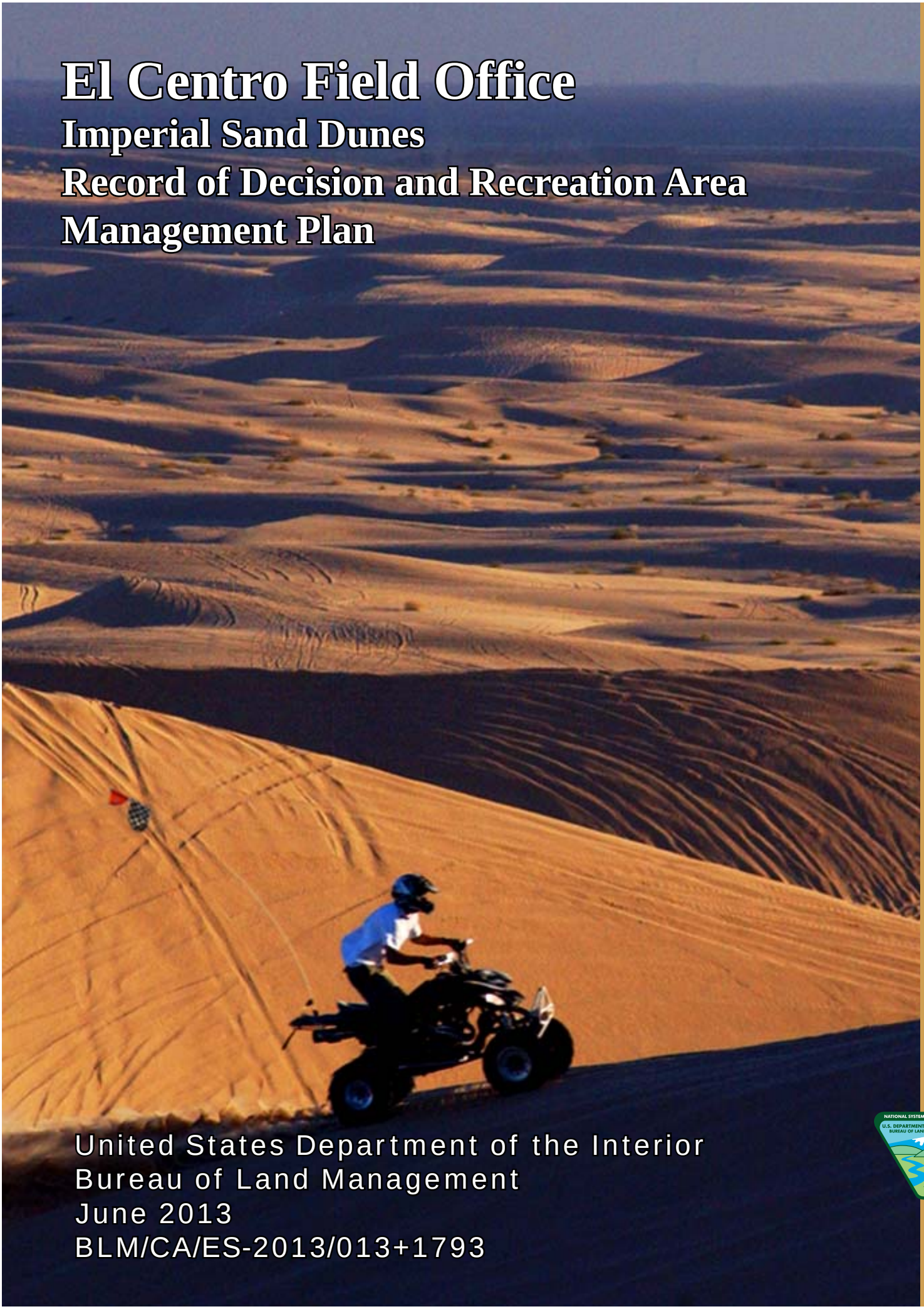

El Centro Field Office

Imperial Sand Dunes Record of Decision and Recreation Area Management Plan

BLM

El Centro Field Office

United States Department of the Interior
Bureau of Land Management
June 2013
BLM/CA/ES-2013/013+1793

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Publication Index #BLM/CA-ES-2013/013+1793

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
El Centro Field Office
1661 S. 4th Street
El Centro, CA 92243
(760) 337-4400

TAKE PRIDE IN AMERICA

In reply refer to:
1610-DP-P
670.36 P

Dear Reader:

I am pleased to announce that, after several years of collaborative effort, the Imperial Sand Dunes Recreation Area Management Plan (RAMP) and Amendments to the California Desert Conservation Area (COCA) Plan are complete. This document will provide guidance for the management of over 160,000 acres of public lands in the Imperial Sand Dunes Recreation Area and over 50,000 acres of additional public lands surrounding the recreation area within the California Desert Conservation Area.

The attached Record of Decision (ROD) and RAMP have been prepared in accordance with the Federal Land Policy Management Act and the National Environmental Policy Act. The ROD links final land use plan decisions to the proposed decisions and analysis presented in the Proposed RAMP/Final Environmental Impact Statement (FEIS) that was released on September 14, 2012, and subject to a 30-day protest period that ended on October 14, 2012. Three protest letters were received. The protests were reviewed by the BLM Assistant Director, Renewable Resources and Planning, in Washington, D.C. After careful consideration of all points raised in the protests, the Assistant Director concluded the responsible planning team and decision makers followed all applicable laws, regulations, policies, and pertinent resource considerations in developing the Proposed Plan and the FEIS. Adjustments and points of clarification incorporated into the RAMP in response to issues raised in the protest process and final BLM review are discussed in the ROD under the sections titled *Modifications and Clarifications.* The protest review did not result in any significant changes to the Proposed Plan.

The ROD serves as the final decision for the land use planning decisions, described in the attached RAMP and CDCA Plan Amendments. However, pursuant to the Order of the U.S. District Court (Center for Biological Diversity v. BLM, 2006), the BLM has been maintaining interim closures of approximately 49,300 Acres to motorized vehicle use in the Imperial Sand Dunes Recreation Area. These closures, and the other injunctive relief ordered by the court, shall expire 90 days after issuance of the ROD, unless the original parties file a response with the District Court explaining why the terms of the Court's Order should continue. In the event the original parties file a response objecting to the expiration of the Order, the District Court will, as appropriate, issue an Order either terminating or amending the original Order, set a status conference, and/or request further briefing.

This ROD also describes a set of implementation decisions (listed in Section 1.1.1). An appeal opportunity for these decisions is being provided at this time. The process is described in the ROD and at 43 Code of Federal Regulations, Part 4, Subpart E. The appeal period will close 30 days from the date the Notice of Availability of the ROD/Approved RMP appears in the Federal

Register.

Now that the ROD has been signed, we look forward to your participation as we implement the plan. If you would like more information, please contact the El Centro Field Office, 1661 S. 4th Street, El Centro, CA 92243, or by telephone at (760) 337-4400.

Sincerely,

Thomas F. Zale
Field Manager

Record of Decision

for the

Imperial Sand Dunes

Recreation Area Management Plan

and

Amendment to the
California Desert Conservation Area Plan

June 2013

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Imperial Sand Dunes Recreation Area Management Plan

and

Amendment to the California Desert Conservation Area Plan

Prepared by
U.S. Department of the Interior
Bureau of Land Management
El Centro Field Office
California
June 2013

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Executive Summary

Introduction

The Bureau of Land Management (BLM) has prepared this Record of Decision (ROD) for the Recreation Area Management Plan (RAMP) and Amendment to the California Desert Conservation Area (CDCA) Plan to provide direction for managing public lands administered by the BLM within and surrounding the Imperial Sand Dunes Recreation Area.

The overall Planning Area for this document encompasses the Imperial Sand Dunes Special Recreation Management Area, which includes the North Algodones Dunes Wilderness and an approximately one-mile-wide planning zone around the entire Imperial Sand Dunes Special Recreation Management Area. The Planning Area encompasses 214,930 acres and is located in eastern Imperial County, California, within the BLM California Desert Conservation Area. This RAMP and CDCA Plan Amendment have been developed to address both federal surface lands and minerals managed by the BLM within the Planning Area.

The ROD and RAMP/CDCA Plan Amendment have been prepared in compliance with BLM's planning regulations at Title 43 Code of Federal Regulations (CFR) 1600 and under the authority of the Federal Land Policy and Management Act of 1976. This document also meets the requirements of the National Environmental Policy Act of 1969 (NEPA), the Council on Environmental Quality's Regulations for Implementing NEPA (40 CFR 1500-1508), the Department of the Interior regulations, and requirements of BLM's Land Use Planning Handbook (MS-1601-1) and NEPA Handbook (H-1790-1).

This document is also available on the El Centro Field Office web site at http://www.blm.gov/en/fo/elcentro, on the BLM California web site at http://www.blm.gov/ca/st/en/prog/planning.html, and on compact disc.

Purpose and Need

Prior to the signing of this ROD, the BLM had managed resources within the Planning Area under the CDCA Plan (1980) and CDCA Plan amendments, including the Northern and Eastern Colorado Desert Coordinated Management Plan (2002), Western Colorado Desert Routes of Travel (2003a), and Imperial Sand Dunes RAMP (1987). The BLM released a revised Imperial Sand Dunes RAMP (2003b), which was challenged in court and was subsequently vacated by the Federal District Court. As part of the Court's decision, interim closures to protect threatened and endangered species in the Imperial Sand Dunes, in place since 2001, remain in place pending completion of this RAMP.

This ROD and the RAMP/CDCA Plan Amendment combine the relevant portions of the Northern and Eastern Colorado Desert Coordinated Management Plan and Western Colorado Desert Routes of Travel, and update the 1987 Imperial Sand Dunes RAMP with issues and concerns identified during the scoping process. The purpose is to provide direction that will guide future management actions for BLM-administered lands within the Planning Area. The ROD and RAMP/CDCA Plan Amendment resolve management issues, determine management objectives and actions, and establish methods to facilitate multiple use and sustained yield management for the entire Planning Area.

Issues

The Notice of Intent to prepare the RAMP/CDCA Plan Amendment and associated Environmental Impact Statement was published in the Federal Register on March 18, 2008. The BLM held three public scoping meetings in April of 2008 and solicited comments. Resource specialists were present to answer questions, and attendees were encouraged to take extra information packages and comment forms, and distribute them to interested individuals that were not able to attend the meetings.

Comments were received from the public, agencies, organizations, and other interested stakeholders. Key issues identified included: designation of open and closed off-highway vehicle recreation areas; allowable uses within the Planning Area; resource protection, particularly of the microphyll woodlands, plant and wildlife species, and cultural resources; law enforcement and public health and safety; hazardous materials management; and facilities management.

The formal comment period for the Draft RAMP/Draft Environmental Impact Statement was from March 26, 2010 to August 9, 2010. BLM held three public comment meetings in April 2010 at which oral comments were recorded and written comments were accepted. Written comments were also accepted via letter, email, and fax throughout the comment period. Key issues identified during the public comment period were similar to those received during the public scoping period and included air quality and protection of Peirson's milk-vetch.

Alternatives

The basic goal of developing alternatives was to prepare different combinations of management actions to address issues and to resolve conflicts among uses. Alternatives must meet the purpose and need, be reasonable and practical or feasible from the technical and economic standpoint, and use common sense. Alternatives may also provide a mix of resource protection, use, and development; must be responsive to the issues; and meet the established planning criteria. Each alternative is a complete

land use plan that provides a framework for multiple-use management of the full spectrum of resources, resource uses, and programs present in the Planning Area.

Alternative 8, the preferred alternative in the Proposed RAMP/Final Environmental Impact Statement, was selected as the RAMP/CDCA Plan Amendment. All other alternatives were rejected. Two types of land use planning decisions are found under each topic for Alternative 8: Desired Future Conditions (resource goals and objectives) and Management Actions (prescriptions to help achieve management objectives).

Under the RAMP/CDCA Plan Amendment, the BLM will manage the public lands in accordance with all applicable laws, regulations, and BLM policy and guidance.

Alternative 8 (RAMP and CDCA Plan Amendment; preferred alternative in the Proposed RAMP/Final Environmental Impact Statement) provides for management of each resource and resource use by establishing a balance between authorized resource use and the protection and long-term sustainability of sensitive resources. It allows visitation and development within the Planning Area, while ensuring that resource protection is not compromised in accordance with the principles of multiple use and sustained yield as mandated by Federal Land Policy Management Act. The decisions under this alternative are a combination of features from several of the other alternatives. In addition to the goals and objectives listed for each resource, the selection of Alternative 8 will result in a CDCA Plan Amendment that addresses multiple use classes; establishes visual resource management classes; updates areas of critical environmental concern; establishes recreation area management zones; designates exclusion or avoidance areas for camping and land use authorizations; adjusts land tenure; designates all BLM-administered lands within the Planning Area as open, closed, or limited to motorized use; and maintains the Northern and Eastern Colorado Desert Coordinated Management Plan and Western Colorado Desert Route of Travel Plan decisions in the Planning Area.

Government and Public Involvement

The BLM continued collaboration efforts by including communities in the formulation and development of alternatives. The scoping meetings gave the public an opportunity to provide input for the BLM to consider in refining the issues to be addressed, discuss visions for BLM lands, and begin exploring alternative ways to manage BLM lands and resources in the Planning Area. Input received from the public (both groups and individuals) was considered in developing the alternatives. The public comments and issues were considered in the range of alternatives and analyzed in the EIS, as required by NEPA.

The ROD and RAMP/CDCA Plan Amendment was developed with coordination and cooperation from the following agencies: California Department of Fish and Wildlife,

California State Historic Preservation Office, and United States Fish and Wildlife Service. The United States Border Patrol, El Centro Sector, and Imperial County Planning Department participated as cooperating agencies. The BLM also consulted with Indian tribes who have oral traditions or cultural concerns relating to the Planning Area or who are documented as having occupied or used portions of the Planning Area during historic times.

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1.0 Record of Decision

The Bureau of Land Management (BLM) has prepared the Recreation Area Management Plan (RAMP) and California Desert Conservation Area (CDCA) Plan Amendment for the Imperial Sand Dunes (ISD) Recreation Area. The Planning Area is approximately 227,000 acres (214,930 BLM-administered acres) and encompasses the ISD Special Recreation Management Area (SRMA), which includes the North Algodones Dunes Wilderness and an additional approximately one-mile-wide zone surrounding the ISD SRMA (excluding land in Mexico; Table 1-1, Map 1-1). The Planning Area is in eastern Imperial County, California, is within the CDCA (see Map 1-1), and covers an area more than 40 miles long and averaging 5 miles wide. Although the Planning Area contains approximately 12,000 acres of non-federal lands, planning and implementation decisions only apply to BLM-administered public lands.

Portions of the Planning Area are also currently managed under the Northern and Eastern Colorado Desert Management Plan (NECO; a BLM plan amendment to the CDCA Plan) and the Western Colorado Desert Routes of Travel Designation Plan (WECO; an implementation-level plan for the CDCA). Only the portions of the NECO and WECO areas that overlap the ISD Planning Area were addressed by the RAMP and CDCA Plan Amendment. Travel management decisions made in the NECO and WECO plans remain in place and were not modified in the RAMP or ROD.

TABLE 1-1
PLANNING AREA ACREAGE (BLM ACRES)

Description	BLM-administered Acres
ISD SRMA (excluding North Algodones Dunes Wilderness)	138,111
North Algodones Dunes Wilderness	26,098
One-mile-wide planning zone around the ISD SRMA	50,722
Total Acres in ISD Planning Area	214,930

The Planning Area is considered a world-class off-highway vehicle (OHV) recreation area and is a well-known recreation resource for local residents and visitors from the southwestern United States (U.S.) and beyond. The Planning Area is the most intensively used OHV recreation area that the BLM manages nationwide, with over one million visitors per year. In addition, the Planning Area is frequently used as a backdrop for commercials and movies because of its unique beauty and landscape. The Planning Area also provides wilderness recreation opportunities and unique habitat for several endemic and sensitive plant, insect, and animal species.

Well-known recreation sites within the SRMA include but are not limited to Buttercup Valley, Gecko and Roadrunner campgrounds, Glamis Flats, Gordons Well, Dunebuggy Flats, Mammoth Wash, Ogilby, and Osborne Overlook (see Map 1-1). The ISD SRMA consists of a typical sand dune habitat with larger dunes found in the central portion of

the Planning Area. Microphyll woodlands can be found on the eastern edge of the sand dunes and contain several plant species, including palo verde (genus *Cercidium)*, mesquite (*Prosopis glandulosa* var. *torreyana)*, and ironwood (*Olneya tesota*).

Because of the overwhelming popularity and regional importance of the Planning Area to visitors, recreational enthusiasts, and others, the ISD SRMA requires careful management to protect its recreational and other resource uses, and its natural, biological, and cultural resources. As the steward of the ISD SRMA, the BLM is charged with the responsibility to oversee and manage this ecologically complex and beautiful public treasure. The BLM developed this RAMP as a tool for long-range planning and management oversight of these important resources.

This Record of Decision (ROD) approves the BLM's ISD RAMP and CDCA Plan Amendment. The RAMP/CDCA Plan Amendment was Alternative 8 in the September 2012 ISD Proposed RAMP/Proposed CDCA Plan Amendment and Final Environmental Impact Statement (EIS), and is included in this ROD as Chapter 2. The ROD provides the background on development of the plan and rationale for approving the proposed decisions contained in Alternative 8 (RAMP/CDCA Plan Amendment), and describes the clarifications and modifications made to resolve the protests received.

The RAMP/CDCA Plan Amendment decisions (including management activities, mitigation, and project design features) for BLM-administered lands within the Planning Area are presented in Chapter 2 of this document. This RAMP/CDCA Plan Amendment/ROD considered public comments, scientific and technical information, and the results of applicable consultations and coordination with federal and state agencies, local governments, Indian tribes, a variety of non-governmental organizations, and numerous individuals.

This RAMP/CDCA Plan Amendment/ROD and its associated Proposed RAMP/CDCA Plan Amendment/Final EIS were prepared in accordance with the Federal Land Policy and Management Act (FLPMA; 43 U.S. Code [USC] 1701 et seq.), the National Environmental Policy Act (NEPA; 42 USC 4321 et seq.), Council on Environmental Quality (CEQ) regulations for implementing NEPA (40 Code of Federal Regulations [CFR] 1500-1508), BLM regulations (43 CFR Part 1600), and BLM policy (NEPA Handbook [H-1790-1] and Land Use Planning Handbook [H-1601-1]).

This ROD incorporates the terms and conditions of the November 2, 2012 Biological Opinion issued to the BLM by the U.S. Fish and Wildlife Service (USFWS; Appendix A).

Joshua Tree National Park
10
Blythe
CALIFORNIA
ARIZONA
RIVERSIDE Co.
IMPERIAL Co.
Palo Verde
Cibola
Chocolate Mountains
Aerial Bombing
and Gunnery Range
Salton Sea
Niland
Colorado River
Calipatria
78
Westmorland
Brawley
Glamis
IMPERIAL
SAND
DUNES
EAST MESA
Imperial
El Centro
Holtville
Fort Yuma
Reservation
Seeley
8
Heber
98
Yuma
Calexico
MEXICO
Somerton
Planning Area
Land Status
Bureau of Land Management
Bureau of Land Management Wilderness
Bureau of Reclamation
Military
State
National Park Service
Tribal Lands
US Fish and Wildlife
Private Lands
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www.ca.blm.gov
Date Prepared: 5/31/2013
Project: Map1-1_Plan_Area

IMPERIAL SAND DUNES
RECREATION AREA MANAGEMENT PLAN

MAP 1-1: Planning Area and Regional Setting

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
El Centro Field Office
June 2013

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1.1 The Decision

The decision is hereby made to approve the attached RAMP and CDCA Plan Amendment for the ISD. The RAMP/CDCA Plan Amendment was prepared under the authority and regulations implementing the FLPMA of 1976 (43 CFR 1600). Land use plan decisions identified in the RAMP/CDCA Plan Amendment are final and become effective when this ROD is signed[1].

Major plan decisions address multiple use classes (MUCs); establish visual resource management (VRM) classes; update areas of critical environmental concern (ACECs); establish recreation area management zones; designate exclusion or avoidance areas for camping and land use authorizations; adjust land tenure; designate all BLM-administered lands within the Planning Area as open, closed, or limited to OHV and other motorized use; and maintains the existing NECO and WECO decisions in the Planning Area. Specific management decisions for public lands within the Planning Area are presented in Chapter 2.0—Recreation Area Management Plan.

1.1.1 Types of Decisions

This ROD contains land use plan and implementation decisions. The BLM must distinguish between land use plan and implementation decisions in all plan amendment documents and clearly describe for the public the administrative remedies for each type of decision. The RAMP/CDCA Plan Amendment includes plan decisions that were protestable to the Director of the BLM as provided through 43 CFR 1610.5-2 and that are subject to judicial litigation in Federal District Court. Implementation decisions may be appealed to the Office of Hearings and Appeals.

The BLM Land Use Planning Handbook (H-1601-1) defines land use plan decisions as “broad-scale decisions [that] guide future management actions and subsequent site-specific implementation decisions” (2005a). Appendix C of the Land Use Planning Handbook identifies specific planning considerations for individual BLM programs. Land use planning decisions that were protestable included the following:

- Adoption of area-wide management actions to comply with the Clean Air Act
- Adoption of regional (California Desert District) Rangeland Health Standards, as appropriate for the Planning Area, to protect soil, water, and vegetation

[1]The BLM is currently maintaining interim closures pursuant to the Order of the U.S. District Court (Order No. C 03-2509 SI). See Section 1.2, Termination of Interim Closures for information on the lifting of that order.

- Identification of desired outcomes, strategies, restoration opportunities, use restrictions, and management actions to conserve and recover special status species and other priority species and habitats
- Identification of cultural resource protection measures and restrictions on uses of other resources to protect cultural resource values
- Identification of criteria and use restrictions to protect paleontological resources
- Designation of VRM classes
- Identification of decisions to protect or preserve wilderness characteristics
- Designation of SRMAs and Recreation Management Zones
- Designation of OHV Management Areas as open, closed, or limited
- Identification of lands for retention, disposal, acquisition, or withdrawal
- Identification of right-of-way avoidance and exclusion areas
- Identification of areas and circumstance under which authorizations for use, occupancy, and development (major lease and land use permits) may be granted
- Identification of potential development areas for renewable energy projects (e.g., solar and wind), communications sites, and other uses
- Identification of areas open to leasing for oil, gas, and geothermal resources
- Identification of areas recommended for closure pursuant to the mining laws for locatable minerals and areas to be open or closed to mineral sales
- Designation of new ACECs or modifications to existing ACECs

Implementation decisions generally constitute the BLM's final approval allowing on-the-ground actions to proceed. Appendix C of the Land Use Planning Handbook identifies possible implementation decisions for specific BLM programs. Implementation decisions in this document that may be appealed include the following:

- Site-specific camping, parking, and other restrictions to protect special status species or wildlife habitat
- Management of wildlife guzzlers, fuel management, and placement of fencing, signing, or other facilities to protect wildlife habitat
- Signing, fencing, interpretive sites, or other facilities to protect cultural and paleontological resources

- Management and design of actions and facilities to meet VRM class objectives
- Site-specific protection measures to protect lands with wilderness characteristics
- Site-specific management actions and plans for ACECs
- Design, development, management, and administration of recreation sites and facilities within recreation management zones
- Designation of individual routes and trails within OHV management areas as open, limited, or closed
- Implementation decisions on routes and trails are found in Appendix B.

Implementation of a RAMP typically begins with its approval by the State Director (see Section 1.2—Termination of Interim Closures below). Some decisions in the RAMP require immediate action and will be implemented upon publication of the ROD and RAMP. Other decisions will be implemented over a period of years. The rate of implementation is tied in part to the BLM's budgeting process.

1.2 Termination of Interim Closures

Pursuant to the Order of the U.S. District Court (Center for Biological Diversity v. BLM, C 03-2509 SI, Sept. 26, 2006), the BLM has been maintaining interim closures as identified in the "Temporary Closure of Approximately 49,300 Acres to Motorized Vehicle Use of Five Selected Areas in the [Imperial Sand Dunes Recreation Area]," 66 Federal Register 53, 431-02 (Oct. 22, 2001). All injunctive relief, including the closures, shall expire 90 days after issuance of the ROD, unless the original parties file a response with the District Court explaining why the terms of the Court's Order should continue. In the event the original parties file a response objecting to the expiration of the Order, the District Court will, as appropriate, issue an Order either terminating or amending the original Order, set a status conference, and/or request further briefing.

1.3 Alternatives Considered

The BLM analyzed eight management alternatives in the Proposed RAMP/CDCA Plan Amendment and Final EIS. The alternatives were based on substantive public input on the existing environment, existing uses, desired future uses, and desired environmental conditions of the Planning Area. The alternatives considered in the EIS are summarized below. In accordance with the CEQ regulations, all of the alternatives identified below were analyzed for environmental effects between and among all the other alternatives. The results of that analysis are summarized in Table 1-2 below, as well as the discussion that follows.

TABLE 1-2
SUMMARY OF DIFFERENCES BETWEEN ALTERNATIVES

	1	2	3	4	5	6	7	8
Acres Available for OHV (Open and Limited)	188,833	139,609	127,153	159,711	156,316	161,391	178,187	179,786
Acres Closed to OHV (Outside Wilderness)	0	49,224	61,680	29,122	32,516	27,441	10,645	9,046
Acres of Peirson's Milk-vetch Habitat Closed (Outside Wilderness)	0	6,775	9,037	6,508	9,037	3,775	5,652	9,046
Acres Available for Wind and Solar Development	188,833	188,833	47,131	39,694	39,694	39,694	188,833	35,115
Acres Excluded from Wind and Solar Development (Outside Wilderness)	0	0	141,702	4,847	4,847	4,847	4,847	153,717
Acres Available for Geothermal Development (with Surface Occupancy)	188,833	188,833	0	0	11,939	11,939	188,833	35,115
Acres Available for Geothermal Development (No Surface Occupancy)	0	0	0	188,833	0	0	0	14,025

NOTE: Inconsistencies in acres between the Final EIS and the Record of Decision may be due to GIS data and rounding.

Alternative 1 (No Action). Since the RAMP is a land use plan decision, Alternative 1 represented the No Action Alternative required by NEPA because it reflects the last formal plan amendment officially recognized by the BLM and reflects the current management direction adopted by the BLM. Alternative 1 did not take into account the Court-ordered Administrative Closures because the administrative closures were originally imposed as a result of a Court-ordered settlement and more recently as a result of a continuing Court order. The BLM interprets the status quo of public land management as that directed by formal land use planning; otherwise, any number of temporal management scenarios could affect environmental analysis leading to an infirm basis for impact comparisons. Under this alternative, management of recreation opportunities, special status species habitat, and other resources would have been maintained at existing levels prior to the 2001 Closure Order. This alternative would not have modified allowable uses to address emerging issues on public lands. The No Action Alternative did not take into account the closure in the ISD SRMA, because the closure is an administrative action (made pursuant to 43 CFR subpart 8341 and a subsequent Court-ordered RAMP revision) and not a formal land use decision approved pursuant to 43 CFR 1610.

The No Action Alternative is meant to establish a baseline for analysis of impacts to the human environment as compared to and among comparison of a range of alternatives. Therefore, the No Action Alternative considered the effects of current management direction (i.e., those approved within an existing land use plan) rather than a temporal closure, because management of public lands under an administrative or judicial closure substantially alters the baseline for analysis. In other words, the trajectory for impacts to the human environment is much different if the BLM compares other reasonable alternatives to management of public lands under a closure order instead of existing land use decisions.

Importantly, using this approach to define the No Action Alternative provided the public and BLM officials with a better understanding of the current management direction that has contributed to the existing conditions of public land resources. Likewise, using this approach provides a better baseline for analysis of impacts from different management alternatives that met the purpose and need for a land use plan amendment/revision.

In comparison with Alternative 2, the No Action Alternative would have allowed OHV use on 188,833 acres, would not have included the administrative closure of 47,722 acres, and would have not closed 6,570 acres of Peirson's milk-vetch (*Astragalus magdalenae* var. *peirsonii*) critical habitat to OHV use. Although not addressed in the 1987 plan, the No Action Alternative did include the North Algodones Wilderness, since this was a permanent legislative action made through the California Desert Protection Act of 1994. In comparison with Alternatives 3 through 8, Alternative 1 would have not amended the CDCA Plan through changes to land use plan decisions including OHV area designations, MUCs, VRM classes, ACEC designations, or identification of exclusion or

avoidance areas for land use authorizations, and would not have provided protection of lands with wilderness characteristics outside the North Algodones Dunes Wilderness.

Based on analysis in Chapter 4 of the Final EIS, Alternative 1 would have had the highest level of impacts from OHV use to sensitive species and would have allowed the maximum acreage for land use authorizations and renewable energy of all the alternatives. Alternative 1 would have had the least impact on OHV recreation use and dispersed camping of all the alternatives.

Alternative 2 would have continued the management direction contained in the 1987 RAMP with changes made to comply with laws, policies, and management measures instituted since the 1987 RAMP was approved, including the designation of the North Algodones Dunes Wilderness in 1994. This alternative also included administrative actions in the Planning Area since the 1987 RAMP was approved, including the Administrative Closures of OHV recreation areas. The specific Court-mandated Administrative Closures would have been adopted by the BLM only under this alternative; however, variations of these closures, with differing acreages, would have occurred in all alternatives except the No Action (Alternative 1). Alternative 2 provided an opportunity to compare the current management with various strategies suggested to be analyzed for future management.

Because the District Court's vacature of the 2005 ROD rendered the 2003 RAMP non-operational, current on-the-ground management of the Planning Area is conducted based on the 1987 RAMP, the Court-ordered administrative closures, and the NECO and WECO CDCA Plan Amendments. Alternative 2 included the Court-mandated interim Administrative Closures. Alternative 2 was used as a baseline in the comparison of the impacts of alternatives in Chapter 4 of the EIS, against which the impacts of other alternatives were compared.

In comparison with Alternative 1, this alternative would have closed 47,722 acres to OHV use, including 6,750 acres of Peirson's milk-vetch critical habitat. In comparison with Alternatives 3 through 8, this alternative would not have amended the CDCA plan through changes to land use plan decisions including OHV area designations (except for the administrative closure areas), MUCs, VRM classes, ACEC designations, or identification of exclusion or avoidance areas for land use authorizations.

Based on analysis in Chapter 4 of the Final EIS, Alternative 2 would have had a lower level of impacts from OHV use to sensitive species than the No Action Alternative or Alternatives 4 through 8. Alternative 2 would have allowed the same acreage for land use authorizations and renewable energy as the No Action and Alternative 7. Alternative 2 would have had the most impact on OHV recreation use and dispersed camping of all the alternatives, except Alternative 3, which would have closed more acres to OHV use.

Alternative 3 generally placed emphasis on preservation of the Planning Area's natural, biological, and cultural resources through limited public use. It focused on natural processes and other unobtrusive methods for natural resource use and management. It proposed fewer motorized and developed recreation opportunities than other alternatives. Alternative 3 would have resulted in a CDCA Plan amendment that addresses MUCs; establishes VRM classes; provides maximum protection for lands with wilderness characteristics; updates ACECs; establishes recreation area management zones; designates exclusion or avoidance areas for camping and land use authorizations; adjusts land tenure; designates all BLM-administered lands within the Planning Area as open, closed, or limited to motorized use; and maintains the NECO and WECO decisions in the Planning Area.

Alternative 3 would have provided the maximum acres closed to OHV use and would have had the lowest level of impacts from OHV use to sensitive species of all the alternatives. Along with Alternatives 4, 5, 6, and 8, this alternative would have allowed about the same acres available for wind and solar development, but would have allowed no geothermal development. Alternative 3 would have had the highest level of impact on OHV recreation use and dispersed camping of all the alternatives.

Alternative 4 emphasized opportunities for visitors to experience natural, biological, and cultural resource values of the Planning Area. It emphasized a combination of natural processes and active management techniques for recreation and use management. The alternative included management decisions that would have provided a balance of multiple uses. Alternative 4 would have resulted in a CDCA Plan amendment that addresses MUCs; establishes VRM classes; updates ACECs; establishes recreation area management zones; designates exclusion or avoidance areas for camping and land use authorizations; adjusts land tenure; designates all BLM-administered lands within the Planning Area as open, closed, or limited to OHV use; and maintains the NECO and WECO decisions in the Planning Area.

Alternative 4 identified a higher level of preservation and a lower level of OHV recreation opportunities than Alternatives 1, 5, 6, 7, and 8. Alternative 4 did not provide for special protection of lands with wilderness characteristics, which distinguished it from Alternative 3. This alternative would have had fewer impacts from OHV use on sensitive species than Alternatives 1, 6, 7, and 8, but would have had more impacts than Alternatives 2 and 3. Alternatives 4 and 5 were similar in acres of OHV designations, but differed in the acres available for geothermal development, with Alternative 4 allowing the maximum acres available (with no surface occupancy) of all alternatives.

Alternative 5 provided visitors with opportunities to experience natural, biological, and cultural resource values of the Planning Area. It emphasized a combination of natural processes and active management techniques for recreation and use management. The alternative included management decisions that would have provided a balance of multiple uses. Alternative 5 identified a more moderate level of preservation than

Alternative 4 and a more moderate level of motorized recreation, recreation opportunities, and renewable development than Alternative 6. Alternative 5 would have resulted in a CDCA Plan amendment that addresses MUCs; establishes VRM classes; updates ACECs; establishes recreation area management zones; designates exclusion or avoidance areas for land use authorizations; adjusts land tenure; designates all BLM-administered lands within the Planning Area as open, closed, or limited to OHV use; and maintains the NECO and WECO decisions in the Planning Area. In contrast to Alternative 3, Alternative 5 would not have provided special protection for lands with wilderness characteristics.

Alternative 6 provided visitors with opportunities to experience natural, biological, and cultural resource values of the Planning Area. It emphasized a combination of natural processes and active management techniques for recreation and use management. The alternative included management decisions that would have provided a balance of multiple uses. Alternative 6 identified a lower level of preservation than Alternative 4 and a higher level of motorized recreation, recreation opportunities, and renewable development than Alternative 5. Alternative 6 would have resulted in a CDCA Plan amendment that addresses MUCs; establishes VRM classes; updates ACECs; establishes recreation area management zones; designates exclusion or avoidance areas for land use authorizations; adjusts land tenure; designates all BLM-administered lands within the Planning Area as open, closed, or limited to OHV use; and maintains the NECO and WECO plan decisions in the Planning Area.

Alternative 7 generally placed an emphasis on consumer-driven uses and the widest array of uses, such as renewable energy, transportation, and utility rights-of-way, and enhanced recreational opportunities (including motorized recreation). It identified areas most appropriate for these various uses. It placed a greater emphasis on developed and motorized recreation opportunities and a lesser emphasis on remote settings and primitive recreation. Alternative 7 would have resulted in a CDCA Plan amendment that addresses MUCs; established VRM classes; updates ACECs; establishes recreation area management zones; designates exclusion or avoidance areas for camping and land use authorizations; adjusts land tenure; designates all BLM-administered lands within the Planning Area as open, closed, or limited to OHV use; and maintains the NECO and WECO decisions in the Planning Area.

