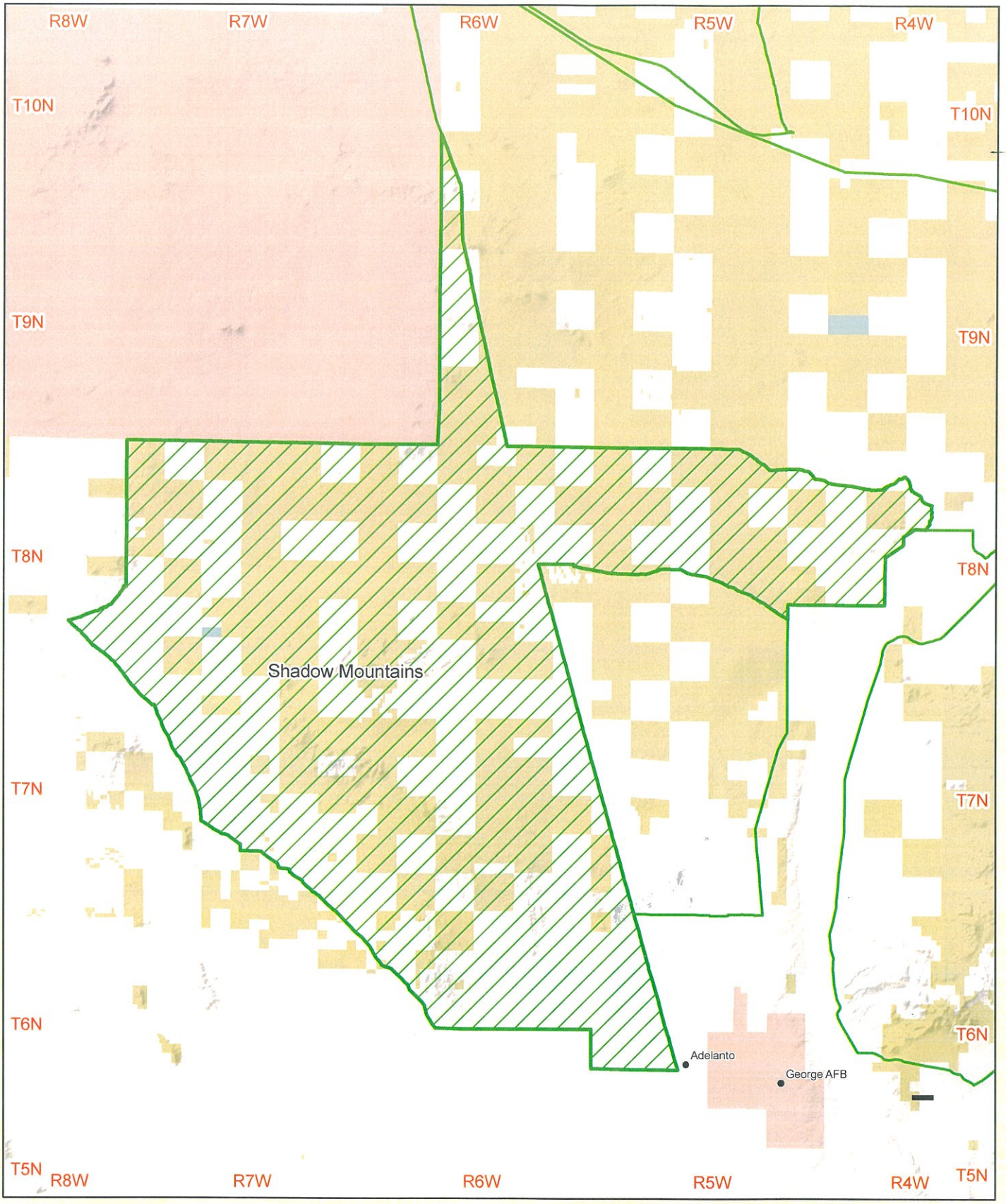
0 1 2 3 4 5

Miles

US Department of the Interior
BUREAU OF LAND MANAGEMENT
Barstow Field Office
Barstow, California
(760) 252-6000
www.ca.blm.gov/barstow

Date Prepared: 3/31/2006
Project: Johnson Valley

Shadow Mountains Grazing Allotment



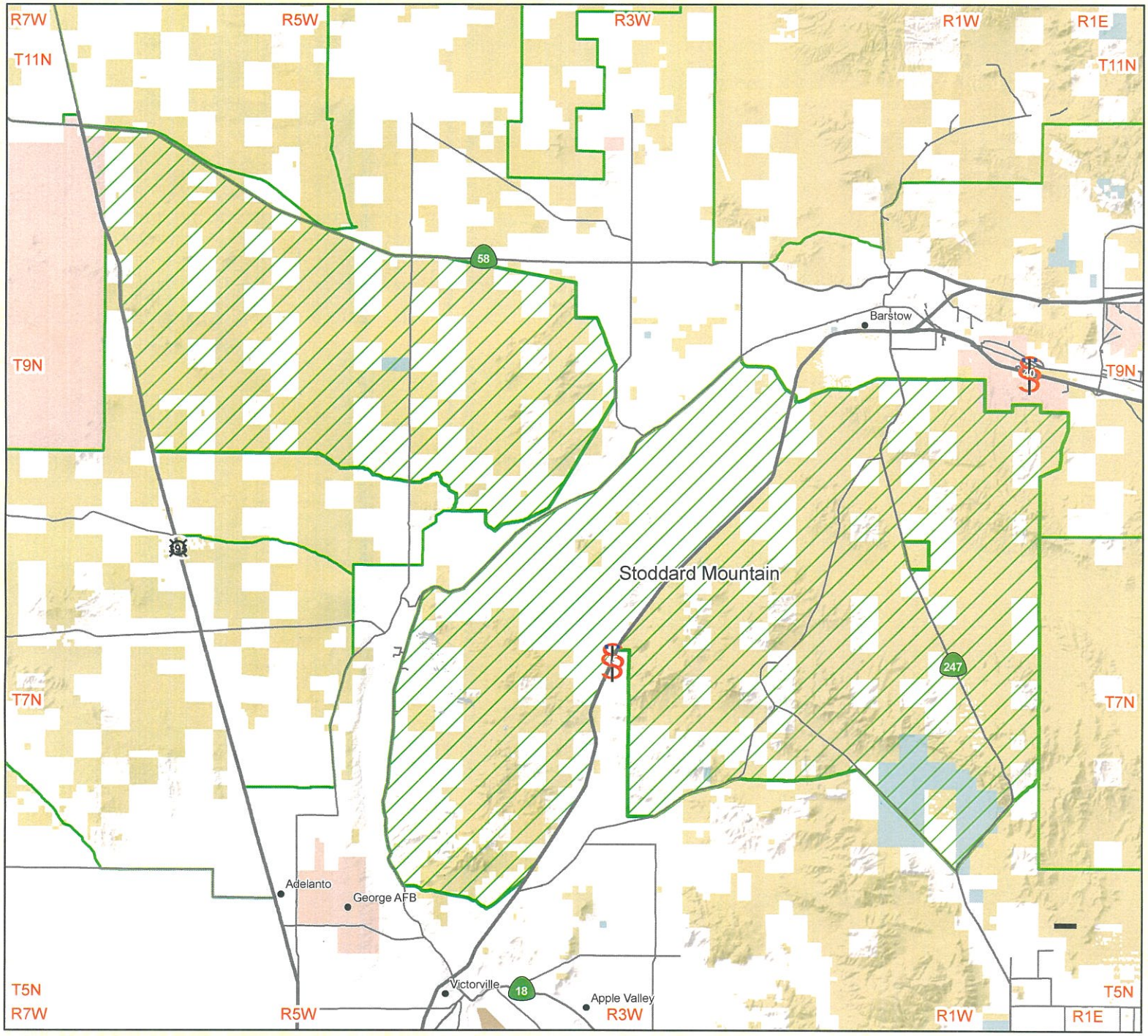
Other Grazing Allotments
Shadow Mountains
Land Ownership
Private
US Bureau of Land Management
Military
State Lands

