

United States
Department of the Interior
BUREAU OF LAND MANAGEMENT
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553

May 30, 2003

Dear Reader:

Enclosed is the *Draft Environmental Impact Report and Statement (Draft EIR/S) for the West Mojave Plan*. The Bureau of Land Management (BLM), the federal lead agency, has prepared the Draft EIR/S in accordance with the National Environmental Policy Act (NEPA). The County of San Bernardino and the City of Barstow, the California lead agencies, have prepared the Draft EIR/S in accordance with the California Environmental Quality Act (CEQA).

This Draft EIR/S is a comprehensive environmental analysis of seven alternatives (including the No Action Alternative) that address compliance with the federal and California endangered species acts (FESA and CESA, respectively).

The purpose of the West Mojave Plan is to develop management strategies for the desert tortoise, Mohave ground squirrel and over 100 other sensitive plants and animals that would conserve those species throughout the western Mojave Desert, while at the same time establishing a streamlined program for compliance with the regulatory requirements of FESA and CESA. Agencies, local jurisdictions and others with a stake in the future of the western Mojave Desert have collaborated in the development of the West Mojave Plan.

The public is invited to submit comments on the Draft Plan and EIR/S. Ninety (90) days are being provided for the review. This duration has been selected to comply with BLM land use plan amendment (90 day) and CEQA (45 day) public review requirements. Responses to comments will be included in the Final EIR/S. Comments must be submitted in writing, and must be received at the following address by no later than Friday, September 12, 2003:

WEST MOJAVE PLAN
22835 Calle San Juan De Los Lagos
Moreno Valley, CA 92553

Public meetings will be held to obtain additional public input on the Draft Plan and EIR/S. All meetings will begin at 6 p.m. and will conclude at 9 p.m. The dates and locations of these meetings will be published in local media.

West Mojave

A Habitat Conservation Plan and California Desert
Conservation Area Plan Amendment

Draft Environmental Impact Report And Statement

May 2003



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EXECUTIVE SUMMARY

E.1 INTRODUCTION

The West Mojave Plan (Plan) is a habitat conservation plan and federal land use plan amendment that (1) presents a comprehensive strategy to conserve and protect the desert tortoise, the Mohave ground squirrel (MGS) and nearly 100 other sensitive plants and animals and the natural communities of which they are a part, and (2) provides a streamlined program for complying with the requirements of the California and federal Endangered Species Acts (CESA and FESA, respectively).

The Plan is being prepared through the collaborative effort of cities, counties, state and federal agencies having jurisdiction over lands within the region. The Plan will allow streamlined project permitting at the local level, equitable sharing of costs among participants, and shared stewardship of biotic resources. The collaborators include:

- ?? **Local Jurisdictions:** The cities of Adelanto, Barstow, California City, Hesperia, Lancaster, Palmdale, Ridgecrest, Twentynine Palms, and Victorville, and the towns of Apple Valley and Yucca Valley; the Counties of Inyo, Kern, Los Angeles and San Bernardino; and the Indian Wells Valley Water District.
- ?? **State of California:** The California Department of Fish and Game and California Department of Transportation
- ?? **Federal:** The Bureau of Land Management and the United States Fish and Wildlife Service.

These agencies and local jurisdictions are cooperating with a variety of non-governmental organizations, including businesses, environmental organizations, user groups and others with a stake in the future management of the planning area, to develop the West Mojave Plan. Over 100 non-governmental organizations (NGO) have participated in this process. Representatives of the agencies, jurisdictions and NGOs comprise the West Mojave *Supergroup*.

The 9,359,070-acre planning area is located to the north of the Los Angeles metropolitan area. The Plan's conservation program applies to both public and private lands within this area. These lands include 3,263,874 acres of BLM-administered public lands, 3,029,230 acres of private lands and 102,168 acres of lands administered by the State of California.

This Executive Summary is organized as follows:

- ?? A brief description of each of the seven alternatives analyzed by this EIR/S
- ?? A summary of the impacts that would result from implementing each of the seven alternatives
- ?? A discussion of the relative likelihood that each of the seven alternatives would achieve the biological goals and objectives established for each of nearly 100 sensitive species addressed by this plan.