Alternative 8 (RAMP/CDCA Plan Amendment; Preferred Alternative) provides for management of each resource and resource use by establishing a balance between authorized resource use and the protection and long-term sustainability of sensitive resources. It allows visitation and development within the Planning Area, while ensuring that resource protection is not compromised in accordance with the principles of multiple use and sustained yield as mandated by FLPMA. The proposed decisions under this alternative are a combination of features from several of the other alternatives. Alternative 8 will result in a CDCA Plan amendment that addresses MUCs; establishes

VRM classes; updates ACECs; establishes recreation area management zones; designates exclusion or avoidance areas for camping and land use authorizations; adjusts land tenure; designates all BLM-administered lands within the Planning Area as open, closed, or limited to OHV use; and maintains the NECO and WECO decisions in the Planning Area. Alternative 8 allows the most acres available for OHV recreation of all alternatives except for No Action Alternative. Along with Alternatives 3 and 5, Alternative 8 closes the most acres to Peirson's milk-vetch critical habitat, thus providing maximum protection for critical habitat while also having the least impact (along with the No Action) to OHV recreation use. Alternative 8 excludes the most acres from wind and solar development of all alternatives, thus having the least impact to all resources and OHV recreation use from utility scale energy developments when compared with other alternatives. Other than Alternatives 5 and 6, this alternative has the least acres of geothermal development with surface occupancy of the alternatives.

1.4 Environmentally Preferred Alternative

Federal environmental quality regulations (40 CFR 1505.2 (b)) require that an agency identify the environmentally preferable alternative or alternatives in the ROD. Alternative 3 is the environmentally preferable alternative.

The BLM has selected Alternative 8, however, as the Preferred Alternative for the RAMP due to the purpose and need for the plan. Under purpose and need, the RAMP is designed to manage and provide a variety of sustainable OHV and other recreational activities (Section 1.2 page 1-3) with one of the purposes of the Plan revision being to manage a "world class recreational experience" and a "diverse range of recreation within the Planning Area" (Section 1.2.2 page 1-4). This has led BLM to select Alternative 8 as the RAMP/CDCA Plan Amendment, since it also includes measures to protect, maintain, and improve the conditions of the special status species and other unique natural and cultural features of the Planning Area. Alternative 8 will provide for management of each resource and resource use by establishing a balance between authorized resource use and the protection and long-term sustainability of sensitive resources. It allows visitation and development within the Planning Area, while ensuring that resource protection is not compromised, in accordance with the principles of multiple use and sustained yield as mandated by FLPMA.

1.5 Management Considerations

The RAMP/CDCA Plan Amendment was designed and selected based on input from other federal agencies, state and local governments, interested groups, Indian tribes, neighboring land owners, and interested citizens. The BLM considers the RAMP as the best approach to meet the purpose and need of the project, address the planning issues, and provide the optimal balance in managing resources and uses of the lands in the Planning Area. Factors considered during this process included: environmental impacts;

issues raised throughout the planning process; specific environmental values, resources, and resource uses; conflict resolution; public input; and laws and regulations.

The BLM is tasked with the job of multiple use management and the sustained yield of renewable resources. These tasks are mandated under FLPMA and numerous other laws and regulations that govern the management of public lands for various purposes and values. Key laws and Executive Orders are listed in Appendix C.

The BLM's purpose and need for the RAMP/CDCA Plan Amendment was to manage and provide a variety of sustainable OHV and other recreational activities and to maintain or improve conditions of the special status species and other unique natural, biological, and cultural resources, while creating an environment to promote the health and safety of visitors, employees, and nearby residents. The Proposed RAMP/CDCA Plan Amendment and Final EIS provided a detailed explanation of the purpose and need in Section 1.2.

Alternative 8 addresses the diverse needs and concerns of the community and stakeholders in a fair manner and provides a practical and workable framework for management of BLM-administered public lands. The RAMP/CDCA Plan Amendment provides a balance between those reasonable measures necessary to protect the existing resource values and the continued public need for use of the BLM-administered public lands within the Planning Area.

The RAMP proposes management that will improve and sustain properly functioning resource conditions while considering needs and demands for existing or potential resource commodities and values. BLM manages resource use by integrating ecological, economic, and social principles in a manner that safeguards the long-term sustainability, diversity, and productivity of the land. Additional key concerns are addressed below.

The RAMP responds to issues related to visitation and development, specifically related to motorized camping and OHV recreation within the Planning Area, while ensuring that resource protection is not compromised in accordance with the principles of multiple use and sustained yield as mandated by FLPMA. The RAMP achieves this end by designating 127,416 acres as open to OHV recreation and closing Peirson's milk-vetch critical habitat to motorized recreation. Visitors who value non-motorized areas for hiking, bird watching, and solitude are accommodated by areas that are closed to motorized travel, which comprise 35,144 acres, including the North Algodones Dunes Wilderness. The RAMP specifies conditions for lands and realty-permitted activities, particularly solar and wind leases, as well as geothermal energy development. The RAMP excludes Peirson's milk-vetch critical habitat, the flat-tailed horned lizard (*Phrynosoma mcallii*) management area, donated lands, wilderness, and ACECs from solar and wind energy development. Peirson's milk-vetch critical habitat is also excluded from all other types of land use authorization. Within the Planning Area, 35,115 acres would be available for rights-of-way for solar and wind energy development, geothermal

leasing would be available on 35,115 acres, and an additional 14,025 acres would be available for geothermal leasing with a no surface occupancy stipulation. Concerns about specific resource values are addressed throughout the RAMP.

1.6 Mitigation and Monitoring

Approved management measures to mitigate adverse impacts of the RAMP were presented in the Final EIS. All practicable means to avoid or minimize environmental harm have been adopted.

The RAMP/CDCA Plan Amendment includes a comprehensive monitoring program (Appendix D) to ensure that implementation of the RAMP achieves the plan's goals and objectives. The monitoring actions include monitoring for species' population levels and ecosystem health or other purposes as noted below:

- Colorado Desert fringe-toed lizard (*Uma notata*)
- Flat-tailed horned lizard sighting recordation
- Peirson's milk-vetch
- Algodones Dunes sunflower (*Helianthus niveus* var. *tephrodes*), Wiggins' croton (*Croton wigginsii*), and other special status species
- Invertebrates
- Mojave population of desert tortoise (*Gopherus agassizii*)
- Wildlife guzzlers to assess function of the guzzler and wildlife use
- Microphyll woodlands (for presence of migratory birds)
- Effectiveness of tamarisk (*Tamarix* spp.) and other invasive species removal
- Wilderness for wilderness characteristics and illegal OHV use
- Effectiveness of law enforcement patrols for resource protection
- Vehicle counters for visitor use patterns
- Campgrounds and dispersed camping areas for visitor use patterns
- Cultural resources for visitor use and vandalism
- Peirson's milk-vetch critical habitat closure boundary for effectiveness and resource protection
- Rainfall amounts for effects on special status species

Information on resource conditions obtained through monitoring will be used to assess the effectiveness of management strategies and evaluate whether or not management should be adapted to accommodate new information, changes in demands on resources, or other considerations.

1.7 Public Involvement

The CEQ Regulations (40 CFR 1500.2(d)) and BLM planning regulations (43 CFR 1610) require that the BLM use an open process to involve the public in land use planning decisions and the NEPA process. Extensive efforts have been made to make the public aware of the planning process and of opportunities for involvement in that process.

1.7.1 Scoping

The scoping process is intended to identify issues and concerns from the public, other agencies, and organizations to frame the scope of the RAMP/CDCA Plan Amendment/EIS. Formal scoping began with the publication of a Notice of Intent in the Federal Register on March 18, 2008 and closed on May 20, 2008.The BLM hosted public scoping meetings in San Diego, California; Phoenix, Arizona; and El Centro, California, on April 22, 23, and 24, 2008, respectively.

The BLM contacted local, state, and federal agencies, including the USFWS, California Department of Fish and Wildlife, Bureau of Reclamation, Imperial County, California State Historic Preservation Officer (SHPO), Department of Homeland Security, and the Imperial Irrigation District during the scoping phase of this EIS. The U.S. Border Patrol El Centro Sector and Imperial County Planning Department requested cooperating agency status for the RAMP/CDCA Plan Amendment/EIS effort. BLM also contacted nine tribal entities to initiate government-to-government consultation and solicit information about issues of concern for the RAMP. The BLM maintained contact with all interested tribes throughout the planning process.

1.7.2 Public Review of the Draft RAMP/CDCA Plan Amendment and Draft EIS

The formal comment period for the Draft RAMP/Draft EIS began with publication of a Notice of Availability in the Federal Register on March 26, 2010, and ended on August 9, 2010. The BLM held three public comment meetings in April 2010—one in San Diego, California, one in El Centro, California, and one in Phoenix, Arizona. BLM received 4,046 comment letters on the Draft RAMP/CDCA Plan Amendment and Draft EIS.

1.7.3 Protest Review and Resolution

A Notice of Availability was published September 14, 2012 to announce the availability of this Proposed RAMP/Proposed CDCA Plan Amendment and Final EIS, which initiated the 30-day protest period. The BLM received three protest letters during the public protest period. The BLM Director's decisions on the protests are summarized in the Director's Protest Resolution Report, Imperial Sand Dunes Recreation Area Management Plan and California Desert Conservation Area Plan Amendment. The

protests are summarized below. The following Planning Area stakeholders submitted protests:

- EcoLogic Partners (representing American Sand Association)
- Center for Biological Diversity (also representing the Sierra Club, Public Employees for Environmental Responsibility, Desert Survivors, California Native Plant Society, and Desert Protective Council)
- County Sanitation Districts of Los Angeles County

The protest letters included comments on law and regulations; natural resources; lands with wilderness characteristics; special status species management; and travel management and wilderness characteristics management. Protesting parties made the following observations and suggestions:

- **Issue 1 (Inadequate NEPA)**: The analysis within the RAMP/Final EIS was flawed, because there was no analysis for closing or removing Patton Valley Road in the RAMP; it failed to take into account the National Natural Landmark designation of the Imperial Sand Hills; it did not provide present baseline data for tortoise, Arizona Bell's vireo (*Vireo bellii* var. *arizonae*), burrowing owl (*Athene cunicularia*), Gila woodpecker (*Melanerpes uropygialis)*, and LeConte's thrasher (*Toxostoma lecontei*) populations; it failed to analyze a carrying capacity limit for the number of visitors to the Algodones Dunes; and it failed to consider whether all or an additional portion of the Algodones Dunes should be designated as an ACEC.
- **Issue 2 (FLPMA)**: The RAMP was not consistent with FLPMA, because it did not include adequate inventory and monitoring data pertaining to certain species of special management concern.
- **Issue 3 (Soils)**: The RAMP did not comply with Executive Orders 11644 and 11989, or the regulations within 43 CFR 8342.1, which require the BLM to only allow OHV use on public's lands when certain criteria (minimization requirements) are met.
- **Issue 4 (VRM)**: The proposed alternative failed to show how the BLM would protect VRM Class I areas in the North Algodones Dunes Wilderness.
- **Issue 5 (Wilderness Characteristics)**: The proposed alternative did not comply with Secretarial Order 3310 regarding lands with wilderness characteristics.
- **Issue 6 (CDCA)**: The RAMP is not consistent with the CDCA Plan.
- **Issue 7 (Climate Change)**: The RAMP/Final EIS was inadequate and inaccurate with respect to the analysis of greenhouse gas contributions by not considering any mitigation measures or adaptive management measures to reduce or offset

greenhouse gas emissions. As a result, the agency failed to comply with Secretarial Order 3226 on global climate change.

- **Issue 8 (Editorial Changes)**: The RAMP/Final EIS erred in suggesting that the Mesquite Regional Landfill will not comply with the biological opinion for the landfill and that truck traffic associated with the Mesquite Regional Landfill would interfere with recreational use of the Imperial Sand Dunes.

- **Issue 9 (Vegetation)**: The BLM did not adequately address impacts to the Peirson's milk-vetch and failed to recognize the Algodones Dunes and most of the ISD Recreation Area as an Unusual Plant Assemblage.

- **Issue 10 (Air Quality)**: The RAMP was not in conformance with the Clean Air Act because it would allow increased OHV use, which would significantly contribute ozone and PM_{10}[1] to the air basin. The Final EIS was also flawed because it did not adequately analyze impacts from PM_{10} and $PM_{2.5}$[2] emissions.

These and other issues were discussed in the three protest letters. The BLM Division of Decision Support, Planning, and NEPA in Washington, D.C., addressed all protests without making significant changes to the Proposed RAMP, although minor adjustments, corrections, and clarifications were made and have been explained in this ROD. In accordance with BLM regulations 43 CFR 1610.5-2, the decision of the BLM Director is the final decision of the Department of the Interior as to those protests.

1.8 Consultation and Coordination

1.8.1 Endangered Species Act Consultation

As a part of this planning effort, BLM initiated consultation with the USFWS under Section 7 of the Endangered Species Act (16 USC 1532 et seq.; Interagency Consultation). The BLM initiated consultation in 2010 with the submission of a Biological Assessment to determine the effect of the Proposed RAMP/CDCA Plan Amendment on all relevant listed, proposed, and candidate species, and associated critical habitat. The Biological Assessment identifies all expected environmental effects, conservation actions, mitigation, and monitoring including analysis of all direct and indirect effects of plan decisions and any interrelated and interdependent actions. On November 2, 2012, the USFWS issued a biological opinion on the plan as a result of the consultation process (see Appendix A). Through the biological opinion, the USFWS determined that implementation of the RAMP is not likely to jeopardize the continued existence of Peirson's milk-vetch or the Mojave population of the desert tortoise, nor is it likely to

[1]Particulate matter with a diameter of less than 10 microns.

[2]Particulate matter with a diameter of less than 2.5 microns.

destroy or adversely modify critical habitat for the Peirson's milk-vetch. The biological opinion also includes a reasonable and prudent measure that is intended to supplement the measures implemented by BLM to minimize or avoid possible adverse impacts on listed species or their critical habitat. The reasonable and prudent measure is as follows:

> The BLM shall monitor and report the levels of incidental take of desert tortoises to the Palm Springs Fish and Wildlife Office throughout implementation of the RAMP and report on the effectiveness of the project minimization measures to reduce the impact of incidental take of this species.

To be exempt from the prohibitions of Section 9 of the Endangered Species Act, BLM must comply with the following term and condition, which implements the reasonable and prudent measure described above. This term and condition is nondiscretionary and designed to minimize the impact of incidental taking of the species. To implement the reasonable and prudent measure above:

> The BLM shall prepare and provide the Palm Springs Fish and Wildlife Office an annual report by September 30 of each year on implementation of the RAMP. The annual report shall document, but not be limited to, the following:

- The number of eggs, juveniles, sub-adults, or adult tortoise found by members of the public or by BLM employees during the reporting year, the date observed, their status when observed (e.g., traveling east, in a burrow, injured or dead on road), and a map and Geographic Information System (GIS) coordinates (North American Datum 83) indicating their location when observed

- The number of tortoises killed or injured during the reporting year and a description of the circumstances leading to the death or injury of individuals

The biological opinion also includes conservation recommendations, which are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information. The biological opinion identifies the following conservation recommendation: Establish a research coordinator position to oversee the overall monitoring and adaptive management program for the ISD.

1.8.2 Consultation with the State Historic Preservation Officer

The BLM initiated formal consultation with the California SHPO by letter in November, 2008. This consultation is in accordance with the Programmatic Agreement among the BLM, the Advisory Council on Historic Preservation, and the National Conference of SHPOs regarding the manner in which the BLM will meet its responsibilities under the

National Historic Preservation Act (1997; 16 USC 470 et seq.) and the State Protocol Agreement among the California State Director of the Bureau of Land Management and the California SHPO (State Protocol Agreement; Revised 2012). The BLM followed up with letters to the SHPO on June 15, 2010, and October 4, 2012, providing updates on the status of the NEPA and Section 106 processes, and an invitation to review the Draft RAMP/Draft EIS and Proposed RAMP/CDCA Plan Amendment and Final EIS, respectively. In a letter dated February 6, 2013, the BLM requested the SHPO's concurrence on the BLM's findings of no adverse effect to historic properties. The SHPO responded via letter dated May 15, 2013 requesting clarification on certain issues and additional information to be provided. Pursuant to the State Protocol Agreement, the BLM considered the views and comments of the SHPO and subsequently provided a written response. In a letter to the BLM dated May 30, 2013, the SHPO stated its concurrence with the BLM's findings of no adverse effect to historic properties and had no comments or concerns. Consultation has been concluded for this planning effort.

1.8.3 Tribal Consultation

The BLM made numerous formal and informal contacts with Indian tribes and other tribal entities in accordance with Executive Orders regarding government-to-government relations with Native Americans. Executive Orders include:

- Executive Order 11593 Protection and Enhancement of Cultural Environment (1971)
- Executive Order 13007 Indian Sacred Sites (1996)
- Executive Order 13175 Consultation and Coordination with Indian Tribal Governments (2000)
- Executive Order 13287 Preserve America (2003)

The Native American Heritage Commission was notified by letter in August, 2008, of the BLM's intent to initiate government-to-government consultation with Indian tribes on the ISD RAMP. The BLM invited tribes to consult on revisions to the RAMP in a November, 2008, letter. A letter was sent to the chairman of each band or tribe with potential cultural ties to the Planning Area or who had expressed an interest in the Planning Area. Letters were also sent to council members, staff, and individuals who might have an interest in or special knowledge of the Planning Area. Each letter detailed the need for a new plan, described the Planning Area, and requested comments on any and all issues that may have been of concern to the tribe, including religious or cultural values that may be affected by planning decisions.

The BLM followed up with a letter in March, 2010, inviting tribes to participate in government-to-government consultation; providing notification of the release of the draft EIS; and inviting tribal participation in three separate open houses in Phoenix, El Centro, and San Diego. A government-to-government consultation meeting between the BLM

and the Quechan Tribal Council was held in April, 2012, and included discussions regarding the development of the final EIS and the proposed revised RAMP.

Indian tribes and interested tribal entities will continue to be consulted, and consultation will continue through site-specific implementation of the RAMP. Native American tribal governments and organizations contacted are listed in the RAMP and Final EIS.

1.8.4 Environmental Protection Agency Review

Both the draft and final RAMP EISs were provided to the Environmental Protection Agency for review, as required by Section 309 of the Clean Air Act (42 USC 7401 et seq.). The BLM received the Environmental Protection Agency review of the Draft EIS and the Final EIS on October 15, 2012.

1.8.5 Other Coordination and Consultation

A number of agencies and interests, including local, state, and federal entities, have been involved with developing this plan. BLM coordinated with any agency that expressed an interest in the plan.

Cooperating agencies were formally invited to participate in developing the alternatives and to provide existing data on their responsibilities, goals, and mandates. Cooperating agencies were also invited to work with the BLM interdisciplinary team in developing the alternatives. Cooperating agencies included Imperial County and U.S. Border Patrol (Yuma and El Centro sectors).

1.8.6 State of California – Plan Amendment Consistency Review and Determination

In accordance with BLM planning regulations, 43 CFR 1610.3-2, BLM must identify any known inconsistencies with state or local plans, policies, or programs. BLM must also provide the Governor up to 60 days in which to identify any inconsistencies and submit recommendations. The State received a formal request for review of the Final EIS on September 14, 2012. The State completed its review on October 12, 2012. No known inconsistencies have been identified, either by the BLM or the Governor, for the RAMP or Plan Amendment decisions.

1.9 Modifications and Clarifications

Minor adjustments, corrections, and clarifications have been made and explained in this ROD.

As part of their protest, the County Sanitation Districts of Los Angeles County (Districts) requested that clarification to inaccurate statements about the Mesquite Regional

Landfill be made. While the landfill is not in the Planning Area, it is adjacent and was considered during analysis of cumulative impacts due to the truck traffic to and from the landfill, which does affect the Planning Area. The following are corrections requested (in *italics*) and the BLM's responses:

- *The Final EIS implies that operations at the landfill will not comply with the Biological Opinion for the landfill by allowing the waste to provide a "year round food source for ravens." As described in the landfill operating documents, the District will operate the landfill in compliance with all applicable requirements.*

The BLM acknowledges that the Districts intend to comply with the biological opinion, and does not assume that the Districts will not do so.

- *The Final EIS also contains several statements which appear to conclude that truck traffic associated with the Mesquite Regional Landfill will impact recreational use of the dunes. These statements are inconsistent with the environmental analysis and mitigation measures contained in the Final Environmental Impact Statement and Environmental Impact Report for the proposed Mesquite Regional Landfill (SC No 92050124, BLM No CA-060-02-5440-10-8026, June 1995), the Final Mesquite Regional Landfill [Conditional Use Permit] Amendments Subsequent Environmental Impact Report (SCH No. 20007071096, September 2010) and the Findings of Fact and Statement of Overriding Considerations for the Final Subsequent Environmental Impact Report on Mesquite Regional Landfill Conditional Use Permit Amendments (Conditional Use Permit #06-003). These documents include the mitigation measure that refuse truck traffic to and from the landfill will be re-routed on heavy recreational use days. Among the examples of an erroneous conclusion in the Final EIS regarding this issue are:*

  a. *Final EIS Section 4.11.6.1.1, Cumulative Impacts on Visual Resources is inconsistent with the Final Subsequent Environmental Impact Report for the landfill which found that Cumulative Impacts on Transportation/Circulation would be mitigated below a level of significance and impacts to visual/aesthetics would not be significant;*

  b. *Final EIS Section 4.15.5.1, Cumulative Impacts to Transportation and Public Access is inconsistent with the Final Subsequent Environmental Impact Report for the landfill which found that Cumulative Impacts on Transportation/ Circulation would be mitigated below a level of significance.*

The BLM acknowledges the mitigation measure of re-routing truck traffic on heavy recreation use days. The BLM will work with the Districts and the Operations Manager of the Mesquite Landfill to coordinate truck traffic at the landfill to minimize impacts to recreation users at the ISD SRMA.

1.9.1 Errata

The purpose of these errata is to correct factual inaccuracies or typographical errors in the ISD Proposed RAMP/Proposed CDCA Plan Amendment and Final EIS. The ROD will govern in the event of any factual discrepancies between it and the Proposed RAMP and Final EIS. To the extent that the clarifications below affect the plan description, the ROD incorporates these clarifications.

1.9.1.1 Multiple Use Classes

The Proposed RAMP contained a discrepancy regarding the alternatives for MUCs. Chapter 2, Section 2.3.1.2—Management Actions Common to All Alternatives erroneously stated that the existing MUCs would be carried forward in Alternatives 1 and 2, and amended in Alternatives 3 through 8. The intent of the BLM was that the existing MUCs would be common to, and be carried forward for, all alternatives, as depicted on Map 2-1 of the Proposed RAMP.

1.9.1.2 Vegetative Use Authorization

Section 2.3.6.4—Vegetative Use Authorization includes a discrepancy regarding Allowable Use Not Requiring Permits. Under Section 2.3.6.4.2—Management Actions Common to All Alternatives, the statement that collection of dead and downed wood from microphyll woodlands or ACECs for use in campfires on public lands is an allowable use not requiring a permit is an error (page 2-37). The intent of the BLM for Alternative 8 and the RAMP is to prohibit collection of dead and downed wood within the ISD SRMA, including the microphyll woodlands as correctly depicted in Table 2-1—Summary of Management Actions and Allocations by Alternative (page 2-6) and Table 2-5—Management Actions for Vegetative Use Authorization by Alternative (page 2-38).

1.9.1.3 Special Status Species Management

Section 2.3.8.1.3—Management Actions by Alternative, Table 2-7, presents the management actions for special status species that vary by alternative (page 2-49). Alternative 8, the preferred alternative for the Proposed Plan includes “Allow camping within some areas within BLM sensitive species habitat, except microphyll woodlands south of Wash 33 and north of Wash 70.”

In sections of Chapter 4—Environmental Consequences, several paragraphs incorrectly list this camping closure as south of Wash 44 or Wash 30, and north of Wash 70. Section 4.5—Impacts on Vegetation Resources, subsection 4.5.2, paragraph 10, page 4-45, reads “Under Alternative 8, the microphyll woodlands would be open to OHV recreation but camping (of all types) would be prohibited within the microphyll woodlands south of Wash 44 and north of Wash 70.” This is incorrect and should read “Under Alternative 8, the microphyll woodlands would be open to OHV recreation but camping

(of all types) would be prohibited within the microphyll woodlands south of Wash 33 and north of Wash 70." Section 4.14—Impacts on Recreation Program, subsection 4.14.1, paragraph 2, page 4-116, reads "Under Alternative 8, campgrounds south of Wash 30 and north of Wash 70 would be closed to camping but open to OHV use." This statement is repeated in Section 4.14.5.3, paragraph 3, page 4-118; Section 4.15.1, paragraph 8, page 4-121; and Section 4.15.5.3, paragraph 2, page 4-123. These are all incorrect and should all read "Under Alternative 8, campgrounds south of Wash 33 and north of Wash 70 would be closed to camping but open to OHV use."

1.9.1.4 OHV Management Area Designations

The Proposed RAMP/CDCA Plan Amendment and Final EIS proposes to designate all BLM-administered public lands within the Planning Area as open, limited, or closed to motorized use. The second paragraph of Section 2.3.16.1, page 2-94 states that "The preferred alternative designates all critical habitat for Peirson's milk-vetch as closed to OHV use." This is consistent with Section 2.3.8.2—Federally Listed Species and Designated Critical Habitat, Table 2-8—Management Actions for Peirson's milk-vetch by Alternative, Alternative 8, on page 2-51.

Map 2-26, OHV Management Areas Alternative 8, depicts polygons labeled "Closed to OHV Use." The largest of these polygons, in the southern portion of the map, appears to be divided by a heavy green line, which could be interpreted as an open OHV travel corridor. This is a mapping error caused by joining two polygons to create one. It is not the intent of BLM to create a travel corridor through Peirson's milk-vetch critical habitat under Alternative 8 and the Proposed Plan. The correct polygon is shown on Map 3-2, Peirson's milk-vetch Critical Habitat. The incorrect polygon shown on Map 2-26 will be replaced with the correct polygon shown on Map 3-2 to emphasize BLM's proposed management action of closing all Peirson's milk-vetch critical habitat to OHV use, with no travel corridors through critical habitat.

1.10 Appeal Procedures

Any party adversely affected by the proposed implementation decisions, as identified in Section 1.1.1 above, has the right to appeal to the Authorized Officer of the El Centro Field Office and to the Office of Hearings and Appeals, Office of the Secretary, U.S. Department of the Interior, Board of Land Appeals. In order for your appeal to be considered complete, it must be in accordance with the regulations contained in 43 CFR Part 4 and U.S. Department of the Interior Form 1842-1. If an appeal is taken, your notice of appeal must be filed in the BLM El Centro Field Office (1661 South 4th Street, El Centro, CA 92243) within 30 days of publication of the Notice of Availability of the ROD in the Federal Register. The appellant has the burden of showing that the decision appealed is in error.

2.0 Recreation Area Management Plan

2.1 Purpose of and Need for Action

This RAMP updates the 1987 ISD RAMP and amends the CDCA Plan. The RAMP has been designed to manage and provide a variety of sustainable OHV and other recreational activities, and to maintain or improve the conditions of the special status species and other unique natural, biological, and cultural resources while creating an environment to promote the health and safety of visitors, employees, and nearby residents.

2.1.1 Need

Since the 1987 RAMP, Peirson's milk-vetch has been listed as threatened under the Endangered Species Act, and critical habitat has been designated by the USFWS. Extensive biological surveys for numerous other species have been completed, and cultural resource surveys and ethnographic studies have been completed. The California Desert Protection Act established the North Algodones Dunes Wilderness in 1994.

Continued population growth in the urban and non-urban areas and shifting demographic patterns in southern California and Arizona have increased the demand for outdoor recreation within the Planning Area and nearby areas. Management challenges continue, with the BLM striving to encourage appropriate recreational use and discourage inappropriate use while respecting the freedom of visitors to enjoy recreation within the Planning Area.

Within southern California, the demand for renewable energy is increasing. This increase has created a need to determine which BLM-managed land in the Planning Area, if any, should be made available for solar, wind, and geothermal development.

2.1.2 Purpose

The BLM sought to provide a comprehensive management plan to address management of the Planning Area. The BLM's purpose in rewriting the RAMP was to use new information to better manage the Planning Area for the recovery and delisting of the Peirson's milk-vetch and Mojave population of the desert tortoise, provide protection to other special status species, prevent additional listings, and manage resources while providing a world-class recreational experience. Whether that recreational experience means traversing a sand dune on an OHV, watching migratory birds gather in the microphyll woodlands, or camping under the stars in the North Algodones Dunes Wilderness, the BLM must manage for a diverse range of recreation within the Planning Area.

The BLM's purpose in amending the CDCA Plan is to support implementation of the RAMP. The CDCA Plan Amendment includes management of lands with wilderness characteristics, designation of avoidance and exclusion areas for land use authorizations, adjustments in land tenure, and adherence to the designation and minimization criteria for OHV areas and trails found in 43 CFR 8342.1-3. It also establishes VRM classes.

2.1.3 Overall Vision

The vision of the BLM in constructing this RAMP/CDCA Plan Amendment is to manage BLM-administered lands comprehensively to accomplish needs for all resource uses while acting as stewards of the land and its valuable resources. The BLM will strive continue to provide a world-class recreational experience while aiding in the recovery of listed species. The BLM sustains the health, diversity, and productivity of public lands for use and enjoyment of present and future generations. The BLM considered the public's needs in the management programs of resources presented in this RAMP/CDCA Plan Amendment.

2.2 Planning Issues

The BLM Land Use Planning Handbook defines planning issues as "disputes or controversies about existing and potential land and resource allocations, levels of resource use, production, and related management practices" (BLM 2005a). Issues identified during scoping for the RAMP/CDCA Plan Amendment and EIS process comprised two categories:

- Issues within the scope of the planning process that are used to develop alternatives or are otherwise addressed in the RAMP/CDCA Plan Amendment and EIS
- Issues outside the scope of the planning process or that could require policy, regulatory, or administrative actions that cannot be addressed through the land use planning process

Those planning and implementation issues determined to be within the scope of the planning process were used to develop the alternatives or were addressed in other parts of the RAMP and EIS. The key issues identified in the scoping report were:

- Identification of areas that are open and closed to OHV recreation
- Need for an Adaptive Management Area
- Need for administrative closures to protect biological resources
- Identification of allowable uses within the Planning Area

- Identification of how BLM intends to carry out resource protection (e.g., microphyll woodlands, invertebrates, plants, and cultural resources)

Two issues identified in the scoping report but determined to be outside the scope of this planning process were concerns about the commercial vending program and the recreation fee program. The commercial vending and recreation fee programs are managed under 43 CFR 2930—Permits for Recreation on Public Lands. The recreation fee program is also managed under the Federal Lands Recreation Enhancement Act with the Recreation Resource Advisory Committee as the advisory entity. The RAMP/CDCA Plan Amendment did not address these issues.

2.3 Planning Criteria

Planning criteria are the standards, rules, and guidelines that help guide the planning process. These criteria influence all aspects of the planning process including inventory and data collection, development of issues to be addressed, formulation of alternatives, analyses of impacts, and selection of the Preferred Alternative. In conjunction with the planning issues, these criteria help focus the planning process and promote the incorporation of appropriate analyses. Planning criteria are developed from appropriate laws, regulations, and policies, as well as public input during the scoping period. The criteria also help guide the final plan selection and are used as a basis for evaluating the responsiveness of the planning options. Additional planning criteria can be added at any point in the planning process.

The following planning criteria were used during the planning process:

- The planning process was completed in compliance with the FLPMA, NEPA, and all other relevant federal laws, Executive Orders, and management policies of the BLM.
- The planning process included an EIS that complied with NEPA standards.
- The planning process set forth a framework for managing recreational activities in order to maintain existing natural landscapes and critical habitat for the threatened Peirson's milk-vetch, and provided for the enjoyment and safety of the visiting public.
- Where existing planning decisions are still administratively valid, those decisions remained unchanged and were incorporated into the RAMP.
- The planning process recognized valid existing rights.
- Native American tribal consultations were conducted in accordance with policy, and tribal concerns were given due consideration. The planning process included the consideration of impacts on Indian trust assets.

- Consultation with the SHPO was conducted throughout the planning process.
- Consultation with USFWS was conducted throughout the planning process.

2.4 Planning Process

The BLM uses an ongoing planning process to maintain consistency and compliance of land use plans and implementation decisions with applicable laws, regulations, and policies. The BLM develops land use management plans and makes decisions using the best information available and extensive public involvement.

While the ultimate responsibility regarding land use plan decisions rests with the BLM on BLM-administered lands, the BLM works with individuals, communities, and governments in collaborative partnerships to improve its stewardship of public lands. The BLM works with tribal, state, and local governments; state and federal agencies; and other interested parties from the earliest stages and throughout the planning process to consider common needs and goals within the Planning Area. At the same time, the BLM considers existing plans of tribal, state, and local governments, and other federal agencies. Several scoping workshops were held to solicit input from the public on the issues and planning criteria for the RAMP/CDCA Plan Amendment. Public agencies were invited to participate as cooperating agencies throughout the planning process and provided valuable information on resources and issues affecting lands under their jurisdiction within the Planning Area.

Land use management plans, including RAMPs, may be revised or amended as the BLM acquires information and knowledge of new circumstances relevant to land and resource values, uses, and environmental concerns.

The specific steps in the development of this RAMP and CDCA Plan Amendment included:

1. Issuing a Notice of Intent to Prepare the RAMP and CDCA Plan Amendment
2. Conducting scoping (i.e., the public process to assist in the identification of planning issues)
3. Analyzing the management situation
4. Developing alternatives to address planning issues
5. Analyzing the effects of the alternatives
6. Identifying a Preferred Alternative
7. Publishing a Draft RAMP and Draft EIS
8. Providing a 90-day public comment period

9. Publishing a Proposed RAMP/CDCA Plan Amendment and Final EIS
10. Providing a 30-day public protest period and a 60-day Governor's consistency review, upon publication of the Proposed RAMP/CDCA Plan Amendment and Final EIS
11. Resolving any protests or issues raised through the Governor's consistency review
12. State Director's approval of the RAMP/CDCA Plan Amendment through the ROD
13. After filing Notice with the Federal District Court for the Northern District of California indicating that the ROD and RAMP/CDCA Plan Amendment (and other relevant documents) have been issued; the Court has ordered a 90-day response period for plaintiffs and defendant intervenors to explain why the Court order should continue. If no response(s) are filed, the Court order will expire 90 days after the Notice is filed.
13. Implementing, monitoring, and evaluating plan decisions

The format and outline for the RAMP/CDCA Plan Amendment adheres to guidance provided in the BLM Land Use Planning Handbook (H-1601-1), the 43 CFR 1600 planning regulations, 40 CFR 1500 regulations, NEPA, FLPMA, and all other applicable federal laws.