0 1 2 3 4 5 6
Miles

US Department of the Interior
BUREAU OF LAND MANAGEMENT
Barstow Field Office
Barstow, California
(760) 252-6000
www.ca.blm.gov/barstow
Date Prepared: 3/31/2006
Project: Shadow Mountains

Map 3

Stoddard Mountain Grazing Allotment



Legend

- Other Grazing Allotments
- Stoddard Mountain

Land Ownership

- Private
- US Bureau of Land Management
- State Lands
- Military
- County/City/Regional

Map 4

0 1 2 3 4 5 6 7 8

Miles

US Department of the Interior
BUREAU OF LAND MANAGEMENT
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Date Prepared: 3/31/2006
Project: Stoddard Mountain

ATTACHMENT 1

SUPPLEMENTAL PROCEDURES FOR LIVESTOCK GRAZING PERMIT/LEASE RENEWALS

A CULTURAL RESOURCES AMENDMENT
TO
THE STATE PROTOCOL AGREEMENT

BETWEEN

CALIFORNIA BUREAU OF LAND MANAGEMENT
AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER

The purpose of this amendment is to address the National Historic Preservation Act (NHPA) Section 106 compliance procedures for processing approximately 400 grazing permit/lease (hereafter "permit") renewals scheduled for 2004 through 2008. This amendment shall cover grazing permit renewals for livestock as defined in 43 CFR 4100.0-5 as "....domestic livestock – cattle, sheep, horses, burros, and goats." The following procedures will allow for renewal of the permits while maintaining compliance with the NHPA. Alternative approaches to this amendment may be developed by individual Field Offices, but such approaches shall fall under the Section 106 regulations of the NHPA (36 CFR Part 800) and shall require individual Field Office consultation with the SHPO.

These supplemental procedures are an amendment to the State Protocol dated April 6, 1998, which is scheduled for termination on October 25, 2004. These supplemental procedures will remain in effect when that Protocol is terminated and will become an amendment to a successor Protocol document.

This amendment deviates from the Protocol in *Section VI. Thresholds for SHPO Review*, which states, "*BLM shall complete the inventory, evaluation and assessment of effects and document all findings, including negative inventories and no effect determinations, in BLM files before proceeding with project implementation.*" This amendment would allow for renewal of an existing grazing permit prior to completing all NHPA compliance needs as long as Protocol direction, the BLM 8100 Series Manual guidelines (Protocol Amendment F), and the following specific stipulations are followed:

I. Planning

Grazing permit renewals of any acreage size shall be scheduled for cultural resource compliance coverage over the next ten years. Such long term management includes scheduling for inventory, evaluation, treatment, and monitoring, as appropriate. Schedules for inventories of all renewals to be covered by this amendment shall be delineated by each participating Field Office and submitted to the SHPO and the State Office at the first annual reporting cycle for FY 2004.

This amendment shall only apply to the reissuance of grazing permit authorizations and existing range improvements. All new proposed undertakings for range improvements shall follow the established procedures within the Protocol or 36 CFR 800, the implementing regulations for Section 106 of NHPA.

II. Inventory Methodology

To address the impacts of grazing on cultural resources, a Class II sampling or reconnaissance survey strategy shall be devised by the cultural resource specialist in consultation with range staff which focuses inventory efforts on areas where livestock are likely to concentrate within areas of high sensitivity for cultural resource site locations. Congregation areas where it has been shown that the greatest levels of impact are likely to occur are generally around springs, water courses, meadows, and range improvement areas such as troughs and salting areas.

All existing range improvements within areas of high sensitivity for the location of cultural resource sites shall be inventoried. However, due to the fact that cattle trailing occurs along fence lines and the area of impact is limited to a one meter wide swath and impacts to cultural resources are generally restricted to this corridor, existing linear improvements will not be inventoried except in areas of high sensitivity for the location of cultural resource sites.

Salting areas may change from season to season making locating these areas problematic. Salting locations will be assessed by the cultural resource specialist in consultation with range staff and the permitee. The permitee will be asked to provide a map designating salting areas and these locations will be inventoried if they occur in areas where the probability for the occurrence of cultural resources is high. All livestock loading and unloading areas and corral areas will also be inventoried within areas of high sensitivity for the location of cultural resources.

A Class I records search will also be conducted for each allotment to ascertain previously recorded site locations and areas of prior survey coverage which can be accepted as meeting current standards. Sites located within livestock congregation areas will be visited to evaluate grazing impacts.

All areas identified for inventory in the survey strategy shall be covered intensely. All unrecorded site locations will be recorded and a report of findings for each allotment will be completed. These investigations shall only address public lands administered by BLM. Private, state and county in-holdings will not be evaluated.