E.2 ALTERNATIVES

The West Mojave Plan identifies measurable biological goals and objectives for each of the sensitive species that is addressed by the Plan. This Draft EIR/S examines seven alternative conservation strategies, each of which presents a different and unique approach to achieving those biological goals and objectives. The seven alternatives include the following:

- ?? **Alternative A: PROPOSED ACTION - HABITAT CONSERVATION PLAN.** This alternative presents a multi-species conservation strategy applicable to public and private lands throughout the planning area. It would serve as (1) an amendment of BLM's CDCA Plan for public lands, and (2) a "habitat conservation plan" for private lands. Incidental take permits would be issued to participating local jurisdictions and state agencies.
- ?? **Alternative B: BLM Only.** This alternative consists of those elements of Alternative A that are applicable to, and that could be implemented on, BLM-administered public lands. It is applicable to public lands only.
- ?? **Alternative C: Tortoise Recovery Plan.** This combines those elements of Alternative A that are applicable to the Mojave ground squirrel and other sensitive species with the management program recommended by the 1994 Desert Tortoise (Mojave Population) Recovery Plan. CDCA Plan amendments and a habitat conservation plan would be adopted and incidental take permits would be issued to participating local jurisdictions and state agencies. The public expressly requested detailed consideration of this alternative during NEPA scoping meetings.
- ?? **Alternative D: Enhanced Ecosystem Protection.** This alternative places a high priority on the conservation of sensitive plants and animals, even if adoption of those recommendations would limit motorized vehicle access to and multiple use of the western Mojave Desert. Its recommendations had their origin in discussions among the participating agencies and members of the public during NEPA scoping and the development of Alternative A. CDCA Plan amendments and a habitat conservation plan would be adopted and incidental take permits would be issued to participating local jurisdictions and state agencies.
- ?? **Alternative E: One DWMA – Enhanced Recreation Opportunities.** This alternative places a high priority on multiple uses of desert lands, including motorized vehicle recreation, even if this might preclude the implementation of some of the programs that otherwise might be implemented to conserve species and ecosystems. It also responds to a specific request raised by the public during scoping meetings that the EIR/S explore whether a single DWMA, protecting only the remaining areas of relatively higher tortoise populations, might be an effective means of conserving desert tortoises. CDCA Plan amendments and a habitat conservation plan would be adopted and incidental take permits would be issued to participating local jurisdictions and state agencies.
- ?? **Alternative F: No DWMA – Aggressive Disease and Raven Management.** This alternative proposes a tortoise conservation strategy that relies on an aggressive program of tortoise disease management and raven control, supported by limited fencing, rather than the establishment of tortoise DWMA's to protect habitat. Subject to these

modifications, the Alternative A conservation program for other species would be implemented. CDCA Plan amendments and a habitat conservation plan would be adopted and incidental take permits would be issued to participating local jurisdictions and state agencies.

?? **Alternative G: No Action.** Existing conservation strategies currently being applied by each of the participating agencies would continue to be implemented.

E.3 SUMMARY OF IMPACTS

The West Mojave Plan was initiated as a species protection plan under Section 10(a) of the FESA and Section 2081 of the CESA. However, Alternatives A, B, C, D and E set a framework for the local jurisdictions to adopt the West Mojave Plan as a Natural Community Conservation Plan (NCCP). Alternative E does not provide sufficient conservation to allow approval as a NCCP, and Alternatives F and G have a different approach, not based on land conservation, that does not conceptually match the goals of an NCCP. Depending on the alternative or combination of measures from each alternative chosen by the BLM, the local jurisdictions could adjust the framework conservation measures accordingly to create a NCCP. With an NCCP, incidental take permits can be issued based on conservation in the plan as a whole under Section 2835 of CESA, rather than based on species-specific conservation measures and mitigating measures as under Section 2081.

Alternatives A through E vary in the amount of new conservation within DWMA, ACECs, and Conservation Areas from 1.20 million acres (19.8% of the total for natural communities) to 1.79 million acres (29.4%) in Alternative C. These new conservation areas add to the existing 1.15 million acres (18.4%) and achieve much greater protection of desert tortoise habitat. For the primary communities of this habitat, creosote bush scrub and saltbush scrub, the increase in habitat conservation is 23-34%. The proportional increase is similar for the Mohave ground squirrel.