2.4.1 Laws, Regulations, and Executive Orders

The BLM planning process is governed by the FLPMA of 1976 and the BLM Planning Regulations in 43 CFR Part 1600. Land use plans provide a framework for public lands to be managed in accordance with the intent of Congress as stated in FLPMA, under the principles of multiple use and sustained yield.

In addition, public lands must be managed in a manner that recognizes the nation's need for domestic sources of minerals, food, timber, and fiber. Land use plans are a primary mechanism for guiding BLM activities to achieve the agency's mission and goals. The BLM Land Use Planning Handbook provides guidance for preparing land use plans, including specific guidance for each program and resource (BLM 2005a).

In addition to FLPMA, NEPA, and their associated regulations, BLM must comply with the mandate and intent of all federal laws (and any applicable regulations) and Executive Orders that apply to BLM-administered lands and resources in the Planning Area (see Appendix C). While many laws may appear to be in conflict with others, the planning process is intended to develop land use plan decisions that resolve such conflicts and meet the multiple-use and sustained-yield mandate of FLPMA.

The BLM must also comply with the federal Endangered Species Act. This act provides for the conservation of ecosystems upon which threatened and endangered species of fish, wildlife, and plants depend. Section 7 of the Endangered Species Act requires

federal agencies to ensure that any action authorized, funded, or carried out by them is not likely to jeopardize the continued existence of listed species or modify their critical habitat.

2.4.2 Relationship to Policies, Plans, and Programs

Implementation of a revised management plan for public lands is subject to numerous laws and regulations, as well as a general requirement for consistency with pre-existing and applicable plans. The following sections summarize the most pertinent policies, plans, and programs that were considered during the planning processes for the Planning Area.

2.4.2.1 Federal Land Policy and Management Act

Pursuant to the FLPMA of 1976, 43 USC 1701 et seq., the BLM is directed to manage the public lands and their resources on the basis of multiple use and sustained yield principles. As required by FLPMA, public lands must be managed in a manner that: protects the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values; preserves and protects, where appropriate, certain public lands in their natural condition; provides food and habitat for fish, wildlife, and domestic animals; and provides for outdoor recreation and human occupancy and use. In addition, public land must be managed in a manner that recognizes the nation's need for domestic sources of minerals, food, timber, and fiber from public land. Land use plans are a primary mechanism for guiding BLM activities to achieve the BLM's mission and goals.

2.4.2.2 California Desert Conservation Area Plan 1980

The CDCA encompasses 25 million acres of land in southern California that were designated by Congress in 1976 through FLPMA. The BLM directly administers approximately 11 million acres of the CDCA. With the designation of the CDCA, Congress directed the BLM to prepare and implement a comprehensive long-range plan for the management, use, development, and protection of public lands within the CDCA. The CDCA Plan, as amended, is based on the concepts of multiple use, sustained yield, and maintenance of the environmental quality. The CDCA Plan provides overall regional guidance for management of the public lands in the CDCA and establishes long-term goals for protection and use of the California desert. The CDCA Plan established four MUC guidelines to address allowable uses and activities such as motorized-vehicle access and recreation, among other resource uses (CDCA Plan Chapter 2). For a detailed description of the MUCs in the Planning Area, see Section 2.8 below.

Since 1980, the CDCA Plan has been amended periodically to reflect changing conditions, including the acquisition of new knowledge relating to natural resources such

as inventories of public land resources, and to update management strategies. This RAMP amends certain parts of the CDCA Plan, as noted in Section 2.5.2 below.

2.4.2.3 California Desert Protection Act

The California Desert Protection Act (CDPA) of 1994 (Public Law 103–433) established the North Algodones Dunes Wilderness to be managed by BLM as a part of the National Wilderness Preservation System. Prior to passage of the California Desert Protection Act, the BLM studied both the North Algodones and South Algodones wilderness study areas for possible wilderness designation under Section 603 of FLPMA. No wilderness was designated for the South Algodones Dunes in the Act. Congress also indicated in the California Desert Protection Act that the South Algodones Dunes wilderness study area had been adequately studied for wilderness designation pursuant to Section 603 of FLPMA and would be released from wilderness study area status. As part of this planning process, however, the BLM evaluated an eventuality of lands not designated as wilderness containing wilderness characteristics and whether to manage these lands to protect wilderness characteristics present on the parcels.

2.4.2.4 ISD RAMP 1987

The Secretary of the Interior designated the Imperial Sand Hills Recreation Lands In 1972. The BLM also prepared a recreation management plan for the area in 1972. Portions of this plan were implemented, including the establishment of the Algodones Natural Area north of State Route 78 and construction of 5.3 miles of the Sand Dunes Road (now called Gecko Road) south of State Route 78, Cahuilla Ranger Station, and Gecko campground facilities along Gecko Road. In 1977, plant surveys revealed the presence of a number of sensitive species in the central dunes along the proposed Gecko Road alignment. To protect habitat for sensitive plants, BLM decided not to extend the road beyond its terminus at the site of Roadrunner Campground. In 1987, an updated RAMP was adopted, which included management prescriptions for the following: recreation opportunities, safety/emergency services/visitor protection, resource protection, protection of wilderness suitability, public contact and interpretation, facility development, operations and maintenance, concessions and vendors, access easements and land acquisitions, and compatibility of land uses. The 1987 RAMP did not address federally listed species or habitat, since none were listed or designated at the time.

2.4.2.5 Interim Closures 2001

In 2000, a group of environmental organizations filed suit against the BLM alleging that BLM was in violation of Section 7 of the Endangered Species Act by failing to enter into formal consultation with the USFWS on the effects of adoption of the CDCA Plan, as amended, upon threatened and endangered species.

Through a negotiated settlement, the BLM acknowledged that activities authorized or permitted under the CDCA Plan may adversely affect threatened and endangered species. The BLM acknowledged the requirement to consult with the USFWS as part of the process to adopt and implement the CDCA Plan so that it is not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of designated critical habitat of listed species. As a result of this acknowledgment, the BLM entered into a settlement agreement whereby it agreed to close certain portions of the Planning Area to OHV use while it developed an updated RAMP. The BLM agreed that those areas would not be reopened until the ROD for the RAMP was signed. In October 2001, the BLM issued a Federal Register notice closing portions of the Planning Area to OHV use pursuant to 43 CFR 8341.2(a).

2.4.2.6 ISD RAMP 2003

The 1987 ISD RAMP was updated in 2003 to provide a guide for management activities and to establish management actions for the Planning Area. It was designed to provide a variety of sustainable OHV and other recreational activities, and to maintain or improve the conditions of the special status species and other unique natural and cultural resources while creating an environment to promote the health and safety of visitors, employees, and nearby residents.

The ROD for the 2003 ISD RAMP was signed in March 2005. The ROD, the RAMP, its associated Final EIS, and supporting biological opinion were challenged in U.S. District Court. In a 2006 federal Court order, the Final EIS, ROD, and biological opinion for the Peirson's milk-vetch were vacated and remanded to the agencies for further consideration. The Court also remanded the RAMP to the BLM for further consideration. In its order on Summary Judgment (CBD v. BLM, 422 F. Supp. 2d 1115, March 14, 2006), the Court determined that the BLM was in violation of NEPA for its failure to consider the interim closure alternative as a full alternative and to take a hard look at endemic invertebrate species.

The U.S. District Court further determined that the BLM's approval of the RAMP based on an outdated invertebrate species inventory was arbitrary and capricious. The Court ordered the BLM to retain the negotiated closures. As a result of the Court's direction and remand and vacature of the 2005 ROD and EIS, and the remand of the 2003 RAMP, the BLM has managed the Planning Area using a compilation of authorizations, including the approved 1987 RAMP; the NECO and WECO CDCA Plan Amendments; and the CDPA of 1994 for the North Algodones Dunes Wilderness. As required by the Court order, the BLM has retained the interim closures.

The 2006 Court order also vacated and remanded the previous USFWS critical habitat designation for the federally threatened Peirson's milk-vetch. On February 14, 2008, the USFWS published a final rule revising critical habitat for the Peirson's milk-vetch.

2.4.2.7 Northern and Eastern Colorado Desert Coordinated Management Plan

The NECO is a landscape-scale multi-agency planning effort that protects and conserves natural resources while simultaneously balancing human uses of the California portion of the Sonoran Desert ecosystem (ROD signed in December 2002). The NECO amended the CDCA Plan to make it compatible with desert tortoise conservation and recovery.

The NECO area overlaps the ISD Planning Area in the eastern portion between the SRMA boundary and the Planning Area boundary. This RAMP maintains the NECO decisions in the overlap area.

2.4.2.8 Western Colorado Desert Routes of Travel Designations

The WECO implementation plan and environmental assessment establish site-specific route designations that are based on and tiered to the CDCA Plan and EIS (BLM 2003a).

The WECO planning area covers approximately 475,000 acres and designated approximately 2,320 miles of open off-road vehicle routes in parts of Imperial County. The plan provides a balance between protecting resources and providing for OHV use by updating previous designations for off-road vehicle limited use areas in Imperial County.

The WECO planning area overlaps the ISD Planning Area. This RAMP maintains the WECO decisions in the overlap area.

2.4.2.9 Other Related Plans and Records of Decision

This RAMP incorporates the following BLM programmatic NEPA documents, including the RODs and environmental analyses:

- Record of Decision for the Vegetation Treatments Using Herbicides on Bureau of Land Management Lands in 17 Western States. Final Programmatic Environmental Impact Statement (BLM 2007)
- Wind Energy Development on BLM-administered Lands in the Western United States. Final Programmatic Environmental Impact Statement (BLM 2005b)
- Record of Decision and Resource Management Plan Amendments for Geothermal Leasing in the Western United States (BLM 2008a)

- Record of Decision and Resource Management Plan Amendments for Designation of Energy Corridors on BLM-Administered Lands in the 11 Western States (BLM 2008b)

- Record of Decision for Solar Energy Development in Six Southwestern States (2012)

  - Lands made available for solar energy development will be managed as variance lands in accordance with the Approved Resource Management Plan Amendments/Record of Decision for Solar Energy Development in Six Southwestern States (BLM 2012).

To the extent consistent with the purposes, policies, and programs of federal laws and regulations applicable to public lands, the BLM will also coordinate land use planning and management of the public lands with state and local governments as well as other federal agencies. Relevant federal, state, and local plans include:

- Desert Tortoise Recovery Plan (USFWS 1994)

- Imperial County General Plan (1993)

- California State Off Highway Motor Vehicle Recreation Strategic Plan (2010)

- Desert Renewable Energy Conservation Plan

  - In 2008, the Governor of California signed Executive Order S-14-08 to establish the Desert Renewable Energy Conservation Plan (DRECP) followed by a Memorandum of Understanding between the State of California and the Department of the Interior to implement the DRECP. The Department of the Interior and the State of California signed an updated Memorandum of Understanding on January 13, 2012. The purpose of the DRECP is to conserve and manage plant and wildlife communities in the desert regions of California while facilitating the timely permitting of compatible renewable energy projects. The DRECP is a collaborative effort being developed under the Federal Endangered Species Act, FLPMA, and the California Natural Community Conservation Planning Act. The California Energy Commission, California Department of Fish and Wildlife, the USFWS, and the BLM make up the Renewable Energy Action Team, which is responsible for preparing the DRECP.

  - The Imperial Sand Dunes SRMA and the surrounding public lands of the ISD RAMP Planning Area are within the boundary of the DRECP; however, the DRECP planning process has not been completed as of the date of this ROD. The ROD for the DRECP will amend the CDCA Plan to adopt the renewable energy and conservation goals for the DRECP Planning Area. The DRECP ROD may include amendments to the one-mile-wide planning zone surrounding the SRMA to reflect the regional nature of the DRECP.

- Current decisions on lands within the ISD RAMP Planning Area that relate to renewable energy development are discussed below in Sections 2.5.2, 2.6, and 2.23.2.4. The decisions will remain in effect until the DRECP or other land use plan ROD amends them.

2.4.2.10 New Information

Since the 1987 RAMP was approved, many new studies and sources of information have been generated. While much of this information was considered in the 2003 RAMP, some of it has been generated since then. The BLM considered this information in the development of alternatives, existing condition information, and in the analysis of impacts in the EIS.

The critical information that has changed since the 1987 ISD RAMP was approved includes:

- Designation of the North Algodones Dunes Wilderness

- Designation of listed species and critical habitat for species protected under the Endangered Species Act—specifically, designation of Peirson's milk-vetch, a federally threatened plant, and its critical habitat and the Mojave population of the desert tortoise, a federally listed threatened animal found in the Planning Area

- Changes in the social and economic conditions of Imperial County and areas adjacent to the Planning Area, as well as the entire state of California, since 1987. These changes led to increases in demand for use of the public lands for recreation and resource use as well as an increased awareness and social value placed on the cultural and natural resources in the Planning Area.

- Dramatic changes in recreation on public lands over the past 25 years, both in levels of use and in the kinds of recreational activities. Much advancement has been made in recent years in the development of motorized vehicles that recreationists use in the Planning Area. The BLM visitor use statistics show that visitation steadily increased in years past, but is has begun to level off since about 2011.

- Revisions to BLM's guidance and policy related to land use planning, energy development, fire management, and other programs since the 1987 plan was approved. In 2008, the BLM published a new NEPA Handbook (H-1790-1) with updated guidance on EIS development.

- Updated inventories of invertebrates, plant and animal (including bird) surveys, and cultural resource inventories.

The 1987 and 2003 RAMPs were both plan-level and implementation-level documents. These plans approved management of the Planning Area on a programmatic planning-

and activity-specific basis. While plan-level decisions require no additional NEPA review once approval occurs, implementation-level decisions often require additional NEPA compliance.

2.5 Decisions

2.5.1 What the Decision / RAMP Provides

Many land use planning decisions are implemented or become effective upon approval of the RAMP. According to the BLM Land Use Planning Handbook, land use planning decisions are broad-scale decisions, which guide future land management actions and subsequent site-specific implementation decisions. Land use planning decisions identify specific areas of public land or mineral resources where certain uses or management actions are allowed, are excluded, or may be restricted in order to achieve a desired future condition or to protect certain resource values. Land use planning decisions fall into two categories: desired future conditions (goals and objectives) and management actions (allowable uses) to achieve outcomes.

2.5.1.1 Desired Future Conditions (Goals and Objectives)

Desired future conditions provide overarching direction for BLM actions in meeting the agency's legal, regulatory, policy, and strategic requirements. Goals and objectives initially were identified at the beginning of the planning process and refined through subsequent collaboration with cooperating agencies. Goals are broad statements of desired outcomes, but generally are not measurable. Objectives are more specific statements of a desired condition that may include a measurable component. Desired future conditions represent land or resource conditions that are expected to result if planning goals and objectives are fully achieved.

The CDCA Plan (1980, as amended) includes management direction for the ISD Planning Area. The goals and objectives presented in this RAMP/CDCA Plan Amendment are in addition to the CDCA Plan's goals. Where applicable, the CDCA Plan's management directions are referenced in this document.

2.5.1.2 Management Actions (Allowable Uses)

Management actions are anticipated to achieve the desired future conditions. Management actions identify where land uses are allowed, restricted, or prohibited on all BLM-administered surface lands and federal mineral estate in a planning area. The RAMP includes specific land use restrictions to meet desired future conditions and may exclude certain land uses to protect resource values. Because the RAMP identifies whether particular land uses are allowed, restricted, or prohibited, management actions often include a spatial (e.g., map) component. Management actions that require additional site-specific project planning as funding becomes available will require further

environmental analysis. The BLM will continue to involve and collaborate with the public during implementation of this plan.

2.5.2 CDCA Plan Amendment Decision Summary

The following is a summary of the key decisions of the ISD RAMP in accordance with BLM's planning regulations, 43 CFR 1601-1610. The following decisions of the ISD RAMP also amend the CDCA Plan:

- Approves Regional Public Land Health Standards and Guidelines. Land Health Standards and Guidelines have been selected for lands within the Planning Area. Following approval of this ROD, the State Director will submit the regional standards and guidelines for approval by the Secretary of Interior.
- Classifies microphyll woodlands as avoidance areas for all commercial and non-commercial surface-disturbing activities
- Closes Peirson's milk-vetch critical habitat to OHV use and other motorized recreation
- Reduces the East Mesa ACEC from 6,454 acres to 5,799 acres
- Eliminates the North Algodones Dunes ACEC in order to remove redundant management prescriptions between this ACEC and the North Algodones Dunes Wilderness
- Establishes VRM classes as follows: 26,098 acres of Class I; 104,739 acres of Class II; 69,055 acres of Class III; and 15,039 acres of Class IV
- Excludes ACECs from solar and wind energy development
- Excludes Peirson's milk-vetch critical habitat and the flat-tailed horned lizard management area from wind and solar energy development and from all other types of land use authorizations. Exclusion areas area areas which are not available for location of rights-of-way under any conditions.
- Excludes donated lands from wind and solar energy development.
- Makes 35,115 acres available for solar and wind energy development
- Prohibits mineral sales or free use permits within the ISD Special Recreation Management Area
- Excludes ISD SRMA and donated lands from geothermal minerals leasing

- Classifies the one-mile-wide planning zone surrounding the SRMA (excluding flat-tailed horned lizard management area; 35,115 acres) as available for geothermal leasing
- Allocates 127,416 acres to the Open Recreation Management Zone
- Allocates 9,046 acres to the Resource Protection Recreation Management Zone
- Allocates 52,370 acres to the Limited Recreation Management Zone
- Allocates 26,096 acres to the North Algodones Dunes Wilderness Recreation Management Zone
- Designates 127,416 acres as Open OHV area
- Designates 35,144 acres as Closed OHV area
- Designates 52,370 acres as Limited OHV area

2.5.3 Incorporation of Terms and Conditions of U.S. Fish and Wildlife Service Biological Opinion

This ROD and RAMP incorporates the terms and conditions of the November 2, 2012 Biological Opinion issued to the BLM by the USFWS (see Appendix A).

2.5.4 Termination of Interim Closures

Pursuant to the 2006 order of the U.S. District Court, the interim closures will be terminated 90 days after the ROD unless the original parties file a motion with the Court to keep the original interim closures in place.

2.5.5 Provide for Authorization and Use

The BLM will continue to administer existing authorizations and uses and will consider future requests consistent with this ROD. Any new authorization or use of public land within the Planning Area must be in conformance with the RAMP and subject to site-specific analysis. Such authorization and use will be subject to administrative review at the time of issuance of a final BLM decision regarding the authorization or use.

2.5.6 Implementation of the RAMP

The planning process began when the BLM published the Notice of Intent to prepare an RAMP with EIS in the Federal Register on March 18, 2008. The Notice of Availability of the Draft RAMP and Draft EIS was published on March 26, 2010. The Notice of

Availability of the Proposed RAMP/Proposed CDCA Plan Amendment and Final EIS was published on September 14, 2012.

Implementation of the RAMP will begin with publication of its Notice of Availability in the Federal Register. Some decisions in the RAMP require immediate action and will be implemented upon publication of the ROD and RAMP. Other decisions will be implemented over a period of years. The rate of implementation is tied, in part, to the BLM's budgeting process.

2.5.7 What the Decision / RAMP Does Not Provide

The RAMP does not contain decisions for actions outside the jurisdiction of the BLM. Comments asking for decisions that were beyond the scope of this plan were forwarded to the appropriate agency. In addition, many decisions are not appropriate at this level of planning and are not included in the ROD.

2.6 Decisions

This section describes the land use planning decisions established by the RAMP/CDCA Plan Amendment. It also includes implementation-level decisions (see Chapter 1, Section 1.1.1). This section is organized by resources and uses.

Throughout this section, information is displayed at a broad overview level, which then moves to the specific. The planning document is presented first by resource, the presence or abundance of which may vary from location to location within the Planning Area. Two different types of land use plan decisions are presented for each resource: Goals and Objectives, and Management Actions. Goals and Objectives are the desired outcomes for resource conditions and resource uses. Management Actions are actions, allowable uses, and land designations that the BLM will implement to achieve the goals and objectives for a particular resource or resource use.

Additional decisions that provide a better understanding of decisions required in the program guidance include Land Health Standards and Guidelines, Land Tenure Adjustment, and Special Designations. These decisions also support the goals outlined in the Goals and Objectives.

The RAMP/CDCA Plan Amendment addresses transportation and access, and designates sections of the Planning Area as open, closed, and limited with a statement of the limitations for OHV recreation. Decisions such as route designation and vending area designation are not planning-level decisions but rather implementation-level decisions. Individual routes are designated as open, closed, and limited by applying the criteria of 43 CFR 8364.1.

The goals and objectives and management actions under the RAMP are numbered and arranged by specific resources and resource uses. Each decision is assigned one of the codes in Table 2-1 below.

TABLE 2-1
DECISION LETTERING FOR RESOURCES AND RESOURCE USES

Resources and Resource Uses	Lettering Code
Multiple Use Classes	MUC
Land Health Standards	LHS
Air Resource Management	ARM
Soil Resource Management	SRM
Water Resource Management	WRM
Vegetative Resource Management	VEG
Priority Plant Species	PPS
Invasive Non-native Plants	INP
Vegetative Use Authorization	VUA
Wildlife Resource Management	WLD
Raptors	RAP
Non-game Migratory Birds	BRD
Bats	BAT
Invertebrates	INV
Game Animals (Birds and Mammals)	GME
Special Status Species Management	SSS
Peirson's Milk-vetch	PMV
Mojave Population of the Desert Tortoise	MDT
State-listed Species	SLS
BLM Sensitive Species	BSS
Wildland Fire Management	WFM
Cultural Resource Management	CRM
Paleontological Resource Management	PRM
Visual Resource Management	VRM
Special Designations – Wilderness	WIL
Lands with Wilderness Characteristics	LWC
Areas of Critical Environmental Concern	ACE
Mineral Resource Management	MIN
Recreation Resource Management	REC
Transportation and Public Access	TPA
Lands and Realty Management	LRM
Public Health and Safety	PHS

2.7 Multiple Use Classes

The 25 million-acre CDCA was established by Congress in 1976 through the FLPMA (43 USC 1781[a]). The CDCA Plan was completed in 1980 and provides guidance for the 11 million acres of public lands within the CDCA administered by the BLM.

The CDCA Plan is a comprehensive long-range plan with goals and specific actions for the management, use, development, and protection of the resources and public lands within the CDCA. The plan is based on the concepts of multiple use, sustained yield, and maintenance of environmental quality. All of the public lands in the CDCA under BLM management, including the ISD, have been designated geographically into four MUCs. The classification was based on the sensitivity of resources and kinds of uses that may be allowed for the each geographic area.

2.7.1 Goals and Objectives

Four MUCs are used in the CDCA Plan. Each describes a different type and level or degree of use that is permitted within a geographic area. The MUCs as described in the CDCA Plan were maintained and were not changed under any alternative[1].

The description of each MUC is listed below:

- Class C (Controlled Use): These lands are to be preserved in a natural state, and access is generally limited to non-motorized, non-mechanized means (e.g., by foot or horseback).
- Class L (Limited Use): These lands are managed to protect sensitive, natural, scenic, ecological, and cultural resource values. They provide for generally lower intensity and carefully controlled multiple uses that do not significantly diminish sensitive resource values.
- Class M (Moderate Use): These lands are managed in a controlled balance between higher intensity use and protection of public lands. A wide variety of uses, such as mining, livestock grazing, recreation, and energy and utility development are allowed. Class M management is also designed to conserve desert resources and to mitigate damage to those resources which permitted use may cause.

[1]The Proposed RAMP/CDCA Plan Amendment and Final EIS contained an error regarding the alternatives for MUCs. Chapter 2, Section 2.3.1.2, Management Actions Common to All Alternatives, erroneously stated that the existing MUCs would be carried forward in Alternatives 1 and 2, and amended in Alternatives 3 through 8. The intent of the BLM was that the existing MUCs would be common to all alternatives, as depicted on Map 2-1.

- Class I (Intensive Use): These lands are managed for concentrated use to meet human needs. Reasonable protection is provided for sensitive natural and cultural values, and mitigation of impacts and rehabilitation of impacted areas will occur when possible.

The existing CDCA Plan MUCs are carried forward under this RAMP. The general areas covered by the MUCs, their acres, and the types and intensity of recreational uses allowed are listed in Table 2-2 below. The MUCs are also depicted in Map 2-1.

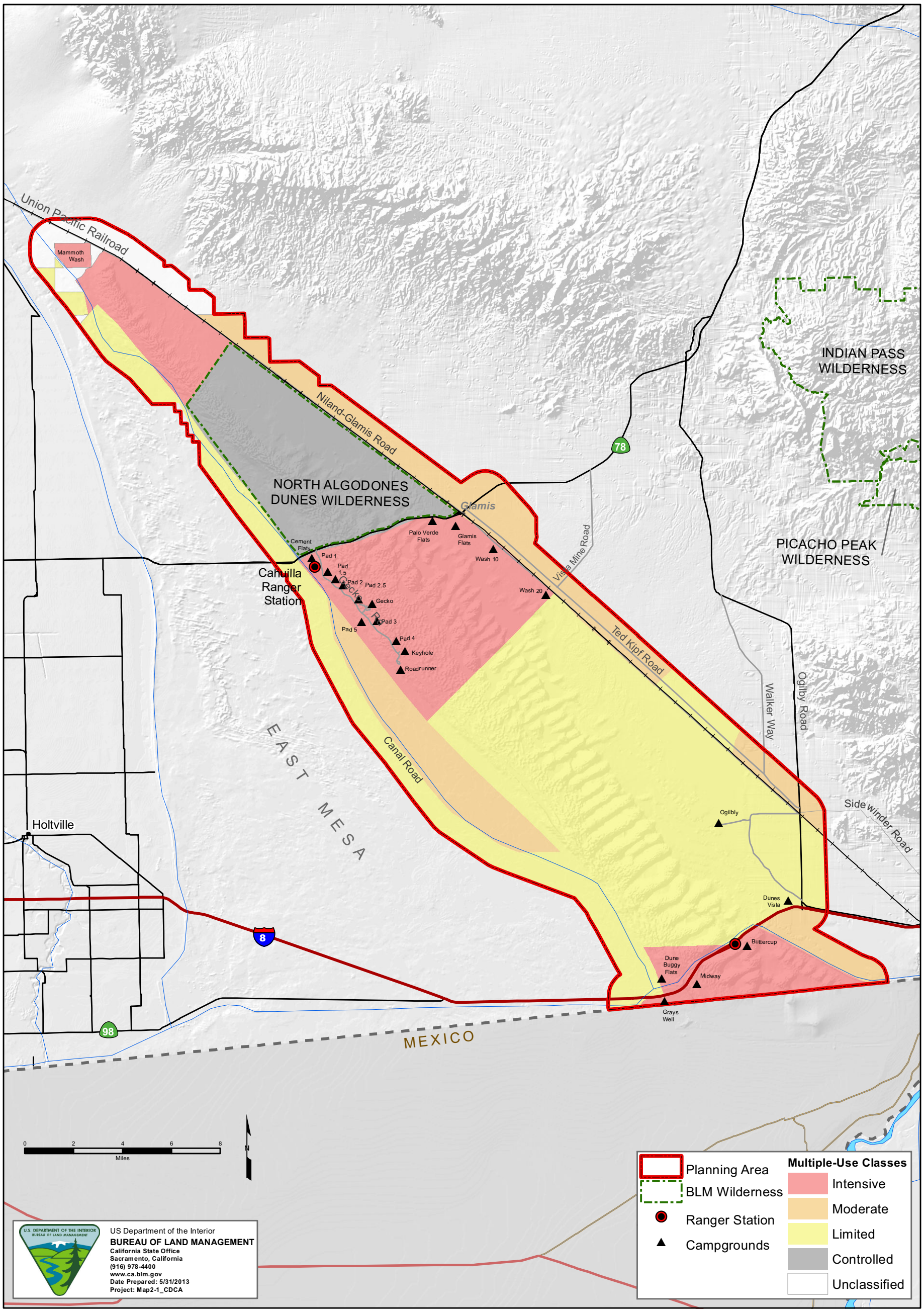
TABLE 2-2
MUCs[1] PREVIOULSY DESIGNATED WITHIN THE ISD

MUC C	MUC L	MUC M	MUC I
North Algodones Dunes Wilderness	Large Central Portion of the ISD Ogilby Area	Area between Old Coachella Canal and New Coachella Canal	Mammoth Wash Area Dunebuggy Flats Area Glamis Area Buttercup Area Gecko Area

[1]CDCA listings

2.8 Land Health Standards Management

The BLM actively manages BLM-administered lands under the Standards for Rangeland Health and Guidelines for Grazing Administration (Rangeland Standards and Guidelines) through authorized uses. Although developed for grazing and rangeland management, it is BLM policy to develop land health standards for all ecosystems through the land use planning process (BLM Handbook H-4180-1, Rangeland Health Standards, II-1). Since grazing does not occur in the Planning Area, these standards are referred to as Land Health Standards in this document. The Secretary of the Interior's Healthy Lands Initiative, which began in 2007, is intended to accelerate land restoration, increase productivity, and improve the health of public lands in the western United States. The goal of the Initiative is to preserve the diversity and productivity of public and private lands across the landscape. The Rangeland Health Standards in the California Desert District have not been approved by the Secretary of the Interior. The BLM will submit the RAMP land health standards, as part of the California Desert District's Rangeland Health Standards, to the Secretary of the Interior for approval. The fallback Rangeland Health Standards for the California Desert District will remain in effect until the proposed standards are approved. Standards are defined as an expression of the level of physical and biological condition or degree of function required for healthy, sustainable public lands. While these standards apply to all public lands managed by the BLM, some resources or conditions may not be present on all public lands. The standards are presented here in full, regardless of resources present (such as riparian areas).



IMPERIAL SAND DUNES RECREATION AREA MANAGEMENT PLAN

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
El Centro Field Office
June 2013

MAP 2-1: CDCA Plan Designated Multiple Use Classes

The Bureau of Land Management makes no warranties, implied or expressed, with respect to information shown on this map.

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Throughout this chapter, Land Health Standards for individual resources are incorporated into each resource's goals and objectives.

2.8.1 Goals and Objectives

LHS-01 Meet or exceed the national policy for watersheds, ecological processes, water quality, and habitats.

LHS-02 Implement the Land Health Standards and Guidelines identified in this document when the California Desert District Rangeland Health Standards are approved by the Secretary of the Interior.

2.8.2 Management Actions

LHS-03 Once the California Desert District Rangeland Health Standards are approved by the Secretary of the Interior, the following regional Land Health Standards will be adopted for the Planning Area:

Standard #1—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. Criteria for this standard are as follows:

- Canopy and ground cover are appropriate for the site.
- There is a 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.
- Soil permeability, nutrient cycling, and water infiltration are appropriate for the soil type.

Standard #2—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. Criteria for this standard are as follows:

- Vegetative cover adequately protects banks and dissipates 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 that soil moisture characteristics are being maintained.
- There is minimal cover of shallow-rooted invader species, and they are not displacing deep-rooted native species.
- Shading of stream courses and water sources is sufficient to support riparian vertebrates and invertebrates.
- Stream is in balance with water, and sediment is being supplied by the watershed where appropriate.
- Stream channel size and meander is appropriate for soils, geology, and landscape.
- Adequate organic matter (litter and standing dead plant material) is present to protect the site and to replenish soil nutrients through decomposition.

Standard #3—Native Species: Healthy, productive, and diverse habitats for native species, including special status species, are maintained in places of natural occurrences. Criteria for this standard are as follows:

- Photosynthetic and ecological processes continue at levels suitable for the site, season, and precipitation regimes.
- Plant vigor nutrient cycles and energy flows are maintaining desirable plants and ensuring reproduction and recruitment
- Plant communities are producing litter within acceptable limits.
- Age class distributions 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 or require action to prevent the spread and introduction of noxious/invasive weeds.
- Appropriate natural disturbances are evident.
- Populations and their habitats are sufficiently distributed to prevent the need for new listings of special status species.

Standard #4—Water Quality: Water quality will meet state and federal standards, including exemptions allowable by law. Criteria for this standard are as follows:

- Dissolved oxygen levels, aquatic organisms, and aquatic plants (e.g., macroinvertebrates, fish, and algae) indicate support of beneficial uses.
- Chemical constituents, water temperatures, nutrient loads, fecal coliform, and turbidity are appropriate for the site or source.
- Best management practices are implemented (best management practices have been included in Appendix E of this document)

2.9 Air Resources Management

The FLPMA and the Clean Air Act of 1970 and Amendments of 1977 and 1990 (42 USC 7401 et seq.) prohibit the BLM or any federal land management agency from conducting, supporting, approving, licensing, or permitting any activity on federal land that does not comply with all applicable local, state, and federal air quality laws, statutes, regulations, and implementation plans. In support of these regulations, the El Centro Field Office has developed a Dust Control Plan, reviewed by the Imperial County Air Pollution Control District (ICAPCD), which provides benefits to air quality and other resources by decreasing air pollutant concentrations, increasing visibility, and decreasing atmospheric deposition (Appendix F). Adherence to air quality regulatory programs through coordination with other federal and state agencies is a key to air quality management success.

Other applicable sections of the Clean Air Act include:

- Applicable National Ambient Air Quality Standards (Section 109)
- State Implementation Plans (Section 110)
- Control of Pollution from Federal Facilities (Section 118)
- Prevention of Significant Deterioration, including visibility impacts to mandatory Federal Class I Areas (Section 160 et seq.)
- Conformity Analyses and Determinations (Section 176(c))

The CDCA Plan, as part of the MUC Guidelines, provides management direction for air quality protection in the region. Under this plan, areas will be managed to protect their air quality and visibility in accordance with Class II objectives of Part C of the Clean Air Act Amendments, unless designated another class by the State of California as a result of recommendations developed by any BLM air quality management plan.

2.9.1 Goals and Objectives

ARM-01 Maintain or improve air quality as established by the National Ambient Air Quality Standards and California Ambient Air Quality Standards through cooperative management of emissions with industry, the State of California, and federal agencies.

ARM-02 Strive to minimize, within the scope of the BLM's authority, any emissions that may cause violations of air quality standards, may add to acid rain, or degrade visibility.

2.9.2 Management Actions

ARM-03 Comply with the applicable State of California air quality standards for all actions that will contribute to particulate matter emissions in the air as a result of actions taken.

ARM-04 As needed, based on the BLM Dust Control Plan, treat the entry road to Dunebuggy Flats Campground for dust control to reduce the impact of OHV activities on air quality, as personnel and funding levels allow.

ARM-05 Install air meters (numbers and locations to be determined) for ozone and particulate matter less than 10 microns in diameter in the Planning Area, if requested by ICAPCD or the U.S. Environmental Protection Agency. Implement actions to mitigate for contributions to the non-attainment due to activities in the Planning Area, as requested by ICAPCD, and as personnel and funding levels allow.