III. Tribal and Interested Party Consultation

Field Offices will be responsible for contacting and consulting with Tribes and interested parties as outlined in 36 CFR 800 and the 8120 manual guidelines. This will also meet BLM government-to-government responsibilities for consultation.

IV. Evaluation

Determinations of eligibility to the National Register of Historic Places shall only be undertaken on sites or properties where it can be reasonably ascertained or it is ambiguous that range activities will continue to impact sites and further consultation with SHPO could be required.

V. Effect

A. Range undertakings where historic properties are not affected may be implemented under the Protocol without prior consultation with SHPO. These undertakings shall be documented in the Protocol Annual Report.

B. Range undertakings where historic properties are identified within APEs, and where historic values are likely to be affected or diminished by project activities, require consultation with SHPO, and ACHP if necessary, on a case-by-case basis, pursuant to 36 CFR 800.5-6.

VI. Treatment

Standard Protective Measures can include but are not limited to:

A. Fencing or exclosure of livestock from the cultural resource sufficient to ensure long-term protection, according to the following specifications:

1. The area within the exclosure must be inventoried to locate and record all cultural resources; and

2. The exclosure (i.e.) fence must not divide a cultural resource so that a portion is outside of the fence; and

3. The cultural resource specialist will determine the appropriate buffer to be provided between the cultural resource and its exclosing fence.

B. Relocation of livestock management facilities / improvements at a distance from cultural resources sufficient to ensure their protection from concentrated grazing use.

C. Removal of natural attractants of livestock to a cultural resource when such removal, in the judgment of the cultural resource specialist, will create no disturbance to the cultural resource (e.g. removing vegetation that is providing shade).

D. Removal of the area(s) containing cultural resources from the allotment.

E. Livestock herding away from cultural resource sites.

F. Use salting and/or dust bags or dippers placement as a tool to move concentrations of cattle away from cultural sites.

G. Locating sheep bedding grounds away from known cultural resource sites.

H. Other protective measures established in consultation with and accepted by SHPO.

The Standard Protective Measures defined above may be used to halt or minimize on-going damage to cultural resources. If the standard protection measures can be effectively applied, then no evaluation or further consultation with SHPO on effects will be necessary. The adopted Standard Protective Measures shall be added to grazing permit "Terms and Conditions" as appropriate for each grazing permit issued or reissued as fully processed permits (completed NEPA analysis, consultation, and decision). The "Terms and Conditions" for each permit may be modified by the addition, deletion, or revision of Standard Protective Measures as described in Section VII of these Supplemental Procedures.

VII. Monitoring

A. Field Offices shall adopt the following monitoring guidelines:

1. monitoring shall be conducted yearly and documented to ensure that prescribed treatment measures are effective; and

2. when damaging effects to cultural resources from grazing activities are ambiguous or indeterminate, Field Offices shall conduct monitoring, as necessary, to determine if degrading effects are resulting from grazing activities and if they are continuing to affect the characteristics that may make properties eligible to the NRHP or if they are otherwise adversely affecting the values of cultural resources.

B. When monitoring has yielded sufficient data to make effect determinations, the following apply:

1. When no additional degrading damage will likely occur because standard treatment measures are adequate to prevent further damage from rangeland management activities, SHPO consultation on a case-by-case basis is unnecessary.

2. When no additional degrading damage will likely occur, even without implementation of standard treatment measures, then no further treatment consideration of those resources is necessary, even if past grazing impacts to the ground surface are evident.

3. When additional degrading damage will likely occur, mitigation of adverse effects shall be addressed on a case-by-case basis, pursuant to 36 CFR 800.5-6.

When monitoring results or case-by-case consultation result in a determination concerning addition or deletion of Special Treatment Measure(s) for a specific allotment, then that Measure(s) will be added to, or deleted from, the Terms and Conditions of the fully processed permit for that allotment.

VIII. Disagreements

When a Field Office Cultural Heritage staff and Field Office Manager fail to agree on inventory, evaluation, monitoring, and application of Special Treatment Measures, then the Field Office Manager shall initiate consultation with the SHPO.

IX. Reporting and Amending

A. Each participating Field Office shall report annually to the SHPO and the State Office, a summary of activities carried out under this amendment to the Protocol during the previous fiscal year. The reporting shall be included in the Protocol Annual Report.

B. Annual reports shall summarize activities carried out under this amendment. These reports are not meant to be compilations of the individual project reports prepared for the range projects; they are meant to be programmatic summaries of data and significant findings.

C. Annual reporting shall include at least three major sections:

1. schedules and status of accomplishments in meeting schedules for cultural resource activities in relation to the range management program as identified in Stipulation I; and

2. results, as annual summaries of accomplishment and significant findings resulting from rangeland management cultural resource activities; and

3. appendices to the report that would include project, coverage and cultural resource location maps and tabular summaries of total number of cultural resources located, new cultural resources located, cultural resources evaluated, types of treatment measures employed at each location, and cultural resources monitored.

Attahcment 1-5

D. Annual reports may contain recommendations for new or revised treatment measures.

E. Either party to this agreement may initiate a process to negotiate new or revised treatment measures or to revise the schedule of inventories. When such a process is initiated, the parties to this agreement shall negotiate new or revised treatment measures or schedule of inventories and such revisions or additions shall be issued as Attachments to these Supplemental Procedures.

STATE DIRECTOR, BUREAU OF LAND MANAGEMENT, CALIFORNIA

/s/ James Wesley Abbott *for*

By Mike Pool Date: 8/17/04

STATE HISTORIC PRESERVATION OFFICER, CALIFORNIA

/s/ Milford Wayne Donaldson

By Milford Wayne Donaldson Date: 8/18/2004

APPENDIX 1

2.2.5 Public Land Livestock Grazing Program

This program identifies conservation prescriptions to be implemented on public land within cattle and sheep allotments managed by the BLM in the West Mojave planning area. Where current management differs from that given in Alternative A, the alternative would prevail, and be authorized through amendments to the CDCA Plan. These prescriptions would become effective at the time the BLM's Record of Decision for the West Mojave Plan is signed ("plan adoption"). This section lists existing BLM Standards and Guidelines, terms and conditions of existing federal biological opinions, and new management prescriptions that would be implemented with plan adoption. The discussion is organized as follows:

- Regional Public Land Health Standards and Guidelines for Grazing Management
- Utilization of Key Perennial Species by Livestock
- Cattle Grazing Outside Tortoise Habitat and the MGS Conservation Area
- Cattle Grazing Within Tortoise Habitat and the MGS Conservation Area
- Cattle Grazing Within Desert Wildlife Management Areas
- Sheep Grazing Within All Allotments
- Sheep Grazing Within the MGS Conservation Area and the Mojave monkeyflower Conservation Area
- Sheep Grazing Within DWMAs
- Voluntary Relinquishment of Cattle and Sheep Allotments

2.2.5.1 Regional Public Land Health Standards and Guidelines for Grazing Management

Regional Public Land Health Standards and Guidelines regulate cattle and sheep grazing on BLM-administered lands. Standards and Guidelines are listed and described below.