In addition to increasing the quantity of habitat conserved, the Plan focuses on protecting the highest quality tortoise and ground squirrel habitat, as defined by highest sign counts and live tortoises and persistent capture locations for the Mohave ground squirrel. The alternatives incorporating private land conservation (A, C, D, E) create large habitat blocks capable of sustaining ecosystem processes, landform diversity, all trophic levels and populations large enough to be viable in the face of fluctuations caused by the extreme desert environment. For the desert tortoise, maintenance of conserved habitat with a high carrying capacity is necessary for recovery after the disease runs its course or a cure is found, and after raven predation is reduced.

The Plan presents significant cumulative impacts, both positive and negative to most of the covered species. The beneficial cumulative impacts include the establishment of large, unfragmented habitat blocks, measures to reduce tortoise mortality, measures to minimize disturbance impacts to conserved lands and measures addressing unique components of diversity, such as endemic species, disjuncts and habitat specialists. The provision of incidental take areas where permitting is streamlined accommodates development of large acreages of habitat. The

developed lands put increasing pressure on the conserved lands, from resource extraction, incidental land uses such as utilities and from recreation. The allowable loss of habitat exceeds conservation in all alternatives. Cumulatively this loss would reduce populations of many species in a very substantial way. As long as the targeted species, which are the rarest and those with known declines, are adequately conserved in the Habitat Conservation Area, the cumulative impact would not be significant or adverse. The more common species would survive within the HCA and are present in abundance outside the west Mojave as well.

Although large acreages are available as incidental take areas, not all of these lands would be developed or even disturbed during the term of the Plan. The growth projections for urban development can be accommodated on a small fraction of the land within the ITA. Many areas without water, utilities, or easy access would remain undeveloped, even from rural residences. The monitoring and adaptive management aspects of the Plan would track the success of the conservation measures, and these undeveloped lands would remain available if alterations are needed in the quantity of conserved lands in the future. They are also available for future recreation areas and for developments such as mining or energy production that can be pursued in remote areas. The allocation of lands for different uses achieved by the West Mojave Plan should not be considered as the final determination of land use for the planning area. It is rather a dynamic process of utilizing the best available science and land use planning to achieve conservation of the species and communities known to be in jeopardy. Technologies of the future can and are expected to alter provisions of the Plan to improve upon the implementation of its objectives.

Motorized Vehicle Access Network Mileage: Alternative A recommends a route network that includes 2,265 miles of open routes within a “redesign area”, 159 miles within the Ord Pilot region, 406 miles within ACECs for which route networks were designated after 1980, and 2,268 miles of remaining 1985-87 designations, or 5,098 miles overall, a total that includes single-track motorcycle routes. This compares to 4,260 miles currently designated open, although that network does not include all single-track routes (many of which were not surveyed in 1985-7) and provided little or no designations for the Middle Knob, Amboy and Ord subregions. Proposed mileage of non-motorcycle routes in higher density tortoise population areas would be 384, a decrease from the 439 miles currently open. The 406 miles within the ACECs be a decrease from the current 427.

E.4 BIOLOGICAL GOALS AND OBJECTIVES: WOULD THEY BE MET?

E.4.1 Desert Tortoise

This section considers the four biological goals and associated objectives identified for desert tortoise conservation by the USFWS and CDFG in 1998 during biological evaluation meetings (U.S. Bureau of Land Management 1999). The goals and objectives are reiterated, and followed by tables that indicate for each alternative whether the goals and objectives are met or not. Generalized summary statements follow indicating why certain objectives are met or not.

Alternatives are reiterated as follows:

- ?? **Alternative A:** Proposed Action – Habitat Conservation Plan
- ?? **Alternative B:** BLM Only
- ?? **Alternative C:** Tortoise Recovery Plan
- ?? **Alternative D:** Enhanced Ecosystem Protection
- ?? **Alternative E:** One DWMA – Enhanced Recreation Opportunities
- ?? **Alternative F:** No DWMA – Aggressive Disease and Raven Management
- ?? **Alternative G:** No Action

Goal 1: Protect sufficient habitat to ensure long-term tortoise population viability (see Table ES-1).

Objective 1.1: Establish a minimum of three, preferably four, Desert Wildlife Management Areas that would be managed for the long-term survival and recovery of the desert tortoise, and which would also benefit other special-status plant and animal species.

Objective 1.2: Ensure that at least one DWMA exceeds 1,000 square miles in size

Objective 1.3: Design DWMA's so that they are well distributed across the recovery unit, edge-to-area ratios are minimized, impediments to the movement of tortoises are avoided, and (where feasible) boundaries are contiguous.

