United States Department of the Interior
Bureau of Land Management

Environmental Assessment
DOI-BLM-CA-D05000-2015-

Allotment Boundary Fences

Location: Jawbone-Butterbredt ACEC
Applicant/Address: BLM Ridgecrest Field Office
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CHAPTER ONE

PURPOSE & NEED

1.1 Introduction and Background

In the hope of reducing the potential cumulative impacts to wildlife and plant species from mitigatable factors such as renewable energy projects and livestock grazing, Congress approved language in Public Law 112-74 supporting the "donation and termination" of domestic livestock operations in the Mojave Desert for "mitigation by allocating the forage to wildlife use . . ."(Consolidated Appropriations Act of 2012).

Approximately 5% of the existing Rudnick Common Allotment (9,000 acres of the 163,842 acres) was relinquished by the holder of the grazing lease in September 2015, using section 122(b) the Act. In completing this relinquishment and providing protection to the natural and cultural resources found there-in; the BLM is assessing the construction of protective fences.

The proposed project is to construct approximately 5.1 miles of fence along portions of Los Angeles Aqueduct 2 (LA2), SC330 and SC51. Accompanying this action, there would be a few strategically placed step-overs for equestrians and hikers, vehicle barriers, cattle guards, locked gate and informational signs. The area encompasses the Robber's Roost Birds of Prey Nesting Area which is seasonally closed to access and has already had some protective barriers, restoration and fencing completed in the front country. It is within the Jawbone-Butterbredt Area of Critical Environmental Concern (ACEC) and is not within wilderness (see Attached Map, page 24). An added benefit of the fences, barriers and signs will be to encourage off-highway vehicle travel to stay on designated routes and adhere to the seasonal closure.

1.2 Purpose and Need for the Proposed Action

The primary purpose of this action is to provide habitat protection and rangeland management by reducing cattle access to the relinquished portion of grazing allotment. This action is needed to protect the unique and sensitive resources of the area including the geological, cultural, wildlife, historical, and scenic quality. The need for action also includes allowing the cattle to be herded through the delineated 'transport area' between the Los Angeles Aqueduct 1(LA1) and Los Angeles Aqueduct 2 (LA2).

1.3 Conformance with BLM Land Use Plan(s):

All alternatives have been analyzed and have been found to be within the scope of the following land use plans and has been found to be in compliance with the goals and objectives of these documents (as required by 43 CFR 1610.5):

The California Desert Conservation Area Plan (1980) as amended
The Jawbone-Butterbredt ACEC Plan (1982)

1.4 Relationship to Statutes, Regulations, or other Plans:

All alternatives have been analyzed within the scope of the following statues, regulations, and policy and has been found to be subject to:

1964 Wilderness Act
1994 California Desert Protection Act
2006 West Mojave Plan

CHAPTER TWO

DESCRIPTION OF ALTERNATIVES, INCLUDING PROPOSED ACTION

2.1 Alternative A – Proposed Action:

The proposed action is construction of a total of approximately 5.1 miles of livestock proof protection fencing, additional route designation carsonites, a locked gate, up to five Robber's Roost Informational signs, up to eight vehicle proof barriers and up to four pedestrian-equestrian step-overs if needed. The relinquishment of the grazing lease in this part of the allotment does not require NEPA action as it is covered by PL 112-74.

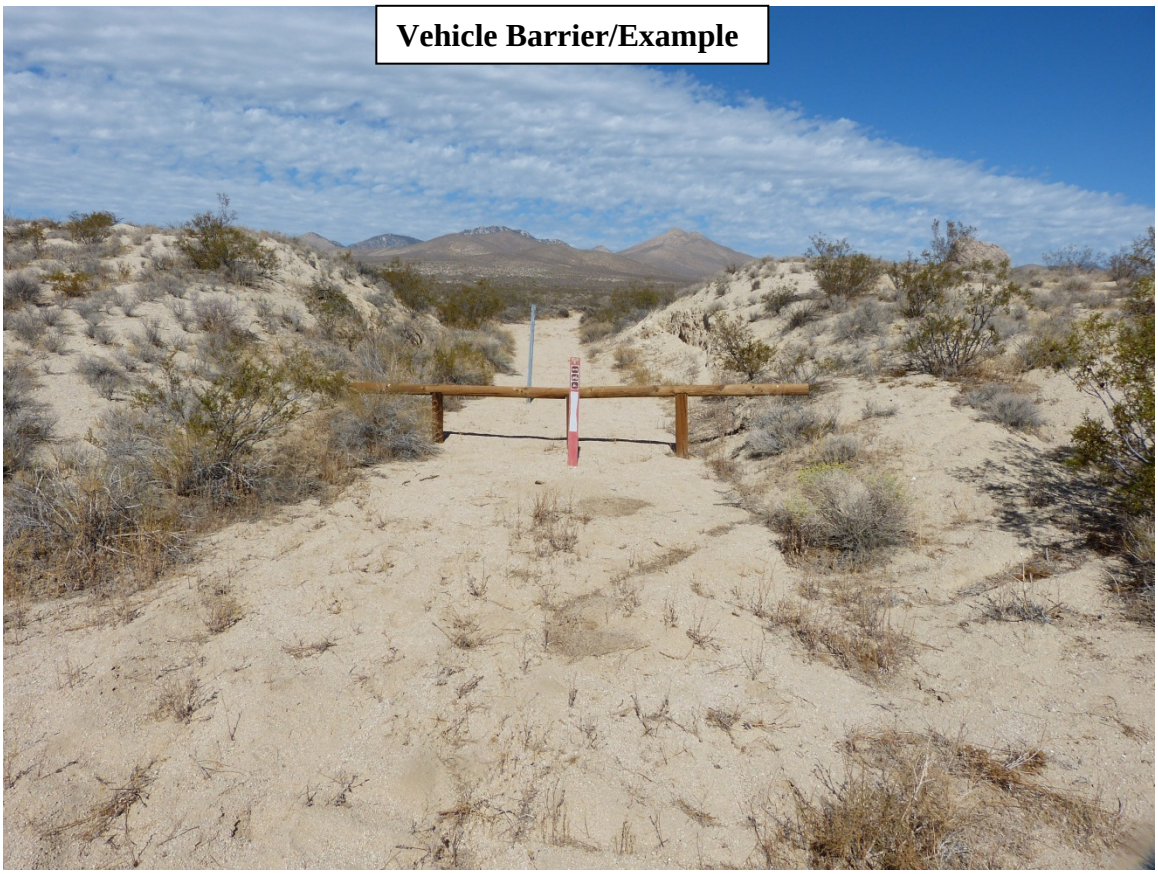
Fences
The fences will be constructed within a Limited Use Area where vehicles are restricted to approved, i.e., designated, routes of travel only. The locations of the proposed fences would be T. 27S., R. 37E., sec. 13, sec. 15, sec 22., sec. 23, sec. 24, sec. 25, T. 27S., R. 38E., sec. 7, sec. 18, sec. 30 along routes LA2, SC330 and SC51 and would total about 5.1 miles. The fence would be constructed along LA2 starting at the terminus of the existing fence south of SC327 and continuing approximately 1.8 miles south along LA2 to the SC51 intersection. The second fence would go from the terminus of the LA1 fence at the corner of SC51 and would run along SC51 east 1.4 miles to the intersection with the Powerline Road. The easement for the LADPW would be taken into consideration. The third fence would go from the western terminus of the SC51 fence (approximately 0.25 northwest from the intersection of SC51 and SC333) and would run along SC51 northwest1.6 miles until the intersection of SC51 and SC82. There the fence would tie into a proposed cattleguard spanning SC51. The other end of the proposed cattleguard would tie into the terminus of the existing fence along SC82. The forth fence would go from the terminus of existing fencing along SC330, and run along SC330 west for 0.15 miles. The fence would then turn off of SC330 and run directly north 0.2 miles where it would tie into an existing fence which runs east-west just south of Freeman Wash. (See map on page)