BLM's grazing regulations in Part 43 CFR 4180 require that State Directors, in consultation with Resource Advisory Councils, develop Standards of Rangeland Health and Guidelines for Grazing management. The grazing regulations require that standards be in conformance with the "Fundamentals of Rangeland Health" (BLM policy developed in 1993) and that the standards and guidelines address each of the "guiding principles" as defined in the regulations. Standards and guidelines are to be incorporated into BLM's land use plans to improve ecological conditions. Improving ecological conditions is based upon attainment and maintenance of basic fundamentals for healthy systems. Standards and guidelines are defined as follows:

- A *Standard* is an expression of the level of physical and biological condition or degree of function required for healthy, sustainable rangelands.

- *Guidelines* for grazing management are the types of grazing management activities and practices determined to be appropriate to ensure that the standards can be met or significant progress can be made toward meeting standards.

Regional Standards apply to all BLM lands and programs, while the *Regional Guidelines* presented below apply only to livestock grazing. BLM staff, in consultation with the BLM's California Desert District Advisory Council, has developed the regional standards and guidelines to satisfy the requirements of BLM's strategic plan, comply with the fundamentals of rangeland health, and address each of the guiding principles as required by the grazing regulations. The development of guidelines for grazing management also addresses each of the guiding principles.

While the definition and adoption of standards and guidelines applies specifically and only to BLM lands, the spirit of initiative is reflected throughout the West Mojave planning area in developing the strategic approach to managing species and habitats.

Required Actions on Grazing Leases: Standards and grazing management guidelines apply to grazing related portions of activity plans, terms and conditions of permits, leases, and other authorizations, and range improvement activities such as vegetation manipulation, fence construction and development of water. For lands leased for grazing uses, the grazing regulations require the authorized officer to "take appropriate action" prior to the beginning of the next grazing season when standards or guidelines are not achieved and livestock grazing has been determined to be a significant factor in the failure to achieve the standard or comply with the guideline.

Application of Standards in Land Use Planning: Regional Standards of Public Land Health would be applied to all resources and uses of the public lands in the following manner:

- *Public Land Health Standards.* A single set of Public Land Health Standards would be applied desert-wide and to all resources and uses. Standards have their foundation in the physical and biological laws of nature. These laws are consistent regardless of the resource or use.

- *Assessment of Public Land Health.* The health of public lands and resources would be assessed using the Standards as the measurement of desired function.

- *Assessment Scale.* The health of public lands would be assessed on a landscape/watershed scale. While it may be useful and necessary to examine certain environmental components on a smaller scale, or at various scales, it is intended that overall Public Land Health be made at a landscape or watershed scale.

- *Health Determination.* Since Standards are a statement of goals for physical and biological function, determinations would be based strictly on the result of resource assessments and be independent of the uses on the public land.

- *Resource Objectives.* Resource management objectives are decisions made in consideration of resource values and capabilities and use needs through land use and activity plans. Public Land Health would be used to determine if resource management objectives are being met. In some cases, particularly where intensive land uses are allowed, resource management objectives could be met while the Public Land Health determination may indicate non-conformance with the Standards.

- *Causal factors.* Where public land health assessments indicate that resource management objectives are not being met, a determination would be made as to the causal factors.

- *Action/Adaptive Management.* Where public land health does not conform to resource management objectives, appropriate action - including changes to land use or activity plans - would be initiated using existing regulatory authorities for each authorized activity. In the case of livestock grazing the regulations require that the authorized officer "take appropriate action" prior to the beginning of the next grazing season when standards or guidelines are not achieved and livestock grazing has been determined to be a significant factor in the failure to achieve the standard or comply with the guideline.

Application of Standards in NEPA Analysis: Analyses of resources and issues guided by Standards would help NEPA review of projects. Consideration of standards should improve identification and analyses of:

- Relevant resource conditions and ecosystem functions
- Actions in terms of affects on resources and ecosystem functions
- The relationship of biological and physical resources and functions
- The most important resources and functions
- Project design and mitigation
- Cumulative effects
- Short-term and long-term affects
- Project compliance

Goals and Objectives of Standards and Guidelines: Table 2-16 presents the goals and objectives of standards and guidelines.

Table 2-16
Goals and Objectives of Standards and Guidelines

GOALS AND OBJECTIVES	
Goals	Develop Standards that would meet or exceed the National policy for: • Watersheds • Ecological processes • Water quality • Habitats Develop Guidelines to meet National policy and the grazing regulations.
Objectives	Implement Standards as directed by National policy and grazing regulations. Implement Guidelines to conform grazing activities to achieve Standards.

Objective A -- Implement Standards: Manage all activities under the following Regional Standards of Public Land Health.

Soils. Soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, geology, landform, and past uses. Adequate infiltration and permeability of soils allow accumulation of soil moisture necessary for optimal plant growth and vigor, and provide a stable

watershed, as indicated by:

- Canopy and ground cover are appropriate for the site;
- There is diversity of plant species with a variety of root depths;
- Litter and soil organic matter are present at suitable sites;
- Microbiotic soil crusts are maintained and in place;
- Evidence of wind or water erosion does not exceed natural rates for the site; and
- Hydrologic and nutrient functions maintained by permeability of soil and water infiltration are appropriate for precipitation.