**Table ES-1
Tortoise Biological Goal 1**

BIOLOGICAL GOAL 1	SEVEN ALTERNATIVES UNDER CONSIDERATION						
OBJECTIVES	A	B	C	D	E	F	G
1.1 Establish 3 or 4 DWMA's	Yes	Yes	Yes	Yes	No	No	No
1.2 At least one DWMA 1,000 mi ²	Yes	No	Yes	Yes	Yes	No	No
1.3 Good reserve design	Yes	No	Yes	Yes	No	No	No

Alternatives A through D share the common characteristics of establishing four DWMA's, with at least one that is 1,000 mi², and incorporating the appropriate reserve design criteria given in Objective 1.3. This is not true for the BLM-only alternative. Although the alternative maintains the external, larger DWMA boundary, private lands are excluded, undermining the adequate DWMA size and configuration (i.e., lack of conservation on private land, checkerboard distribution within the DWMA would undermine conservation efforts). Although Alternative E would result in the establishment of a single 1,000 mi² DWMA, it fails to meet Objectives 1.1 and 1.3. Alternatives F and G would fail to establish any DWMA's, and therefore would fail to meet any of the three criteria.

Goal 2: Establish an upward or stationary trend in the tortoise population of the West Mojave Recovery Unit for at least 25 years (see Table ES-2).

Objective 2.1: Achieve population growth rates (λ mdas) within DWMA's of at least 1.0.

Objective 2.2: Attain a minimum average population density of 10 adult female tortoises per square mile within each DWMA.

Objective 2.3: Establish a program for tortoise population monitoring that would detect an increase, decrease, or stable trend in tortoise population densities, and include an information feedback loop that ensures that necessary changes would be made in management.

**Table ES-2
Tortoise Biological Goal 2**

BIOLOGICAL GOAL 2	SEVEN ALTERNATIVES UNDER CONSIDERATION						
OBJECTIVES	A	B	C	D	E	F	G
2.1 Achieve stable populations	Unk	Unk	Unk	Unk	No	No	No
2.2 Achieve 10 females/mi ²	Unk	Unk	Unk	Unk	No	No	No
2.3 Population monitoring	No	No	No	No	No	No	No

There are limited means of assessing the seven alternatives in their efficacy to meet Goal 2 and its objectives. Success would be measured in terms of the population’s response to implementing proactive conservation programs identified in each alternative. Achieving stable populations and a certain density of tortoises per square mile is unknown for the first four alternatives. Although Alternative E would result in the establishment of a single DWMA, even if the objectives were met for so small an area, poor reserve design, including very high surface area to boundary ratio, would effectively undermine the efficacy of conservation. Failure to establish DWMA’s under Alternatives F and G would exacerbate rather than facilitate attaining these objectives.

Unfortunately, the ability to realize Goal 2, for all alternatives, is hampered by the likelihood of catastrophic die-offs that could ultimately extirpate tortoises regardless of proactive conservation management. It would also appear that distance sampling, which is suggested as the means of monitoring the population, might fail in its ability to detect increases or decreases in the population. The methodology does fairly well to measure rapid declines in the population over a three to five year period, but would fail to detect gradual increases, which may take a dozen or more years to detect. The method would be better applied in above-average concentration areas, as a tool to detect die-offs; continuing to apply it in extirpation areas will result in low sample sizes, which would fail to meet the minimum sample size of 80 tortoises/stratum required by the methodology.

Goal 3: Ensure genetic connectivity among desert tortoise populations, both within the West Mojave Recovery Unit, and between this and other recovery units (see Table ES-3).

Objective 3.1: Delineate and maintain movement corridors between DWMA’s, and with the Eastern Mojave Recovery Unit, the Eastern Colorado Recovery Unit, and the Northern Colorado Recovery Unit.

Objective 3.2: Ensure a minimum width of two miles for movement corridors, and include provisions for major highway crossings.

Table ES-3
Biological Goal 3

BIOLOGICAL GOAL 3	SEVEN ALTERNATIVES UNDER CONSIDERATION						
OBJECTIVES	A	B	C	D	E	F	G
3.1 Delineate movement corridors	No	No	No	No	No	No	No
3.1 Connectivity to eastern recovery unit	No	No	No	No	No	No	No
3.2 Minimum width for connectors	No	No	No	No	No	No	No

As indicated in the table, none of the objectives would be realized by any of the alternatives. However, one has to question the validity of the biological goal in the first place. For example the four critical habitat units designated by the USFWS and analogous DWMA's recommended by the recovery team were used to derive the current proposals, yet with the exception of a small part of the Superior-Cronese DWMA, which is contiguous with the Eastern Mojave Recovery Unit, there are no places where connectivity between conservation areas is possible.