ARM-06 Evaluate impacts of activities within the Planning Area to air quality non-attainment. Implement BLM Dust Control Plan to reduce the effects to air quality as required by the ICAPCD.

ARM-07 Use the best available control measures. These measures may include hardening of applicable roadways, watering or applying dust suppressants to roadways, limiting vehicle speeds, or restricting vehicular access. The BLM maintains a Dust Control Plan with the ICAPCD and will use this plan to determine what best available control measures to use.

2.10 Soil Resource Management

The ISD comprises a variety of dune types (e.g., draas, linear, parabolic, barchan, zibars). These dunes are separated occasionally by inter-dune areas, where relatively little sand accumulates into dune formations. The dune system lies on alluvial fan material emanating from the Cargo Muchacho Mountain and Chocolate Mountain. Some dunes reach 300 feet in height.

The Planning Area contains a wide variety of soil types, as might be expected in a zone that spans the transition from low desert to rocky desert mountains. This variety of soil types is the result of diversity in parent material, relief, climate, living organisms, and age of the soils.

2.10.1 Goals and Objectives

SRM-01 Manage soils to maintain productivity and to minimize erosion.

SRM-02 Preserve the natural process of dune movement and formation.

SRM-03 Meet Land Health Standard #1, as related to soils and as described in Section 2.8).

2.10.2 Management Actions

SRM-04 Minimize surface disturbance from authorized activities. Post-activity disturbed surfaces will be restored to a pre-disturbance or natural condition as applicable.

SRM-05 Incorporate erosion control measures into projects on a case-by-case basis.

2.11 Water Resource Management

The objective of the Federal Water Pollution Control Act (Clean Water Act, Public Law 92-500, as amended; 33 USC §§ 1251 et seq.) is to restore and maintain the chemical, physical, and biological integrity of the nation's waters (Section 101a). Under Sections 401 and 404, the Clean Water Act regulates point and non-point-source pollution. Other applicable regulations include the California Water Code.

Surface waters in the Planning Area can be divided into watersheds, portions of the landscape that collect runoff from the surface, concentrate it into channels, and conduct the resulting flow to a definable outlet. The Planning Area is traversed by the All-American and the Coachella canals, which carry water from the Colorado River to the Imperial and Coachella valleys. The Planning Area is within the Colorado River watershed basin (Watershed Region 7).

The Planning Area occurs within the Amos–Ogilby–East Mesa groundwater basin. The groundwater resources within BLM-managed lands are managed by the BLM. This is without regard to Federally Reserved Water Rights, which apply to all water needs related to the reservation of federal lands. Local jurisdictions may exert authority over some aspects of the production of groundwater, such as drilling. The BLM works in cooperation with the California State Water Resources Control Board and California Department of Water Resources regarding management of the groundwater resource.

The CDCA Plan, as part of the MUC Guidelines, provides management direction for water quality protection in the region. Under this plan:

- Class C areas will be managed to maintain and enhance both surface and groundwater resources.
- Class L areas will be managed to provide for the protection and enhancement of surface and groundwater resources, except for instances of short-term degradation caused by water development projects. Best management practices developed by the BLM during the planning process outlined in the Clean Water Act Section 208 will be used to avoid degradation and to comply with Executive Order 12088.
- Class M and I areas will be managed to minimize degradation of water resources. Best management practices developed by the BLM during the planning process outlined in the Clean Water Act Section 208 will be used to avoid degradation and to comply with Executive Order 12088.

2.11.1 Goals and Objectives

2.11.1.1 General

WRM-01 Promote BLM activities or authorized activities that do not degrade surface or groundwater in the Planning Area.

WRM-02 Promote water quality to achieve or make significant progress toward achieving established BLM management objectives such as meeting wildlife needs.

WRM-03 Meet proposed Land Health Standard #4, as related to water quality (see Section 2.8.2).

2.11.1.2 Surface Water

WRM-04 Identify and protect surface waters where possible.

WRM-05 Preserve and enhance the natural condition and hydrology of washes.

WRM-06 Identify area-wide use restrictions or other protective measures to meet federal, state, and local water quality requirements.

2.11.1.3 Groundwater

WRM-07 Make groundwater, where present, available for beneficial use on public lands in coordination with the State of California and Imperial County.

2.11.2 Management Actions

WRM-08 Prevent or reduce water quality degradation through implementation of applicable best management practices or other specific mitigation measures, when applicable.

WRM-09 Continue to maintain or improve water quality in accordance with state and federal standards. Consult with the appropriate state agencies on proposed projects that may significantly affect water quality.

WRM-10 Maintain authorized vehicle routes in a manner that will promote natural hydrology and protect water quality through application of best management practices.

2.12 Vegetative Resource Management

The primary vegetation communities within the Planning Area are: creosote bush scrub, microphyll woodlands, psammophytic scrub, and canal-influenced vegetation (Westec 1977; BLM 1987).

The basis for managing vegetation and invasive or noxious weeds for BLM lands can be found in the following federal laws, regulations, and policies:

- Taylor Grazing Act of 1934
- Public Rangelands Improvement Act of 1978
- Clean Water Act of 1977
- Federal Noxious Weed Act of 1974
- Executive Order 13112—Invasive Species Control
- BLM Manual Section 1740—Renewable Resource Improvements and Treatments
- BLM Manual 9011—Chemical Pest Control
- Vegetation Treatment Using Herbicides on BLM Lands in 17 Western States Final Programmatic Environmental Impact Statement and ROD of November 2007
- Endangered Species Act of 1973, as amended
- Natural Resources Conservation Service Ecological Site Guides
- California State Director and Pacific Southwest Regional Forester Traditional Gathering Policy (Appendix G)

In addition, the following non-federal agreements and laws will be applied in the Planning Area:

- California Native Plant Protection Act of 1977
- California Endangered Species Act
- 1988 Food and Agricultural Code of California (Division 23, California Desert Native Plants Acts)

The BLM management goals for vegetation from the CDCA Plan's Vegetation Element are outlined below:

- Maintain the productivity of the vegetative resource while meeting the consumptive needs of wildlife, livestock, wild horses and burros, and humans. Provide for such uses under principles of sustained yield.
- Manage plant species on the federal and state lists of threatened and endangered species and their habitats, so that the continued existence of each will not be jeopardized. Stabilize and, where possible, improve populations through management and recovery plans developed and implemented cooperatively with the USFWS and the California Department of Fish and Wildlife.
- Manage plant species that the BLM has officially designated as sensitive for California and their habitats, so that the potential for federal or state listing is minimized. Include consideration of sensitive species habitats in all decisions, so that impacts are avoided, mitigated, or compensated.
- Manage unusual plant assemblages, so that their continued existence is maintained. In all actions, include consideration of unusual plant assemblages, so that impacts are avoided, mitigated, or compensated.
- Manage wetland and riparian areas in the CDCA with the following specific objectives: a) avoid the long-term and short-term impacts associated with the destruction, loss, or degradation of wetland and riparian areas; b) preserve and enhance the natural and beneficial values of wetland and riparian areas, which may include constraining or excluding those uses that would cause significant long-term ecological damage; c) include practical measures to minimize harm in all actions causing adverse impacts on wetlands and riparian areas; and d) retain all wetlands and riparian habitats presently under BLM administration wherever high resource values exist and adverse impacts cannot be mitigated.
- Accomplish the objectives of other resources by altering plant composition, density, and/or cover. Objectives include eliminating harmful or noxious plants, increasing livestock or wildlife forage production, and improving wildlife habitat characteristics.

Diversified native plant communities are favored over monocultures or communities based on non-native species.

2.12.1 Plant Communities

2.12.1.1 Goals and Objectives

2.12.1.1.1 Planning Area-wide

VEG-01 Maintain viable populations of all native species throughout the Planning Area.

VEG-02 Maintain habitat connectivity throughout the Planning Area to limit habitat fragmentation and maintain transfer of genetic material from all sub-populations.

VEG-03 Protect biological diversity through the conservation of native plant communities and special status species with consideration for multiple uses of the land and sustained ecological function.

VEG-04 Maintain and enhance a mosaic of native plant communities.

VEG-05 Promote wildlife forage and habitat values, and maintain and/or restore intrinsic biological integrity and value of all native plant communities.

VEG-06 Protect or restore native species through an integrated weed management approach emphasizing prevention, early detection, and eradication of invasive non-native plants.

VEG-07 Promote plant communities that continue to support wildlife in a manner consistent with other resource management practices or uses.

VEG-08 Promote natural processes that secure soil resources and protect against erosion and air quality degradation.

VEG-09 Meet proposed Land Health Standards #3 and #4, as related to vegetative resources (see Section 2.8.2).

2.12.1.1.2 Desired Plant Communities

Creosote Bush Scrub

VEG-10 Promote multi-layered desert communities that are dominated by perennial vegetation, which provide for watershed connectivity, sediment capture and storage, energy dissipation, and bank stability.

VEG-11 Promote diverse vegetative composition and structure that include such species as creosote (*Larrea tridentata*), desert willow (*Chilopsis linearis* spp. *arcuata*), Mormon

tea (*Ephedra trifurca*), burro bush (*Ambrosia dumosa*), and giant Spanish needle (*Palafoxia arida* var. *gigantea*).

VEG-12 Promote sufficient vegetation that provides landscape habitat connectivity and physical stability, which in turn support ground-dwelling species.

Microphyll Woodlands

VEG-13 Promote multi-layered desert communities that are dominated by perennial vegetation, which provide for watershed connectivity, sediment capture and storage, energy dissipation, and bank stability.

VEG-14 Promote diverse vegetative composition and structure that include such species as blue palo verde (*Cercidium floridum* spp. *floridum)*, desert willow, ironwood, mesquite, smoke tree (*Psorothamnus spinosus)*, and catclaw acacia (*Acacia greggii*). Size and growth form, such as overhanging branches and mid- and under-story vegetation, are represented by naturally occurring species of moderate density.

VEG-15 Promote sufficient vegetation that provides landscape habitat connectivity and physical stability, which in turn support ground-dwelling species.

Psammophytic Scrub

VEG-16 Promote diverse vegetative composition and structure that include such species as Colorado Desert buckwheat (*Eriogonum deserticola*), Mormon tea, fan-leaf crinkle-mat (*Tequilia plicata*), and Wiggin's croton.

VEG-17 Promote sufficient vegetation to provide landscape habitat connectivity and physical stability, which in turn supports ground-dwelling species.

2.12.1.2 Management Actions

VEG-18 Implement a monitoring plan for the microphyll woodland community. Analyze the monitoring data to compare the trend in vegetation cover due to the different types of impacts in each area.

VEG-19 Implement a thorough monitoring program to track recreation use and the condition of special status species (see Appendix D).

VEG-20 Avoid adverse impacts to special status species, priority species, plants protected by the California Native Plant Protection Act, and their associated habitats by developing, modifying, redesigning, mitigating, or abandoning specific projects.

VEG-21 Restore degraded native plant communities through restoration activities that could include but are not limited to exclusion of disturbance activity, invasive plant removal, site preparation, and revegetation.

VEG-22 Restore surface disturbance from discretionary activities (e.g., right-of-way construction) with rehabilitation measures including imprinting, contouring, debris and brush replacement, native plant seeding (where appropriate), and invasive plant treatment.

VEG-23 Restore surface disturbance from illegal trespass activities (not including closure violations) with rehabilitation measures including imprinting, contouring, debris and brush replacement, native planting or seeding (where appropriate), and invasive plant treatment.

VEG-24 Require minimum impact approaches such as trimming trees instead of removal, using existing routes and rights-of-way instead of creating new ones, and using previously disturbed sites and crushed vegetation instead of blading new routes, where appropriate.

VEG-25 Encourage transplanting of plant species directly on-site or onto neighboring public lands where feasible, using approved protocol for surface-disturbing activities where avoidance is not possible.

VEG-26 Design surface-disturbing activities to avoid impacts to desired plant communities to the greatest extent possible. Where avoidance is not possible, these areas will be restored to their previously undisturbed or native condition. Restoration will follow approved protocol and include watering and maintenance until establishment.

VEG-27 Remove tamarisk and other non-native invasive plant species using mechanical and herbicide applications in accordance with the BLM policy on minimum tools in wilderness and the Vegetation Treatment Using Herbicides on BLM Lands in 17 Western States Final Programmatic EIS (BLM 2007) and ROD of November 2007.

VEG-28 Salvage useable native plants and parts of plants where plants would normally be lost due to development, disposal, or disturbance on public lands when practicable. Plants and parts of plants may be replanted on public lands or salvaged for public purposes. Plants and parts of plants will only be removed from public lands pursuant to applicable federal and state laws and regulations governing the sale, disposal, and transportation of plants.

VEG-29 Use native plant materials for landscaping at developed facilities within public lands.

VEG-30 Treat non-native invasive species, where appropriate, to meet management objectives.

VEG-31 Limit the introduction of non-native plants through an education program partnered with recreational users, OHV users, and other recreational users.

VEG-32 Develop partnerships with adjacent landowners, local agencies, state agencies, and federal agencies to manage habitat, conduct restoration activities, develop educational material, and provide interpretation of vegetation.

VEG-33 Give rehabilitation priority to habitat that supports special status species and ACECs.

VEG-34 Prohibit removal of native standing trees, alive or dead, with the exception of fire management, public health and safety, or disease control.

VEG-35 Classify microphyll woodlands as avoidance areas for all commercial and non-commercial surface-disturbing activities. Avoidance areas are defined in the BLM Land Use Planning Handbook as areas to be avoided but which may be available for location of rights-of-way with special stipulations.

VEG-36 Allow OHV recreation and prohibit camping in microphyll woodlands south of Wash 33 and north of Wash 70 (see also Section 2.25—Transportation and Public Access in this chapter).

2.12.2 Priority Plant Species

Priority plant species are rare, unusual, or key species that are not listed as BLM sensitive or listed as threatened and endangered species. Priority plant species are known to occur on or near the BLM-administered lands within the Planning Area. The El Centro Field Office priority plant species list will be updated on a regular basis to reflect new information and survey data. These species have ecological importance, rarity, and human interest. Identification of priority plant species will help prevent the avoidable loss of these plants due to development and implementation of other multiple-use objectives.

2.12.2.1 Goals and Objectives

PPS-01 Ensure that plant species populations are stable or increasing, with adequate recruitment given the ecological conditions and dynamics associated with the Planning Area.

PPS-02 Promote landscape-scale conservation of the priority plant species to protect or restore botanical resources of concern and to ensure consistent management across jurisdictional boundaries.

2.12.2.2 Management Actions

PPS-03 Minimize or mitigate loss of habitat or fragmentation of priority plant species populations.

PPS-04 Avoid priority plant species where possible to mitigate for surface-disturbing activities. Where avoidance is not possible, these populations will be restored as appropriate to their previously undisturbed or native condition after completion of the activity. Restoration of priority plant species and habitat will follow approved protocol and include watering and maintenance until establishment.

PPS-05 Implement protection and restoration measures such as signage, invasive weeds treatment, and native plant seed collection for the priority plant species.

PPS-06 Treat non-native invasive species where appropriate to protect priority plant species.

2.12.3 Invasive Non-native Plants

Non-native, invasive, and state- and federally listed noxious weed species collectively constitute one of the gravest threats to the biodiversity of BLM lands. Two critical components of managing these species are identifying those species that threaten biodiversity and other ecological functions and values, and prioritizing species for management efforts, which must be based, at least in part, on the ecological impacts imparted by these invaders.

Non-native invasive species degrade aesthetic vegetation values, tourism opportunities, and recreational value of public lands. Native species in upland and riparian ecosystems are competitively reduced, and the ecological process altered when non-native plants (both noxious and invasive weeds) become established and flourish.

2.12.3.1 Goals and Objectives

INP-01 Prevent the introduction or spread of non-native invasive and state- and federally listed noxious weed species and promote the reduction of existing invasive species populations.

2.12.3.2 Management Actions

INP-02 Use an integrated pest management approach to ensure that the best methods available are implemented to prevent the introduction of and to control the spread of non-native plants, invasive plants, and noxious weeds (Department of the Interior 2007).

INP-03 Treat non-native invasive species that constitute significant fuel load and fire threat directly by using integrated pest management or management through fire breaks and other tactics.

INP-04 Treat tamarisk and other invasive non-native species in the Planning Area.

2.12.4 Vegetative Use Authorization

The BLM manages vegetation for habitat, multiple use, and sustained yield. This section describes authorizations that are needed to collect plant material from public land and activities that do not require written authorization.

2.12.4.1 Goals and Objectives

VUA-01 Ensure presence of dead and downed wood on the ground to provide wildlife habitat and reduce soil erosion.

VUA-02 Allow for the collection of plant material consistent with the maintenance of natural ecosystem processes.

2.12.4.2 Management Actions

VUA-03 Prohibit wood cutting for commercial purposes in the Planning Area.

VUA-04 Prohibit dead and downed wood collection within the ISD SRMA and ACECs.

VUA-05 Prohibit commercial wood collection within the microphyll woodlands or ACECs.

VUA-06 Grant free use, without permit, of culturally important plants for traditional cultural gathering of vegetation by Native Americans in accordance with Interagency Traditional Gathering Policy (see Appendix G). No commercial vegetation collection will be permitted. All other collection will only be allowed for educational, research, or environmental restoration purposes.

VUA-07 Prohibit removal of native standing trees alive or dead with the exception of fire management, public health and safety, or disease control.

2.12.4.2.1 Allowable Uses Requiring Permits

VUA-08 To manage vegetation resources, the BLM will administer a permit program for specific commercial and non-commercial uses. Vegetative use authorization will be considered for educational, research, or environmental restoration purposes, and permits will include standard guidelines and stipulations for collection. Permits could also include stipulation developed during a site-specific NEPA analysis. Priority plant species will be protected and collections will be permitted on a case-by-case basis.

- **Plant and Seed Collection.** Scientific collection of vegetative materials, including seeds, will require a free-use permit (Form 5510). Commercial seed collection will require a permit on BLM lands and will follow approved protocol. Seed collection for BLM administrative use will follow approved protocol.

- **Salvage Plant Collection.** Plant salvage will be allowed within the Planning Area for educational, research, or environmental restoration purposes. Plant salvage will require prior written authorization from BLM and may require a permit from the United States Department of Agriculture.

2.12.4.2.2 Allowable Uses Not Requiring Permits

VUA-09 The public does not need a written authorization or permit for the following uses:

- Per 43 CFR 8365.1-5(b), "Except on developed recreation sites and areas, or where otherwise prohibited and posted, it is permissible to collect from the public lands reasonable amounts of the following for noncommercial purposes:"

  1. Small quantities (no more than 20 percent of available resource from any individual plant and from total collecting area) of flowers for personal use

  2. Small quantities (no more than 20 percent of available resource from any individual plant and from total collecting area) of dry vegetation, nuts, or berries

  3. Five or fewer pieces (i.e., cuttings) of a live native plant (California Native Plant Protection Act)—no whole plants may be collected

  4. Tamarisk in any quantities

- Free use, without permit, of culturally important plants is granted for traditional cultural gathering of vegetation by Native Americans, in accordance with the California State Director and Pacific Southwest Regional Forester Traditional Gathering Policy (see Appendix G).

2.12.4.2.3 Prohibited Uses (Collection Not Allowed)

VUA-10 The public is prohibited from collecting:

- Live cacti of any kind

- Whole, live native plants

- Fuel wood for home heating purposes

- All species in the family Fouquieriaceae (e.g., ocotillo, candlewood); the genus *Prosopis* (mesquites); the genus *Cercidium* (palo verde); *Acacia greggii* (catclaw acacia); *Dalea spinosa* (smoketree); and *Olneya testota* (ironwood), including both dead and live specimens
- Any species listed as a special status species
- The collection and possession of ironwood at any time will be prohibited.

Supplementary rules to identify prohibited uses will be published through the Federal Register after the publication of the ROD. The BLM will comply with 43 CFR 8365.1-6 in the establishment of supplementary rules.

2.13 Wildlife Resource Management

The following laws, regulations, and policies direct the management of fish and wildlife on BLM-administered public lands:

- Endangered Species Act of 1973, as amended
- Migratory Bird Treaty Act of 1918
- Bald and Golden Eagle Protection Act of 1940, as amended 1962
- Executive Order 13112—Invasive Species
- Executive Order 13186—Conservation of Migratory Birds
- Executive Order 13443—Enhancement of Hunting Opportunities
- BLM Manual 6840—Special Status Species Management
- BLM Manual 6500—Wildlife, Fish, and Plant Resources
- BLM Manual 6740—Wetland–Riparian Area Protection and Management

BLM ensures that the public lands are managed in accordance with FLPMA (43 USC 1701 et seq.) and other applicable laws and regulations under the principles of multiple use and sustained yield. The BLM manages the ISD SRMA to both preserve and protect certain designated areas in their natural condition to provide shelter, food, and habitat for fish and wildlife, and other areas to provide for outdoor recreational uses. The BLM implements goals and management tools in accordance with the CDCA Plan to develop management strategies or plans for wildlife and desert habitats to achieve the goals of recovery of federal and state endangered or threatened species; minimizing the potential for listing of BLM-designated sensitive species; promoting wildlife populations through

habitat enhancement projects; and including consideration of crucial habitats of wildlife species in all decisions so that impacts can be avoided, mitigated, or compensated. See also CDCA Plan Wildlife Element Goals 3 and 4 below.

Through the Wildlife Element of the CDCA Plan, the BLM has developed the following five goals for managing and promoting wildlife resources, as well as special status species and their habitats:

1. Avoid, mitigate, or compensate for impacts of conflicting uses on wildlife populations and habitats. Promote wildlife populations through habitat enhancement projects so that balanced ecosystems are maintained and wildlife abundance provides for human enjoyment.

2. Develop and implement detailed plans to provide special management for: 1) areas that contain rare or unique habitat; 2) areas with habitat sensitive to conflicting uses; 3) areas with habitat especially rich in wildlife abundance or diversity; and 4) areas that are good representatives of common habitat types. Many areas falling into these categories contain listed species, which, as indicator species, may become the focus of management.

3. Manage wildlife species on the federal and state lists of threatened and endangered species and their habitats so that their continued existence is not jeopardized. Stabilize and, where possible, improve populations through management and recovery plans developed and implemented cooperatively with the USFWS and the California Department of Fish and Wildlife.

4. Manage wildlife species officially designated as sensitive by the BLM for California and their habitats so that the potential for federal or state listing is minimized.

5. Include consideration of crucial habitats of sensitive species in all decisions so that impacts are avoided, mitigated, or compensated.

In addition to the goals and objectives, and management actions presented in this section, Vegetative Resource Management and Lands and Realty Management (Sections 2.7 and 2.18, respectively) also contain goals and objectives and management actions that provide additional wildlife habitat conservation measures.

2.13.1 Planning Area-wide

2.13.1.1 Goals and Objectives

WLD-01 Maintain viable populations of all native species throughout the Planning Area.

WLD-02 Maintain habitat connectivity throughout the Planning Area to limit habitat fragmentation and maintain transfer of genetic material from all sub-populations throughout the Planning Area.

WLD-03 Promote and maintain healthy key habitats (e.g., microphyll woodlands and psammophytic scrub) and associated wildlife assemblages.

WLD-04 Promote wildlife resources that will meet conservation, socio-economic (e.g., hunting, watchable wildlife), and tribal needs.

WLD-05 Provide well-distributed habitat and connectivity corridors capable of supporting self-sustaining populations of interacting groups of priority species for biodiversity and genetic viability.

WLD-06 Provide suitable habitat capable of maintaining stable or increasing trends in abundance of wildlife species.

WLD-07 Reduce human-caused disturbance to habitats that result in animal mortalities or undesirable effects to populations of priority species during critical times, such as breeding or drought.

WLD-08 Maintain or restore appropriate amount, distribution, and characteristics of life-stage habitats for general wildlife species. Populations of non-native plants should be reduced or eradicated in areas where their presence threatens the integrity of general wildlife populations.

2.13.1.2 Management Actions

WLD-09 Restore native species habitat distribution and occurrence, especially for priority species (priority species are those that are recognized as significant for at least one factor: density; diversity; size; public interest; remnant character; or age), conserve biological diversity, maintain genetic integrity and exchange, and improve availability of suitable habitats and habitat linkages. Initiate restoration activities in priority habitats, such as invasive weed removal or native seeding, to move toward desired habitat conditions and provide functional landscapes to sustain populations of fish and wildlife species.

WLD-10 Authorize reintroductions, transplants, and supplemental stockings (augmentations) of native wildlife populations (as defined in BLM Manual 1745) in current or historic ranges in cooperation with the USFWS and/or the California Department of Fish and Wildlife to: 1) maintain populations, distributions, and genetic diversity, 2) conserve or recover threatened or endangered species, 3) restore or enhance native wildlife diversity and distribution; and 4) maintain isolated populations.

WLD-11 Manage invasive and pest species in accordance with applicable BLM policies.

WLD-12 Coordinate with California Department of Fish and Wildlife to ensure that wildlife guzzlers provide safe access for wildlife to usable water.

WLD-13 Pursue land acquisition options (i.e., purchase, exchange, donation, and easement) to consolidate important wildlife habitats.

WLD-14 Maintain habitat connectivity throughout the Planning Area.

WLD-15 In coordination with BLM, allow California Department of Fish and Wildlife to maintain wildlife guzzlers. Consider construction of additional guzzlers upon request by California Department of Fish and Wildlife.

2.13.2 Priority Wildlife Species

Priority species for the Planning Area include raptors, non-game migratory birds, bats, invertebrates, and game animals.

2.13.2.1 Raptors

2.13.2.1.1 Goals and Objectives

RAP-01 Maintain, restore, or enhance nesting and foraging habitat for raptors.

RAP-02 Provide for safe passage of migrating raptors.

2.13.2.1.2 Management Actions

RAP-03 Provide natural or human-made nesting or perching structures in suitable areas to enhance foraging and breeding habitat for raptors as the need arises.

RAP-04 Require all new structures to be raptor-safe in accordance with the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (Avian Power Line Interaction Committee 2006) or the current version of this document.

RAP-05 Apply the BLM wind energy development program policies and best management practices relating to raptors from Appendix A in the Wind Energy Development Program ROD (BLM 2005c).

2.13.2.2 Non-game Migratory Birds

2.13.2.2.1 Goals and Objectives

BRD-01 Maintain, restore, or enhance nesting, foraging, and migratory stopover habitat consistent with non-game migratory bird habitat management objectives, emphasizing the natural biological diversity.

BRD-02 Provide for safe passage of non-game migratory birds.

BRD-03 Minimize habitat fragmentation and provide for migratory corridors.

BRD-04 Promote socio-economic and recreational values of birds, such as ecotourism.

2.13.2.2.2 Management Actions

BRD-05 Prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable, through the application of mitigation measures on authorized activities.

BRD-06 Management actions will be guided by recommendations of comprehensive migratory bird planning efforts such as those completed by California Partners in Flight, including the Riparian Bird Conservation Plan (Riparian Habitat Joint Venture and California Partners in Flight 2004) and other plans as available.

BRD-07 Require all new structures to be bird-safe in accordance with the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 (Avian Power Line Interaction Committee 2006) or the current version of this document.

BRD-08 Apply the BLM wind energy development program policies and best management practices relating to non-migratory game birds from Appendix A in the Wind Energy Development Program ROD (BLM 2005c).

BRD-09 Provide recreational opportunities for bird watching and photography.

BRD-10 Monitor new energy development, including power lines and wind turbines or other structures, to better understand risks to non-game migratory birds.

BRD-11 Require a non-game migratory bird inventory for new utility or energy projects.

2.13.2.3 Bats

2.13.2.3.1 Goals and Objectives

BAT-01 Maintain, enhance, and protect bat roost sites and foraging habitat while providing for public safety.

2.13.2.3.2 Management Actions

BAT-02 Protect foraging habitat within microphyll woodlands.

BAT-03 Apply the BLM wind energy development program policies and best management practices from Appendix A in the Wind Energy Development Program ROD (BLM 2005c).

BAT-04 Require a bat inventory for new wind energy projects.

2.13.2.4 Invertebrates

2.13.2.4.1 Goals and Objectives

INV-01 Promote adequate vegetative structure including nectar sources, foraging, and breeding substrate for invertebrate species.

INV-02 Protect public health and safety from Africanized bees.

INV-03 Promote native pollinator species.

INV-04 Protect habitat requirements for insect species of concern found within the Planning Area.

INV-05 Maintain and enhance habitat across a wide variety of dune environments.

2.13.2.4.2 Management Actions

INV-06 Avoid adverse impacts to sensitive invertebrate species and associated habitats by developing, modifying, redesigning, mitigating, or abandoning specific projects.

INV-07 Restore surface disturbance from discretionary activities, such as right-of-way construction, with rehabilitation measures including imprinting, contouring, debris and brush replacement, native plant seeding (where appropriate), and invasive plant treatment.

INV-08 Restore surface disturbance from illegal trespass activities (not including closure violations) with rehabilitation measures including imprinting, contouring, debris and brush replacement, native planting or seeding (where appropriate), and invasive plant treatment.

2.13.2.5 Game Animals (Birds and Mammals)

Resident small game animals that may be present in the Planning Area include: California quail (*Calllipepla californica*) and varieties thereof; Gambel's (or desert) quail (*Callipepla gambelii*); mountain quail (*Oreortyx pictus*) and varieties thereof; Hungarian (or gray) partridge (*Perdix perdix*); red-legged partridge (*Alectoris rufa*), including the chukar and other varieties; ring-necked pheasant (*Phasianus colchicus*) and varieties; wild turkey (*Meleagris galiopavo*) of the order Galliformes; and the following game mammals: jackrabbits and varying hares (genus *Lepus*), cottontail rabbits, and brush rabbits (genus *Sylvilagus*).

Resident big game animals that may be present in the Planning Area include deer (genus *Odocoileus*) and Nelson bighorn sheep (subspecies *Ovis canadensis nelsoni*).

2.13.2.5.1 Goals and Objectives

GME-01 Maintain, enhance, and protect habitat for native game animal populations.

GME-02 Promote the legal pursuit of game.

2.13.2.5.2 Management Actions

GME-03 Prohibit OHV use for the pursuit of game within OHV closed areas.

GME-04 Maintain, restore, or enhance water resources for native game animal populations. Water developments will include design features to ensure safety and accessibility to water by desirable wildlife. Where practical, water troughs and tanks will be kept full year-round to provide a continuous water supply for native game animals. Provide reasonable administrative use-related vehicular access by California Department of Fish and Wildlife personnel to game animal water facilities for operation and maintenance activities, which could include cross-country travel along a pre-approved route as authorized by federal law. Enhancement projects will not be undertaken for non-native birds and mammals.

GME-05 Apply the BLM wind energy development program policies and best management practices from Appendix A in the Wind Energy Development Program ROD (2005c).

GME-06 Construction of new wildlife guzzlers may be considered on a case-by-case basis.

2.14 Special Status Species Management

Special status species are fish, wildlife, and plants that require specific conservation measures or management directions due to population or habitat concerns. Special management measures within BLM-administered lands are necessary to reduce or eliminate potential adverse impacts to species or habitats, particularly measures to reduce the likelihood of take of a listed species under the Endangered Species Act. Special status species fall under the following broad categories: federally listed species under the Endangered Species Act—threatened, endangered, proposed, or candidate species and designated or proposed critical habitat—and BLM sensitive species. BLM State Directors are directed as follows to designate sensitive species using the criteria found in BLM Manual 6840:

A. Designation of BLM Sensitive Species. State Directors shall designate species within their respective States as BLM sensitive by using the following criteria. For species inhabiting multiple states, State Directors shall coordinate with one another in the designation of BLM sensitive species so that species status is consistent across the

species' range on BLM-administered lands, where appropriate. Species designated as BLM sensitive must be native species found on BLM-administered lands for which the BLM has the capability to significantly affect the conservation status of the species through management, and either:

1. There is information that a species has recently undergone, is undergoing, or is predicted to undergo a downward trend such that the viability of the species or a distinct population segment of the species is at risk across all or a significant portion of the species range, or

2. The species depends on ecological refugia or specialized or unique habitats on BLM-administered lands, and there is evidence that such areas are threatened with alteration such that the continued viability of the species in that area would be at risk.

When a particular species becomes in danger of rapidly dwindling to extinction, BLM will include the species on the BLM Sensitive Species List. BLM maintains Sensitive Species Lists by state. The list is updated regularly and is available on the BLM California website.

Decisions in this plan are consistent with BLM's mandate to protect and recover species listed under the Endangered Species Act and are consistent with objectives and recommended actions in approved species recovery plans.

In addition to the Endangered Species Act, the following laws, regulations, and policies direct the management of special status species on BLM-administered public lands:

- Migratory Bird Treaty Act of 1918, as amended
- Bald and Golden Eagle Protection of 1940, as amended 1962
- Executive Order 13186—Conservation of Migratory Birds
- BLM Manual 6500—Wildlife, Fish, and Plant Resources
- BLM Manual 6840—Special Status Species Management
- BLM California Manual H-6840.06—Special Status Plant Management
- BLM Manual 1737—Riparian-Wetland Area Management
- Approved Recovery Plans for federally listed species within the Planning Area (Mojave population of the desert tortoise)

The following are the management goals from the CDCA Plan Wildlife Element that pertain to special status species and their habitats:

- Develop and implement detailed plans to provide special management for:
  - areas that contain rare or unique habitat;
  - areas with habitat sensitive to conflicting uses;
  - areas with habitat especially rich in wildlife abundance or diversity; and
  - areas with good representative of common habitat types.

Many areas falling into these categories contain listed species, which may become the focus of management as indicator species:

- Manage those wildlife species on the federal and state lists of threatened and endangered species and their habitats so that the continued existence of each is not jeopardized. Stabilize and, where possible, improve populations through management and recovery plans developed and implemented cooperatively with the USFWS and the California Department of Fish and Wildlife (BLM Manual 6840).
- Manage wildlife species officially designated as sensitive by the BLM for California and their habitats so that the potential for federal or state listing is minimized.
- Include consideration of habitats of sensitive species in all decisions so that impacts are avoided, mitigated, or compensated.

2.14.1 Planning Area-wide

2.14.1.1 Goals and Objectives

SSS-01 Maintain, enhance, and restore habitats for the survival and recovery of species listed under the Endangered Species Act and to prevent proposed or candidate species from becoming listed as endangered or threatened under the Endangered Species Act. Perform management actions that contribute to recovery and delisting of species listed under the Endangered Species Act.

SSS-02 Avoid or minimize activities that would result in the following situations for special status species and associated habitat on BLM-administered public lands: 1) species becoming endangered or extirpated from public lands in the Planning Area; 2) species undergoing significant current or predicted downward trend in habitat capability that would reduce a species' existing distribution; and 3) species undergoing significant current or predicted downward trend in population or density.

SSS-03 Provide habitat capable of maintaining stable or increasing population trends of special status species to ensure persistence. Provide suitable ecological conditions that

constitute well-distributed habitats and connective corridors to support reproductive needs and free-flow movements of special status species for population persistence.