Native Species. Healthy, productive and diverse habitats for native species, including special status species (Federal T&E, Federally proposed, Federal candidates, BLM sensitive, or California State T&E, and CDD UPAs) are maintained in places of natural occurrence. As indicated by:

- Photosynthetic and ecological processes continue at levels suitable for the site, season, and precipitation regimes;
- Plant vigor, nutrient cycle, and energy flow are maintaining desirable plants and ensuring reproduction and recruitment;
- Plant communities are producing sufficient litter;
- Age class distribution of plants and animals are sufficient to overcome mortality fluctuations;
- Distribution and cover of plant species and their habitats allow for reproduction and recovery from localized catastrophic events;
- Alien and noxious plants and wildlife do not exceed acceptable levels;
- Appropriate natural disturbances are evident; and
- Populations and their habitats are sufficiently distributed and healthy to prevent the need for listing special status species.

Riparian/Wetland and Stream Function. Wetland systems associated with subsurface, running, and standing water function properly and have the ability to recover from major disturbances. Hydrologic conditions are maintained. As indicated by:

- Vegetative cover would adequately protect banks, and dissipate energy during peak water flows;
- Dominant vegetation is an appropriate mixture of vigorous riparian species;
- Recruitment of preferred species is adequate to sustain the plant community;
- Stable soils store and release water slowly;
- Plant species present indicate soil moisture characteristics are being maintained;
- There is minimal cover of invader/shallow-rooted species, and they are not displacing deep-rooted native species;
- Maintain shading of stream courses and water sources for riparian dependent species;
- Stream is in balance with water and sediment being supplied by the watershed;
- Stream channel size and meander is appropriate for soils, geology, and landscape; and
- Adequate organic matter (litter and standing dead plant material) is present to protect the

site and to replenish soil nutrients through decomposition.

Water Quality.[1] Surface and groundwater complies with objectives of the Clean Water Act and other applicable water quality requirements, including meeting the California State Standards, as indicated by:

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

Objective B – Conform Grazing Activities: Manage grazing activities with the following regional guidelines.

1. Facilities shall be located away from riparian-wetland areas wherever they conflict with achieving or maintaining riparian-wetland functions.

2. The development of springs and seeps or other projects affecting water and associated resources would be designed to protect the ecological functions and processes of those sites.

3. Grazing activities at an existing range improvement that conflict with achieving proper functioning conditions (PFC) and resource objectives for wetland systems (lentic, lotic, springs, adits, and seeps) shall be modified so PFC and resource objectives can be met, and incompatible projects shall be modified to bring into compliance. The BLM would consult, cooperate, and coordinate with affected interest and livestock producers(s) prior to authorizing modification of existing projects and initiation of new projects. New range improvement facilities shall be located away from wetland systems if they conflict with achieving or maintaining PFC and resource objectives.

4. Supplements shall be located a sufficient distance away from wetland systems so they do not conflict with maintaining riparian wetland functions.

5. Management practices shall maintain or promote perennial stream channel morphology

---

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

i. Where beneficial uses of water bodies have been listed as threatened or impaired pursuant to Section 303(d) of the Federal Clean Water Act;

ii. Where aquatic habitat is present or has been present for Federal threatened or endangered, candidate, and other special status species dependent on water resources: and,

iii. In designated water resource sensitive areas such as riparian and wetland areas.

(e.g., gradient, width/depth ration, channel roughness, and sinuosity) and functions that are appropriate to climate and landform.

6. Grazing management practices shall meet State and Federal water quality Standards. Where impoundments (stock ponds) and having a sustained discharge yield of less than 200 gallons per day to surface or groundwater are excepted from meeting State drinking water Standards per SWRCB Resolution Number 88-63.

7. In the California Desert Conservation Area all wildfires in grazing allotments shall be suppressed. However, to restore degraded habitats infested with invasive weeds (e.g., tamarisk) prescribed burning may be utilized as a tool for restoration. Prescribed burns may be used as a management tool where fire is a natural part of the regime.

8. In years when weather results in extraordinary conditions seed germination, seedling establishment and native plant species growth shall be allowed by modifying grazing use.

9. Grazing on designated ephemeral rangeland shall be allowed only if reliable estimates of production have been made, an identified level of annual growth or residue to remain on site at the end of the grazing season has been established, and adverse effects on perennial species are avoided.

10. During prolonged drought, range stocking shall be reduced to achieve resource objectives and /or prescribed perennial forage utilization. Livestock utilization of key perennial species on year-long allotments shall be checked about March 1 when the Palmer Severity Drought Index/Standardized Precipitation Index indicates dry conditions are expected to continue.

11. Through the assessment process or monitoring efforts, the extent of invasive and/or exotic plants and animals shall be recorded and evaluated for future control measures. Methods and prescriptions shall be implemented, and an evaluation would be completed to ascertain future control measures.

12. Restore, maintain or enhance habitats to assist in the recovery of federally listed threatened and endangered species. Restore, maintain or enhance habitats of special status species including federally proposed, Federal candidates, BLM sensitive, or California State T&E to promote their conservation.

13. Grazing activities shall support biological diversity across the landscape and native species and micro biotic crusts are to be maintained.

14. Experimental research efforts shall be encouraged to provide answers to grazing management and related resource concerns through cooperative and collaborative efforts with outside agencies, groups, and entities.

Utilization of Key Perennial Species by Livestock: The following prescription would be adopted to govern utilization of key perennial species by livestock in continuous year-long

operations:

- (LG-1) Based on Holechek's (et al., 1998) work or the best scientific information available, livestock utilization level of key perennial species in the Mojave Desert range type would not exceed 40 percent on ranges that are grazed during the dormant season and are meeting Standards. Rangelands that are grazed during the active growing season and are not meeting Standards shall not exceed 25 percent utilization of key species except as described in allotment management plans, decisions, or other management documents with a specific grazing strategy with prescribed level of perennial forage consumption. The utilization range between 25 and 40 percent is for those forage species with a proper use factor that would allow consumption up to and between 25 and 40 percent otherwise lower use limits would prevail. Until modified with current information, utilization of the following general range types as shown in Table 2-17 shall be prescribed for grazing use.

Table 2-17
Proposed Plan Grazing Guidelines for Range Types

RANGE TYPE	PERCENT OF USE OF KEY PERENNIAL SPECIES	
	POOR – FAIR RANGE CONDITION OR GROWING SEASON	GOOD – EXCELLENT RANGE CONDITION OR DORMANT SEASON
Mojave/Sonoran Desert Scrub	25	40
Salt Desert Shrub land	25	35
Semi desert Grass and Shrub land	30	40
Sagebrush Grassland	30	40
Mountain Shrub land	30	40
Pinyon-Juniper Woodland	30	40

Rangeland in good condition or grazed during the dormant season can withstand the higher utilization level. Rangelands in poor condition or grazed during the active growth season would receive lower utilization levels.