The fences will be built with a smooth wire at the bottom and 3 barbed wires at the top. The spacing of the wires from the ground to the top wire will be 16, 8", 6", & 12". The fence will be constructed with metal T-post, wooden H braces and pull post, surface disturbance will be minimal. Warning signs (reflectors) will be installed along the length of the fence and a 16" high gap would be provided along the base of the fence to enable the movement of wildlife (i.e. desert tortoises). Barriers would bridge gaps (washes) between natural obstacles.

No designated open routes of travel would be closed by this proposed action. There is currently an existing fence along SC51 and LA2 that the crew can emulate for the new fence.

Vehicle Barriers

Up to eight vehicle barriers are being proposed within the Robber's Roost Area. Some already exist, but are in need of repair. The proposed barriers will mostly occur over washes and washlets. The barriers will not close off any designated routes of travel. The types of barriers could be post and cable, wooden H-braces, and large boulders. All barriers will be signed to warn the public. The BLM will work with the construction crews to identify the priority sites and appropriate barrier type.



Equestrian/Pedestrian Step-overs

While the primary purpose of the fences is to restrict cattle from entering the relinquished area, it should have a beneficial impact on preventing OHV traffic from entering the Robber's Roost Area on non-designated routes. With other recreational uses in mind, we propose a few strategically placed equestrian-pedestrian step-overs, called horse stiles, along the eastside of SC51 fence line. The height will be no more than 16 inches and the length and width shall be 60" by 60" (See example photo below). Similar stiles exist in the vicinity, such as in Indian Wells Canyon.

1. A step-over would be placed in the fence running along SC51 one at the intersections with LA1.

2. Another stepover could be placed in the fence on SC 51 between LA1 and the Powerline where there is adequate parking perhaps where SC51 makes a turn from NorthWest to due west.

General Best Management Practices

1. Cattleguards will be placed and filled with dirt so that tortoises and other wildlife can walk out of them if they fall through.

2. Break or cut vegetation only to the extent necessary to construct fence. Do not clear fence line of vegetation and do not cut limbs with bird nests on them.

3. Minimize soil disturbance. Construction crews will walk in and carry tools, equipment and materials to all work sites. NO off-route travel in vehicles is allowed.

4. Reduce introduction of noxious weed seed by cleaning tools and machinery prior to entering project site.

5. Warning signs (reflectors) will be installed on fences, barriers, etc.

6. Posts and signs will be put in well away from existing animal burrows. A pre-construction survey for wildlife burrows will occur within a week prior to construction. Posts can be moved along the fence line to avoid hitting a burrowing animal or damaging a burrow.

7. Protective stipulations for desert tortoises and Mohave ground squirrel are a part of the project and are attached in **Appendix B** of this document and must be adhered to. Applicable stipulations include the following precautions: Fenceline construction will occur during the inactive season, the crew will be informed that tortoises inhabit the area, project-related vehicles may not exceed 20 miles per hour, the work crew will actively look for tortoises along the roads to prevent hitting them, workers would inspect under their vehicles before moving them, and tortoises are not to be handled or disturbed in any way.

8. A locked gate similar to the others in the area will be placed at one site along SC 51 for administrative uses. The location is noted on the map.

2.2 Alternative B – No Action:

Under the "no action" alternative, the proposed fences would not be constructed between the newly relinquished and un-relinquished portions of the allotment. No activities described in Alternative A would occur.

2.3 Alternatives Rejected From Further Analysis:

2.3.1 Alternative C:

Keep livestock out of the newly relinquished area via herding or other methods other than building a fence.

This alternative was not considered because it is not feasible or practical. This methodology is less effective and it is very expensive to keep a rider out there the entire time the livestock are in the adjoining pasture. Also, one rider may not be able to ensure that the cattle do not stray into the relinquished area.

CHAPTER THREE

Critical Element	Affected
Air Resources	***YES***
ACECs	***YES***
Cultural Resources	*NO*
Farmlands, Prime/Unique	*NO*
Floodplain management	*NO*
Nat. Amer Rel Concerns	*NO*
T&E Wildlife	***YES***
T&E Vegetation,	*NO*
Special Status Plants	*NO*
Water Resources	*NO*
Wastes, Hazardous/solid	*NO*
Wetlands/Riparian Zone	*NO*
Wild and Scenic Rivers	*NO*
Wilderness Management	*NO*
Wildlife Habitat/Species	***YES***
Fire management	*NO*
Land Use	*NO*
Mineral resources	*NO*
Paleontology	*NO*
Recreation	***YES***
Livestock Management	***YES***
Soils	***YES***
Environmental Justice	*NO*
Vegetation	***YES***
Visual resources	***YES***

AFFECTED ENVIRONMENT

Some of the resource elements that are not affected may not be discussed further.