Given highways, freeways, and the city of Barstow, there was never an opportunity to connect the Ord-Rodman with either of the western DWMA's. Connectivity between the three DWMA's to the west with the Pinto Mountain DWMA was never physically possible. Fort Irwin occupies most of the contiguous areas between the Western Mojave Recovery Unit and the Eastern Mojave Recovery Unit; 29 Palms Marine Corps Base occupies most of the contiguous boundary with the Northern Colorado Recovery Unit; and Joshua Tree National Park completely encompasses the mutual boundary between the Western Mojave and Eastern Colorado recovery units. Given that the Department of Defense and National Park Service manage these areas, respectively, there was never any opportunity to establish conservation areas in these places to provide for connectivity. Even so, there are undeveloped (albeit severely degraded on military installations) habitats between areas in the West Mojave and recovery units to the east, which will allow for genetic transfer.

There is also the question of connectivity being a good thing in the West Mojave. Sign count data collected since 1998 revealed that there appears to be a spread of disease or some other mortality factor that may be facilitated by the connectivity suggested in the recovery plan. If these patterns are truly resulting from disease spread (to be determined before the final plan is published), one needs to question the validity of maintaining connectivity among conservation areas. If anything, it would appear that having the Ord-Rodman and Pinto Mountain DWMA's physically separated from the two western DWMA's strengthens the conservation strategy because there is no connectivity; as proposed they may be less vulnerable to regional spread of disease.

That the alternatives fail to result in connectivity among the DWMA's and adjacent recovery units is not considered a serious flaw with any of the alternatives for the reasons given above. Although there is no connectivity between conservation areas, there are still habitats crossing these borders that will allow tortoises to pass unimpeded from one recovery unit to an adjacent one. Recent news suggests that the recovery plan would be revisited. It is strongly recommended that the new recovery team consider the issue of connectivity in light of the new information now available.

Goal 4: Reduce tortoise mortality resulting from interspecific (i.e., raven predation) and intraspecific (i.e., disease) conflicts that likely result from human-induced changes in the ecosystem processes (see Table ES-4).

Objective 4.1: Initiate proactive management programs addressing each conflict, to be implemented by each affected agency or jurisdiction.

Objective 4.2: Establish an environmental education program to facilitate public understanding and support for proactive management programs necessary to reduce tortoise mortality.

Objective 4.3: Continue research programs and monitoring programs that assess the relative importance of human activities and natural processes that affect desert tortoise populations.

**Table ES-4
Tortoise Biological Goal 4**

BIOLOGICAL GOAL 4	SEVEN ALTERNATIVES UNDER CONSIDERATION						
OBJECTIVES	A	B	C	D	E	F	G
4.1 Address each conflict	Yes	No	Yes	Yes	No	No	No
4.2 Establish education program	Yes	Yes	Yes	Yes	Yes	Yes	No
4.3 Continue research and monitoring	Yes	No	Yes	Yes	No	No	No

Alternative A, upon which Alternatives C and D are predicated, was specifically designed to address the 22 known or suspected threats to tortoises discussed in the recovery plan and recently summarized by Boarman (2002). Each program must be considered on its own merits, but in general, Alternatives A, C, and D were designed with these threats in mind, and are intended to meet Objective 3.1. Their efficacy is susceptible to limited funding, public support, and many other factors that are not easily foreseeable or controlled.

Effective conservation must necessarily rely on cooperation among all land managers, and include both private and public lands. Alternative B would fail to implement Objective 3.1 for this reason. Alternative E could work to implement Objective 3.1 in the 1,000 mi² area, but its small size fatally flaws it as providing for regional tortoise conservation. By its focus on disease and raven management, only, Alternative F fails to accomplish the objective.

Establishing an education program is often touted as important to regional conservation plans yet is seldom realized or implemented. In spite of this ubiquitous problem, each of the alternatives (excepting Alternative G, No Action) proposes some form of enhanced education. For this objective to be realized, managers must take a different, proactive look at regional education, or the conservation strategy is likely to be undermined.