Monitoring of grazing allotments resource conditions would be routinely assessed to determine if Public Land Health Standards are being met. In those areas not meeting one of more Standards, monitoring processes would be established where none exist to monitor indicators of health until the Standard or resource objective has been attained. Livestock trail networks, grazed plants, livestock facilities, and animal waste are expected impacts in all grazing allotments and these ongoing impacts would be considered during analysis of the assessment and monitoring process. Activity plans for other uses or resources that overlap an allotment could have prescribed resource objectives that may further constrain grazing activities (e.g., ACEC). In an area where a Standard has not been met, the results from monitoring changes to grazing management required to meet Standards would be reviewed annually. During the final phase of the assessment process, the Range Determination includes the schedule for the next assessment of resource conditions. To attain Standards and resource objectives, the best science would be used to determine appropriate grazing management actions. Cooperative funding and assistance from other agencies, individuals, and groups would be sought to collect prescribed monitoring data for indicators of each Standard.

2.2.5.2 Cattle Grazing Outside Tortoise Habitat and the MGS Conservation Area

The following prescriptions would be implemented for all cattle allotments managed by the BLM in the planning area that are not located within either desert tortoise habitat or the Mohave Ground Squirrel Conservation Area. Affected cattle allotments include Double Mountain, Oak Creek and Round Mountain.

- (LG-2) Health assessments would be completed prior to authorizing a grazing lease or renewal of grazing lease for Double Mountain, Oak Creek, and Round Mountain.

- (LG-3) Within 12 months after completing a Health Assessment for a specific area (i.e., grazing allotment, watershed, etc.), the BLM would use field and office information to make a health determination, which would serve as baseline information to develop corrective management strategies. Where a determination indicates that standards are not being achieved, changes in grazing management would be implemented that may result in new terms and conditions to achieve standards and conform to guidelines. Although not reiterated below, this same regulatory process would be required following specified time frames given for the health assessments that follow.

The West Mojave Plan's cattle grazing program affects public lands only; it does not address the grazing of cattle on private land.

2.2.5.3 Cattle Grazing Within Tortoise Habitat and the MGS Conservation Area

The livestock grazing management prescriptions listed below would be implemented for all cattle allotments managed by the BLM in the planning area that occur in desert tortoise habitat and within the Mohave Ground Squirrel Conservation Area. Affected cattle allotments include: Cady Mountain, Cronese Lake, Darwin, Hansen Common, Harper Lake, Lacey-Cactus-McCloud, Olancha Common, Ord Mountain, Pilot Knob, Rattlesnake Canyon, Rudnick Common, Tunawee Common, and Walker Pass Common.

Unless otherwise noted, all protective measures identified in Section 2.2.5.3 would be implemented in desert tortoise habitat and the MGS Conservation Area.

2.2.5.3.1 Management under Existing Federal Biological Opinions

In June 2002, the USFWS issued a biological opinion for the CDCA Plan, entitled *Biological Opinion for the California Desert Conservation Area Plan [Desert Tortoise] (1-8-01-F-16).* The reasonable and prudent measures set forth in the biological opinion, and terms and conditions to implement them, are applicable to the West Mojave planning area. The BLM must ensure that any permittee or lessee (hereafter referred to as lessee) complies with terms and conditions, which implement reasonable and prudent measures.

The second term and condition references the March 1994 opinion entitled, *Biological Opinion for Cattle Grazing on 25 Allotments in the Mojave Desert, Riverside and San Bernardino Counties, California (1-8-94-F-17).* A summary of applicable terms and conditions

for cattle activities are listed in Appendix O.

2.2.5.3.2 New Management Prescriptions

The following prescriptions comprise new management that would be implemented through plan adoption.

- (LG-4) The Lacey-Cactus-McCloud allotment boundary would be modified to exclude those portions that occur on China Lake NAWS.

- (LG-4a) Livestock kind and use designation in the Darwin Allotment would be converted from horse to cattle and the allotment would be incorporated within the Lacey-Cactus-McCloud Allotment.

- (LG-5) All cattle carcasses would be removed and disposed of in an appropriate manner (i.e., not buried) within two days of being found or, if this is not practicable, such reasonable time as is acceptable to the BLM authorized officer. Cross-country vehicle travel to remove cattle carcasses must have prior approval from the BLM.

- (LG-6) In all cattle allotments occurring in tortoise habitat outside of DWMAs, ephemeral authorization would only be granted when ephemeral production exceeds 230 pounds per acre. The Cady Mountain and Rudnick Common Allotments are outside DWMAs, but significant areas of high quality desert tortoise habitat are found within the allotment. Grazing use would continue until lessee voluntarily relinquishes all grazing use (see Section 2.2.5.8).

- (LG-7) New cattle guards would be designed and installed to prevent entrapment of desert tortoises. All existing cattle guards in desert tortoise habitat would be modified within three years of plan adoption to prevent entrapment of desert tortoises.

- (LG-8) Any hazards to desert tortoises that may be created, such as auger holes and trenches, would be eliminated before the rancher, contractor, or work crew leaves the site.

2.2.5.3.3 Health Assessments

(LG-9) Cady Mountain, Hansen Common, Lacey-Cactus-McCloud, Olancha Common, Rattlesnake Canyon, Rudnick Common, Tunawee Common, Walker Pass Common, and Whitewater Canyon Allotments would receive the highest priority for health assessments following adoption of the plan. Cady Mountain and Rudnick Common would be scheduled for assessment of public land health subject to a two-year review period. Allotments not relinquished after 24 months from adoption of the plan would be scheduled for public land health assessment within 18 months.

2.2.5.4 Cattle Grazing Within DWMAs

The livestock grazing management prescriptions listed below would be implemented for all cattle allotments managed by the BLM in the planning area that are located within tortoise DWMAs. Unless otherwise noted, all prescriptions identified in Sections 2.2.5.3 and 2.2.5.4 would also be implemented in DWMAs. Affected cattle allotments include Cronese Lake, Harper Lake, Ord Mountain and Pilot Knob; Valley Well allotment would not be affected.

2.2.5.4.1 Proposed Management Prescriptions

The following prescriptions comprise new management that would be implemented through plan adoption.