SSS-04 Manage allowable uses to minimize habitat destruction, degradation, and fragmentation to protect special status species. Habitat modifications from land and resource uses will be at levels that do not threaten the persistence of special status species populations.

SSS-05 Achieve stable or increasing populations of special status plant species over time with adequate pollination, nurse plants, recruitment, and survivorship. Maintain desired habitat conditions or restore degraded habitats to promote pollinator success and survival.

SSS-06 Achieve stable or increasing populations of special status animal species over time with adequate recruitment and survivorship. Maintain desired habitat conditions or restore degraded habitats to promote reproductive success and survival.

SSS-07 Protect the habitat of sensitive species throughout the Planning Area.

2.14.1.2 Management Actions

SSS-08 Implement species- or habitat-specific goals, objectives, and actions, as applicable, addressed in the approved recovery plans.

SSS-09 Prohibit activities or projects on BLM-administered lands that would jeopardize the continued existence of federally listed plant and wildlife species, or species proposed for listing.

SSS-10 Authorize reintroductions, transplants, and supplemental stockings (augmentations) of special status species populations (as defined in BLM Manual 1745) in current or historic ranges in cooperation with the USFWS and/or California Department of Fish and Wildlife to: 1) maintain populations, distributions, and genetic diversity, 2) conserve or recover threatened or endangered species, 3) restore or enhance diversity and distribution; and 4) maintain isolated populations.

SSS-11 Maintain or restore appropriate amount, distribution, and characteristics of life-stage habitats for special status plant species. Populations of non-native plants should be reduced or eradicated in occupied and potential special status plant habitat.

SSS-12 Apply the BLM wind energy development program policies and best management practices from Appendix A in the Wind Energy Development Program ROD (BLM 2005c).

SSS-13 Prohibit commercial or personal collection of special status species. Allow research collection by permit only.

SSS-14 Follow prescriptions in recovery plans for federally listed species.

SSS-15 Allow camping within designated areas of desert tortoise habitat.

SSS-16 Allow camping within some areas within BLM sensitive species habitat, except microphyll woodlands south of Wash 33 and north of Wash 70.

2.14.2 Federally Listed Species and Designated Critical Habitat

The Endangered Species Act of 1973 calls for preparation of recovery plans for threatened and endangered species likely to benefit from the effort, and authorizes the Secretary of the Interior to appoint recovery teams to prepare the plans. The USFWS is the responsible agency for writing and overseeing the recovery plan. A recovery plan establishes recovery goals and objectives, describes site-specific management actions recommended to achieve those goals, and estimates the time and cost required for recovery. A recovery plan is not self-implementing, but presents a set of recommendations for managers and the general public, which are endorsed by an approving official of the Department of the Interior. Recovery plans also serve as a source of information on the overall biology and status of and threats to a species. The BLM is using these recovery plans for listed species to address threats and propose conservation measures within the Planning Area.

USFWS has provided a list of two federally listed species known to occur or with the potential to occur within the Planning Area: Peirson's milk-vetch and the Mojave population of desert tortoise (USFWS 2009a).

2.14.2.1 Peirson's Milk-vetch (Threatened)

Peirson's milk-vetch was listed by the USFWS as threatened in 1998. It is also recognized as endangered by the State of California and as a special status species by the BLM. Peirson's milk-vetch habitat consists of sandy depressions at the base of high dunes and lower established dunes. According to the USFWS Peirson's Milk-vetch Spotlight Species Action Plan (2009b), the overall recovery objective for Peirson's milk-vetch is to provide habitat capable of maintaining stable or increasing trends in abundance and survivorship.

2.14.2.1.1 Goals and Objectives

PMV-01 Promote population increase and protect habitat necessary to promote recovery.

PMV-02 Provide for habitat connectivity between Peirson's milk-vetch populations throughout the dunes.

PMV-03 Ensure no adverse modification of critical habitat, as mandated by the Endangered Species Act.

PMV-04 Achieve stable or increasing populations of Peirson's milk-vetch over time with adequate pollination, nurse plants, recruitment, and survivorship. Maintain desired habitat conditions or restore degraded habitats to promote pollinator success and survival.

PMV-05 Minimize effects resulting from human-caused disturbances.

2.14.2.1.2 Management Actions

PMV-06 Promote research activities to further management goals of Peirson's milk-vetch.

PMV-07 Implement a monitoring plan for Peirson's milk-vetch. Analyze the monitoring data to compare the trend in species abundance due to the different types of impacts in each area.

PMV-08 Provide for recovery of Peirson's milk-vetch through critical habitat protection.

PMV-09 Prohibit motorized recreation within Peirson's milk-vetch critical habitat.

PMV-10 Exclude Peirson's milk-vetch critical habitat from solar energy development. Exclusion areas are defined as areas which are not available for location of rights-of-way under any conditions.

PMV-11 Exclude Peirson's milk-vetch critical habitat from wind energy development.

PMV-12 Exclude Peirson's milk-vetch critical habitat from all other types of land use authorization.

2.14.2.2 Mojave Population of the Desert Tortoise (Threatened)

The Mojave population of desert tortoise was federally listed as threatened in 1990. It is also recognized as a special status species by BLM and as a threatened species by the State of California. In California, the desert tortoise is most commonly found in association with creosote bush scrub with intershrub space for growth of herbaceous plants. The overall recovery objective for the Mojave population of the desert tortoise is to provide habitat capable of maintaining stable or increasing trends in abundance and survivorship of desert tortoise in all recovery units in the Mojave region. The Planning Area partially overlaps with the Eastern Colorado recovery units in southeastern California (BLM 2002). Recovery goals, objectives, strategies, and delisting criteria are described in the Mojave Desert Tortoise Recovery Plan (USFWS 1994).

2.14.2.2.1 Goals and Objectives

MDT-01 Maintain and improve habitat for the Mojave population of the desert tortoise.

MDT-02 Promote population increase and protect habitat necessary to promote recovery.

MDT-03 Provide for habitat connectivity between desert tortoise populations.

MDT-04 Establish the goals and criteria for three categories of desert tortoise habitat areas designated in the desert tortoise recovery plan (USFWS 1994). These categories are:

- Category I. Maintain stable, viable populations, retain natural shelter sites, protect existing tortoise habitat values, and increase populations where possible.
- Category II. Maintain stable, viable populations and halt further declines in tortoise values.
- Category III. Limit tortoise habitat and population declines to the extent possible through mitigating impacts.

2.14.2.2.2 Management Actions

MDT-05 The following management actions apply to all desert tortoise habitat within the Planning Area and are derived from the 2011 Revised Recovery Plan for the Mojave Population of the Desert Tortoise (USFWS).

- Review land use requests on a case-by-case basis. Requests may be approved, denied, or require mitigation to achieve Goals and Objectives.
- Compensate for loss of desert tortoise habitat in accordance with the Desert Tortoise Compensation Team report (1991).
- Limit activities that would fragment or further isolate existing Mojave populations of desert tortoise (e.g., canals, highways).
- Reduce the attraction of predators through proper management of garbage.
- Reduce take of desert tortoises, by injury or death, through proper mitigation measures.

MDT-06 Allow camping within designated areas of desert tortoise habitat.

2.14.3 State-listed Species

The BLM Special Status Species policy provides for cooperative relationships with states for purposes of conservation of sensitive species and compliance with the Endangered Species Act.

There are four state-listed species found within the Planning Area: Algodones Dunes sunflower, Wiggins' croton, Gila woodpecker, and Arizona Bell's vireo. These four species are treated as BLM sensitive species according to BLM policy.

2.14.3.1 Algodones Dunes Sunflower (State of California Endangered)

Algodones Dunes sunflower was listed by the State of California as endangered in 1979. The Algodones Dunes sunflower is a rare perennial plant that lives in shifting sand habitats in the highest dunes. Overall, the conservation objective is to provide habitat capable of maintaining stable or increasing trends in abundance of the Algodones Dunes sunflower.

2.14.3.1.1 Goals and Objectives

SLS-01 Maintain suitable habitat of sufficient quality and quantity that could support the Algodones Dunes sunflower.

2.14.3.1.2 Management Actions

SLS-02 Implement a monitoring plan for the Algodones Dunes sunflower. Analyze the monitoring data to compare the trend in species abundance due to the different types of impacts in each area.

2.14.3.2 Wiggins' Croton (State of California Rare, California Native Plant Society - 2)

Wiggins' croton was recognized by the State of California as rare (California Native Plant Society-2) in January 1982 (California Natural Diversity Database 2001). Wiggins' croton is a perennial plant in the Euphorbiaceae family that thrives in shifting sand habitats. Overall, the conservation objective is to provide habitat capable of maintaining stable or increasing trends in abundance of Wiggins' croton.

2.14.3.2.1 Goals and Objectives

SLS-03 Maintain suitable habitat of sufficient quality and quantity with adequate patch sizes that could support Wiggins' croton.

2.14.3.2.2 Management Actions

SLS-04 Analyze impacts of all projects occurring within occupied Wiggins' croton habitat and require that projects mitigate the impacts as appropriate.

2.14.3.3 Gila Woodpecker (State of California Endangered)

The Gila woodpecker was listed by the State of California as endangered in 1988. The Gila woodpecker is found in Sonoran desert habitats where it nests in saguaro cacti as well as large mesquite and palo verde trees. Overall, the conservation objective is to provide habitat capable of maintaining stable or increasing trends in abundance of Gila woodpecker.

2.14.3.3.1 Goals and Objectives

SLS-05 Maintain suitable habitat of sufficient quality and quantity with adequate patch sizes that could support Gila woodpeckers.

SLS-06 Maintain microphyll woodlands with large trees and sufficient recruitment that could support Gila woodpeckers.

2.14.3.3.2 Management Actions

SLS-07 Analyze impacts of all projects occurring within occupied Gila woodpecker habitat and require that projects mitigate the impacts as appropriate.

2.14.3.4 Arizona Bell's Vireo (State of California Endangered)

Arizona Bell's vireo was listed by the State of California as endangered in 1988. The Arizona Bell's vireo is a rare subspecies of the Bell's vireo that inhabits dense lowland shrub and mesquite brushlands. Overall, the conservation objective is to provide habitat capable of maintaining stable or increasing trends in abundance of Arizona Bell's vireo.

2.14.3.4.1 Goals and Objectives

SLS-08 Maintain suitable habitat of sufficient quality and quantity with adequate patch sizes that could support vireos.

SLS-09 Maintain dense mesquite patches in microphyll woodlands that would support vireos.

2.14.3.4.2 Management Actions

SLS-10 Analyze impacts to the Arizona Bell's vireo for all projects occurring within occupied Arizona Bell's vireo habitat and require that projects mitigate the impacts as appropriate.

2.14.4 BLM Sensitive Species

The BLM sensitive species identified in the Planning Area are as follows: Munz's cholla (*Opuntia munzii*), giant Spanish needle (*Palafoxia arida*), sand food (*Pholisma sonorae*), Algodones dunes sunflower, Wiggins croton, Orocopia sage (*Salvia greatei*), spotted bat (*Euderma maculatum*), California leaf-nosed bat (*Macrotus californicus)*, cave myotis (*Myotis velifer*), Townsend's big-eared bat (*Plecotus townsendii*), Arizona Bell's vireo, Gila woodpecker (*Melanerpes uropygialis*), burrowing owl, LeConte's thrasher, lowland (San Sebastian) leopard frog (*Rana yavapaiensis*), Couch's spade-foot toad (*Scaphiopus couchi*), flat-tailed horned lizard, and Colorado fringed-toed lizard.

Per policy detailed in California BLM Manual Supplement 6840.06, all California Native Plant Society List 1B plant species that occur on BLM lands are considered to be BLM sensitive species. Species that are also listed by either the federal government or State of California are discussed above.

2.14.4.1 Goals and Objectives

BSS-01 Protect habitats of sensitive plant and wildlife species on BLM-administered lands to prevent the species from becoming listed under the Endangered Species Act.

2.14.4.2 Management Actions

BSS-02 Allow collection of seeds of native plants to be used in rehabilitation and restoration activities.

BSS-03 Implement and manage consistently with the Flat-tailed Horned Lizard Range-wide Management Strategy (Flat-tailed Horned Lizard Interagency Coordinating Committee 2003).

BSS-04 Implement a monitoring plan for BLM sensitive plants. Analyze the monitoring data to compare the trend in species abundance due to the different types of impacts in each area.

BSS-05 Implement a monitoring plan for BLM sensitive wildlife species. Analyze the monitoring data to compare the trend in species abundance due to the different types of impacts in each area.

BSS-06 Implement a monitoring plan for the flat-tailed horned lizard. Analyze the monitoring data to compare the trend in species abundance due to the different types of impacts in each area.

BSS-07 Acquire lands from willing sellers within the East Mesa Management Area.

BSS-08 Protect habitat for BLM sensitive species whenever possible.

BSS-09 Implement a monitoring plan for sand food (*Pholisma sonorae)*.

2.15 Wildland Fire Management

The BLM coordinates with other agencies to manage fire in accordance with the nationwide BLM fire policy and the National Fire Plan. This integrates fire and fuels management with other land and resource management activities to benefit natural resources and implement multiple-use on BLM-administered lands within the Planning Area.

The CDCA Plan, as part of the MUC Guidelines, provides management direction for wildland fire management. Fire suppression measures will be taken in accordance with specific fire management plans subject to such conditions as authorized officer deems necessary, such as use of motorized vehicle, aircraft, and fire-retardant chemicals.

The Planning Area is in the Palm Springs–South Coast El Centro Fire Management Zone and the ISD Recreation Area Fire Management Unit. BLM has the responsibility to provide a fire agency representative, fire prevention, law enforcement, and resource management on BLM-administered lands. BLM works to minimize impacts to resources from suppression activities and reduce rehabilitation costs from fire damage. The BLM identifies wilderness, wilderness study areas, and ACECs as special management units requiring additional consideration to protect the resources on these lands. The dunes are dominated by psammophytic scrub and creosote scrub and also contain scattered stands of microphyll woodland vegetation, some of which are thick with closed canopies. These vegetation communities are not considered to be fire-adapted and must be managed accordingly.

2.15.1 Goals and Objectives

WFM-01 Protect human life (both firefighters and public) and communities, property, and the natural resources on which they depend. Firefighter and public safety are the highest priority in all fire management activities.

WFM-02 The management response to wildfire is appropriate to the values, risks, and other factors present. The management response may vary from aggressive suppression action to those actions that allow fire to function in its natural ecological role.

2.15.2 Management Actions

WFM-03 Implement fuels reduction programs where needed, with wildland fuels decreased and maintained at a manageable level, creating conditions conducive to safe, efficient, and effective firefighting. Fire and fuels management treatments may include fire suppression, prescribed fire, and non-fire treatments (manual, chemical, mechanical,

or biological treatments). Treat non-native invasive species that constitute significant fuel load and fire threat directly by using Integrated Pest Management or management through fire breaks and other tactics.

WFM-04 Identify, prioritize, and plan fuels reduction projects using a uniform system for determining wildland fire risk in wildland–urban interface (e.g., Risk Assessment and Mitigation Strategy).

WFM-05 Identify and implement post-fire stabilization and rehabilitation actions in burned areas to restore a functional landscape to meet the natural resource management objectives.

WFM-06 Apply the minimum impact management tactics, identified in the Interagency Standards for Fire and Aviation Operations, in the wilderness, when wildland fire suppression is required.

WFM-07 Consider the desired conditions and management prescriptions in implementing fire management activities for ACECs (see Section 2.22.3 for ACEC management actions).

WFM-08 Use wildland fire suppression methods with lesser ground disturbance to minimize potential adverse impacts on special status species, critical habitat, desired plant communities, and cultural resources. Provide an on-site resource advisor to consult with the wildland fire responders on the location of sensitive resources and provide input to minimize impacts to those resources. When feasible, use of fire suppression techniques that minimize ground-disturbing impacts is desirable; however, reduction of total acreage lost to fire, especially in critical habitat, through the use of mobile attack with engines, fireline construction with bulldozers, aerial fire retardant, or other necessary techniques is appropriate and requested.

WFM-09 Use fire retardants or chemicals adjacent to waterways in accordance with the Environmental Guidelines for Delivery of Retardant or Foam near Waterways: Interagency Standards for Fire and Aviation Operations (National Interagency Fire Center 2009).

WFM-10 Use wildland fire to achieve resource benefits whenever possible

2.16 Cultural Resource Management

The management of cultural resources on BLM land must be in compliance with several federal laws, including the Antiquities Act of 1906; the National Historic Preservation Act of 1966, as amended; the NEPA of 1969; Executive Order 11593—Protection and Enhancement of the Cultural Environment; FLPMA of 1976; the American Indian Religious Freedom Act of 1978; the Religious Freedom Restoration Act of 1993; the

Archaeological Resource Protection Act of 1979; the Native American Graves Protection and Repatriation Act of 1990; Executive Order 13007—Indian Sacred Sites; and Executive Order 13287—Preserve America. BLM also manages cultural resources in accordance with the National Programmatic Agreement (Among the Bureau of Land Management Advisory Council on Historic Preservation and the National Conference of State Historic Preservation Officers Regarding the Manner in Which the BLM will Meet Its Responsibilities under the National Historic Preservation Act) of 2012. In addition, the BLM manages its cultural resources according to BLM Manuals 8100 through 8170, and in accordance with the BLM–California SHPO Protocol Agreement of 2007, as amended. Locations of cultural resource sites are to be kept confidential with the exception of public use sites.

The following are management goals from the CDCA Plan's Cultural Resource Element:

- Broaden the archaeological and historical knowledge of the CDCA through continuing inventory efforts and the use of existing data.
- Continue the effort to identify the full array of the CDCA's cultural resources.
- Preserve and protect representative samples of the full array of the CDCA's cultural resources.
- Ensure that cultural resources are given full consideration in land use planning and management decisions, and ensure that BLM-authorized actions avoid inadvertent impacts.
- Ensure proper data recovery of significant (National Register of Historic Places quality) cultural resources where adverse impacts can be avoided.

2.16.1 Goals and Objectives

CRM-01 Identify, preserve, and protect significant cultural resources, districts, and landscapes and ensure that they are available for appropriate uses by present and future generations.

CRM-02 Identify priority geographic areas for new field inventory, based upon a probability for unrecorded significant resources.

CRM-03 Enhance public understanding of and appreciation for cultural resources through educational outreach and heritage tourism opportunities.

CRM-04 Evaluate identified cultural resources under the criteria for the National Register of Historic Places. Eligible resources will be formally nominated for listing to the National Register of Historic Places, as appropriate.

CRM-05 Promote new survey efforts on an ongoing basis, utilizing partners where appropriate.

CRM-06 Maintain viewsheds of important cultural resources whose settings contribute significantly to their scientific, public, traditional, or conservation values.

CRM-07 Provide and encourage cultural resources research opportunities that would contribute to the understanding of the ways humans have used and influenced natural systems and processes.

CRM-08 Seek to reduce imminent threats, and direct and indirect impacts to cultural resources, or potential conflict with other resource uses.

CRM-09 Increase BLM nation-to-nation consultation and coordination with Native American Tribes.

2.16.2 Management Actions

CRM-10 Current legal, regulatory, and policy direction concerning cultural resources exists to protect and preserve these national heritage assets, as well as support development of literature, interpretive sites, and other forms of public education designed to increase knowledge, understanding, and enjoyment of these irreplaceable resources. Legal protection, physical preservation and restoration, documentation, and access by scientists and the general public are regulated by federal law. The electronic management and archiving of cultural data are vital to the management of these resources. The management actions presented here are a result of the need to update the existing plan and incorporate current legislation and policy direction for the management of cultural resources.

CRM-11 Maintain current cultural resource data in a GIS format and increase knowledge of cultural resources within the Planning Area through proactive surveys. The inventory will include a prioritized list (high/medium/low sensitivity) of areas for future inventory—based on sensitivity and the likelihood of significant, unrecorded sites. Inventory strategies for un-surveyed areas will be continually refined.

CRM-12 Work cooperatively with the California SHPO on data sharing and information management, and the promotion and enhancement of public education, including Archaeological Awareness Week/Historic Preservation Month, outreach, and stewardship programs.

CRM-13 Provide for and/or increase interpretive educational opportunities at selected cultural and historic sites, including the Plank Road (CA-IMP-4764H). Work with communities, Tribes, interested individuals, and other agencies to enhance public understanding, appreciation, and enjoyment of cultural resources.

CRM-14 Implement protection measures to stop, limit, or repair damage to sites that are on or eligible for the National Register of Historic Places. A variety of protection measures, described in BLM Manual 8140, may be used to protect the integrity of sites at risk and will include signing, fencing or barriers, trash removal, erosion control, backfilling, repairing, shoring up or stabilizing structures, restricting uses and access, and closures. Where feasible, acquire non-BLM-administered properties within the Planning Area that contain significant cultural resources including, but not limited to, those properties listed or eligible for listing in the National Register of Historic Places.

CRM-15 Manage spiritually significant and traditional cultural properties in consultation with Native American Tribes, accommodate Tribal access to spiritually significant and traditional cultural properties, and prevent physical damage or intrusions that might impede their use by religious practitioners (pursuant to Executive Order 13007 and American Indian Religious Freedom Act). The locations of spiritually significant and traditional cultural properties and other places of traditional or religious importance to Native American Tribes will be kept confidential to the extent allowed by law.

CRM-16 Coordinate with Native Americans to manage harvesting areas for the collection of medicinal herbs, ceremonial herbs, other vegetation, and/or minerals for traditional or ceremonial use (see Section 2.12.4—Vegetative Use Authorization and Appendix G for more information).

CRM-17 Evaluate and allocate cultural properties (including cultural landscapes) to one of six uses as outlined in BLM's Land Use Planning Handbook (H-1601-1) and BLM-IB No. 2002-101—Cultural Resource Considerations in Resource Management Plans.

2.16.3 Cultural Use Allocation

The BLM evaluates cultural resources according to their current and potential uses (BLM Manual Section 8110 for Cultural Resources). Cultural resources are allocated to one or more of the following use categories: Scientific Use, Public Use, Traditional Use, Conservation for Future Use, Experimental Use, and Discharged from Management. A site may be allocated to more than one use category.

Table 2-3 depicts typical use allocations for the various types of cultural resources found within the Planning Area. Scientific Use is defined as resources preserved until research potential is realized; Conservation for Future Use is defined as resources preserved until conditions for use are met; Traditional Use is defined as resources designated for long-term preservation; Public Use is defined as resources designated for long-term preservation and on-site interpretation; Experimental Use is defined as resources that will be protected until used; and Discharged from Management is defined as resources with no use after recordation and not to be preserved. The Plank Road (CA-IMP-4764H) is allocated to the Public Use and Conservation for Future Use categories. No cultural resources are allocated to the Discharged from Management category at this time.

Sites within the Planning Area will typically be allocated to one or more of the use categories presented in the table, although specific allocations of individual sites may be reevaluated and revised based on changing circumstances, or if any new or existing information regarding site attributes comes to light (e.g., site access, physical setting, site complexity, Native American consultation, and impacts to the site). In addition, all sites within the ACECs and wilderness are allocated to the Conservation for Future Use and Traditional Use categories and managed appropriately for that class.

TABLE 2-3
USE ALLOCATIONS FOR CULTURAL PROPERTIES

Cultural Site Types	Scientific Use	Public Use	Traditional Use	Conservation for Future Use	Experimental Use
Lithic Scatters	X		X	X	
Ceramic Scatters	X		X	X	
Habitation and Temporary Campsites	X		X	X	
Ground Stone Scatters	X		X	X	
Cairn and Rock Alignments	X		X	X	
Trails	X		X	X	
Cleared Circle and Rock Rings	X		X	X	
Human Remains			X	X	
Historic Trash Scatter and Dumps	X			X	X
Military Encampments	X			X	
Historic Roads	X	X		X	
Canals	X	X		X	
Railroads	X	X		X	
Transmission Lines	X	X		X	

2.17 Paleontological Resource Management

Paleontological resources found on public lands are recognized by BLM as constituting a fragile and nonrenewable scientific record of the history of life on Earth. They therefore represent an important component of America's natural heritage. All lands within the Planning Area have been classified as containing vertebrate fossils.

The BLM manages paleontological resources principally under the following authorities: Title VI, Subtitle D of the Omnibus Public Land Management Act, known by its popular name, the Paleontological Resources Preservation Act (123 Stat. 1172; 16 USC 470aaa et seq.); BLM Manual 8270—Paleontological Resources Management; BLM Handbook 8270-1—General Procedural Guidance for Paleontological Resources Management; FLPMA of 1976; NEPA of 1969; the Federal Cave Resources Protection Act of 1988;

and various sections of BLMs regulations found in CFR Title 43. BLM policy laid forth in these guidelines promotes the scientific, educational, and recreational uses of fossils on public lands, mitigates resource conflicts, and develops strategies to regularly monitor public lands where important paleontological localities have been identified.

The CDCA Plan's Cultural Resource Element includes management goals for paleontological resources along with those for cultural resources. The following CDCA management goals apply to the protection of paleontological resources:

- Ensure that paleontological resources are given full consideration in land-use planning and management decisions.
- Preserve and protect a representative sample of the full array of the CDCA's paleontological resources.
- Ensure proper data recovery of significant paleontological resources where adverse impacts cannot be avoided or otherwise mitigated.

2.17.1 Goals and Objectives

PRM-01 Protect and conserve significant paleontological resources as they are discovered on public lands.

PRM-02 Manage paleontological resources in ways that prioritize research needs, facilitate educational and recreational needs, and protect important sites.

PRM-03 Develop specific objectives and management actions for fossil localities, when paleontological resources are discovered in the Planning Area.

2.17.2 Management Actions

PRM-04 Evaluate paleontological resources as they are discovered, considering their scientific, educational, and recreational values. Identify appropriate objectives, management actions, and allowable uses for fossil localities as they are found.

PRM-05 Restrict the collection of all vertebrate fossils and invertebrate and plant fossils of paleontological interest to legitimate scientific or educational uses in accordance with permitting procedures.

PRM-06 Allow recreational collecting of common invertebrate and plant paleontological resources, in accordance with the Paleontological Resources Preservation Act.

PRM-07 Require immediate notification should paleontological resources be encountered during project surface-disturbing activities, and cease work in the area of

the discovery. Work may not resume until the BLM issues a written authorization to proceed.

PRM-08 Although all lands within the Planning Area have been classified as Potential Fossil Yield Classification (PFYC) Class 2 (low likelihood for sensitive fossils), a field survey by a qualified paleontologist may be required if future information determines or indicates the presence of important paleontological resources prior to surface-disturbing activities. Management prescriptions for resource preservation and conservation through controlled access or special management designation could be considered. Surface-disturbing activities may require an assessment in PFYC Class 2 areas to determine further courses of action. Assessment or mitigation in PFYC Class 1 areas will not be required except in very rare circumstances.

2.18 Visual Resource Management

The BLM prepares and maintains on a continuing basis an inventory of visual values on all public lands in accordance with the VRM system (BLM 1984). The VRM system provides a way to identify, evaluate, and determine the appropriate levels of management of scenic values. The inventory of visual values has been documented for the BLM-administered lands within the Planning Area. The inventory serves as the basis for the designation of VRM Classes I-IV, which takes into account other resource uses on public lands within the Planning Area. The VRM classes are best defined by their goals and objectives, which are described below. The overall goal of VRM analysis is to minimize visual impacts through development of mitigating measures.

The following criteria were used to determine the VRM Class designations for the Planning Area:

- The overall management emphasis intended for each alternative
- Recognition of all applicable special designations and all land use decisions
- Assertion that other management activities and land uses proposed may be achieved within the applicable VRM Class
- Use of the least restrictive class that still achieves stated goals and objectives

The overarching management goals for visual resources in the Planning Area are established by the CDCA Plan's Recreation Element, as follows:

- The CDCA has a superb variety of scenic values. The public considers these scenic values a significant resource. The BLM recognizes these values as a definable resource and an important recreation experience. These visual resources will receive consideration in BLM resource management decisions. Many management activities

involve alteration of the natural character of the landscape to some degree; the BLM will take the following actions to effectively manage for these activities:

1. The appropriate levels of management, protection, and rehabilitation on all public lands in the CDCA will be identified, commensurate with visual resource management objectives in the multiple-use class guidelines.
2. Proposed activities will be evaluated to determine the extent of change created in any given landscape and to specify appropriate design or mitigation measures using the BLM's contrast rating process.

2.18.1 Goals and Objectives

VRM-01 The RAMP set VRM classes ranging from Class I to IV, and all future projects and actions will adhere to the following VRM class objectives as appropriate:

Class I Objective. The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.

Class II Objective. The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Class III Objective. The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention, but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Class IV Objective. The objective of this class is to provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repetition of the basic elements.

2.18.2 Management Actions

VRM-02 Incorporate design considerations to minimize potential impacts to public lands' visual values into all surface-disturbing activities, regardless of size. Proponents will be encouraged to meet with the BLM personnel to discuss and provide input during the

initial planning and design phase to minimize costly redesign and mitigation at a later time.

VRM-03 Evaluate proposed surface-disturbing activities in accordance with BLM VRM Handbook H-8431-1 Visual Contract Rating. Conduct a visual contrast analysis to ensure that projects meet the VRM class requirements for that area. This visual contrast analysis from Key Observation Points will consider the following factors: distance (between project and Key Observation Points), angle of observation, length of time the proposed project would be in view, relative size or scale, season of use, light conditions, recovery time, spatial relationships, atmospheric conditions, and motion.

VRM-04 Use visual resource design techniques and best management practices to mitigate the potential for short- and long-term visual impacts from other uses and activities until demonstrated to meet the VRM class objectives.

VRM-05 Designate wilderness as Class I, in accordance with BLM's national policies.

VRM-06 Encourage retrofitting of existing facilities to comply with the VRM Class objectives for that area by working in partnership with existing right-of-way holders (such as communication sites). Incorporate mitigation measures, such as repainting existing facilities, and carefully locating and designing new facilities (such as by using topographic screening) to minimize their contrast with the characteristic landscape.

VRM-07 Designate ACECs as Class II or in some cases as Class III. Designate Class III and IV to areas with high potential for renewable resource uses, areas that are managed for high recreational value, and other areas which continue to be managed primarily for habitat values, regardless of scenic quality.

VRM-08 Manage the Planning Area according to the VRM Classification shown on Map 2-2. VRM Class acres are listed in Table 2-4 below.

TABLE 2-4
VRM CLASSES WITHIN ISD PLANNING AREA

VRM Class	Acres
I (acres)[1]	26,098
II (acres)	104,739
III (acres)	69,055
IV (acres)	15,039
Total	214,930

[1]The acreages identified for VRM Class I represent the digital boundaries of the wilderness. These acreages may not coincide completely with those designated by Congress.

2.19 Special Designations and Lands with Wilderness Characteristics

Special Designations for BLM-administered lands within the Planning Area include the North Algodones Dunes Wilderness and three ACECs (Map 2-3). In addition, the Planning Area has been inventoried for lands with wilderness characteristics.

Wilderness is designated by Congress. Through the planning process, the BLM may designate ACECs and identify lands with wilderness characteristics following the criteria outlined in law (FLPMA), regulations (43 CFR 1610.7-2), and policy (Handbook 1601; IM 2011-54).

The CDCA Plan, under the ACEC Program, provides the following management goals:

- Identify and protect the significant natural and cultural resources requiring special management attention found in BLM-administered lands in the CDCA.
- Provide for other uses in the designated areas, compatible with the protection and enhancement of the significant natural and cultural resources.
- Systematically monitor the preservation of the significant natural and cultural resources on BLM-administered lands, and the compatibility of other allowable uses with these resources.

2.19.1 Wilderness

The North Algodones Dunes Wilderness includes 26,098 acres of BLM-administered public lands. This wilderness was established through the California Desert Protection Act of 1994. Wilderness is designated by Congress and wilderness areas are managed according to the Wilderness Act (16 USC 1131-1136, 78 Stat. 890), specific legislation such as the California Desert Protection Act of 1994, regulations for wilderness management at 43 CFR 6300, Wilderness Management Policy (BLM 1981), and BLM manual MS-6340.

2.19.1.1 Goals and Objectives

WIL-01 Provide for the long-term protection and preservation of the area's wilderness character. The area's naturalness and untrammeled condition, opportunities for solitude, opportunities for primitive and unconfined types of recreation, and any ecological, geological, or other features of scientific, educational, scenic, or historic value will be managed so that they remain unimpaired.

Union Pacific Railroad
Niland-Glamis Road
Glamis
78
Vista Mine Road
Gecko Rd
Ted Kipr Road
Walker Way
Ogilby Road
Canal Road
EAST MESA
Side winder Road
Holtville
8
98
MEXICO
0 2 4 6 8
Miles
N
Planning Area
Visual Resource Management
Class I
Class II
Class III
Class IV
US Department of the Interior
BUREAU OF LAND MANAGEMENT
California State Office
Sacramento, California
(916) 978-4400
www.ca.blm.gov
Date Prepared: 5/31/2013
Project: Map2-2_VRM

IMPERIAL SAND DUNES
RECREATION AREA MANAGEMENT PLAN

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
El Centro Field Office
June 2013

MAP 2-2: Visual Resource Management

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Chocolate Mountains
Aerial Bombing and Gunnery Range

Union Pacific Railroad

Niland-Glamis Road

US Naval Reserve

NORTH ALGODONES DUNES WILDERNESS

Glamis

78

INDIAN PASS WILDERNESS

PICACHO PEAK WILDERNESS

Vista Mine Road

Gecko Rd

US Naval Reserve

Ted Kipf Road

Walker Way

Ogilby Road

Canal Road

EAST MESA

Side winder Road

Holtville

East Mesa ACEC

8

98

Plank Road ACEC

MEXICO

0 2 4 6 8
Miles

N

Planning Area
Designated ACEC

Land Status
Bureau of Land Management
Bureau of Land Management Wilderness
Military
State
Private Lands

US Department of the Interior
BUREAU OF LAND MANAGEMENT
California State Office
Sacramento, California
(916) 978-4400
www.ca.blm.gov
Date Prepared: 5/31/2013
Project: Map2-3_SpDes

IMPERIAL SAND DUNES RECREATION AREA MANAGEMENT PLAN

MAP 2-3: Special Designations

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
El Centro Field Office
June 2013

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WIL-02 Meet minimum requirements necessary for the administration of the area for the purpose of the Wilderness Act and the California Desert Protection Act (including measures required in emergencies involving the health and safety of persons within the area).

2.19.1.2 Management Actions

WIL-03 Continue to provide monitoring, signing, and restoration as necessary.

WIL-04 Allow proposed activities (e.g., surface-disturbing activities) in wilderness per the Wilderness Act or California Desert Protection Act if:

- The proposed action is conforming or nonconforming by accepted use specifically permitted in wilderness areas by the Wilderness Act and subsequent laws in a manner that will prevent unnecessary or undue degradation of an area's wilderness character.
- The proposed activity complies with Section 106 of the National Historic Preservation Act including documentation and—where applicable—consultation has been completed with the SHPO and federally recognized tribes.
- The proposed activity complies with Section 7 of the Endangered Species Act and that compliance has been completed and documented in consultation with USFWS.