3.1 Description of Affected Environment

Introduction:
This chapter presents the potentially affected existing environment (i.e., the physical, biological, social, and economic values and resources) of the impact area as identified in the Interdisciplinary Team Analysis Record Checklist found above. This chapter provides the baseline for comparison of impacts/consequences described in Chapter 4.

3.2 General Setting:
The proposed project would occur within the Jawbone-Butterbredt ACEC which is situated along the western boundary of the California Desert Conservation Area (CDCA) west of Ridgecrest, California. It can be found south of State Route 178 and west of State Route 14.

3.3 Elements of the Human Environment and Other Resources Brought Forward for Analysis:

3.3.1 Wildlife and Threatened and Endangered Species

Desert tortoise- *Gopherus agasizzii* (State and federally Threatened species)

Desert tortoises are found in a variety of desert scrub habitats, but have been shown to occur preferentially in areas of high plant diversity, such as along the edges of washes and in other ecotones. They require a specific soil friability to enable digging and to maintain burro strength as they spend nearly their entire lives (estimated 98%) underground, emerging to feed on grasses and forbs in early springs and again to breed in late summer and fall. They are long lived, require large home ranges (10 to more than 450 acres), and females do not begin breeding until they are 15 to 20 years old. Known to be declining range-wide, many legitimate and ongoing threats have been identified.

Recent fieldwork in the far western Mojave has documented extant populations of desert tortoise into the eastern foothills of the Scodie, Piute, and Tehachapi Mountains, with the entire eastern flank of the Resource Conservation Area mapped as having "high potential" for the species. Within the Jawbone-Butterbredt ACEC, many sightings have occurred near Robber's Roost.

The most recent information on the desert tortoise (life history, population trends, diet, reproduction, threats, etc) is found in the Tortoise Recovery Plan (USFWS, 2011).
The area is not within a designated Critical Habitat, Desert Tortoise Wildlife Management Area (DWMA). However, it is within suitable habitat and stipulations will be followed accordingly.

Mohave ground squirrel – *Xerospermophilus mohavensis* (State Threatened)

Using 1500 meters (about 5,000 feet) as the upper limits of its habitat, MGS is likely to be present along all proposed fence lines. This projects falls within the Mohave Ground Squirrel Conservation Area. The West Mojave Plan (U. S. Bureau of Land Management, 2004) identifies the eastern slopes of the allotment as the Sierra Foothills Habitat Connector. The Plan calls for close scrutiny of any actions in this area to avoid severing the populations to the north and south.

It prefers soils that are ideal for burro construction (avoiding hard packed soil and loose sand), and many threats have been identified as constraining the population. Four core populations were recently identified. One of which, "Little Dixie Wash," coincides nearly completely with the eastern half of the Rudnick Common Allotment. About 54% of all Mohave ground squirrel records are from Mojave creosote bush scrub, with about 20% from desert saltbush scrub and 9% from Mojave mixed woody scrub. There are many factors (like rainfall, etc) that regulate the Mohave ground squirrel population, but Dr. Phil Leitner has shown that winterfat (*Krascheninnikovia lanata*), spiny hopsage

(*Grayia spinosa*) and saltbush (*Atriplex sp*) are especially important in the diet of the species (US Bureau of Land Management, 2003).

3.3.2 Air & Climate Resources:

Air quality throughout the project area is generally good. There are, however, times that the area does not meet air quality standards due to locally generated and/or transported in pollutants. The east portion of the Kiavah Wilderness lies within the Mojave Desert Air Basin. The entire Wilderness is in attainment for ozone. Ozone pollutants occur primarily due to transport from San Joaquin Valley. The east side of the wilderness is in attainment/maintenance for PM_{10} emissions. Sources for PM_{10} emissions include traffic along the dirt routes close to the wilderness, such as the aqueduct roads, Bird Springs Pass Road, and other designated routes, and from illegal off-route vehicle use. The project area is within the Kern County Air Pollution Control District.

3.3.3 ACEC:

The proposed construction would occur within the Jawbone-Butterbredt Area of Critical Environmental Concern (ACEC), specifically in proximity to the Robber's Roost Birds of Prey Nesting Area. Robber's Roost is a large outcropping of granite rocks that serve as ideal nesting locations for species of birds such as Prairie Falcons (*Falco mexicanus)* and Golden Eagles (*Aquila chrysaetos*). The Jawbone-Butterbredt ACEC Plan of 1982 implemented the closure within 500 yards of Robber's Roost from February 1st to July 1st to protect and provide solitude for nesting raptors.

This ACEC is 211,000 acres and was established in 1980 by the CDCA Plan to protect outstanding wildlife and Native American values. Historically the ACEC has been very popular with OHV-users. Management prescriptions affecting the area are both ACEC and wildlife habitat management related. Special Area status assures that the habitat and associated species of known significance will be considered as key environment components during the Environmental Assessment process for future proposed land uses.

The Jawbone-Butterbredt ACEC management plan was implemented to protect significant and sensitive wildlife and cultural values from inadvertent damage caused by visitor use. For example, sensitive wildlife values include many birds of prey, desert tortoise and Mohave ground squirrel habitat. Cultural values include Native American heritage and religious sites traditionally used by the Kawaiisu.

3.3.4 Cultural Resources:

The relinquishment area (Area of Potential Effects or APE)) is about 9,000 acres in size. It is bounded by State Highway 14 on the east, State Highway 178 on the north, the Sequoia National Forest-BLM Kiavah Wilderness Area on the west, and the remainder of the Rudnick Grazing Allotment to the south. The project area encompasses a variety of environmental zones along with a series of riparian canyons. These canyons were used by prehistoric peoples as they moved about making use of seasonally available plant and animal food resources. Historic archaeological remains represent attempts at ranching, transportation, and water resource development.

Archaeological sites have been recorded sporadically within the relinquishment locale since the early 1950s, but between 2002 and 2004 four extended cultural resource surveys were conducted that directly included portions of the APE. URS Corporation, under contract to BLM, conducted a Class III (100%) inventory of the Jawbone and Dove Spring Open Areas, and then a Class II (sample) inventory of the surrounding Jawbone-Butterbredt ACEC (Bevill and Nilsson 2004). They covered 2,000 acres within the Jawbone, 3,300 acres within the Dove Spring, and an additional 5,185 acres of the Jawbone-Butterbredt ACEC, and recorded about 140 new sites. Approximately 70 acres of this total occur within the relinquishment boundary.