- (LG-10) No ephemeral authorizations would occur in DWMAs. Allotments currently capable of authorizing ephemeral and perennial forage for cattle use would be designated for perennial forage use only. Therefore, Pilot Knob Allotment would no longer be available for cattle grazing and all ephemeral production would be available for tortoise recovery and conservation. Authorizations related to grazing activities (e.g., range improvements) on the Pilot Knob Allotment would be cancelled and the allotment designation would be removed from the CDCA Plan.

- (LG-11) Issuance of temporary non-renewable (TNR) grazing permits would be prohibited in DWMAs for all lands below an elevation of 4,000 feet.

- (LG-13) When ephemeral forage production[2] is less than 230 pounds per acre, cattle would be substantially removed from portions of the allotment within the DWMA referred to as "Designated Exclusion Areas" (see Map 2-13) from March 15 to June 15.

- (LG-14) Cattle may remain past March 15 in expectation of ephemeral forage production over 230 pounds per acre. If this level of forage is not attained when weather conditions (e.g., warming of the soil) are appropriate, cattle must be substantially removed from Designated Exclusion Areas until such time as 230 pounds per acre ephemeral forage is achieved or June 15, whichever is earlier. This determination would be made based on the evaluation and judgment of the BLM authorized officer. If cattle must be removed, the operator would be given two weeks to remove them from the designated exclusion area.

- (LG-16) The term "substantially removed" recognized that a few individual cattle might wander into the Designated Exclusion Areas despite the operator's best efforts and regardless of management facilities (e.g., fences, water sources) that are in place.

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2 The *ephemeral production threshold* should not be confused with *ephemeral authorization*. The 230-pound *ephemeral production threshold* is intended to avoid competition between cattle and tortoises in years of poor rainfall and plant growth. *Ephemeral authorization* is different, in that it allows the lessee to increase the stocking rate during years when ephemeral plant growth is abundant. Whereas, ephemeral authorization would allow more cattle to be grazed (only outside DWMAs), the ephemeral production threshold would trigger the removal of cattle from Exclusion Areas (only inside DWMAs).

- (LG-17) The grazing strategy would be developed within a year and implemented within two years of plan adoption. The strategy would be a written plan detailing the area of removal, natural cattle movements, existing and potential improvements, and other constraints of cattle management.

- (LG-17a) The Ord Mountain Allotment Management Plan will be revised after adoption of the West Mojave Plan. As part of the implementation of the revised AMP, based upon available funding, range fences would be installed in two places to exclude cattle from high concentration tortoise areas round adjacent to the Ord Mountain Allotment: (a) along the southern boundary of the allotment, west of the Cinnamon Hills, in northern Lucerne Valley; and (2) along the eastern boundary of the allotment, in the vicinity of Box Canyon.

2.2.5.4.2 Health Assessments

(LG-18) Cronese Lake, Harper Lake, and Ord Mountain Allotments would be scheduled for assessment of public land health subject to a two-year review period. Allotments not voluntarily relinquished after 24 months from adoption of the plan would be scheduled for public land health assessment within 18 months.

- (LG-19) Based on concerns expressed by management and grazing lessee(s), conduct a study of tortoise nutritional ecology in relation to livestock grazing, comparable to studies performed in the Ivanpah Valley during the later 1990s. If appropriate, modify grazing program in response to study findings.

ATTACHMENT 2

The following terms and conditions must be met and maintained for sheep grazing use to be authorized:

1. Sheep grazing for the 1993 season will occur within established allotment boundaries. Only those operators which have current grazing leases in a particular allotment will be authorized to graze that allotment, unless prior written approval is obtained by the BLM.

2. Turnout in interim Category I and II desert tortoise habitat shall not be permitted.

3. Turnout in interim Category III desert tortoise habitat shall occur when the amount of ephemeral forage in an allotment or grazing area reaches 200 pounds (air-dried-weight) per acre. Should ephemeral production drop below 200 pounds per acre in Category III, you shall be required to remove the sheep from the vicinity or the allotment.

4. Grazing use within allotments is limited to the area delineated on the attached map.

5. No grazing is authorized except as approved annually by application. **ALL HERDERS SHALL HAVE A COPY OF THE CURRENT USE AUTHORIZATION IN THEIR POSSESSION AND A COPY POSTED ON THE CAMP TRAILER.** When trailing, all herders are required to have a copy of the current trailing authorization.

6. Sheep bands are limited to no more than 1,000 sheep with an approximately equal numbers of lambs.

7. Grazing use is limited to one pass per season at a given location. A pass is identified by physical evidence that sheep use has occurred. Sheep shall graze in a loose or scattered pattern. Within 15 days after the close of the authorized grazing period, the lessee/permittee **must** submit a Bureau supplied map delineating areas of use within the allotment.

8. **NO BEDDING OR WATERING SITE CAN BE USED FOR MORE THAN ONE DAY. NEW BEDDING OR WATERING SITES MUST BE AT LEAST 1/4 MILE FROM PREVIOUS SITES.**

9. The herder will utilize previously disturbed sites for all bedding and watering locations. **DO NOT USE DESIGNATED** PROGRAMTONAL CAMPING SITES AS WATERING OR BEDDING SITES

10. No bedding or watering sites are allowed within 1/4 mile of any paved road. A herder shall be present when sheep are grazing or otherwise moving within a 1/4 mile from any paved road. The herder need not be present when sheep are bedded during mid-day or at night.

11. Stopping and parking of vehicles, and vehicular camping along routes of travel shall be limited to within 50 feet of all routes in multiple-use Class "L" and "M" as described in the California Desert Conservation Area Plan. Stopping, parking and camping can be anywhere in class "I" (i.e. Off-Highway Vehicle Open Area).

12. **A CAMP SITE OR CAMP TRAILER CANNOT REMAIN IN THE SAME LOCATION FOR MORE THAN SEVEN (7) DAYS. A NEW CAMP LOCATION MUST BE AT LEAST ONE (1) MILE FROM ANY PREVIOUS CAMP LOCATION.** In an effort to control raven predation, trash and garbage must be removed from each camp site; no trash or garbage is to be buried at the camp site. All sheep carcasses within 300 feet of a road shall be removed.

13. All sheep shall be watered on or immediately adjacent to dirt roads (within 25 feet) or sheep shall be watered in areas that have been cleared of shrubs from past use. For safety sake, care should be exercised when watering sheep on a dirt road.