Research and monitoring (Objective 4.3) are strongly encouraged for Alternatives A, C, and D but are missing, or only partially applied (Alternative F), in the remaining alternatives. It is difficult (and questionable) to assign limited funds to continued research when there are numerous, costly conservation programs that need to be implemented. Monitoring is essential, but the efficacy of distance sampling to function as intended is questionable.

E.4.2 Mohave Ground Squirrel

Table ES-5 presents an overview of the likely success of each alternative in meeting the biological goals established by the West Mojave Plan for the threatened Mohave ground squirrel.

**Table ES-5
Mohave Ground Squirrel Biological Goals**

	Biological Goals Met or Not: comparisons among alternatives						
Goal 1. Ensure long-term protection of MGS habitat throughout the species range.							
Objectives for Goal 1	A	B	C	D	E	F	G
Upon Plan adoption, establish management areas for the long-term conservation of MGS habitat:	Yes	No	Yes	Yes	No	No	No
1.1a Establish the MGS CA for the protection of unfragmented habitats outside military installations.							
1.1b Establish BTAs to minimize indirect impacts of human development to the MGS CA	Yes	No	No	Yes	No	No	No
1.1c Provide for heightened project review in NE L.A County to minimize development of MGS habitats in the southern portion of the range.	Yes	No	No	Yes	No	No	No
1.2 Allow for adjustments to the MGS CA boundary based on findings of scientific studies.	Yes	No	Yes	Yes	No	No	No
1.3 Implement appropriate actions to ensure the long-term protection of habitat in the MGS CA throughout the life of the Plan.	Yes	No	Yes	Yes	No	No	No
1.4 On a yearly basis, track the loss of MGS habitat resulting from Plan implementation.	Yes	Yes	Yes	Yes	Yes	Yes	No
1.5 Cooperate with military installations by sharing scientific information and reviewing management plans (INRMP, CLUMP, etc to assist environmental managers in evaluating MGS habitat protection on the bases.	Yes	Yes	Yes	Yes	Yes	Yes	No
Goal 2. Ensure long-term viability of the MGS throughout its range.							
Objectives for Goal 2							
2.1 As per the mandate of the CDFG, minimize and fully mitigate the impacts of the Plan’s authorized incidental take of the MGS throughout the life of the Plan.	Yes	No	Yes	Yes	No	No	No
2.2 Upon Plan adoption, initiate and conduct studies that would determine the following measurable biological parameters: (a) the regional status, (b) potential “hot spots” (refugia), (c) genetic variation throughout the range, and (d) the ecological requirements of the MGS.	Yes	No	Yes	Yes	No	No	No
2.3 Establish long-term study plots throughout the range and annually monitor their MGS populations. Fund continued monitoring in the Coso Range to provide baseline population data.	Yes	No	Yes	Yes	No	No	No
2.4 Use the biological and population data from Goal 2, Objectives 2 and 3 to modify the management prescriptions, as warranted, to ensure the long-term viability of the species.	Yes	No	Yes	Yes	No	No	No

The findings here are similar to those for the tortoise; Alternatives A, C, and D, with a few exceptions, would better realize MGS conservation than the other alternatives. The same flaws identified with Alternatives B, E, F, and G for the tortoise would apply to MGS conservation. Given that the species is only State-listed, Alternatives B and G would, for the most part, be the same.

E.4.3 Other Species

Table ES-6 presents a comparison of acres of habitat conserved, and acres available for incidental take, for each species addressed by the West Mojave Plan for each alternative.