The heritage consulting firm Ancient Enterprises, Inc. (AE), from Santa Monica, also under contract to the BLM, conducted a 2,000 acre survey in areas surrounding the Jawbone and Dove Springs Open Areas, and recorded an additional 12 sites. However, none of their survey transects involved the current APE lands.

URS Corporation also conducted a linear site survey of the Los Angeles Aqueduct corridor, under contract to Los Angeles Department of Water and Power (LADWP), and recorded an additional 25 sites within the Jawbone-Butterbredt ACEC. About three miles of the LA Aqueduct traverses the APE, and this URS survey aggregated roughly 45 acres of Class III survey coverage within the APE.

During 2005 archeologists from the Anthropological Studies Center, Sonoma State University, working for Caltrans conducted surveys along Highway 14 for a proposed reconstruction of the road between Red Rock State Park and the junction of the highway with US Highway 395 in the north. They covered about 255 acres and recorded 22 archeological sites along Highway 14 within or adjacent to the Caltrans right-of-way, which borders the APE on its eastern boundary. While three sites were determined to be eligible for the National Register of Historic Places (NRHP), and are now considered Historic Properties, none of these three sites occurs within the relinquishment APE.

Starting in 2006 and continuing to the present, the BLM Ridgecrest Field Office has been conducting on-going Class III cultural resource surveys of many of the designated routes within the region, including the relinquishment area. Four field surveys conducted in conjunction with this initiative have been conducted within the APE by BLM archeologists. Three archeological sites have been recorded by these BLM sponsored surveys within the APE, with about 210 acres having been surveyed to date.

To date, approximately 365 acres of the relinquishment's acreage (4%) has been subjected to full Class III intensive cultural resources investigations, and twelve prehistoric and historic archaeological sites have been recorded within the relinquishment area. Prehistoric site types that have been recorded include permanent and seasonal habitation sites (Midden), bedrock milling areas (BRM), lithic scatters (LS) , and rock art features such as petroglyphs and pictographs. Historic period sites that have been recorded include rock walls, foundations, collapsed wood frame structures, abandoned mine shafts and adits, isolated rock cairns, historic trails and roads.

Starting in 2008, resource protection fencing for the Robber's Roost Area was initially constructed to reduce trespass into the area, especially during the sensitive nesting period. The fence followed a portion of LA2 and SC330 and five gates were installed at the entrances of SC330, SC333, and SC327 near the aqueduct road. A portion of SC51 north of LA2 was also fenced in a second round of fencing.
Historic site, Bandit Rock (also known as Robber's Roost), a prominent rocky uplift in the northeast sector of the allotment, was listed on the National Register Historic Places in 1976. The Los Angeles Aqueduct itself is presently under review for its eligibility for listing on the NRHP, and is being considered as an eligible property.

In 1972 the Keeper of the National Register placed the Last Chance Canyon Archeological District on the National Register based upon a short application from Mr. Alex Apostolides, acting as a private citizen. The boundary of this District was based upon latitude and longitude bearings centered on the Last Chance Canyon area of the El Paso Mountains. However, the northwest corner of this National Register District does occur within the relinquishment area.

The relinquishment area occurs within the 155,435 acre Jawbone-Butterbredt Area of Critical Environmental Concern (ACEC). The ACEC was established by the California Desert Plan of 1980 to allow management directions specific to the protection of heritage resources. There are geographical locations within the ACEC that are important to the local Kawaiisu Indian peoples for spiritual and religious reasons. The management plan for the ACEC evaluated these concerns in 1982 and determined that the existing uses of the Native communities are compatible with existing management priorities.

A listing of the twelve sites presently known to occur within the APE is displayed in Table One.

Table One: Archeological Sites Known to Occur Within the Relinquishment Area.

Site Number	**Type of Site**	**Potential of Effect**	**Potential Eligibility**
KER-0216	Rock shelter & BRM	Moderate	High
KER-3548/H	BRM-Petro; Hist Debris	Moderate	High
KER-3549H	LA Aqueduct 1 and 2	Low	High
KER-5869	Lithics Scatter	Moderate	Moderate
KER-6106	Major Habitation	High	High
	Hist Mining	Low	Low

KER-6649H	& Debris		
KER-6352	Rock shelter & BRM	Moderate	High
KER-6353	Rock shelter	Moderate	High
KER-7190H	Hist Foundation	Low	Low
KER-7760	Lithic Scatter	Moderate	Moderate
KER-7761H	Hist Trash Scatter	Low	Low
KER-7763	Lithic Scatter	Moderate	Moderate

KEY: BRM = Bedrock Mortar; Hist = Historic; Petro = Petroglyph

An analysis of these twelve sites shows that seven are prehistoric in nature, four are of the historic period, and one site contains elements from both eras. The historic sites represent surface evidences of mining, a foundation, a trash scatter, and the Los Angeles Aqueduct No.1 and No.2. The multi-component site contains historic trash and a bedrock mortar outcropping. The seven prehistoric sites include a major habitation site with extensive surface features; three rock shelters, two that include bedrock mortars associated with them; and three sparse lithic scatters.

A preliminary assessment of these twelve archeological sites for their eligibility for the National Register was recently undertaken. The analysis involved considerations of all four criteria for possible eligibility determinations. The NRHP Criterion are: Criteria A-Events important to American History; Criteria B-People who had an important role in American History; Criteria C-Unique Architectural or Engineering structures; and Criteria D-Contribution of data important to the interpretation of American Prehistory. While not yet fully confirmed, it appears that six of the twelve sites do contain attributes that would tend to confirm eligibility for the NRHP. Three sites appear to be problematic as their present potential would have to be rated as Moderate, with three sites containing minimum qualifying features or data, and as a result of this, they would probably be found Not Eligible for the Register.

Overall, there is a high probability that additional prehistoric and historic archeological sites occur within the relinquishment APE, but have not yet been identified or recorded to professional standards. It would take additional surveys of this APE before a full

understanding of the cultural resources that occur within the relinquishment area can be known.