14. **FAILURE TO COMPLY WITH THE ABOVE TERMS AND CONDITIONS AND AFTER RECEIVING A THIRD VERBAL WARNING FOR FAILURE TO COMPLY WITH THE TERMS AND CONDITIONS SHALL RESULT IN THE REVOCATION OF GRAZING AUTHORIZATION FOR THE BAND(S) IN NON-COMPLIANCE (43 CFR 4130.6-1(b)).**

APPENDIX 2

2.2.5.8 Voluntary Relinquishment of Cattle and Sheep Allotments

(LG-29) The BLM's CDCA Plan does not currently provide for voluntary relinquishment of BLM cattle and sheep allotments, but would be amended to allow for this action.

Voluntary relinquishment of a grazing permit or lease, combined with a decision in the West Mojave Plan designating selected public lands not available for livestock grazing, is an important method for achieving conservation goals for desert tortoise and other sensitive species. By itself, voluntary relinquishment has no effect on whether an allotment may be grazed. BLM may transfer the forage made available as a result of the relinquishment to a new permittee or lessee if grazing is an allowable use under the existing land use plan. Any qualified applicant can apply for the available forage. When combined with a land use planning decision designating public lands not available for livestock grazing, voluntary relinquishment can result in long-term reduction or elimination of grazing on public lands. Land use planning decisions are not irreversible, however, and a decision to designate lands as available or not available for livestock grazing can be changed through a subsequent plan amendment or revision.

Upon approval of the West Mojave Plan, allotments identified for voluntary relinquishment would continue to be available for livestock grazing under the terms and conditions of the plan until: (1) a permittee or lessee submits a written request for voluntary relinquishment, (2) BLM and the permittee or lessee agree on a timeframe, and (3) BLM complies with all statutory requirements including issuance of a grazing decision in accordance with 43 CFR 4160.1 based on site-specific environmental review, consultation with affected parties, and such other procedures as may be required by statute or regulation. A grazing decision can be appealed.

BLM has been contacted by third parties who have expressed an interest in acquiring the grazing preference and permit/lease in the West Mojave planning area for purposes other than livestock grazing. Private parties may utilize a variety of financial arrangements and sale contracts to acquire ranches and transfer the associated grazing permit. BLM is not a party to these private agreements. While BLM may acknowledge an agreement in the planning process in connection with a voluntary request for relinquishment, BLM conducts its own analysis and makes its own independent decision about devoting public rangelands to a use other than livestock grazing.

BLM's decision whether to identify an allotment for voluntary relinquishment and subsequent designation of the public lands as not available for grazing is based on criteria set forth in the BLM Land Use Planning Handbook, H-1790-1, Appendix C. A separate plan amendment or revision will not be required where voluntary relinquishment is identified below as a management action for an allotment.

Grazing use would continue until the lessee voluntarily relinquishes its grazing preference and lease. Upon relinquishment, BLM would, without further analysis or notice: not

reissue the lease; remove the allotment designation; assume any and all private interest in range improvements located on public land; and, designate the land within the allotment as no longer available for livestock grazing.

Voluntary relinquishment would only occur where the action would ultimately result in direct conservation benefits for special-status plant and animal species covered by the West Mojave Plan. Table 2-20 lists the grazing allotments and covered species that would benefit from this action.

Allotments identified as "Common" (e.g. Rudnick Common) are so-named because multiple lessees have grazing rights on those allotments, and several of them are identified for both cattle and sheep grazing. Lessees may request voluntary relinquishment of the portion of common allotments they are permitted to graze where use areas have been identified through an allotment management plan, or where management areas or pastures have been assigned by BLM in accordance with 43 CFR 4110.2-4. Where common allotments are not divided into use areas, voluntary relinquishment must be requested by all lessees permitted to graze the allotment.

Table 2-20
Special-Status Species That Would Benefit From
Voluntary Relinquishment of
Cattle and Sheep Allotments

CATTLE ALLOTMENT	SPECIAL-STATUS SPECIES
Cady Mountain	Desert tortoise, bighorn sheep
Cronese Lakes	Desert tortoise
Harper Lake	Desert tortoise, Mohave ground squirrel, desert cymopterus,
Ord Mountain	Desert tortoise, Mojave monkeyflower
Pilot Knob	Desert tortoise, Mohave ground squirrel, desert cymopterus
Cady Mountain	Desert tortoise, bighorn sheep
Cronese Lakes	Desert tortoise
Harper Lake	Desert tortoise, Mohave ground squirrel, desert cymopterus,
Ord Mountain	Desert tortoise, Mojave monkeyflower
SHEEP ALLOTMENT	**SPECIAL-STATUS SPECIES**
Bissell	Desert tortoise, Mohave ground squirrel, alkali mariposa lily
Boron	Desert tortoise, Mohave ground squirrel, desert cymopterus
Buckhorn Canyon	Desert tortoise, Mohave ground squirrel
Cantil Common	Desert tortoise, Mohave ground squirrel, Red Rock poppy, Red Rock tarplant
Lava Mountains	Desert tortoise, Mohave ground squirrel
Monolith-Cantil	Desert tortoise, Mohave ground squirrel, Barstow woolly sunflower
Shadow Mountains	Desert tortoise, Mohave ground squirrel
Spangler Hills	Desert tortoise, Mohave ground squirrel
Stoddard Mountain, East	Desert tortoise, bighorn sheep, Mojave monkeyflower
Stoddard Mountain, Middle	Desert tortoise, Mojave monkeyflower
Stoddard Mountain, West	Desert tortoise, Mohave ground squirrel, Barstow woolly sunflower
Bissell	Desert tortoise, Mohave ground squirrel, alkali mariposa lily
Boron	Desert tortoise, Mohave ground squirrel, desert cymopterus
Buckhorn Canyon	Desert tortoise, Mohave ground squirrel
Cantil Common	Desert tortoise, Mohave ground squirrel, Red Rock poppy, Red Rock tarplant

Lava Mountains	Desert tortoise, Mohave ground squirrel
Monolith-Cantil	Desert tortoise, Mohave ground squirrel, Barstow woolly sunflower
CATTLE & SHEEP ALLOTMENT	SPECIAL-STATUS SPECIES
Rudnick Common	Desert tortoise, Mohave ground squirrel, Red Rock poppy, Red Rock tarplant, Kelso Creek monkeyflower, yellow-eared pocket mouse