**Table ES-6
Acreage of Conservation and Incidental Take of Covered Species in Each Alternative**

	A PREFERRED		B BLM ONLY*		C RECOVERY PLAN		D ENHANCED ECOSYSTEM		E ENHANCED RECREATION	
	Cons	Take	Cons	Take	Cons	Take	Cons	Take	Cons	Take
Desert tortoise	1,477,630	See text for ITA	1,023,329	454,301 in DWMA. See text for ITA	1,514,847	See text for ITA	1,505,494	4,393 See text for ITA	715,424	4,393 in DWMA. See text for ITA
Mohave ground squirrel	1,701,947	See text for ITA	1,280,106	See text for ITA	1,701,947	See text for ITA	1,701,947	See text for ITA	1,701,947	See text for ITA
Alkali Mariposa Lily	Permanent = 3,500+ Interim = 23,810 Isolated sites	40,861	0	40,861	Permanent = 3,500+ Interim = 23,810 Isolated sites	40,861	Permanent = 3,500+ Interim = 23,810 Isolated sites	40,861	Permanent = 3,500+ Interim = 23,810 Isolated sites	40,861
Barstow Woolly Sunflower	50,548+	50	17,682+	32,872	50,548+	50	50,548+	50	50,548+	50
Bats	All significant roosts	< 25 bats at any one site	All significant roosts	No t limited	All significant roosts	< 25 bats at any one site	All significant roosts	< 25 bats at any one site	All significant roosts	< 25 bats at any one site
Bendire's Thrasher*	132,497	3,973	132,497	3,973	132,497	3,973	132,497	3,973	132,497	3,973
Bighorn sheep	All lambing areas	No individuals; foraging and dispersal habitat	All lambing areas	No individuals; foraging and dispersal habitat	All lambing areas	No individuals; foraging and dispersal habitat	All lambing areas plus one dispersal corridor	No individuals ; foraging habitat	All lambing areas	No individuals; foraging and dispersal habitat
Brown-crested	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0
Burrowing owl	Unk.	No mortality. Limited.	Occurrences on BLM lands	No mortality. Limited.	Unk.	No mortality. Limited.	Unk.	No mortality. Limited.	Unk.	No mortality. Limited.
Carbonate Endemic Plants	5,169	Minimal	4,393	776	5,169	Minimal	5,169	Minimal	5,169	Minimal
Charlotte's phacelia	All known sites	50	30 of 37 sites	7 sites	All known sites	50	All known sites	50	All known sites	50
Crucifixion thorn	All known sites	50	All known sites	50	All known sites	50	All known sites	50	All known sites	50

	A		B		C		D		E	
	PREFERRED		BLM ONLY*		RECOVERY PLAN		ENHANCED ECOSYSTEM		ENHANCED RECREATION	
Desert cymopterus	Most occupied habitat	50	Most occupied habitat	50	Most occupied habitat	50	Most occupied habitat	50	Most occupied habitat	50
Ferruginous hawk	Prevents and remedies electrocution threat	Unknown but minimized	Prevents and remedies electrocution threat on BLM lands	Potential electrocutions on private lands	Prevents and remedies electrocution threat	Minimized	Prevents and remedies electrocution threat	Minimized	Prevents and remedies electrocution threat	Minimized
Flax-like monardella	All (20,495)	0	17,671	Unk.	All (20,495)	Unk.	All (20,495)	Unk.	All (20,495)	Unk.
Golden eagle	20,495 at Middle Knob. Prevents and remedies electrocution threat. Minimizes mining impacts.	0	17,671 at Middle Knob. Prevents and remedies electrocution threat on BLM lands	0	20,495 at Middle Knob. Prevents and remedies electrocution threat. Minimizes mining impacts.	0	20,495 at Middle Knob. Prevents and remedies electrocution threat. Minimizes mining impacts.	0	20,495 at Middle Knob. Prevents and remedies electrocution threat. Minimizes mining impacts.	0
Gray vireo	15,954+	Unk.	4,393+	Unk.	15,954+	Unk.	15,954+	Unk.	15,954+	Unk.
Inyo California towhee	98% of area (public lands)	2% of area (private lands)	98% of area (public lands)	2% of area (private lands)	98% of area (public lands)	2% of area (private lands)	98% of area (public lands)	2% of area (private lands)	98% of area (public lands)	2% of area (private lands)
Kelso Creek Monkeyflower*	1,870	50	1,870	Unk. Minimal	1,870	Unk. Minimal	1,870	Unk. Minimal	1,870	Unk. Minimal
Kern buckwheat	All except <0.1	<0.1	Most occupied habitat	Estimated 5 acres	All except <0.1	<0.1	All except <0.1	<0.1	All except <0.1	<0.1
Lane Mountain milkvetch	14,597	0	10,164	4,433	14,597	0	14,597	0	14,597	0
LeConte's thrasher	1,782,892	Unk.	1,392,984	Unk.	1,811,468	Unk.	1,782,892	Unk.	1,521,707	Unk.
Little San Bernardino Mountains gilia	All known drainages	50	Sites within JTNP	All other known drainages	All known drainages	50	All known drainages	50	All known drainages	50
Mojave fringe-toed lizard	42,865+	4 sites, see text	37,270	5,595+	42,865+	4 sites, see text	42,865+	4 sites, see text	42,865+	4 sites, see text
Mojave monkeyflower	57,087	50	36,630	20,457	57,087	50	57,087	50	57,087	50
Mojave River vole	All sites (conditional)	0	0	Unk	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0