3.3.5 Soils:
Soils in the project area are generally well-drained and coarse-textured, and are primarily developed from weathered and decomposed granite rock, leaving a coarse, sandy loam with a thin top soil layer and poorly developed subsoil horizons. The soil depth ranges from deeper alluvial materials to very shallow or nonexistent over the rocky substrate, with clay and calcium layers occurring at various depths in some areas. These soils have low moisture- and nutrient-holding capacities and the many rock outcroppings reduce the productive base and increase runoff potential. These soils are deemed highly erodible once vegetation has been removed and the surface has been disturbed. In many areas of Jawbone-Butterbredt, the soil has been subject to periodic surface disturbance due to livestock grazing for over 100 years. Additional soil disturbance is occurring on roadways and on undesignated roads and trails as a result of OHV use in the general area. Utility rights-of-way maintenance on the two Los Angeles ROWs, the aqueduct and power line corridors, also results in soil disturbance. Soil stability was evaluated in the Rudnick Common Allotment as part of the Rangeland Health evaluation. Forty four upland sites were evaluated and the soil surface factor in the allotment averaged 11.3; which is in the stable range. Soil impacts were noted at a number of sites within the allotment where cattle were concentrating. Most of these were developed sites at management facilities such as water developments and corrals.

3.3.6 Vegetation:
The project area is located at the western edge of the Desert Floristic Province as described in the *The Jepson manual: vascular plants of California* (Baldwin et al.). Sawyer et al. in *A Manual of California Vegetation* describe the vegetation as shrubland of the *Larrea tridentata-Ambrosia dumosa* alliance. The vegetation type is characterized by *Larrea tridentata* (creosote bush) and *Ambrosia dumosa* (burrobush or bursage) co-dominant in the shrub canopy (Sawyer et al.). Additional plants present include *Ericameria cooperi* (Cooper's goldenbush), *Acamptopappus sphaerocephalus* (rayless goldenhead), and *Ambrosia salsola* (burrobrush or cheesebush). No Special Status or otherwise rare plants are known to occur in the areas of proposed fence construction.

The *Larrea tridentata-Ambrosia dumosa* vegetation alliance has a rarity ranking of G5, S5 (Sawyer et al.). The ranking of G5 indicates that the alliance is “Demonstrably Secure- Common; widespread and abundant” on a global level”. The state ranking of S5 means that the alliance is “Secure—Common, widespread, and abundant in the state” of California (CNPS)

The relinquished portion of Canyons pasture includes a known occurrence of *Phacelia nashiana* (Charlotte’s phacelia), a BLM Special Status Plant (BLM Sensitive). CNDDB reports that more than 6000 individuals of *P. nashiana* were observed in the vicinity of Robber’s Roost in 2003. Although much of the P. nashiana habitat at Robbers Roost is comprised of terrain unfavorable to cattle (i.e, steep slope), at least some of the population is reasonably vulnerable to potential cattle trespass.

3.3.7 Recreation:

The project area supports a wide range of outdoor recreational opportunities and experiences including backpacking/hiking, horseback riding, rock climbing, hunting, birding, nature study, camping, mountain biking, four-wheel touring, rock hounding/mineral collecting, ATV and motorcycle riding, and target shooting. OHV activities are some of the most popular recreational activities in the area. OHV use is limited to designated roads and trails except within the Jawbone Canyon and Dove Springs Open Areas which are south of the proposed fences. Designated routes and trails were outlined by the Jawbone-Butterbredt ACEC Management Plan and are signed by brown carsonite signs with the Route Numbers on them. Some off-route OHV use does occur in and around the proposed project area.

3.3.8 Livestock Management

Livestock have been grazing Rudnick Common Allotment for the last 100 years and the BLM has permitted livestock for least the last 60 years. The area relinquished is on the northern boundary of the allotment and abuts the area around Walker Pass relinquished in 2013. In the lowland areas to the east of the mountains the forage is desert scrub and bunch grasses in areas.

3.3.9 Native American Concerns:

The majority of the area encompassed by the Rudnick Common allotment, including the current relinquishment area (APE), was inhabited at historic contact by the Kawaiisu Indians. The Kawaiisu, who have cultural affinities with both the California and Great Basin regions, occupied an area that included the Tehachapi Mountains, portions of the Kern River Valley, and the Walker Pass area. Other areas frequented by them, included the Antelope Valley and eastern Sierra Nevada canyons, such as Jawbone, Grapevine, and Sand. While not a federally recognized tribe, the Kawaiisu are recognized by the State of California, and a number of people of Kawaiisu descent still live the in Tehachapi and Kern River Valley area.

BLM has consulted with five Native American Tribes regarding the Rudnick Allotment specifically, including the acreage of the relinquishment area. The Tribes include the Bishop Paiute Tribe, the Big Pine Paiute Tribe, the Fort Independence Paiute Tribe, the Lone Pine Paiute-Shoshone Tribe and Timbisha Shoshone Tribe. The BLM requested comments and invited the tribes to consult under the *Executive Memorandum of April 29, 1994* (Government-to-Government Consultation) and other applicable laws and regulations. No tribes have requested to initiate consultation or have commented on this topic.

3.3.10 Visual Resources:

This area has significant man-made developments that have changed the natural setting.

CHAPTER FOUR

ENVIRONMENTAL IMPACTS

4.1.1 Alternative A – Proposed Action:

Wildlife (including T&E):

There would be no direct impacts to Special status species such as the desert tortoise, and Mohave ground squirrel. This action is within the Mohave ground squirrel Conservation Area, but this project would not negatively affect them provided certain fencing and construction techniques are followed that are stipulated in the project description and Appendices. Also any stipulations proposed by California Department of Fish and Wildlife should be adhered to. Indirectly, the impacts would generally be positive, with the reduction of impacts to wildlife habitat by OHV activity and cattle. Negative impacts to soil and vegetation would be reduced, important elements to burrowing species. The fence should cause more vehicles to run on designated open routes, and reduce the impacts to species. This project would not adversely affect this species provided certain fencing techniques, set forth in the project description, are followed.

There are few interactions between threatened and endangered wildlife species and fences. To prevent fatal interaction, the bottom wire of the fence would be constructed of smooth wire and not contain barbs. Also, reflectors would be placed on the fence lines in order for wildlife to see them and avoid them. Other species such as shrikes, enjoy fence lines as place to "stash" their daily catch and to impress mates.