WIL-05 Expand access by improving staging areas at wilderness access points.

WIL-06 Provide new informational kiosks at wilderness access points.

WIL-07 Comply with management provisions provided for by law or policy, including:

- Wilderness is withdrawn from mineral entry, mineral leasing, and mineral sales.
- No use of motor vehicles, motorized equipment, or other form of mechanical transport.
- No structure or installation within these areas.
- Administrative structures (e.g., trail markers or informational kiosks) and use of vehicles and structures will be the minimum necessary for the administration of these areas.
- Prescribed fire may be used: 1) to reintroduce or maintain the natural condition of a fire-dependent ecosystem, 2) to restore fire where past strict fire control measures had interfered with natural ecological processes, 3) where a primary value of a given wilderness would be perpetuated as a result of burning, or 4) where it would perpetuate threatened and endangered species.

2.19.2 Lands with Wilderness Characteristics

Lands outside of designated wilderness or wilderness study areas are assessed during the planning process to determine if they possess one or more wilderness characteristics, such as naturalness, opportunities for solitude, and/or primitive and unconfined recreation. The inventory and evaluation conducted for the ISD Planning Area met the requirements of FLPMA, Title II, Sections 201 and 202. Considering wilderness characteristics in the land use planning process may result in several outcomes, including, but not limited to the following: 1) emphasizing other multiple uses as a priority over protecting wilderness characteristics; 2) emphasizing other multiple uses while applying management restrictions (conditions of use, mitigation measures) to reduce impacts to wilderness characteristics; 3) the protection of wilderness characteristics as a priority over other multiple uses (see the BLM Land Use Planning Handbook 1601-1, Appendix C, subparagraph K, Wilderness Characteristics).

Management of lands with wilderness characteristics is part of BLM's multiple use mandate and is recognized within the spectrum of resource values and uses within the ISD Planning Area. Lands with wilderness characteristics were defined for this RAMP as areas:

- Having been affected primarily by the forces of nature with the imprint of human work substantially unnoticeable
- Having outstanding opportunities for solitude or a primitive and unconfined type of recreation; and potentially containing ecological, geological, or other features of scientific, educational, scenic, or historical value

The BLM-administered public lands in the Planning Area were inventoried for lands with wilderness characteristics for this RAMP/CDCA Plan Amendment. The inventory found that 42,083 acres of BLM-administered public lands possessed one or more wilderness characteristics and were contained in a parcel identified as Wilderness Characteristic Unit (WCU) 1. The area's west boundary follows the edge of the dune system, whereas the east boundary follows Wash Road adjacent to the Union Pacific Railroad tracks. The north and south boundaries indicate the limit of substantially noticeable impacts resulting from OHV use. The WCU 1 is completely surrounded by public lands and has a 640-acre section of private lands in the middle. Although WCU 1 may be traversed by a limited number of OHVs in the winter and small portions of the landscape include trails which are 20- to 50-foot-wide strips devoid of vegetation, the area appears essentially untrammeled by humans.

The Final EIS, Section 3.13.2 contains a summary of the inventory process and the results of the wilderness characteristics inventory.

2.19.2.1 Goals and Objectives

LWC-01 Lands identified as possessing wilderness characteristics will be managed to protect their open space values and for the use and enjoyment of the public. In addition, these lands augment multiple-use management of adjacent and nearby lands through the protection of wildlife habitat, natural plant communities, and similar natural values.

2.19.2.2 Management Actions

LWC-02 Allow motorized recreation per OHV use allocations.

LWC-03 Protect resource values that are present on the lands through prescriptions of the recreation management zones for that area.

LWC-04 WCU 1 will be managed under Open, Open/No Camping, and Resource Protection Recreation Management Zones (see Section 2.24.3.2—Recreation Management Zones of this chapter).

LWC-05 WCU 1 is unavailable for solar and wind energy development (see maps in Section 2.23.2.4.2).

LWC-06 WCU 1 is not available for mineral leasing, mineral material sales, or free use permits.

LWC-07 Lands within WCU 1 are to be retained and are not available for disposal (sale or exchange).

2.19.3 Areas of Critical Environmental Concern

The guidance for ACEC designation is included in FLPMA and the BLM planning regulations. ACECs must meet the relevance and importance criteria in 43 CFR 1610.7-2(b) and must require special management (43 CFR 1601.0-5[a]) to protect the area and prevent irreparable damage to resources or natural systems as well as to protect life and promote safety in areas where natural hazards exist.

Areas qualifying for consideration as ACECs must have substantial significance and value, including qualities of more than local significance and special worth, consequence, meaning, distinctiveness, or cause for concern. The values for which ACECs are designated are considered the highest and best use for those lands and protection of those values will take precedence over multiple uses.

2.19.3.1 General ACEC Goals and Objectives

ACE-01 ACECs provide protection for relevant and important special status species, wildlife, scenic, and significant cultural resources values.

2.19.3.2 General ACEC Management Actions

ACE-02 Ensure land use authorizations approved in ACECs are consistent with the actions presented in Section 2.26—Lands and Realty Management of this chapter.

ACE-03 Ensure mineral management actions authorized in ACECs are consistent with the actions presented in Section 2.23—Minerals Management of this chapter.

ACE-04 Exclude public lands within ACECs to wind and solar energy development. Exclusion areas are defined as areas that are not available for location of rights-of-way under any conditions.

ACE-05 Retain ACECs in public ownership and seek to acquire non-federal lands and interests in lands within the ACECs from willing sellers by purchase, exchange, or donation. Future acquisitions of in-holdings and edgeholdings will be managed in accordance with the designated ACEC. See Land Tenure in Section 2.26.1 for additional information.

ACE-06 Allow treatment for hazardous fuels and non-native invasive or pest species.

ACE-07 Prohibit wood collection in all ACECs.

ACE-08 Allow traditional use by Native Americans consistent with Vegetative Use Authorization.

ACE-09 Monitor resources within the ACECs to detect change and prevent future deterioration.

ACE-10 Perform restoration treatments where damage has occurred or where it will reduce vehicle incursions.

2.19.3.3 ACEC-specific Goals and Objectives

ACE-11 The Plank Road ACEC was established to protect the remaining portions of the Plank Road, which are extremely susceptible to damage, particularly from OHV recreation.

ACE-12 The East Mesa ACEC contains wildlife values which require special management attention (a significant portion of flat-tailed horned lizard habitat is in the ACEC), and cultural resources requiring special management attention may also be present. These values are potentially threatened by visitor use and energy development within the ACEC and were considered in need of protection.

2.19.3.4 ACEC-specific Management Actions

ACE-13 Retain the 416-acre Plank Road ACEC to protect cultural resources and other resource values.

ACE-14 Reduce acreage of the East Mesa ACEC from 6,454 acres to 5,802 acres in order to eliminate overlap with the ISD SRMA east of the New Coachella Canal.

ACE-15 The original North Algodones Dunes ACEC is removed because it overlaps the North Algodones Dunes Wilderness. BLM strives to manage the area to the highest protection possible and to avoid administrative overlap.

2.20 Mineral Resource Management

The BLM manages mineral resources in accordance with BLM's National Mineral Policy, General Mining Law of 1872, as amended, various mineral leasing acts (for leasable minerals), FLPMA (43 USC 1701 et seq.), Minerals Act of 1947 (for salable minerals), implementing regulations (43 CFR 3700 and 3800), the Energy Policy Act, and the National Energy Policy (both of these as they relate to geothermal energy). Development of mineral resources from public lands managed by the BLM is directed by Congress through various enabling laws under three general categories: locatable minerals (General Mining Law of 1872, as amended), leasable minerals (subject to the various Mineral Leasing Acts), and salable minerals (subject to mineral materials disposed of under the Materials Act of 1947, as amended).

The general goals for mineral resources under the CDCA Plan's Geology, Energy, and Mineral Resources Element are to:

- Assure the availability of known mineral resource lands for exploration and development within the multiple-use management framework.
- Encourage the development of mineral resources in a manner which satisfies national and local needs and provides for economically and environmentally sound exploration, extraction, and reclamation processes.
- Develop a mineral resource inventory; geology, energy, and minerals resources database; and professional, technical, and managerial staff knowledgeable in mineral exploration and development.

2.20.1 Locatable Minerals

Minerals subject to location under the General Mining Law of 1872 (30 USC 22, et seq.; as amended) include metallic minerals such as gold, silver, copper, lead, zinc, and uranium; non-metallic minerals such as asbestos, barite, gypsum, and mica; and

uncommon varieties of stone (43 CFR 3800). The General Mining Law of 1872 allows citizens and those declaring intent to become citizens of the United States the right to enter upon public lands and reserve interests for the purposes of exploration and development of minerals subject to the mining law. Appropriation of a mineral deposit is made by location of a mining claim. No rights under the mining laws can be exercised by a claimant until a discovery of a valuable mineral deposit has been made within the boundaries of the mining claim.

Exploration and development must be conducted in accordance with all applicable laws, regulations, and policies, and in conformance with the approved land-use plan. Restrictions and stipulations may be applied to a proposed activity based on review and analysis by the authorized officer.

All activity is managed under the authority of the regulations at 43 CFR 3809 (public lands and wilderness) and 43 CFR 3802 (wilderness study areas). Authorization is based on the level of disturbance and whether the activity is conducted in a special designation area. Casual use activities—such as panning for gold, prospecting, and monumentation of mining claims—are authorized by the regulations where disturbance will be nominal. No approval is required from the authorized officer of the BLM. Where exploration activities would cause more than nominal disturbance and surface disturbance is five acres or less, a notice is required to be reviewed by the authorized officer of the BLM to assure that unnecessary or undue degradation would not occur to public lands or resources.

BLM manages to protect sensitive resources by defining protective prescriptions in land-use planning that are to be applied in any approval of activities. Where mineral development activity would adversely affect sensitive resource values, the BLM may petition (to the Assistant Secretary for Land and Minerals Management) for withdrawal an area from the operation of the mining laws. Withdrawals greater than 5,000 acres must have congressional review and approval.

The BLM must make public land and resources available for prospecting and location of valuable (locatable) mineral deposits to meet local, regional, and national needs for metals and industrial minerals, and protect sensitive resource values.

2.20.1.1 Goals and Objectives

MIN-01 Provide opportunities for exploration, location, and development of mining claims and sites while preventing unnecessary or undue degradation of public lands and resources.

2.20.1.2 Management Actions

MIN-02 Consolidate, through land tenure adjustments, surface and subsurface (minerals) estates under single ownerships when possible, thereby improving manageability of the federal lands involved. Consolidate split-estate pursuant to Sections 205 and 206 of FLPMA.

MIN-03 Require a notice prior to conducting any exploration—defined as the search for and collection of geochemical, rock, soil, or mineral specimens using mechanized and/or motorized earth moving equipment—when removing less than 1,000 tons of presumed ore for testing, and causing surface disturbance of less than 5 acres.

MIN-04 Require mining plans of operations for any explorations that would remove 1,000 tons or more of presumed ore for testing and/or result in surface disturbance greater than 5 acres, any operations that would result in greater than negligible surface disturbance, and operations that would use any mechanized or motorized earth moving equipment. A plan of operations must be approved by the authorized officer of the BLM and may be subject to stipulations to assure conformance with the land-use plan.

MIN-05 Require an investigation and a report to determine the validity of the mining claim prior to approval of a mining plan of operations in withdrawn areas where the mining claim predates the withdrawal.

MIN-06 Require a mining plan of operations in any special designation in accordance with existing 43 CFR 3809 regulations.

MIN-07 Mining activities will be in compliance with all State of California reclamation requirements, particularly the Surface Mining and Reclamation Act.

MIN-08 Congressionally designated wilderness is legislatively withdrawn from all forms of entry, appropriation, or disposal under the public land laws.

MIN-09 Maintain ACEC(s) as open to mineral entry under the Mining Law, subject to Section 7 and Section 106 consultations.

MIN-10 Maintain the ISD SRMA, excluding wilderness, as open to mineral entry under the Mining Law, subject to Section 7 and Section 106 consultations.

2.20.2 Leasable Minerals

Leasable minerals include fluid energy mineral deposits such as oil, gas, coal bed methane, carbon dioxide (CO_2), and geothermal resources, as well as solid energy and industrial minerals such as coal, sodium, and potash. Although not a leasable mineral, helium is included in this category, because it is typically associated with CO_2 exploration and development (43 CFR 3100 and 43 CFR 3200).

Laws and regulations applicable to federal leasing in the Planning Area include:

- Mineral Leasing Act of 1920 as amended and supplemented
- Acquired Lands Mineral Leasing Act of 1947
- Mining and Minerals Policy Act of 1970
- Federal Onshore Oil and Gas Leasing Reform Act of 1987
- 43 CFR 3100 (Oil and Gas Leasing)
- 43 CFR 3200 (Geothermal Resources Leasing)
- BLM Manual Series 3100—Onshore Oil and Gas Leasing (and handbooks)

The BLM defines geothermal resources as renewable energy fluid minerals that can be developed after obtaining a lease from BLM. Regulations and policy applicable to geothermal leasing of federal minerals in the Planning Area include but are not limited to the Geothermal Steam Act of 1970, 43 CFR 3200, and the Programmatic EIS for Geothermal Leasing in the Western United States (BLM 2008a). The Geothermal Steam Act authorizes the Secretary of the Interior to make disposition of geothermal steam and associated geothermal resources and for other purposes. This Act allows the Secretary to issue leases for development and associated geothermal resources on public, withdrawn and acquired lands administered by the Department of the Interior. Geothermal Resources Leasing on the other hand is controlled by laid down guidelines in 43 CFR 3200.

The lease is a right to access and develop mineral resources contained within the boundaries of the leased area in compliance with the lease terms and in conformance with appropriate local, state, and federal laws and regulations. Where information is necessary to classify lands as valuable to the public for minerals subject to the leasing laws, prospecting permits may be authorized before leases would be approved. Where mineral deposits subject to leasing are known to be valuable, BLM may offer to lease through competition. Competitive leasing is required for all oil and gas. Leases are typically termed for 20 years and are extended as long as in producing status. A payment of an annual rental and or a royalty for minerals produced is made to the U.S. by the lessee.

In some situations where sensitive resource values occur, a lease may be issued with a no surface occupancy requirement. This requirement must assure that the mineral deposit on the lease could be developed by means of off-site development.

A determination that lands are available for leasing represents a commitment to allow surface use under standard terms and conditions, unless stipulations constraining

development are attached to leases. When applying leasing restrictions, the least restrictive constraint to meet the resource protection objective will be used.

For reserved mineral interests on private land, leasing of federal mineral estate on lands where the surface is not held by the federal government will be done in accordance with federal law, regulations, and policy guidance. The surface owner will be notified prior to lease and given the opportunity to comment.

2.20.2.1 Goals and Objectives

MIN-11 Provide opportunities for mineral leasing while preventing unnecessary or undue degradation of public lands.

2.20.2.2 Management Actions

MIN-12 Map 2-4 shows land available for geothermal minerals leasing within the Planning Area. For geothermal leasing, 35,115 acres are available, 139,691 acres are not available, and 14,025 acres are available, but with a no surface occupancy stipulation.

MIN-13 In highly sensitive areas, where special stipulations are not sufficient to protect surface resource values, including recreation, special status species, and special designations, stipulations for no surface occupancy for leasable mineral development may be attached to the lease, in addition to no surface occupancy stipulations outlined in this plan.

MIN-14 Manage consistent with the Flat-tailed Horned Lizard Range-wide Management Strategy.

MIN-15 Classify the flat-tailed horned lizard management area as available for geothermal leasing, but with a no surface occupancy stipulation.

MIN-16 Classify the one-mile-wide planning zone surrounding the SRMA (excluding flat-tailed horned lizard management area) as available for geothermal minerals leasing.

MIN-17 Exclude donated lands from geothermal minerals leasing.

MIN-18 Exclude ISD SRMA from geothermal minerals leasing.

MIN-19 Prohibit surface occupancy within critical habitat, ACEC(s), other special area designations, and camping and staging areas.

MIN-20 Wilderness is not available for minerals leasing.

2.20.3 Salable Minerals

Salable minerals include construction materials such as sand, gravel, cinders, decorative rock, and building stone as described in 43 CFR 3600. Laws and regulations applicable to salable minerals on public lands in the Planning Area include:

- Acquired Lands Mineral Leasing Act of 1947
- Mineral Materials Act of 1947 as amended
- FLPMA; and 43 CFR Part 3600
- Surface Resources Act of 1955
- BLM Handbook H3042-1—Solid Minerals Reclamation Handbook
- BLM Manual and Handbook 3600

Disposal of mineral materials from BLM-administered lands requires either a sales contract or a free use permit from the appropriate BLM office. Disposal of mineral materials is authorized in accordance with appropriate laws, regulations, and policies in conformance with the approved land use plan and if disposal is determined to be in the public interest. Use of public lands and resources for salable mineral development cannot be allowed, if not in the public interest and if such action would result in unnecessary or undue degradation to public lands or resources.

Public lands will be available for disposal of salable mineral materials at the discretion of the authorized officer.

2.20.3.1 Goals and Objectives

MIN-21 Prevent unnecessary or undue degradation of public lands.

MIN-22 Respond appropriately to increasing demand for mineral materials in the Planning Area.

MIN-23 Provide mineral materials on a case-by-case basis for infrastructure development.

2.20.3.2 Management Actions

MIN-24 Issue mineral material sales or free use permits on a case by case basis in the approximate one-mile-wide planning zone around the ISD SRMA consistent with applicable land use plans.

MIN-25 Prohibit mineral sales or free use permits within the ISD SRMA.

Chocolate Mountains
Aerial Bombing and Gunnery Range

Union Pacific Railroad

US Naval Reserve

US Naval Reserve

NORTH ALGODONES DUNES WILDERNESS

Niland-Glamis Road

Glamis

78

INDIAN PASS WILDERNESS

PICACHO PEAK WILDERNESS

Vista Mine Road

Gecko Rd

Ted Kipf Road

Walker Way

Ogilby Road

Canal Road

EAST MESA

Side winder Road

Holtville

8

98

MEXICO

0 2 4 6 8
Miles

N

Planning Area
Lands Available for Geothermal Minerals Leasing
Lands Available for Geothermal Minerals Leasing with No Surface Occupancy
Lands not Available for Geothermal Minerals Leasing

Land Status
Bureau of Land Management
Bureau of Land Management Wilderness
Military
State
Private Lands

US Department of the Interior
BUREAU OF LAND MANAGEMENT
California State Office
Sacramento, California
(916) 978-4400
www.ca.blm.gov
Date Prepared: 5/31/2013
Project: Map2-4_GeoT

IMPERIAL SAND DUNES RECREATION AREA MANAGEMENT PLAN

MAP 2-4: Lands Available for Geothermal Minerals Leasing

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
El Centro Field Office
June 2013

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2.21 Recreation Resource Management

There are several regulations, laws, policies, and guidelines that authorize and direct BLM recreation management activities. Section 202(c)(9) of FLPMA provides to the extent consistent with law governing the administration of the public lands, BLM is to coordinate the land use inventory, planning, and management activities of or for the public lands with the land use planning and management programs of other federal, state, tribal, and local governments, including statewide outdoor recreation plans. This coordination is to occur through the BLM's consideration of the policies of approved state and tribal land resource management programs, among other considerations. The BLM is directed, to the extent practical, to assure that consideration is given to state, local and tribal plans germane to the development of public land use plans, and assist in resolving, again to the extent practicable, inconsistencies between the federal and non-federal plans. Public land use plans are to be consistent with state and local plans to the maximum extent the Secretary of the Interior finds consistent with federal law and the purposes of FLPMA.

Recreation within the Planning Area is also managed under the National Management Strategy for Motorized OHV Use on Public Lands (BLM 2001), under the Recreation Element of the CDCA Plan, and is consistent with the goals of the CDCA Plan Recreation Element. FLPMA's implementing regulations and the Federal Lands Recreation Enhancement Act (Public Law 108-447) enable the BLM to collect Special Recreation Permit fees.

The CDCA Plan provides overall management direction for all public lands in the CDCA. The CDCA Plan's Recreation Element lists the following management goals:

- Provide for a wide range of quality recreation opportunities and experiences emphasizing dispersed undeveloped use.
- Provide a minimum of recreation facilities. These facilities should emphasize resource protection and visitor safety.
- Manage recreation use to minimize user conflicts, provide a safe recreation environment, and protect desert resources.
- Emphasize the use of public information and education techniques to increase public awareness, enjoyment, and sensitivity to desert resources.
- Adjust management approach to accommodate changing visitor use patterns and preferences.
- Encourage the use and enjoyment of desert recreation opportunities by special populations, and provide facilities to meet the needs of these groups.

2.21.1 Goals and Objectives

The majority of visitation to the Planning Area is associated with motorized camping and OHV recreation. However, other recreational activities such as hunting, hiking, wildflower and wildlife viewing, bird watching, photography, and commercial uses also occur to a lesser degree. As such, the majority of public lands within the Planning Area have recreation opportunities that can be appropriately managed while conserving natural, biological, and cultural resources as prescribed by the BLM's multiple-use mission and planning documents.

REC-01 This recreation and visitor services blueprint (based on the BLM National Recreation and Visitor Services program) for the future also sets three primary goals for the BLM recreation program:

- Improve access to appropriate recreation opportunities on BLM-managed lands.
- Ensure a quality experience and enjoyment of natural, biological, and cultural resources on BLM-managed lands.
- Provide for and receive fair value in recreation.

REC-02 To meet the specific needs and changing demands of recreation visitors and changes in BLM recreation management, a BLM California-specific Recreation and Visitor Services Strategy was completed in 2008 (BLM 2008c). The strategy outlined a framework with specific goals, objectives, and actions to be implemented. The three primary goals of the document were designed to increase public land stewardship through consistent and coordinated management of the BLM California recreation program in order to achieve the best possible balance of recreational uses and land health standards statewide. The three primary goals are to:

- Set a framework for achieving sustainable experiences and quality of life outcomes for individuals, communities, and the environment.
- Sustain diversity, distinctive character, and capacity of BLM recreation settings.
- Increase the economic stability and sustainability of the BLM California recreation program.

REC-03 The seven main objectives for BLM recreation management in California are to:

1. Manage for recreation experiences and quality of life.
2. Encourage sustainable travel/tourism collaborations.
3. Fair value and return through fees and commercial services.
4. Establish a comprehensive approach to travel management.

5. Public health and safety and improve accessibility.
6. Enhance and expand visitor services.
7. Encourage and sustain collaborative partnerships.

2.21.2 General Management Actions

REC-04 Develop or retrofit facilities to accommodate visitation and meet agency requirements.

REC-05 Design all new facilities to meet the social needs of the visitors and the management needs of the BLM.

REC-06 Provide a minimum number of recreational facilities. Those facilities should emphasize resource protection and visitor safety.

REC-07 Determine if existing facilities meet accessibility standards, management objectives, and desired future conditions. Existing facilities deemed critical will be maintained and/or modified to be accessible, to the extent possible, and safe for visitor use. Facilities not meeting management objectives and accessibility standards will be considered for removal.

REC-08 Collect recreation fees.

REC-09 Collect Special Recreation Permit fees for commercial and non-commercial activities under the authority of the Federal Lands Recreation Enhancement Act (Public Law 108-447, Section 804) and other applicable regulations and BLM policy.

REC-10 Conduct a visitor survey to provide public input on safety, natural, biological, and cultural resources concerns, and management of the Planning Area. Implement a visitor and OHV recreation survey.

REC-11 Work cooperatively with the OHV community, the environmental community, and other local, state, and federal agencies to develop and implement interpretive and public relations programs about issues and resources related to the Planning Area.

REC-12 Develop and maintain educational programs which may include on-the-ground improvements such as signs and interpretative kiosks, partnerships, and educational materials throughout the Planning Area as funding allows.

REC-13 Provide quality informational and interpretive materials and programs to enhance the visitor's knowledge of the Planning Area's flora, fauna, historic, recreational, and other significant resources and opportunities. Emphasize the use of public information and education techniques to increase public awareness, enjoyment, and sensitivity to desert resources.

REC-14 Consider utilization of concessionaire(s) to manage certain activities and uses in the Planning Area within the framework of the ISD RAMP.

REC-15 Develop ways of using concessions to help maintain or operate recreation areas.

REC-16 Protect at-risk cultural and historical resources from recreational damage as needed throughout the Planning Area. Work together with new and existing groups to foster partnerships that accomplish BLM goals and objectives.

REC-17 Prohibit collection of wood for home heating purposes.

REC-18 Prohibit burning wood with non-combustible items (pallets).

REC-19 Maintain and/or develop volunteer campground host program in appropriate areas.

REC-20 Prohibit vending in all areas closed to OHV recreation and in limited use areas.

REC-21 Create an environment to promote the health and safety of visitors, employees, and nearby residents by working with local, state, and federal agencies and interest groups.

REC-22 Manage recreational uses to minimize user conflicts, provide a safe recreation environment, and protect desert resources.

REC-23 Engage communities, including key enthusiasts, in the resolution of health and safety issues/other conflicts at BLM recreational sites or areas.

REC-24 Improve capacity to inform visitors about safety concerns (e.g., facilities, fire), environmental conditions, and emergency situations, both on-site and by using web-based and other technologies.

REC-25 Work with law enforcement officers and public affairs staff when possible to publicize vandalism and convictions.

REC-26 Maintain involvement in community-based planning to address mutual needs including communities (all local governments), service-providing businesses, and the BLM.

REC-27 Engage chamber of commerce/tourism groups, outdoor businesses, heritage organizations, outfitters, other private recreation providers, and organized groups for ideas and ways to disseminate information regarding suitable visitor destinations on public lands, maps, and user ethics.

REC-28 Develop and maintain partnerships that fulfill local needs while balancing recreational demands in administering public lands.

REC-29 Continue and enhance partnerships with other federal and state agencies, such as the Department of Defense, California State Parks, and California Department of Fish and Wildlife.

REC-30 Adjust management approach to accommodate changing visitor use patterns and preferences.

REC-31 Continue working with the business community, organized recreation groups, outfitters, communities, and interested individuals to instill a sense of pride and caring for public lands.

REC-32 Expand visitor education regarding a "pack it in, pack it out" policy. Continue to educate the public regarding Leave No Trace or Tread Lightly! ethics.

REC-33 Use alternative funding sources (such as Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users) to partner with local groups to further transportation planning.

REC-34 Allow camping and OHV recreation within the Dunebuggy Flats Campground.

REC-35 Allow camping and OHV recreation within some of the microphyll woodlands south of State Route 78 and north of Interstate 8.

REC-36 Prohibit camping within the microphyll woodlands south of Wash 33 and north of Wash 70. OHV recreation will continue to be allowed in this area.

2.21.3 Recreation Management Areas

The BLM identifies SRMAs where the resources of the public lands attract visitors from one of the three following recreation markets:

Public lands with a demonstrated *community* recreation–tourism market will be managed as a Community SRMA. A Community SRMA is managed in collaboration with the local community to primarily benefit the local residents.

Public lands with a demonstrated *destination* recreation–tourism market will be managed as a Destination SRMA. A Destination SRMA is managed as a regional or national destination through collaborative partnerships.

Public lands with a demonstrated *undeveloped* recreation–tourism market will be managed as an Undeveloped SRMA. An Undeveloped SRMA is managed to maintain dispersed and undeveloped recreation opportunities.

The ISD will be managed as a Destination SRMA. The ISD SRMA encompasses 164,209 acres (including the North Algodones Dunes Wilderness) of BLM-administered lands (Map 2-5). This RAMP also addresses the area one mile beyond and parallel to the ISD SRMA boundary, encompassing 50,722 acres of BLM-administered lands (see Map 2-5).

2.21.3.1 Imperial Sand Dunes SRMA

REC-37 The ISD SRMA boundaries are the U.S.–Mexico border to the south, the Coachella Canal to the west (for the most part), the Union Pacific Railroad to the east (along with portions of Ogilby Road and the All-American Canal), and the Mammoth Wash area to the north where the dunes terminate (see Map 2-5).

REC-38 The ISD SRMA will be managed as a nationally unique resource for dune-based recreation opportunities. The BLM will continue to provide recreation opportunities for the public throughout the ISD SRMA by following the goals and objectives in the 2008 BLM California Recreation and Visitor Services Strategy.

2.21.3.1.1 Management Actions

REC-39 Provide a variety of sustainable OHV and other recreational activities.

REC-40 Develop, continue, and/or improve recreation monitoring to provide accurate and consistent data in order to make sound management decisions.

REC-41 Provide a quality recreational experience for OHV enthusiasts in the ISD SRMA.

REC-42 Manage the ISD SRMA as a regional or national destination through collaborative partnerships to promote the continued use of the lands for these activities.

REC-43 Manage the ISD SRMA as a nationally unique resource for dune-based recreation opportunities.

REC-44 Assure the conservation of recreation diversity to provide a spectrum of opportunities to meet the diverse tastes and preferences of the public.

REC-45 Provide for a wide range of quality recreation opportunities and experiences emphasizing facility-based and dispersed undeveloped use.

REC-46 Encourage the use and enjoyment of desert recreation opportunities by special populations and provide facilities to meet the needs of those groups.

REC-47 Collaborate with communities and constituencies to inventory and administer setting character to maintain a diversity of settings across the entire spectrum of recreation experiences, which include motorized recreation uses such as motorcycling,

Chocolate Mountains
Aerial Bombing and Gunnery Range

Union Pacific Railroad

US Naval Reserve

US Naval Reserve

NORTH ALGODONES DUNES WILDERNESS

Niland-Glamis Road

Glamis

78

INDIAN PASS WILDERNESS

PICACHO PEAK WILDERNESS

Vista Mine Road

Geeko Rd

Ted Kipf Road

Walker Way

Ogilby Road

Canal Road

EAST MESA

Sidewinder Road

Holtville

8

98

MEXICO

0 2 4 6 8
Miles

N

Planning Area
SRMA

Land Status
Bureau of Land Management
Bureau of Land Management Wilderness
Military
State
Private Lands

US Department of the Interior
BUREAU OF LAND MANAGEMENT
California State Office
Sacramento, California
(916) 978-4400
www.ca.blm.gov
Date Prepared: 5/31/2013
Project: Map2-5_SRMA

IMPERIAL SAND DUNES
RECREATION AREA MANAGEMENT PLAN

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
El Centro Field Office
June 2013

MAP 2-5: Special Recreation Management Area (SRMA)

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four-wheeling, OHVs, and driving for pleasure; non-motorized recreation experiences such as hiking, horseback riding, and backpacking; and heritage tourism options that maintain the integrity of cultural, paleontological, and natural history and historical locations while interpreting the stories of these important places.

REC-48 Implement and monitor plan objectives to ensure that benefits, experiences, maintenance of recreation setting character, and land health standards are met.

REC-49 Continue to partner and collaborate with gateway communities and other partners to increase support, and strengthen economies for BLM recreational destinations.

REC-50 Identify opportunities for companies and community businesses to sponsor projects that achieve management objectives, maintain recreational character, and meet land health standards.

REC-51 Identify sustainable tourism opportunities and work with local communities, partners, historic interest groups, and the tourism community to sustain and promote education about, and enjoyment, and protection of those opportunities.

REC-52 Expand the adoption of recreation areas by partners and volunteers, by including them in the planning process as well as in implementing actions and assisting with ongoing maintenance.

REC-53 Continue to work closely with other agencies, local communities, and groups to support and promote the Watchable Wildlife program.

Primary Market Strategy

REC-54 The primary market strategy for the ISD SRMA is to target demonstrated destination recreation–tourism market demand for specific activity, experience, and benefit opportunities.

Partnerships and Coordination

REC-55 The BLM will coordinate with local and gateway communities, Native American tribes and groups, California SHPO, Imperial County, California Department of Fish and Wildlife, USFWS, U.S. Border Patrol, California State Parks, California State Lands Commission, local public health and safety organizations, other law enforcement entities, and various non-governmental organizations.

Environmental Education Needs

REC-56 The BLM supports the Tread Lightly! and Leave No Trace national programs and promotes responsible OHV recreation, hunting ethics, and natural, biological, and cultural resource ethics. BLM will provide information about recreation, natural, cultural, and historical resources, and other points of interest.

2.21.3.2 Recreation Management Zones

Within each SRMA, BLM also allocates Recreation Management Zones. A Recreation Management Zone represents public lands with a distinctive recreation niche (activities, experiences, and benefits) within each SRMA. The BLM will focus management, funding, and planning within the SRMA and its Recreation Management Zones to work towards stated Recreation Management Goals and Objectives.

The allocation of the SRMA and Recreation Management Zones provides the Planning Area with an activity-level planning framework for recreation management.

REC-57 Recreation Management Zones are presented in Table 2-5 and Map 2-6.

TABLE 2-5
RECREATION MANAGEMENT ZONES WITHIN PLANNING AREA (ACRES)

Recreation Management Zone	Acres
Open	127,416
Resource Protection	9,046
Limited	52,370
North Algodones Dunes Wilderness	26,098
Total	214,930

Note: Inconsistencies in acres may be due to GIS data and rounding.

2.21.3.2.1 Open Recreation Management Zone

Goals and Objectives

REC-58 The Open Recreation Management Zone is managed for OHV and other motorized recreational opportunities while conserving natural, biological, and cultural resources.

Recreation Niche: The Open Recreation Management Zone consists of two types of opportunities, camping and expansive sand dune OHV recreation. The camping areas are destination points off several roads and highways, including Interstate 8, Ogilby Road (S34), and State Route 78, which accommodate large, motorized camping units such as recreational vehicles, toy haulers, semi-truck/trailer combinations, fifth wheel

Chocolate Mountains
Aerial Bombing and Gunnery Range

Union Pacific Railroad

Mammoth Wash

Niland-Glamis Road

US Naval Reserve

NORTH ALGODONES DUNES WILDERNESS

Glamis

Palo Verde Flats

Glamis Flats

Cement Flats

Pad 1

Pad 1.5

Pad 2

Pad 2.5

Wash 10

Wash 20

Gecko

Pad 3

Pad 5

Pad 4

Keyhole

Roadrunner

Vista Mine Road

Ted Kipf Road

Canal Road

Walker Way

Ogilby Road

Sidewinder Road

Ogilby

INDIAN PASS WILDERNESS

PICACHO PEAK WILDERNESS

US Naval Reserve

EAST MESA

Holtville

Dunes Vista

Buttercup

Dune Buggy Flats

Midway

Grays Well

MEXICO

78

8

98

Planning Area

Ranger Station

Campgrounds

Recreation Management Zones (RMZ)

Open RMZ

Open RMZ - No Camping

Limited RMZ - Designated Routes of Travel Only

Limited RMZ - No Camping

Resource Protection RMZ

North Algodones Dunes Wilderness Area RMZ

Land Status

Bureau of Land Management

Bureau of Land Management Wilderness

Military

State

Private Lands

0 2 4 6 8
Miles

N

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Project: Map2-6_RMZ

IMPERIAL SAND DUNES RECREATION AREA MANAGEMENT PLAN

MAP 2-6: Recreation Management Zones

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El Centro Field Office
June 2013

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trailers, and others. The OHV recreation area encompasses the large and small sand dunes where visitors operate their OHV for recreation.