	A PREFERRED		B BLM ONLY*		C RECOVERY PLAN		D ENHANCED ECOSYSTEM		E ENHANCED RECREATION	
Mojave tarplant	All occupied habitat	50 (new locations)	All occupied habitat	Unk.	All occupied habitat	50 (new locations)	All occupied habitat	50 (new locations)	All occupied habitat	50 (new locations)
Panamint alligator lizard	All suitable habitat	0	All suitable habitat	0	All suitable habitat	0	All suitable habitat	0	All suitable habitat	0
Parish's alkali grass	All of single known site	0	0	Unk.	0	All of single known site	0	All of single known site	0	All of single known site
Parish's phacelia	898	50	512	376	898	50	898	50	898	50
Parish's popcorn flower	All of single known site	0	0	Unk.	All of single known site	0	All of single known site	0	All of single known site	0
Prairie falcon	20,495 at Middle Knob. Minimizes mining impacts.	0	17,671 at Middle Knob. Minimizes mining impacts.	0	20,495 at Middle Knob. Minimizes mining impacts.	0	20,495 at Middle Knob. Minimizes mining impacts.	0	20,495 at Middle Knob. Minimizes mining impacts.	0
Red Rock poppy	All occupied habitat	50	All occupied habitat	Minimal	All occupied habitat	50	All occupied habitat	50	All occupied habitat	50
Red Rock tarplant	All occupied habitat	50	All occupied habitat	Minimal	All occupied habitat	50	All occupied habitat	50	All occupied habitat	50
Reveal's buckwheat	All occupied habitat	0	All occupied habitat	o	All occupied habitat	o	All occupied habitat	o	All occupied habitat	o
Salt Springs checkerbloom	All of single known site	0	0	Unk.	All of single known site	0	All of single known site	0	All of single known site	0
San Diego horned lizard	15,954+	Unk.	4,393+	Unk.	15,954+	Unk.	15,954+	Unk.	15,954+	Unk.
Shockley's rock-cress	5,169	0	4,393	776	5,169	0	5,169	0	5,169	0
Short-joint beavertail cactus	10,785	50	0	All	10,785	50	10,785	50	10,785	50

	A PREFERRED		B BLM ONLY*		C RECOVERY PLAN		D ENHANCED ECOSYSTEM		E ENHANCED RECREATION		
Southwestern pond turtle	All known sites (conditional at some)	Unk.	Selected sites	Unk.	All known sites (conditional at some)	Unk.	All known sites (conditional at some)	Unk.	All known sites (conditional at some)	Unk.	.
Southwestern willow flycatcher	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	(
Summer tanager	Mojave River sites (conditional)	Unk.	Selected sites	Unk.	Mojave River sites (conditional)	Unk.	Mojave River sites (conditional)	Unk.	Mojave River sites (conditional)	Unk.	1 (
Triple-ribbed milkvetch	All known sites	0	Sites on public land	Unk.	All known sites	0	All known sites	0	All known sites	0	.
Vermilion flycatcher	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	(
Western snowy plover	All known sites	0	All known sites	0	All known sites	0	All known sites	0	All known sites	0	.
White-margined beardtongue	All known sites	50	Most known sites	Unk.	All known sites	50	All known sites	50	All known sites	50	.
Yellow-eared pocket mouse	Unk	Unk	Selected ACECs	Unk	Unk	Unk	Unk	Unk	Unk	Unk	
Yellow warbler	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	(
Western yellow-billed cuckoo	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	All sites (conditional)	0	(
Yellow-breasted chat	Mojave River sites (conditional) 10,785 (Big Rock Creek)	0	Mojave River sites (conditional)	0	Mojave River sites (conditional) 10,785 (Big Rock Creek))	0	Mojave River sites (conditional) 10,785 (Big Rock Creek)	0	Mojave River sites (conditional) 10,785 (Big Rock Creek)	0	1 (1

See also Table 2-11. Unk. = Unknown. * Acreages are for BLM managed lands only

** Los Angeles County may expand its SEA boundaries, providing some conservation for this species.

*** See text for potential conservation of the No Action Alternative. Continued review of projects under CEQA, by BLM in Category 1 habitat, and by FWS in oc will result in some conservation by provision of compensation lands or set-asides.