A list and description of threatened or endangered plant species would be provided to the person building the fence and they would be tasked with avoiding those plant species.

Mitigation: None. As best management practices are incorporated into project description no further mitigation is necessary.

Air & Climate Resources:
No significant impacts are anticipated. The proposed project conforms to the implementation plans and doesn't exceed the deminimus emission levels and no further conformity determination is necessary.

Mitigation. None.

ACECs
The proposed action would implement ACEC plan management prescriptions that protect wildlife habitat and cultural values. As a result, impacts of this project would be positive and ultimately provide additional protection for aforementioned resource issues.

Mitigation. None.

Vegetation
Construction of the proposed fences would offer some protection for *Phacelia nashiana* against livestock trespass and potential grazing by cattle in the vicinity of Robbers Roost.

Along the immediate path of the proposed fenceline, some common species of plants and their seeds may be directly destroyed during fence construction. No special status plants would be negatively impacted by the proposed action.

Mitigation. None. As best management practices are incorporated into project description no further mitigation is necessary.

Noxious Weeds
As noxious weed species are not known to occur within the project area, the spread of existing noxious weeds would not be a concern. Construction of new fences would, however, create some level of soil disturbance and present the opportunity for the introduction of weed seed to the site via tools and machinery. Required washing of tools and machinery would eliminate this potential impact.

Mitigation. None. As best management practices are incorporated into project description, no further mitigation is necessary.

Soils
This alternative would cause slight impacts on soils. The proposed action may result in a small change in wind and /or water erosion potential over background levels but no increases over the current levels. There would be a slight decrease in compaction and erosion due to reduced livestock activity in the relinquished area. No use of heavy machinery during construction and periodic maintenance of the proposed fence lines would minimize site-specific disturbances to soils.

Mitigation. None. As best management practices are incorporated into project description no further mitigation is necessary.

Recreation
The fence and locked gate will block of access to one older existing mining disturbance area that is used as a campsite by some recreationalist. Routes that might be closed by the fence line are not designated open for use. The fence should improve the recreational environment in compliance with the ACEC Plan and implementation of the designated route system and will result in a net positive effect. Additionally step overs are a part of the design to allow hikers and other recreational users that recreate without motorized vehicles.

Mitigation. None. As best management practices are incorporated into project description no further mitigation is necessary.

Visual Resources
The proposed fence would introduce additional manmade linear features into an area laced with manmade linear intrusions in the form of the aqueduct and some vehicle trespass routes off of the designated route system. However, the proposed fence line would be set back from the centerline of the nearest available open, designated route in the area, and would be screened by creosote bushes and other surrounding vegetation.

Mitigation. None. As best management practices are incorporated into project description no further mitigation is necessary.

Livestock Management
A proportion of the cattle which graze Canyon Pasture will be discouraged from using the newly relinquished area by the two new fences. The fence on the southern side of Aqueduct Pasture effectively keeps cattle out of the relinquished area. The fence eastern side of Canyons Pasture, western side of the aqueduct, will reduce number cattle foraging in the vicinity of Robber's Roost

Mitigation
None

Cultural Resources:
The proposed fence alignment along the west side of the LA-2 designated route occurs within survey coverage of the 2004 URS investigation of the LA Aqueduct and its supporting infrastructure. This field coverage was conducted according to current BLM cultural resource policy and standards, thus, this coverage remains valid for analysis purposes of this environmental documentation. This 2004 survey did not identify any historic or prehistoric cultural resources within the APE that would be affected by the construction of this proposed fence line.

The proposed fence alignment along the north side of the SC-51 designated route was surveyed by BLM archeologists during September 2015 specifically for the analysis needs of this environmental assessment. The survey was conducted to BLM Class III intensive survey standards, but did not identify any cultural resources within a 30 meter (100 foot) wide transect immediately adjacent to the SC-51 roadbed. Thus, the construction of this proposed fence line will not have any effects upon any Historic Properties.

In addition, under the proposed action, there would be no change to cultural resources management components of the California Desert Conservation Area Plan as amended. Any proposed improvements or changes in the approved management plans would be reviewed pursuant to Section 106 of the National Historic Preservation Act as implemented in the *State Protocol Agreement between the California State Director of the Bureau of Land Management and the California State Historic Preservation Officer Regarding the Manner in which the Bureau of Land Management will meet Its Responsibilities under the National Historic Preservation Act (February* 2014); hereinafter referred to as the *Protocol*.

The proposed action would support continue livestock grazing in accordance with current management plans. The overall threats to cultural properties within the broader Rudnick Allotment would continue, but would not change significantly from current levels. Presently, the twelve recorded archaeological sites within the relinquishment area would be protected against continued livestock grazing. Under the proposed action, livestock grazing would be limited in the vicinity of these properties until an assessment of effects can be completed in accordance with procedures outlined in the *Protocol*. Under the proposed alternative, BLM would continue to implement the procedures outlined in the *Protocol* to identify historic properties that may be affected by livestock grazing. Where conflicts

between livestock grazing and significant cultural properties are identified, BLM would implement the appropriate Standard Protective Measures specified in the *Protocol*, or in cases where conflicts cannot be resolved, the BLM would consult with the California State Historic Preservation Officer pursuant to Section 106 of the National Historic Preservation Act and the *Protocol*.

Mitigation
None

Native American Concerns

Consultation with Native Americans to date regarding whether there could be significant effects to tribally important locations and resources located within the Rudnick Allotment or the relinquishment area have not identified any such concerns.

Mitigation
None

4.2.2. Alternative B – No Action

Wildlife (including T&E):
Cattle trespass may continue at the present level, with the possibility of loss of habitat in the proposed project area for the desert tortoises, Mohave ground squirrel, and other sensitive species.

Air & Climate Resources:
No significant changes in impact from the proposed action.

ACECs
Cattle trespass may continue the loss of habitat in the proposed project area. This would degrade the quality of the ACEC.

Vegetation
This alternative would allow the continuance of some livestock trespass into the relinquished portion of the allotment that contains a known occurrence of *Phacelia nashiana*. The plants do not possess spines or other robust defensive mechanisms and are presumably palatable to livestock.