Primary Activities: Camping and OHV recreation.

Experiences: OHV recreation, risk and challenge, camping (socializing with friends and family), watching OHV activity, commercial vending, reading, walking, and photography. Interactions between visitors may be high. Developed entry and access roads, intensified motorized recreation.

Benefits: Personal: Increased opportunities for visitors to appreciate open spaces through motorized and non-motorized recreation. Improves quality of life for visitors through health and fitness, stress reduction, and mental well-being. Promotes self-reliance and self-confidence through improved skills and knowledge. Enhanced sense of freedom, personal adventure, and appreciation of nature.

Household & Community: Increased natural and historical appreciation from regional tourism. Increased opportunity for positive social interactions—including family bonding, OHV community, and stewardship of the public lands.

Economic: Increased local and regional tourism. Increased local and regional tax revenue and employment opportunities.

Environment: Reduced impacts to more sensitive natural, biological, and cultural resources by managing OHV recreation in areas identified by BLM.

2.21.3.2.2 Resource Protection Recreation Management Zone

Goals and Objectives

REC-59 The Resource Protection Recreation Management Zone is managed for its natural qualities to provide opportunities for expansive non-motorized recreational activities.

Recreation Niche: The Resource Protection Recreation Management Zone accommodates non-motorized recreation. Recreation may occur in the form of hiking, photography, and wildlife viewing. This Recreation Management Zone provides the opportunity for environmental education through non-motorized exploration and observation of native plant and animal species.

Primary Activities: Hiking, wildlife viewing, photography.

Experiences: Hiking, wildlife viewing, and environmental education opportunities. Interactions between visitors may be low. No entry and access roads.

Benefits: Personal: Increased opportunities for visitors to appreciate open spaces through non-motorized recreation. Improves quality of life for visitors through health and fitness, stress reduction, and mental well-being. Promotes self-reliance, and self-confidence through improved skills and knowledge. Enhanced sense of freedom, personal adventure, and appreciation of nature.

Household & Community: Increased natural and historical appreciation. Increased opportunity for positive social interactions, including family bonding and stewardship of the public lands.

Economic: Increased regional tourism revenues.

Environment: Reduced impacts to sensitive natural, biological, and cultural resources by reducing OHV recreation areas.

2.21.3.2.3 Limited Recreation Management Zone

Goals and Objectives

REC-60 The Limited Recreation Management Zone is managed for its limited motorized recreational opportunities and for natural qualities. There are three potential types of limited opportunities in the Recreation Management Zone (limited OHV use, camping, and environmental education and tourism). The Limited Recreation Management Zone is is the public land in the approximately one-mile-wide planning zone surrounding the ISD SRMA. This Recreation Management Zone incorporates the existing NECO and WECO plan decisions that allow OHV travel on designated routes identified in the NECO and WECO plans.

Recreation Niche: The seasonal restriction Limited Recreation Management Zone area can be accessed from Interstate 8 to the Dunebuggy Flats camping area. The NECO and WECO Limited Recreation Management Zone areas can be accessed from several points, including Interstate 8, Ogilby Road, and State Route 78. The area between the old and new Coachella canals can be accessed from Interstate 8 and State Route 78. These areas within the Limited Recreation Management Zone provide the opportunity for environmental education through several interpretive kiosks in addition to offering camping and limited use OHV recreation.

Primary Activities: Camping and OHV recreation.

Experiences: Limited use OHV recreation (travel limited to designated routes of travel or areas with seasonal restrictions under specific conditions), camping, environmental education, and tourism opportunities. Interactions between users may be low. Developed entry and access roads, limited motorized recreation, and extensive sand dunes.

Benefits: Personal: Increased opportunities for visitors to appreciate open spaces through limited motorized recreation. Improves quality of life for visitors through health and fitness, stress reduction, and mental well-being. Promotes self-reliance, and self-confidence through improved skills and knowledge. Enhanced sense of freedom, personal adventure, and appreciation of nature.

Household & Community: Increased natural and historical appreciation from regional tourism. Increased opportunity for positive social interactions, including family bonding, OHV community, and stewardship of the public lands.

Economic: Increased regional tourism.

Environment: Reduced impacts to more sensitive natural, biological, and cultural resources by managing OHV recreation into areas identified by BLM.

2.21.3.2.4 North Algodones Dunes Wilderness Recreation Management Zones

Goals and Objectives

REC-61 The North Algodones Dunes Wilderness Recreation Management Zone is managed to sustain its wilderness character and provide for non-motorized recreation opportunities.

Recreation Niche: The North Algodones Dunes Wilderness Recreation Management Zone is an accessible destination point north of State Route 78 that accommodates non-motorized recreation. Recreational use may occur in the form of hiking and photography. This Recreation Management Zones provides the opportunity for environmental education as well as informational kiosks, in addition to offering non-motorized recreation.

Primary Activities: Hiking, camping, photography.

Experiences: Camping, hiking, and environmental education opportunities. Interactions between users may be low. Developed entry and access roads, and scattered non-motorized recreational use.

Benefits: Personal: Increased opportunities for visitors to appreciate open spaces through non-motorized recreation. Improves quality of life for visitors through health and fitness, stress reduction, and mental well-being. Promotes self-reliance, and self-confidence through improved skills and knowledge. Enhanced sense of freedom, personal adventure, and appreciation of nature.

Household & Community: Increased natural and historical appreciation. Increased opportunity for positive social interactions, including family bonding and stewardship of the public lands.

Economic: Increased regional tourism revenues.

Environment: Reduced impacts to sensitive natural, biological, and cultural resources within the wilderness.

2.22 Transportation and Public Access

Managing access to and across public lands is a vital task for BLM under the authority of 43 CFR 8342.1. OHV use is an important component of recreational use in the ISD Planning Area. To better describe all aspects of travel management, OHV use is discussed in this section rather than in the recreation section.

Among the goals of the CDCA Plan for motorized vehicle access are

1. Provide for constrained motorized vehicle access in a manner that balances the needs of all desert users, private landowners, and other public agencies.

2. Avoid adverse impacts to desert resources to the degree possible, when designating or amending areas or routes for motorized vehicle access.

The BLM designates public land areas as open, limited, or closed to the use of off-road vehicles (also referred to as OHVs in this document) under a variety of authorities, including but not limited to FLPMA, Executive Orders 11644 and 11989, and the designation criteria found in 43 CFR 8342. This section also discusses travel management designations carried over from the existing NECO and WECO plan amendments. The NECO plan decisions have been in place since 2002 and the WECO decisions since 2003. Route designations from these plans were developed to minimize impacts to federally listed and BLM sensitive species, including the desert tortoise and flat-tailed horned lizard. These route designation decisions from the NECO and WECO plans remain unchanged, and management decisions of those plans will continue to be implemented in the ISD RAMP.

Although the CDCA Plan does not have any formal management goals for transportation, the Motorized Vehicle Access Element states, “Based on implementation priorities, BLM will, with assistance from the public, determine which routes in [multiple use] Class L and M areas need to be closed or limited in some other way. Route approval will be based on these considerations” (BLM 1999).

2.22.1 OHV Management Area Designations

TPA-01 This RAMP/CDCA Plan amendment designates all BLM-administered public lands within the Planning Area as open, closed, or limited to motorized use. OHV management areas are presented in Table 2-6 and Map 2-7. Definitions for limited, open, and closed area designations are established in 43 CFR 8340.0-5 (f), (g), and (h), respectively and described below.

TABLE 2-6
OHV MANAGEMENT AREA DESIGNATIONS WITHIN THE PLANNING AREA (ACRES[1])

Designation	Acres
Open	127,416
Closed	35,144
Limited	52,370
Total Acres	214,930

[1]BLM-administered acres within the Planning Area.

Note: Inconsistencies in acres may be due to GIS data and rounding.

Open areas are areas where all types of vehicle use are permitted at all times, anywhere in the area subject to the operating regulations and vehicle standards set forth in 43 CFR 8341 and 8342.

Limited areas are restricted at certain times, in certain locations, and/or to certain vehicular use. These restrictions may be of any type, but can generally be accommodated within the following categories: numbers of vehicles, types and sizes of vehicles, time or season of vehicle use, permitted or licensed use only, use on existing roads and trails, use on designated roads and trails, limited to administrative use only, and other restrictions. In accordance with the CDCA Plan, as amended, stopping, parking, and vehicle camping is allowed within 300 feet of the centerline of a route, except within sensitive areas (such as ACECs), where the limit will be 100 feet, and within the Flat-tailed Horned Lizard Management Area, where the limit will be 50 feet. This will be monitored on a continuing basis. If monitoring results show effects that exceed limits of acceptable change, the distance allowed for motorized vehicles to pull off from a designated route may be modified. This plan will continue to be consistent with the CDCA Plan, as amended, including continuing implementation of management decisions in the existing NECO and WECO plans.

Closed areas are areas where motorized vehicle use is prohibited. Use of OHVs in closed areas may be allowed for administrative or emergency purposes; however, such use will be made only with the approval of the authorizing officer. Congressionally designated wilderness is statutorily closed to motorized and mechanized use, except for purposes specifically provided for by law.

2.22.2 Routes of Travel

The routes of travel decisions currently existing in the one-mile-wide planning zone of the Planning Area were developed through the NECO (BLM 2002) and WECO (BLM 2003a) CDCA Plan amendments and the designation criteria found in 43 CFR 8342.1. The NECO and WECO plan decisions do not change within the ISD RAMP Planning Area and are incorporated in this plan to maintain consistency and for management efficiency. The NECO and WECO plans were developed to protect federally listed threatened or endangered species and promote their recovery, as well as minimize impacts to other special status plant and animal species. Decisions in these plans include reducing OHV routes and areas open to camping in sensitive species habitat; improved signing; increased law enforcement; and restoration and monitoring of closed routes. These decisions from the NECO and WECO plans are carried forward in this RAMP. The efforts to minimize impacts to these resources are documented in the description of alternatives, affected environment, and environmental consequences chapters of the plan amendments and their associated environmental analysis documents. In addition, the NECO Plan includes biological parameters to minimize harassment of wildlife and disruption of habitats from OHV route designations. See NECO Chapter 2, Section 2.5.2 Table 2-11. These plan amendments are included by reference. These routes of travel (Map 2-8) are within designated limited use areas.

TPA-02 Routes of travel within the OHV limited use area surrounding the ISD SRMA have been designated as open routes, except for Gray's Well Road, Luis Aguilar Road, Wash Road, and Gecko Road, which are limited to street-legal vehicles only. To minimize impacts to sensitive species, stopping, parking, and camping along the open routes in the Flat-tailed Horned Lizard Management Area is limited to within 50 feet on either side of the route centerline. Routes within the ISD SRMA, excluding the wilderness, have also been designated as open, except for Gray's Well Road, Luis Aguilar Road, Wash Road, and Gecko Road, which are limited to street legal vehicles only. Open routes are available to motorized vehicles. Limited routes may have additional limitations on use including vehicle size, vehicle type, and season of use. Closed routes will be closed to motorized vehicles, including OHVs, but open to biking, hiking, and equestrian use. Table 2-7 provides the total mileage of open and limited routes in the Planning Area, and Map 2-8 illustrates the locations of the various routes of travel[2]. Although discussed here, the route designation decisions contained in the NECO and WECO land use plan amendments remain unchanged and are not subject to appeal. The routes of travel that are within the ISD SRMA, and not included in the existing NECO and WECO plan areas, are subject to appeal. Also see Appendix B of this document for information related to the routes of travel appeals process.

[2]Routes of travel are an implementation-level decision and do not require a plan amendment to change.

Chocolate Mountains
Aerial Bombing and Gunnery Range

Union Pacific Railroad

Mammoth Wash

US Naval Reserve

US Naval Reserve

NORTH ALGODONES DUNES WILDERNESS

Niland-Glamis Road

Glamis

78

Vista Mine Road

Red Kipf Road

Canal Road

Walker Way

Ogilby Road

Side winder Road

INDIAN PASS WILDERNESS

PICACHO PEAK WILDERNESS

Cement Flats

Pad 1

Pad 5

Pad 2

Pad 2-5

Gecko

Pad 3

Pad 5

Pad 4

Keyhole

Roadrunner

Palo Verde Flats

Glamis Flats

Wash 18

Wash 20

Ogilby

Dunes Vista

Buttercup

Dune Buggy Flats

Midway

Grays Well

EAST MESA

Holtville

8

98

MEXICO

0 2 4 6 8
Miles

N

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Project: Map2-7_OHV

Planning Area
Ranger Station
Campgrounds

Off-Highway Vehicle (OHV) Management Areas
Open to OHV Use
Open to OHV Use - No Camping
Limited OHV Use
Limited OHV Use - No Camping
Closed to OHV Use

Land Status
Bureau of Land Management
Bureau of Land Management Wilderness
Military
State
Private Lands

IMPERIAL SAND DUNES RECREATION AREA MANAGEMENT PLAN

MAP 2-7: OHV Management Areas

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June 2013

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Chocolate Mountains
Aerial Bombing and Gunnery Range

Union Pacific Railroad

Mammoth Wash

US Naval Reserve

US Naval Reserve

NORTH ALGODONES DUNES WILDERNESS

Niland-Glamis Road

Glamis

78

INDIAN PASS WILDERNESS

PICACHO PEAK WILDERNESS

Palo Verde Flats

Glamis Flats

Wash 10

Wash 20

Wash Road

Vista Mine Road

Ted Kipf Road

Walker Way

Ogilby Road

Side Winder Road

Ogilby

Cement Flats

Pad 1

Pad 1.5

Pad 2

Pad 2.5

Gecko

Pad 3

Pad 5

Pad 4

Keyhole

Roadrunner

Canal Road

EAST MESA

Holtville

8

98

Dunes Vista

Buttercup

Dune Buggy Flats

Midway

Grays Well

MEXICO

0 2 4 6 8
Miles

N

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Date Prepared: 5/31/2013
Project: Map2-8_Routes

Planning Area
Roadways
Routes of Travel
Ranger Station
Campgrounds

Land Status
Bureau of Land Management
Bureau of Land Management Wilderness
Military
State
Private Lands

IMPERIAL SAND DUNES RECREATION AREA MANAGEMENT PLAN

MAP 2-8: Routes of Travel in the Planning Area

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June 2013

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TABLE 2-7
ROUTES OF TRAVEL (MILES)

Route Name	Miles
Gray's Well Road	4.49
Luis Aguilar Road	0.49
Wash Road	5.69
Gecko Road	6.39
Other (unpaved)	174.31
Total Miles	191.37

2.22.2.1 Goals and Objectives

TPA-03 Ensure that the BLM minimizes impacts to identified sensitive cultural, natural, biological, and visual resources.

TPA-04 Ensure that the BLM continues to provide essential motorized access to non-federal lands, prior existing rights on BLM lands, and private in-holdings surrounded by BLM lands.

TPA-05 Ensure that the BLM continues to provide adequate motorized access for the maintenance of wildlife guzzlers and for dispersed recreation activities such as hunting.

TPA-06 Ensure that the BLM provides for a wide variety of recreational opportunities (e.g., hiking, OHV recreation, horseback riding, and commercial activities).

TPA-07 Reduce or halt the unauthorized incursions into closed areas.

2.22.2.2 Management Actions for Designated Routes of Travel

To minimize impacts to sensitive resources, reduce conflicts between users, and provide for visitor safety, the following will apply to designated routes and surrounding lands within the Planning Area:

TPA-08 Maintain, and where necessary, improve Wash Road.

TPA-09 Allow primary motorized vehicle travel only on designated routes. Emergency vehicles may use a drivable wash to access a site. Where no roads exist, vehicles could be authorized on a case-by-case basis to travel cross-country to avoid the need for road building, with appropriate environmental analysis.

TPA-10 Ensure that designated routes within the Planning Area are adequately signed and mapped for public use.

TPA-11 Where new roads are considered in the future, roadbeds will be no wider than needed for reliable access. Proposed new roads will be considered only after appropriate environmental analysis and will use BLM specifications and best management practices to minimize impacts to resources and reduce erosion.

TPA-12 Reduce vehicle incursions or trespass on closed routes or in closed areas by restoring lands to their pre-disturbance conditions as rapidly as funding permits. Sensitive resources in immediate danger or those that have been damaged by linear disturbances will be a high priority for restoration. Typically, the restoration will be limited to that portion of the route of trespass that is in line of sight from an open route. Each route will be evaluated on a case-by-case basis, and the most appropriate method of restoration will be used based on geography, topography, soils, hydrology, and vegetation. The methods of restoration will include:

- Not repairing washed-out routes
- Using natural barriers, such as large boulders
- Using rocks and dead and downed wood to obscure the route entryway
- Employing mulching, chipping, and raking to disguise evidence of routes
- Ripping up the route bed and reseeding with vegetation native to that area
- Utilizing fences or barriers
- Providing signage, including information to OHV users, on the need and value of resource protection
- Converting closed motorized two-track routes into non-motorized single track routes

2.23 Lands and Realty Management

The lands and realty management program consists of four distinct parts: land tenure, land use authorization (including solar and wind energy), withdrawals, and utility corridors. Land tenure focuses on disposing of and acquiring lands or interests in lands. Public lands will be retained in federal ownership, unless as a result of land use planning it is determined that disposal of a particular parcel would serve the national interest.

Land use authorization focuses on public demand requests for rights-of-way, permits, leases, and easements.

As used in the lands and realty program, a withdrawal removes an area of federal land from settlement, sale, location, or entry under some or all of the general land laws (including the Mining Law of 1872) for the purpose of limiting activities under those laws to maintain other public values in the area or reserving the area for a particular public purpose or program. Withdrawals are also used to transfer jurisdiction over an area of federal land from one department, bureau, or agency to another.

An energy corridor is a linear strip that has been identified through the land use planning process as being a preferred location for existing and future utility rights-of-way and that is suitable to accommodate one or more rights-of-way which are similar, identical, or compatible.

The lands and realty management program administers public lands within a framework of numerous laws and regulations. The most comprehensive of these is FLPMA which, along with implementing regulations, enables BLM to accomplish a variety of land actions, including but not limited to sales, withdrawals, acquisitions, exchanges, leases, permits, easements, and rights-of-way. In 1988, FLPMA was amended by the Federal Land Exchange Facilitation Act (102 Stat. 1087), which established uniform rules and regulations for appraisals, procedures, and guidelines for the resolution of appraisal disputes in the exchange process.

Other applicable laws and policies include:

- Mineral Leasing Act of 1920 (30 USC 185) as amended: BLM issues rights-of-way for oil and natural gas pipelines and related facilities pursuant to Section 28 of the Mineral Leasing Act.

- Recreation and Public Purposes Act, as amended: The act of June 14, 1926, as amended (43 USC 869 et seq.), is used primarily for providing land to fulfill the need for public services (parks, monuments, schools, community buildings, hospitals, sanitary landfills) due to urban expansion.

- Airport and Airway Improvement Act of 1982 (49 USC 2215): The act provides for the conveyance of BLM-administered lands to public agencies for use as airports and airways.

- Federal Highway Acts: Various federal highway acts codified in 23 USC, Sections 17 and 317 and the current Interagency Agreement also apply to lands and realty management.

- Federal Land Transaction and Facilitation Act 114 Stat. 613; 43 USC 2301 et seq.) of July 25, 2000: The Federal Land Transaction and Facilitation Act amended FLPMA to allow retention by the BLM of receipts received from the sale of land or interests in land under Section 203 of FLPMA or conveyance of mineral interest under Section 209(b) of FLPMA, as long as the applicable land use plan was completed prior to July 25, 2000.

- The National Energy Policy Act of 2005 and Executive Order 13423, dated January 24, 2007 provide direction to federal agencies to take appropriate actions to expedite the review of energy-related right-of-way projects, support renewable energy

development on federal lands (including wind energy), and improve efficiencies in the processing of right-of-way applications.

The CDCA Plan does not have any formal management goals for the lands and realty program.

2.23.1 Land Tenure

2.23.1.1 Disposal

All land disposal actions are discretionary with emphasis on the evaluation of whether such lands are: 1) manageable, 2) needed for any particular federal purpose, or 3) better suited to serving the public. Exchanges are used for disposal to assure an optimum final land ownership pattern and provide better overall land management. Sales will be considered where more efficient. Sales are primarily competitive or modified competitive. Disposal of these lands will be made on a case-by-case basis and will be accomplished by the most appropriate disposal authority.

Public lands are to be retained in federal ownership, unless it is determined that disposal of a particular parcel will serve the national interest (FLPMA Section 102(a)(1)).

Land Available for Disposal

LRM-01 No lands will be available for disposal within the Planning Area.

2.23.1.2 Acquisition

Purchase and donations of lands are a key mechanism for land acquisition. Lands or interest in lands (including easements) may be acquired by BLM through purchase, exchange, or donation. Section 205 of FLPMA authorizes the Secretary of the Interior (delegated to BLM) to acquire non-federal lands or interests in lands pursuant to FLPMA by purchase, exchange, or donation.

Currently, the BLM is actively acquiring flat-tailed horned lizard habitat as mitigation for impacts to lost habitat resulting from several projects, including the Arizona State Highway project, Drop 2 Water Reservoir, and the All-American Canal lining. Compensation monies are being used to make the purchases of lands from willing sellers. Sections of land, or portions thereof, which are in various stages of the acquisition process, lie within the Planning Area and, upon successful acquisition, will be managed in accordance with this RAMP.

LRM-02 Currently pending land acquisitions equal 6,603 acres.

2.23.1.2.1 Goals and Objectives

LRM-03 Lands or interest in lands (including easements) to be acquired must either:

- Facilitate access to public lands and resources
- Maintain or enhance public uses and values
- Facilitate implementation of this Proposed RAMP/CDCA Plan amendment and Final EIS
- Provide for a more manageable land ownership pattern
- Include significant natural or cultural resource values

2.23.1.2.2 Management Actions

LRM-04 Manage all acquired lands in accordance with the approved land use and planning decisions for surrounding or adjacent BLM-administered lands.

LRM-05 Consolidate split-estate pursuant to Sections 205 and 206 of FLPMA.

LRM-06 Any lands acquired by the BLM will include both the surface and subsurface (minerals) estate when possible and will be managed in accordance with the approved land use decisions for the surrounding area.

2.23.2 Land Use Authorizations

2.23.2.1 Leases/Permits/Easements

The BLM will strive to increase and diversify our nation's sources of both traditional and alternative energy resources, improve our energy transportation network, and ensure sound environmental management in accordance with the President's National Energy Policy. Section 302 of FLPMA gives the Secretary of the Interior broad authority to manage public lands "through easements, permits, leases, licenses, published rules, or other instruments."

Leases, permits, or easements will be considered and issued under applicable laws and regulations pursuant to regulations found at 43 CFR 2900. Issuance of leases, permits, or easements is a discretionary action. These authorizations may include but are not limited to airport leases; Recreation and Public Purposes Act leases; and leases, permits, or easements (e.g., film permits, apiary permits) considered or issued under 43 CFR 2920.

Public land is subject to application for community expansion needs under a wide variety of public land laws. Community expansion needs will continue to be handled on a case-

by-case basis in accordance with the appropriate authority. BLM will use federal lands for community expansion needs such as airports, parks, hospitals, and community centers pursuant to applicable laws and regulations.

An easement is defined as the right to use another landowner's real estate for a specific purpose. The most common type of easement is the right to travel over another landowner's land, known as a right-of-way. In addition to rights-of-way, the BLM may commonly grant easements for the placement of utility poles, utility trenches, water lines, or sewer lines. The owner of property that is subject to an easement is said to be "burdened" with the easement, because the allowed use may not be interfered with.

2.23.2.1.1 Goals and Objectives

LRM-07 Manage recreational and commercial activities within the Planning Area to accommodate visitor needs, improve visitor experience, and—where consistent with management goals—allow economic benefits for local and regional communities.

LRM-08 Maintain public access to BLM-administered lands through easements when needed.

LRM-09 Be responsive to public demand for leases, permits, and easements on a case-by-case basis, consistent with management prescriptions.

LRM-10 Land is not available for leasing for residential purposes.

2.23.2.1.2 Management Actions

LRM-11 Consider leases, permits, and easements on a case-by-case basis to meet public demand consistent with exclusion and avoidance areas identified by alternative.

2.23.2.2 Right-of-way Permits

Under the authorities of FLPMA (1976) and the Mineral Leasing Act of 1920, BLM grants right-of-way permits to qualified individuals, businesses, and government entities for use of public lands.

Title V of FLPMA, as amended, states that BLM is authorized to grant, issue, or renew right-of-way permits over, upon, under, or through lands for various uses. The uses that will be authorized by right-of-way permits issued pursuant to FLPMA will include access roads, power lines, telephone lines, fiber-optic systems, communications facilities, and water and sewer pipelines.

The BLM may also allow the use of the public lands or interests in lands through issuance of right-of-way permits pursuant to Mineral Leasing Act. Examples of uses that

would be authorized by right-of-way grants issued pursuant to the Mineral Leasing Act would include crude oil pipelines and oil and gas pipelines.

2.23.2.2.1 Goals and Objectives

LRM-12 Be responsive to public demand for rights-of-way on a case-by-case basis, consistent with management prescriptions.

2.23.2.2.2 Management Actions

LRM-13 Locate new major rights-of-way in designated corridors, unless an evaluation of the project shows that locating outside of a designated corridor is the only practicable alternative.

2.23.2.3 Communication Sites

Public lands may be designated for use as communications sites. BLM communications sites accommodate the wireless systems referred to in the Telecommunications Act of 1996 as well as many other uses, including radio broadcast facilities, commercial mobile radios, private mobile radios, and microwaves on designated communications sites. Communication sites are issued as rights-of-way or as communication use leases under FLPMA, per 43 CFR 2800 and 2920. Emphasis will be placed on consolidating single facility sites into more efficient communication facilities through site development plans.

There are three existing communication sites in the Planning Area: Dunes Vista Communication Site, Dunebuggy Flats Communication Site, and Ogilby Communication Site. Map 2-9 displays the locations of existing communication sites.

2.23.2.3.1 Goals and Objectives

LRM-14 When practicable, consolidate future proposed facilities within existing communication sites, consistent with management proscriptions.

2.23.2.3.2 Management Actions

LRM-15 Ensure any application for proposed facilities at existing communication sites is compatible with other uses at the site existing at the time of application.

LRM-16 Consider applications for new communication sites outside the three existing sites on a case-by-case basis emphasizing co-location and subleasing of facilities, consistent with management proscriptions.

2.23.2.4 Renewable Energy (Solar and Wind)

This section addresses renewable energy development not discussed in the Minerals section. The potential for renewable (solar and wind) energy in the Planning Area is

based on environmental, physical, economic, and social criteria, in conjunction with policy directives. BLM's general policy is to facilitate environmentally responsible commercial development of solar-energy projects on public lands and use solar energy systems on BLM facilities where feasible.

Statutes and regulations applicable to wind energy development on public lands in the Planning Area include FLPMA and 43 CFR 2800. As stated in Executive Order 13212, an energy project streamlining process requires expediting production, transportation, and conservation of energy.

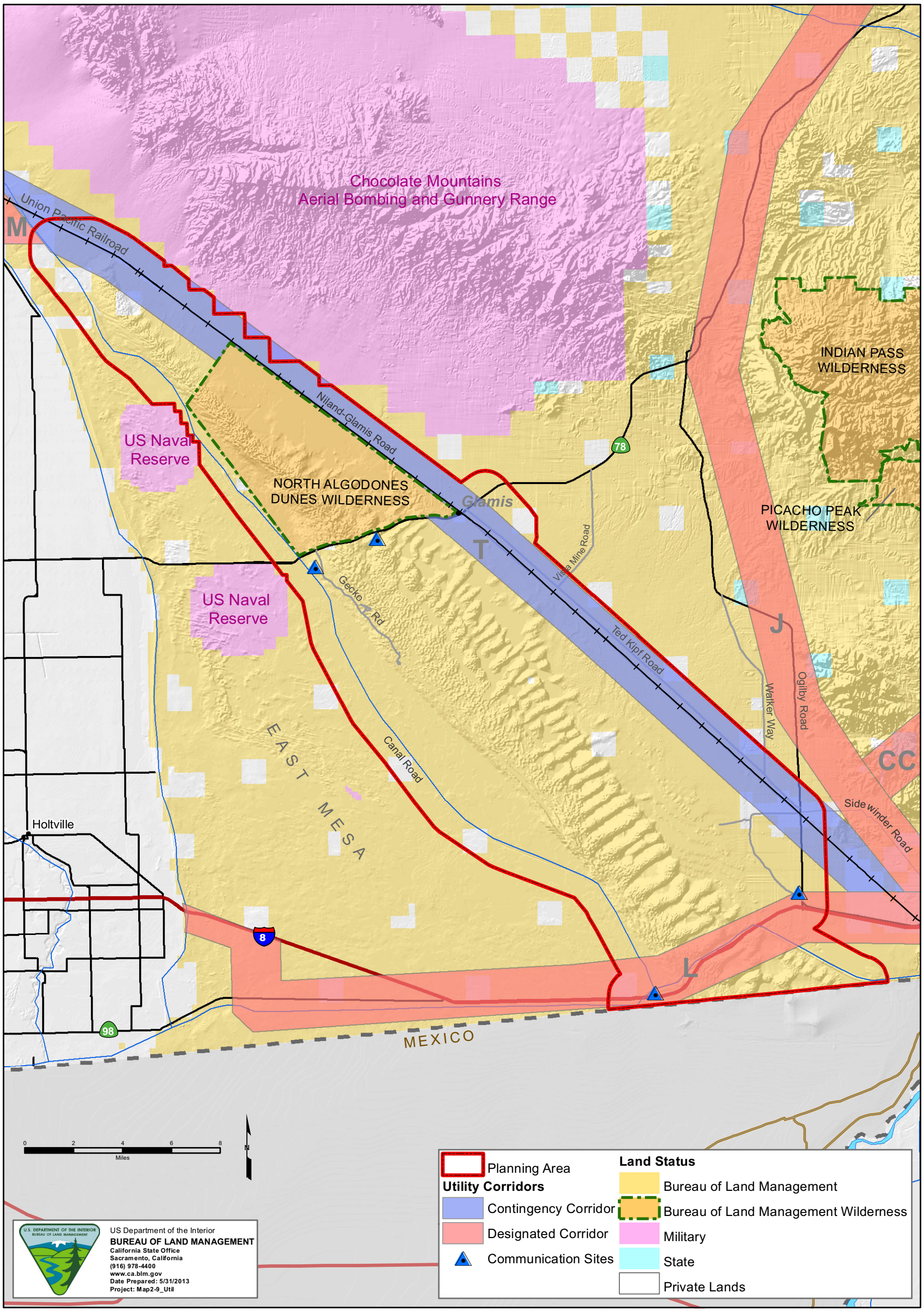
Wind-energy projects will comply with Instruction Memorandum 2009-043, the Wind Energy Development Policy, and best management practices outlined in Attachment A in the Wind Energy Development Program ROD (BLM 2005c). The Final Programmatic EIS on Wind Energy Development on BLM-administered Lands in the Western United States (BLM 2005b) and the BLM and Department of Energy's Solar Final Programmatic EIS are tiered to and thereby incorporated by reference. The RAMP excludes some areas from solar energy development where those areas are bordered by exclusion areas in the Solar Programmatic EIS. Lands made available for solar development under this RAMP will be administered as variance lands, in accordance with the Solar Programmatic EIS ROD; BLM 2012.

The BLM will strive to increase and diversify our nation's sources of both traditional and alternative energy resources, improve our energy transportation network, and ensure sound environmental management in accordance with the President's National Energy Policy (National Energy Policy Development Group 2001).

Regulations and policy applicable to solar arrays on public lands in the Planning Area include FLPMA, 43 CFR 2800, Instruction Memorandum 2011-003 Solar Energy Development Policy, subsequent BLM policies for both solar and wind energy development, Instruction Memoranda 2011-059 through 2011-061, and the policies adopted by the Solar Programmatic EIS ROD.

Additionally, Department of Defense entities in the State of California requested that the BLM provide them with early notification of proposed renewable energy development on public lands. The objective of this early coordination is to provide an opportunity for the Department of Defense to coordinate and consult with the BLM to inform BLM of the Department of Defense's concerns with the proposed renewable energy development project as it may relate to current and future military training missions including: military operating areas, military training routes, air space, and ground access.

For proposed renewable energy development, it is critical that this notification and coordination occur at the earliest possible stage (e.g., when permits for wind testing are being considered by BLM). Early coordination can help identify proposed wind energy



IMPERIAL SAND DUNES RECREATION AREA MANAGEMENT PLAN

MAP 2-9: Utility Corridors and Communication Sites

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projects which may impact current and future military operations before an applicant invests large amounts of money or time in a project. Early involvement by the military would also alert an applicant to a project posing a challenge to military operations and mission. It would also help to identify changes in a proposed project and/or mitigation which would minimize impacts to current and future military operations. Changes may include reducing the number of wind turbines proposed for the area or relocating proposed individual wind turbines or solar power towers to minimize interference with military training routes.

2.23.2.4.1 Goals and Objectives

LRM-17 Provide for the production and distribution of renewable energy, consistent with management of the recreation area and prescriptions.

2.23.2.4.2 Management Actions

LRM-18 Make land available for renewable energy development consistent with applicable laws, regulations, and policy and in accordance with the approved land use and planning decisions.

LRM-19 Use BLM Wind Energy Development Program Policies and best management practices established in Attachment A of the ROD (BLM 2005c) for all site-specific wind development projects.

LRM-20 Use BLM and Department of Energy's Solar Programmatic EIS ROD for all site-specific solar development projects. Projects within the Planning Area will be administered as variance lands under the policies and processes described in the Solar Programmatic EIS ROD.

LRM-21 Use State of California Best Management Practices and Guidance Manual: Desert Renewable Energy Projects, for development of renewable energy projects in the Planning Area. The BLM and other Renewable Energy Action Team agencies authored the manual. The BLM may modify these best management practices as necessary over time.

LRM-22 Land available for lease for solar energy development within the Planning Area includes: 27,606 acres available as variance lands; no avoidance areas; and 161,226 acres excluded (Map 2-10).

LRM-23 Land available for lease for wind energy development within the Planning Area includes: 35,115 acres available; no avoidance areas; and 153,717 acres excluded (Map 2-11).

2.23.3 Withdrawals

A withdrawal removes an area of federal land from settlement, sale, location, or entry under some or all of the general land laws, for the purpose of limiting activities under those laws to maintain other public values in the area or reserving the area for a particular public purpose or program. Withdrawals are also used to transfer jurisdiction over an area of federal land from one department, bureau, or agency to another.