Weeds
Noxious weeds are not presently known to exist in the vicinity of the proposed project area. Without the construction of any new fences the conditions would be expected to continue relatively unchanged.

Soils
Wind and water erosion would continue at the current rates.

Recreation
Recreational use by hiking and other non-motorized recreation would be less encumbered by this alternative. Recreational users would not be required to locate a step over to cross the areas that would have a fence line in Alternative A. Recreational access to the one older existing mining disturbance area that is used as a campsite would be maintained. Motor vehicle recreation would be on open routes which are not impacted by the fence line.

Visual Resources
Visual resources would be less impacted due to the fence not being constructed.

Cultural Resources

Under the No Action alternative, there would be no change to cultural resources management components of the California Desert Conservation Area Plan as amended. Cattle grazing would continue at current levels pursuant to planning and management prescriptions. Proposed range improvements and changes in approved management plans would be reviewed pursuant to Section 106 of the National Historic Preservation Act as implemented in the *Protocol*. The threats to the 12 cultural properties located within the relinquishment area boundary would continue but would not change significantly from current levels. As with the Proposed Action Alternative, livestock grazing would be limited in the vicinity of these properties until an assessment of effects can be completed in accordance with procedures outlined in the *Protocol*. As under the proposed alternative, BLM would continue to implement the procedures outlined in the *Protocol* to identify historic properties that may be affected by livestock grazing. Where conflicts between livestock grazing and significant cultural properties are identified, BLM would implement the appropriate Standard Protective Measures specified in the *Protocol*, or in cases where conflicts cannot be resolved, the BLM would consult with the California State Historic Preservation Officer pursuant to Section 106 of the National Historic Preservation Act and the *Protocol*.

Native American Concerns
Consultation with Native Americans to date regarding whether there could be significant effects to tribally important locations and resources located within the Rudnick Allotment or the relinquishment area have not identified any such concerns.

4.3 Cumulative Impacts Analysis:
"Cumulative impacts" are those impacts resulting from the incremental impact of an action when added to other past, present, or reasonably foreseeable actions regardless of what agency or person undertakes such other actions.

4.3.1 Past and Present Actions:
Past or ongoing actions that affect the same components of the environment as the proposed action are:

Implementation of the designated route network throughout the Western Mojave Desert is in accordance with the WEMO Plan Amendment to the CDCA Plan.

4.3.2 Cumulative Impacts:

As the area is significantly impacted with numerous man made enhancements; the fence and barriers would add to that visual affect. However, the area would remain within the BLM management objectives for that area.

Other resource elements do not have an effect, or have only a very minor direct or indirect effect so will not be analyzed for cumulative effect.

CHAPTER FIVE

CONSULTATION AND COORDINATION:
On-going NEPA actions are posted on the Ridgecrest BLM web site. Environmental Assessments are typically posted for 30 days prior to signing a decision. Members of the public can submit comments that will be considered prior to a decision. The public can request a copy of any signed EA.

PERSONS, GROUPS, AND AGENCIES CONSULTED
The U.S. Fish and Wildlife Service was consulted with a Not likely to Adversely Affect Concurrence request in October, 2015 based on the protective stipulation being applied (Appendix B). The California Department of Fish and Wildlife were part of this project from the beginning and additional comments and suggestions by them will be taken into consideration for the final EA.

Consultation with the State Historic Preservation Officer regarding the range permit process is accomplished pursuant to the procedures outlined in the *Protocol*. BLM Ridgecrest has submitted a schedule for the phased identification and evaluation of historic properties that might be threatened by continued grazing within the allotment. The *Protocol* provides a systematic long term management strategy to accomplish the identification and evaluation of cultural properties, as well as Standard Treatment Measures that may be utilized when BLM determines that significant historic properties would be affected by livestock grazing. In cases where BLM identifies that conflicts cannot be resolved, the BLM would consult with the California State Historic Preservation Officer pursuant to Section 106 of the National Historic Preservation Act and the *Protocol*.

List of Preparers

BLM employees who contributed to this EA are listed below.

Table: List of Preparers

BLM Preparers

Name	Title	Responsible for the Following Section(s) of this Document
Caroline Woods	Wildlife Biologist	Project Lead, Impact analysis for Wildlife and Threatened and Endangered Species.
Jack Hamby	CA State Range/Weeds Program Lead	Support and Preparation
Craig Beck	Recreation Branch Chief	Recreation
Donald J. Storm	Archaeologist	Impact analysis for Cultural Resources
Sam Fitton	Natural Resource Specialist	Impact analysis for Range/Livestock Grazing
Paul Rodriguez	Realty Specialist	Lands and Realty
Lynnette Elser	NEPA Coordinator	NEPA, Recreation, Purpose and Need

Non-BLM Preparers

Name	Title	Responsible for the Following Section(s) of this Document
Dan Tyree	Archaeologist	Field Surveys for Cultural Resources
Loren Dunham	CLM Intern	Impact analysis for Soil, Water, Air
Marcus Lorusso	Range Technician	Impact analysis for Vegetation, Noxious Weeds; GIS support

Branch Chief _____ Date _____

NEPA Compliance _____ Date _____

Appendix A: References Cited{tc "6.1 References Cited" \f A \l 2}:

Baldwin, B. G. et al. (Eds.). 2012. The Jepson manual: vascular plants of California, 2nd edition. University of California Press. Berkeley, CA.

Bureau of Land Management (BLM). 2006. West Mojave Plan Amendment to the CDCA Plan. California Desert District. Available online at: http://www.blm.gov/ca/st/en/fo/cdd/wemo.html

California Native Plant Society. 2014. Rare and Endangered Plant Inventory. Available online at: http://www.rareplants.cnps.org/detail/253.html

California Natural Diversity Database (CNDDB). 2014. Special vascular plants, bryophytes, and lichens list. California Department of Fish and Wildlife.

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A manual of California vegetation, 2nd edition. California Native Plant Society, Sacramento, CA.

Bureau of Land Management. 2005. West Mojave Plan Amendment (WEMO)

U.S. Fish and Wildlife Service, 2011. Revised Recovery Plan for the Mojave Population of Desert Tortoise (*Gopherus agassizii*).

APPENDIX B

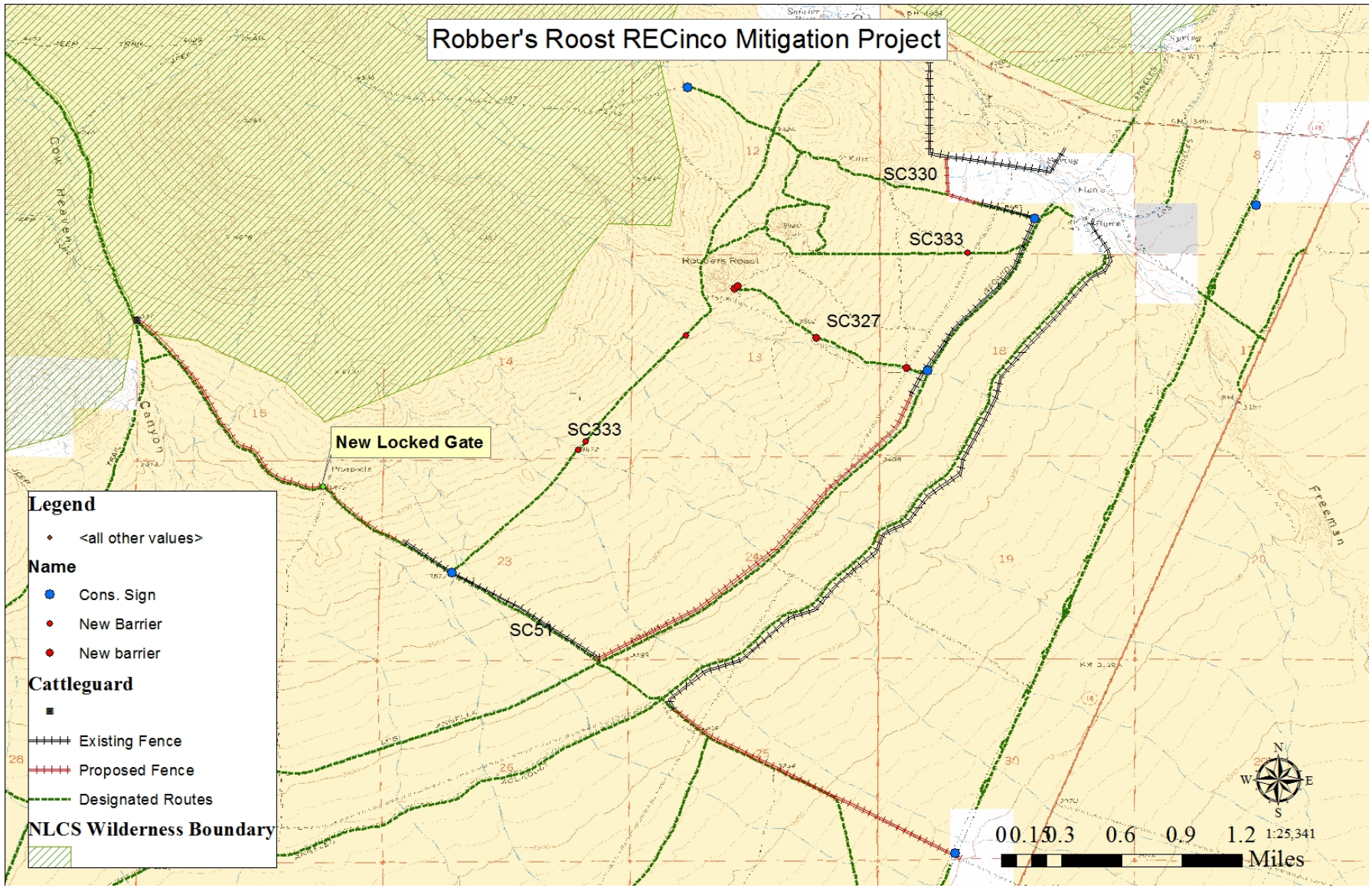
Protective Stipulations for Desert Tortoise and Mohave ground squirrel

The following measures shall be adhered to:

- All workers engaged in activities in this project will be educated by the BLM Biologist about the desert tortoise and the Mohave ground squirrel, including awareness on habitat requirements, activity patterns, and avoidance measures. Tortoise awareness stickers will be handed out for placement on vehicles and equipment.
- Prior to any ground disturbing activity, a biologist with experience in surveying for desert tortoise and their burrows will survey the entire site (15 meter swath on each side of proposed fenceline) and the locations of all desert tortoise and burrows will be marked for avoidance. While surveying for tortoises/burrows, the biologist will mark any squirrel sized holes for avoidance also. These burrows will be marked with a bird deterrent reflective tape and/or device to deter Ravens. If burrows are found, the fence will be re-aligned to avoid it. Any flagging/marking

used, will be removed after construction is complete.

- No desert tortoises can be handled at any time. If a desert tortoise is found on-site, all activity that may harm or kill the desert tortoise must cease until the desert tortoise leaves on its own accord.
- Avoidance measures would include only using established roads, walking on trails when possible, and avoiding walking on burrows. All vehicles must be parked in previously disturbed sites.
- The qualified desert tortoise monitor must be onsite and actively monitoring for desert tortoise ahead of any vehicles or other equipment that may be causing surface disturbance.
- When traveling on designated routes, a 20 mph will be enforced and drivers will exercise care to observe and avoid desert tortoise.
- Personnel must check under their vehicles prior to moving them. If there is a desert tortoise under a vehicle, the vehicle must not be moved until the desert tortoise leaves on its own accord.
- No pets (dogs, etc.) will be allowed at the project site.
- All trash and food items shall be promptly contained within closed, raven-proof containers
- Reduce introduction of noxious weed seed by cleaning tools and machinery prior to entering project site.
- Minimize soil disturbance.
- Break or cut vegetation only to the extent necessary to construct fence. Do not clear fence line.
- Construction on the fenceline will occur during the general inactive season for tortoises (in the inactive season (October-February) for the desert tortoise
- Please call the BLM Biologist at 760-384-5400 or 5425 with any questions.


Robber's Roost RECinco Mitigation Project
SC330
SC333
SC327
SC333
SC51
New Locked Gate
Legend
<all other values>
Name
Cons. Sign
New Barrier
New barrier
Cattleguard
Existing Fence
Proposed Fence
Designated Routes
NLCS Wilderness Boundary
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