2.23.3.1 Land Withdrawn, Current and Proposed

2.23.3.1.1 Goals and Objectives

LRM-24 Protect sensitive or significant natural, biological, and cultural resource and/or recreational values from disturbances relating to locatable mineral entry.

2.23.3.1.2 Management Actions

LRM-25 Seek revocation of existing withdrawals, if the land is no longer needed for the original purpose of the withdrawal. Current withdrawal lands are shown in Map 2-12.

LRM-26 Continue periodic review of existing withdrawals, including other agency withdrawals, to ensure that the reasons for the withdrawal are still valid and that only the acreage needed is retained in withdrawn status.

2.23.4 Utility Corridors

To minimize adverse environmental impacts and the proliferation of separate rights-of-way, the utilization of utility corridors will be required to the extent practical and each right-of-way will reserve to BLM the right to grant additional rights-of-way or permits for compatible uses on or adjacent to rights-of-way granted pursuant to FLPMA. In designating utility corridors and in determining whether to require that rights-of-way be confined to them, BLM will take into consideration national and state land-use policies, environmental quality, economic efficiency, national security, safety, and good engineering and technological practices.

2.23.4.1 Goals and Objectives

LRM-27 Consolidation of major rights-of-way within the approved corridor to minimize resource impacts.

LRM-28 The designated corridors will be the preferred location for major utility rights-of-way consistent with the CDCA Plan, as amended (see Map 2-9).

Chocolate Mountains
Aerial Bombing and Gunnery Range

Southern Pacific Railroad

US Naval Reserve

US Naval Reserve

NORTH ALGODONES DUNES WILDERNESS

Niland-Glamis Road

Glamis

78

INDIAN PASS WILDERNESS

PICACHO PEAK WILDERNESS

Mine Road

Gecko Rd

Jet Jeff Road

Walker Way

Ogilby Road

Canal Road

EAST MESA

Sidewinder Road

Holtville

8

98

MEXICO

0 2 4 6 8
Miles

N

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California State Office
Sacramento, California
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www.ca.blm.gov
Date Prepared: 5/31/2013
Project: Map2-10_Solar

Planning Area

Lands Available for Solar Energy Development

Available

Excluded

Land Status

Bureau of Land Management

Bureau of Land Management Wilderness

Military

State

Private Lands

IMPERIAL SAND DUNES RECREATION AREA MANAGEMENT PLAN

MAP 2-10: Lands Available for Solar Energy Development

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Chocolate Mountains
Aerial Bombing and Gunnery Range

Southern Pacific Railroad

US Naval Reserve

US Naval Reserve

NORTH ALGODONES DUNES WILDERNESS

Niland-Glamis Road

Glamis

78

Vista Mine Road

Gecko Rd

Ted Kipf Road

Walker Way

Ogilby Road

INDIAN PASS WILDERNESS

PICACHO PEAK WILDERNESS

Canal Road

EAST MESA

Sidewinder Road

Holtville

8

98

MEXICO

0 2 4 6 8
Miles

N

Planning Area

Lands Available for Wind Energy Development

Available

Excluded

Land Status

Bureau of Land Management

Bureau of Land Management Wilderness

Military

State

Private Lands

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IMPERIAL SAND DUNES RECREATION AREA MANAGEMENT PLAN

MAP 2-11: Lands Available for Wind Energy Development

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Chocolate Mountains
Aerial Bombing and Gunnery Range

Southern Pacific Railroad

Niland-Glamis Road

US Naval Reserve

NORTH ALGODONES DUNES WILDERNESS

Glamis

78

INDIAN PASS WILDERNESS

PICACHO PEAK WILDERNESS

Vista Mine Road

Gecko Rd

US Naval Reserve

Ted Kipf Road

Walker Way

Ogilby Road

Canal Road

EAST MESA

Side winder Road

Holtville

8

98

MEXICO

0 2 4 6 8
Miles

N

Planning Area
Existing Withdrawals

Land Status
Bureau of Land Management
Bureau of Land Management Wilderness
Military
State
Private Lands

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Date Prepared: 5/31/2013
Project: Map2-12_Withd

IMPERIAL SAND DUNES RECREATION AREA MANAGEMENT PLAN

MAP 2-12: Existing Land Withdrawals within the Planning Area

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2.23.4.2 Management Actions

LRM-29 Continue the existing three utility corridors (one is a contingency corridor). There is one 2-mile-wide existing utility corridor along Interstate 8 on BLM-administered lands within the Planning Area. A second utility corridor begins in the northernmost portion of the Planning Area near Mammoth Wash and runs north (see Map 2-9). The contingency corridor travels along the eastern boundary of the Planning Area adjacent to the Union Pacific Railroad tracks (see Map 2-9).

LRM-30 Locate all new major utility rights-of-way (consisting of the following types) within the designated corridors: 1) new electrical transmission towers and cables of 161 kilovolts or above; 2) all pipelines with diameters greater than 12 inches; 3) coaxial cables for interstate communications; and 4) major aqueducts or canals for interbasin transfers of water.

LRM-31 Avoid special designation areas and environmentally sensitive areas, where practical.

2.24 Public Health and Safety

According to applicable federal and state laws and regulations, BLM will identify areas or hazards which have a potential impact to public health and safety.

The following are public health and safety concerns in the Planning Area:

- Recreation, visitor health and safety, and law enforcement
- International border issues
- Unexploded ordnance (UXO)
- Hazardous materials
- Noise

The CDCA Plan does not set out specific goals for public health and safety and management of hazardous materials; however, BLM's policy is to reduce threats to public health, safety, and property. Additionally, the CDCA Plan multiple-use classifications do not allow for disposal of hazardous or non-hazardous waste on public lands.

2.24.1 Recreation, Visitor Health and Safety, and Law Enforcement

Federal regulations under Title 43 CFR Part 8340 and Title 43 CFR 8360 direct BLM to manage vehicle use and protect the resources of public lands in recreation areas, to promote the safety of all users of those lands, and to minimize conflicts among the

various users of those lands. Both the BLM and visitors to the Planning Area are concerned about compliance with laws and regulations and current law enforcement issues. Increasing visitor populations during the OHV-recreation season create large crowds and congestion throughout the Planning Area. During the high visitation holiday periods, there is a need to increase the level of enforcement to maintain the quality of the recreational experience currently enjoyed by the majority of the visiting public. The BLM will continue to promote public health and safety throughout the Planning Area.

2.24.1.1 Goals and Objectives

PHS-01 Work cooperatively with the county, the contracted emergency medical service providers, and other interested agencies, to find innovative methods of providing the highest level of emergency medical service needed to adequately serve visitors to the Planning Area, as needs fluctuate.

PHS-02 Provide adequate basic life support training to the ISD SRMA staff as a minimum level of emergency medical service.

PHS-03 Improve the health and safety of visitors, employees, and nearby residents by working with local, state, and federal agencies and interest groups.

PHS-04 Promote safety through education about the rules and regulations within the Planning Area.

PHS-05 Promote safety through law enforcement activities to improve compliance with the rules and regulations of the Planning Area.

PHS-06 Improve health by addressing the air quality around established roads with the management of dust and particulates through stabilization and/or reduction in accumulation, as appropriate and practical, and the enforcement of speed limitations.

PHS-07 Provide education to encourage compliance with the rules about camping-related issues such as disposal of trash and wastewater.

PHS-08 Reduce OHV-related accidents and injuries. Provide education concerning the rules and regulations relating to OHV use within the Planning Area.

PHS-09 Increase compliance with all laws and regulations.

2.24.1.2 Management Actions

PHS-10 Work cooperatively with the county, contracted emergency medical service providers, and other partners to find innovative methods of providing the highest level of emergency medical service needed to adequately serve the visitors of the Planning Area, as needs fluctuate.

PHS-11 Provide emergency medical technician training to the permanent visitor services staff as a minimum level of emergency medical service.

PHS-12 Provide adequate off-highway emergency medical service support to the county and visitors throughout the Planning Area.

PHS-13 Maintain and enhance cooperation between law enforcement entities having jurisdictional authority within the Planning Area. Enforce existing rules and regulations to facilitate a safe visitor experience. Manage OHV destination areas to provide safety for the OHV recreationists and agency personnel.

PHS-14 Provide for adequate law enforcement and visitor services (emergency medical technicians).

PHS-15 Maintain law enforcement coalition and cooperate with local agencies.

2.24.2 International Border Issues

The BLM manages approximately 11 miles of public land along the U.S.–Mexico border within the Planning Area. Along the U.S.–Mexico border there are incidences of undocumented immigrant traffic and other criminal activity.

2.24.2.1 Goals and Objectives

PHS-16 Ensure that public lands adjacent to the U.S.–Mexico border are safe for public and agency use.

2.24.2.2 Management Actions

PHS-17 Coordinate with U.S. Border Patrol to minimize impacts to resources in emergency situations, where greater access may be required.

PHS-18 Educate visitors about border safety through continued partnerships.

PHS-19 Maintain area adjacent to the U.S.–Mexico border as open to public use and continue voluntary compliance through public education and cooperation with U.S. Border Patrol to enhance public safety.

2.24.3 Unexploded Ordnance

Unexploded ordnance (UXO) consists of military materials used in tests and on training ranges. UXO may include but is not limited to bombs, mortars, artillery shells, rockets, submunitions, and landmines.

Two sources of risk exist at UXO sites: 1) risks from explosions and 2) risks from munition constituents (materials originating from UXO or other munitions, including the

chemical constituents that result from their breakdown) that have leached into soil and water.

The U.S. Army Corps of Engineers is responsible for investigating and mitigating environmental impacts related to past military use at these types of facilities.

Given the number of aircraft used on the various military facilities in the vicinity of the Planning Area, it is possible that a military aircraft could crash or miss targets in the live ranges and be a source of UXO.

2.24.3.1 Goals and Objectives

PHS-20 Promote public and/or environmental safety from UXO and related hazardous materials.

2.24.3.2 Management Actions

PHS-21 Identify the locations on BLM-administered lands that are potential areas of UXO concern in cooperation with the U.S. Army Corps of Engineers.

PHS-22 Report UXO to the proper authorities for disposal as they are found.

2.24.4 Hazardous Materials

Hazardous materials consist of chemicals and materials that have the potential to adversely impact human health and the environment. In the Planning Area, hazardous materials could include but are not limited to petroleum products, industrial chemicals, acids, heavy metals, lead-based paint, and asbestos-containing materials. Potential sources of hazardous materials include abandoned mines, mining mill sites, landfills, illegal dumping (including sewage), leaking fuel tanks, illegal drug manufacturing sites, abandoned buildings, and other sites.

Illegal dumping has a potential to cause environmental impacts to BLM-administered land within the Planning Area. Chemical leachate from these sites has the potential to contaminate soil and reach surface and/or groundwater.

Laws governing the management of these materials include Comprehensive Environmental Recovery, Compensation, and Liability Act, Resource Conservation Recovery Act, other federal laws and regulations, and state and local regulations. Mining and milling wastes are managed under the Comprehensive Environmental Recovery, Compensation, and Liability Act as potentially hazardous materials or hazardous waste.

2.24.4.1 Goals and Objectives

PHS-23 Minimize the presence and potential impact to human health and the environment from hazardous materials.

2.24.4.2 Management Actions

PHS-24 Perform public notification of potential health risks by means of notices, signage, and other forms of communication.

PHS-25 Remediate areas contaminated with hazardous materials in accordance with applicable laws and regulations.

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3.0 Implementation and Monitoring

3.1 Implementation

Many land use plan decisions are implemented or become effective upon approval of the plan and ROD. Examples of decisions that become effective upon approval include decisions on land health standards, desired outcomes (goals and objectives), allowable uses to achieve outcomes, and all special designations such as an ACEC. Management actions that require additional site-specific project planning as funding becomes available will require further environmental analysis. Decisions to implement site-specific projects are subject to administrative review at the time when such decisions are made.

The BLM will continue to involve and collaborate with the public during implementation of this RAMP. Opportunities to become involved in the plan implementation and monitoring will include development of partnerships and community-based citizen working groups. The BLM invites citizens and user groups within the Planning Area to become actively involved in implementation, monitoring, and evaluation of RAMP decisions. The BLM and citizens may collaboratively develop site-specific goals and objectives that mutually benefit public land resources, local communities, and the people who live, work, or play on the public lands.

3.2 Requirements for Further Environmental Analysis

Site-specific environmental analyses and documentation (including the use of categorical exclusions and determinations of NEPA adequacy where appropriate) may be prepared for one or more individual projects in accordance with management objectives and decisions established in the RAMP. In addition, the BLM will ensure that the environmental review process completes required USFWS Section 7 consultations and coordination with the California SHPO in accordance with the BLM Cultural Resources National Programmatic Agreement and California BLM–SHPO protocols.

As appropriate, interdisciplinary impact analysis will be based on this ROD and RAMP and associated Final EIS. If the analysis prepared for site-specific projects finds potential for significant impacts not already described in an existing EIS, another EIS or a supplement to an existing EIS may be warranted.

Upon providing public notice of a decision, supporting environmental documentation will be sent to all affected interests and made available to others on request. Decisions to approve implementation-level plans or to implement site-specific projects are subject to administrative review at the time such decisions are made.

3.3 Adaptive Management

Adaptive management is a formal, systematic, and rigorous approach to learning from the outcomes of management actions, accommodating change, and improving management. It involves synthesizing existing knowledge, exploring alternative actions, and making explicit forecasts about their outcomes. Management actions and monitoring programs are carefully designed to generate reliable feedback and clarify the reasons underlying outcomes. Actions and objectives are then adjusted based on this feedback and improved understanding. In addition, decisions, actions, and outcomes are carefully documented and communicated to others, so that knowledge gained through experience is passed on rather than being lost when individuals move or leave the organization.

This ROD and RAMP implement an adaptive management strategy. This adaptive management process is a flexible process that generally involves four phases—planning, implementation, monitoring, and evaluation. As the BLM obtains new information, it will evaluate monitoring data and other resource information to periodically refine and update desired conditions and management strategies. This approach ensures the continual refinement and improvement of management prescriptions and practices.

3.4 Plan Monitoring

Plan monitoring is conducted in three stages. The first of these is to ensure that decisions when implemented meet the goals and objectives of the ROD and RAMP. This type of monitoring is conducted as RAMP decisions become effective or when decisions to approve implementation-level plans or to implement site-specific projects are approved or implemented. The next stage of monitoring is to determine whether plan decisions are achieving the desired effects. Effectiveness monitoring provides an empirical database on impacts of decisions and effectiveness of mitigation. Effectiveness monitoring is also useful for improving analytical procedures for future impact analyses and for designing or improving mitigation and enhancement measures. As stated in the BLM Land Use Planning Handbook H-1601-1 (page 33):

> Implementation monitoring is the process of tracking and documenting the implementation (or the progress toward implementation) of land use plan decisions. This should be done at least annually and should be documented in the form of a tracking log or report. The report must be available for public review (one way to accomplish this is an annual planning update which can be sent to those who participated in the planning process or have expressed an interest in receiving the report). The report should describe management actions proposed or undertaken to implement land use plan decisions and can form the basis for annual budget documents. In subsequent years, reports should document which

management actions were completed and what further actions are needed to continue implementing land use plan decisions.

Effectiveness monitoring is the process of collecting data and information in order to determine whether or not desired outcomes (expressed as goals and objectives in the land use plan) are being met (or progress is being made toward meeting them) as the allowable uses and management actions are being implemented. A monitoring strategy must be developed as part of the land use plan that identifies indicators of change, acceptable thresholds, methodologies, protocols, and timeframes that will be used to evaluate and determine whether or not desired outcomes are being achieved. The monitoring process should collect information in the most cost-effective manner and may involve sampling or remote sensing.

Monitoring could be so costly as to be prohibitive if it is not carefully and reasonably designed. Therefore, it is not necessary or desirable to monitor every management action or direction. Unnecessary detail and unacceptable costs can be avoided by focusing on key monitoring questions and proper sampling methods. The level and intensity of monitoring will vary, depending on the sensitivity of the resource or area and the scope of the proposed management activity.

Appendix D of this document outlines an approach to monitoring based on needs identified in this RAMP. Monitoring will be directed at areas in which specific and important resource values and visitor experiences could be threatened. Key results of monitoring will be summarized in annual reports and made available to the public online.

The last stage of monitoring is to determine whether a plan decision continues to be the correct or proper decision over time. Evaluation monitoring goes beyond effectiveness monitoring and focuses on examining the validity of decisions.

3.5 Plan Evaluation

As stated in the BLM Land Use Planning Handbook H-1601-1 (pages 34-36), evaluation is the process of reviewing the land use plan and the periodic plan monitoring reports to determine whether the land use plan decisions and NEPA analysis are still valid and whether the plan is being implemented. Land use plans are evaluated to determine if:

1. Decisions remain relevant to current issues

2. Decisions are effective in achieving (or making progress toward achieving) desired outcomes

3. Any decisions need to be revised

4. Any decisions need to be dropped from further consideration

5. Any areas require new decisions

In making these determinations, the evaluation should consider whether mitigation measures are satisfactory, whether there are significant changes in the related plans of other entities, and whether there is new data of significance to the plan. The plan should be periodically evaluated (at a minimum every 5 years) as documented in an evaluation schedule. Plan evaluations should also be completed prior to any plan revisions and for major plan amendments.

Evaluations may identify resource needs and means for correcting deficiencies and addressing issues through plan maintenance, amendments, or new starts. They should also identify where new and emerging resource issues and other values have surfaced. Evaluations may also identify new and innovative practices that improve effectiveness and efficiency so that other offices may benefit. The state and field office will identify an interdisciplinary team that will complete the evaluation(s), and the BLM State Director should approve or concur with all evaluations. Evaluation of the RAMP will generally be conducted every five years, unless unexpected actions, new information, or significant changes in other plans, legislation, land conveyances, or litigation triggers an evaluation.

An evaluation report documenting the findings of the evaluation must be prepared. Following BLM State Director approval or concurrence, the report will be made available to the public. Guidance on the report format is included in the BLM Land Use Planning Handbook H-1601-1, page 36.

3.6 Plan Maintenance

The BLM regulation in 43 CFR 1610.5-4 provides that land use plan decisions and supporting components can be maintained to reflect minor changes in data. Maintenance is limited to further refining, documenting, or clarifying a previously approved decision incorporated in the plan. Maintenance must not expand the scope of resource uses or restrictions or change the terms, conditions, and decisions of an approved plan.

Plan maintenance is not considered a plan amendment and does not require formal public involvement, interagency coordination, or NEPA analysis required for making new land use plan decisions. Maintenance actions must be documented in the plan or supporting components (i.e., recorded so that the change and Field Manager concurrence are evident). Examples of maintenance actions include: 1) correcting minor data, typographical, mapping, or tabular data errors in the planning records after a plan or plan amendment has been completed; 2) refining the known habitat of a special status species addressed in the plan based on new information; and 3) modifying or

waiving the lease stipulation language in a RAMP/ROD consistent with the criteria outlined in the land use plan.

3.7 Plan Modification

3.7.1 Amending the Approved RAMP

Plan amendments (see 43 CFR 1610.5-5) change one or more of the terms, conditions, or decisions of an approved land use plan. These decisions may include those relating to desired outcomes; measures to achieve desired outcomes, including resource restrictions; or land tenure decisions. Plan amendments are most often prompted by the need to: 1) consider a proposal or action that does not conform to the plan; 2) implement new or revised policy that changes land use plan decisions, such as an approved conservation agreement between the BLM and the USFWS; 3) respond to new, intensified, or changed uses on public land; and 4) consider significant new information from resource assessments, monitoring, or scientific studies that change land use plan decisions.

The BLM regulations in 43 CFR 1600 and the NEPA process detailed in the CEQ regulations in 40 CFR 1500 guide preparation of plan amendments. The process is tailored to the anticipated level of public interest and potential for significant impacts.

3.7.2 Revising the Approved RAMP

RAMP revisions (see 43 CFR 1610.5-6) involve preparation of a new RAMP to replace an existing one. RAMP revisions are necessary if monitoring and evaluation findings, new data, new or revised policy, or changes in circumstances indicate that decisions for an entire plan or a major portion of the plan no longer serve as a useful guide for resource management. Plan revisions are prepared using the same procedures and documentation as for new plans.

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4.0 Acronyms

ACEC	Area of Critical Environmental Concern
BLM	Bureau of Land Management
CDCA	California Desert Conservation Area
CDPA	California Desert Protection Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO_2	carbon dioxide
DRECP	Desert Renewable Energy Conservation Plan
EIS	Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act
ICAPCD	Imperial County Air Pollution Control District
GIS	geographic information system
ISD	Imperial Sand Dunes
MUC	Multiple Use Class
NECO	Northern and Eastern Colorado Desert Management Plan
NEPA	National Environmental Policy Act
OHV	Off-highway vehicle
PFYC	Potential Fossil Yield Classification
RAMP	Recreation Area Management Plan
RAWS	remote area weather stations
ROD	Record of Decision
SHPO	California State Historic Preservation Officer
SRMA	Special Recreation Management Area
U.S.	United States
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
UXO	Unexploded ordnance
VRM	visual resource management
WCU	Wilderness Characteristic Unit
WECO	Western Colorado Desert Routes of Travel Designation Plan

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2008b Record of Decision and Resource Management Plan Amendments for Designation of Energy Corridors on BLM-Administered Lands in the 11 Western States.

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Westec Services, Inc.

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APPENDICES

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APPENDIX A

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United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Carlsbad Fish and Wildlife Office
6010 Hidden Valley Road, Suite 101
Carlsbad, California 92262

In Reply Refer To:
FWS-IMP-09B0172-11F0310

Memorandum

To: Field Manager, El Centro Field Office, Bureau of Land Management
El Centro, California

From: Field Supervisor, Carlsbad Fish and Wildlife Office
Carlsbad, California

Subject: Endangered Species Act Consultation on the Effects of the Proposed Imperial Sand Dunes Recreation Area Management Plan/California Desert Conservation Area Plan Amendment and Final Environmental Impact Statement, Imperial County, California [(1610, 1150) P CA 670.36)]

This memorandum transmits the U.S. Fish and Wildlife Service's (Service) biological opinion on the Bureau of Land Management's (BLM) Imperial Sand Dunes (ISD) Proposed Recreation Area Management Plan (PRAMP)/California Desert Conservation Area (CDCA) Plan Amendment and Final Environmental Impact Statement (EIS), and its effects on the federally threatened Peirson's milk-vetch (*Astragalus magdalenae* var. *peirsonii*) and its designated critical habitat, and the Mojave desert tortoise (*Gopherus agassizii*, desert tortoise or tortoise) in accordance with section 7 of the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq*.). The PRAMP is an update of the 1987 Recreation Area Management Plan (RAMP; BLM 1987a). We received your March 26, 2010, request for formal consultation on March 26, 2010.

Along with Peirson's milk-vetch and the desert tortoise, your request for consultation addressed five other species of plants and animals federally-listed, proposed for Federal listing, or identified as candidates for listing that were identified as having potential to occur in the planning area: Yuma clapper-rail (*Rallus longirostris yumanensis*) (endangered), southwestern willow flycatcher (*Empidonax traillii extimus*) (endangered), razorback sucker (*Xyrauchen texanus*) (endangered), flat-tailed horned lizard (*Phrynosoma mcalli)* (proposed threatened), and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) (candidate). Based on the distribution of known occurrences and presence of suitable habitat, the BLM determined that the proposed action will not affect Yuma clapper-rail, southwestern willow flycatcher, razorback sucker, and western yellow-billed cuckoo (BLM 2009). The BLM also determined that critical habitat for the desert tortoise, southwestern willow flycatcher, and razorback sucker does not occur in the planning area and therefore will not be affected by the proposed action. The March 26, 2010, request for formal consultation also requested formal conference in accordance with

section 7 of the Act on the flat-tailed horned lizard. However, on March 15, 2011, the Service withdrew the proposed rule to list the flat-tailed horned lizard as a threatened species (Service 2011a), thereby negating any obligation or need for formal conference on this species. Based on the determinations discussed above, these five species, their respective critical habitats, and desert tortoise critical habitat will not be addressed in this biological opinion.

This biological opinion is primarily based on information provided in the following documents and communications: (1) *Biological Assessment for the Imperial Sand Dunes Draft Recreation Area Management Plan/Draft Environmental Impact Statement* (BLM 2009); (2) *Imperial Sand Dunes Draft Recreation Area Management Plan and Draft Environmental Impact Statement* (BLM 2010); (3) the revised desert tortoise recovery plan (Service 2011b); (4) the Table of Contents and Chapters 2, 3, and 4 of the *Imperial Sand Dunes Proposed Recreation Area Management Plan/California Desert Conservation Area Plan Amendment and Final Environmental Impact Statement* (PRAMP; BLM 2012) provided on August 2, 2012; (5) supplemental information provided by BLM during the consultation process; and (6) pertinent literature contained in our files. The project file for this consultation is located at the Palm Springs Fish and Wildlife Office (PSFWO).

CONSULTATION HISTORY

On March 16, 2000, the Southwest Center for Biological Diversity, Sierra Club, and Public Employees for Environmental Responsibility (PEER) filed a lawsuit against BLM alleging the BLM violated sections 7(a)(2) and 7(d) of the Act and its implementing regulations. The plaintiffs alleged BLM failed to initiate consultation with the Service on the effects of the CDCA Plan, its amendments, and related actions that may affect listed species in the CDCA that are authorized, approved, allowed, or otherwise carried out pursuant to the CDCA Plan and its amendments and by authorizing, allowing, or implementing land use practices that might affect federally listed species prior to completing a programmatic consultation with the Service on the CDCA Plan and its amendments.

On August 25, 2000, the plaintiffs and BLM agreed to a settlement that included establishment of temporary closure areas within the Algodones Dunes[1] until completion of the Record of Decision (ROD) regarding the CDCA Plan EIS. At the request of BLM, the CDCA Plan level consultation was combined with the consultation on the proposed 2002 RAMP. In March 2002, BLM released the RAMP and EIS for public comment, and on July 17, 2002, the Service met with BLM and agreed to combine the biological opinion on the CDCA Plan with the biological opinion on the RAMP rather than issue separate opinions.

We issued a biological opinion on the effects of implementation of the CDCA Plan as amended by the draft 2002 RAMP on April 3, 2003. Two parties, the American Sand Association and the

[1] The name "Algodones Dunes" refers to the entire extent of the dune system in the geographic region, while the administrative designation for the portion managed by the BLM is referred to as the Imperial Sand Dunes Recreation Area.

Center for Biological Diversity, brought separate suits against the Service regarding our 2003 biological opinion.

On August 5, 2003, we published a proposed rule to designate critical habitat for Peirson's milk-vetch (Service 2003). On September 5, 2003, BLM requested: (1) Formal conference on proposed critical habitat for the Peirson's milk-vetch; (2) clarification of the scope of our April 3, 2003, biological opinion in relation to RAMP longevity; and (3) correction of a "few factual errors." We published a final critical habitat designation for the Peirson's milk-vetch on August 4, 2004 (Service 2004), which became effective on September 3, 2004.

We reviewed and reexamined our biological opinion based on the BLM request for clarification and the final critical habitat designation. Numerous conference calls, meetings, and drafts of the biological opinion were exchanged between BLM and the Service. On January 25, 2005, we issued a new biological opinion for the final 2003 RAMP.

On June 3, 2005, the Center for Biological Diversity, Sierra Club, PEER, and Desert Survivors filed suit against the BLM and the Service alleging violations of the Act, National Environmental Policy Act (NEPA), Federal Land Policy and Management Act (FLPMA) of 1976, and the Administrative Procedure Act. As part of this suit, the plaintiffs alleged that the 2005 biological opinion was arbitrary and capricious and that the Service did not properly consider and weigh the benefits and costs associated with designating critical habitat for Peirson's milk-vetch. On September 25, 2006, the court ruled for the plaintiffs and ordered injunctive relief and agency remand, including remanding both the biological opinion and the critical habitat designation to the Service.

As a result of the lawsuit, the Service published a revised proposed critical habitat rule on July 27, 2007 (Service 2007a). The final revised critical habitat rule was published on February 14, 2008, and currently includes 12,105 acres in three units (Service 2008a). In December 2008 and January 2009, two parties filed separate lawsuits against the Service challenging the 2008 critical habitat designation. In a ruling on August 5, 2010, the court ruled in favor of the Service and upheld the 2008 critical habitat designation.

From July 2008 to the present, the Service has been actively involved in discussions with the BLM regarding preparation of the PRAMP and how best to avoid and minimize adverse impacts to listed species within the action area. Following initiation of consultation, we requested additional information and clarification on the description of the proposed action and species surveys via electronic mail on several occasions through August 2011.

In preparing this biological opinion, we provided a draft biological opinion to BLM on April 11 and August 2, 2012. All comments received from the BLM were incorporated into this biological opinion as appropriate.

BIOLOGICAL OPINION

DESCRIPTION OF THE PROPOSED ACTION

The proposed action is the BLM's implementation of the PRAMP, which will guide management of the ISD in Imperial County, California (Figure 1) for 15 to 20 years. The PRAMP updates and revises the 1987 RAMP and amends the CDCA Plan (1980 as amended). The RAMP planning area encompasses 214,930 acres, which includes the currently designated 138,111-acre ISD Special Recreation Management Area (SRMA) and the 26,098-acre North Algodones Dunes Wilderness (located within the SRMA). The remainder of the planning area (50,722 acres) is within a 1-mile limited use area around the entire SRMA that is part of the existing El Centro Extensive Recreation Management Area (ERMA) and is currently managed under the Northern and Eastern Colorado Desert Coordinated Management Plan (NECO) and the Western Colorado OHV Routes of Travel Designation Plan (WECO). The planning area also includes privately owned in-holdings; however, BLM decisions do not apply to private property.

The purpose of the PRAMP is to update land use planning decisions based on changes in circumstances and policies since the current RAMP was adopted in 1987. The final EIS for the PRAMP analyzes eight alternatives to address the various combinations of public land uses and resource management practices within the RAMP planning area. This biological opinion analyzes the impacts to listed species resulting from implementation of BLM's Preferred Alternative (Alternative 8), which is the proposed action. The proposed action is designed to provide a variety of sustainable off-highway vehicle (OHV) and other recreational activities, maintain or improve the conditions of the special status species, and protect other unique natural and cultural resources, while creating an environment to promote the health and safety of visitors, employees, and nearby residents.

Per BLM's Land Use Planning Handbook, decisions for the planning area fall into two types: Land Use Plan (LUP) decisions and Implementation decisions. LUP decisions are broad-scale decisions that guide land management actions and subsequent site-specific implementation decisions. LUP decisions fall into two categories: desired outcomes (goals and objectives), and allowable uses and actions to achieve outcomes. Allowable uses are described as decisions that designate areas as open or closed, or as avoidance or exclusion areas, for various uses. If public lands are designated open for specific uses through a LUP Decision, those uses would still be analyzed and approved or denied through the NEPA process in the future. Implementation decisions outlined in the PRAMP generally constitute the BLM's final approval allowing on-the-ground actions to proceed. However, the BLM has identified several Implementation decisions that will require separate case-by-case authorization and analysis under NEPA and section 7 of the Act in the future. These decisions, defined in this biological opinion as "Future Implementation Actions" require site-specific planning and NEPA analysis, and are described below. Future Implementation Actions may be incorporated into implementation plans (activity or project plans) or may exist as stand-alone decisions.

The PRAMP identifies various management decisions and actions that BLM proposes to implement to accomplish the agency's land use objectives under 17 different Resource Categories. Management actions identified under the 17 Resource Categories include LUP and Implementation decisions, and Future Implementation Actions. The Resource Categories analyzed in this biological opinion are summarized below. A detailed description of the Resource Categories can be found in the PRAMP.

Rangeland Health Standards Management

Goals and Objectives: Maintain or improve soil, riparian-wetland and stream function, native species, and water quality health in the planning area.

LUP Decision: The PRAMP proposes to continue using existing national policy and regional standards found in the NECO and WECO plans for achieving the above objectives.

Implementation Decision: To meet these objectives, the BLM proposes to have a group of specialists (fewer than 10 people) survey 30 "representative sites" throughout the planning area every 10 years via visual inspection and photographic documentation. Travel to survey locations would be along designated roads or open travel areas. Surveys would be conducted outside of the spring growing season and avoid desert tortoise burrows, deep bowls in the dunes, and large individual Peirson's milk-vetch.

Air Resources Management

Goals and Objectives: Maintain or improve air quality in the planning area as established by the national and State of California air quality standards.

LUP Decision: The BLM will comply with State of California air emission standards. This would be accomplished through cooperative management of emissions with industry, the State of California, and Federal agencies and strive to minimize any emissions that may cause violations of air quality standards, add to acid rain, or degrade visibility.

Implementation Decisions: Air quality will be maintained or improved by implementing the actions described below for the *Transportation and Public Access Management* Resource Category.

Soil Resources Management

Goals and Objectives: The BLM will manage soils to maintain productivity, minimize erosion, and preserve natural processes of dune movement and formation.

LUP Decision: Adopt regional standards for rangeland health related to soils.

Implementation Decisions: Soil resources will be managed by adopting the actions described below for the *Transportation and Public Access Management* Resource Category and by using the best management practices (BMPs) included in Appendix C of the PRAMP.

Water Resources Management

Goals and Objectives: Maintain or improve water quality in accordance with State and Federal standards.

LUP Decision: None

Implementation Decisions: Ensure BLM activities or authorized activities do not degrade surface or groundwater in the planning area by identifying and protecting surface waters where possible, and preserving and enhancing natural conditions and hydrology of washes. This would be accomplished by (1) preventing or reducing water quality degradation through implementation of applicable BMPs or other specific mitigation measures, and (2) implementing travel management actions that maintain authorized vehicle routes in a manner that will promote natural hydrology and protect water quality through application of BMPs and actions described below for the *Transportation and Public Access Management* Resource Category.

Vegetation Resource Management

Goals and Objectives: Maintain viable populations of all native plant species in the planning area, (i.e., creosote bush scrub, microphyll woodlands, and psammophytic scrub), maintain habitat connectivity in the planning area to limit habitat fragmentation and support transfer of genetic material among sub-populations, promote biological diversity, and maintain and enhance a mosaic of plant communities.

LUP Decision: Classify microphyll woodlands as avoidance areas for surface-disturbing activities and land use authorizations. This area will be an avoidance area for all discretionary BLM authorizations requiring a permit, lease, or right-of-way (ROW) (e.g., renewable energy projects, new utility corridors, communication sites, mineral leasing or sales, filming, and agricultural leases). Non-surface disturbing commercial recreation permits may be considered on a case-by-case basis in areas open to motorized use and camping.

Implementation Decision: Allow OHV recreation but close camping in microphyll woodland south of Wash 44 and north of Wash 70.

Future Implementation Actions: To meet the above objectives, BLM proposes future management actions to protect and/or restore native species including (1) weed management emphasizing prevention, early detection and eradication of invasive nonnative plants; (2) restoring degraded native plant communities through restoration activities; (3) restoring surface disturbance from discretionary activities; (4) encouraging transplantation of plant species directly on-site or onto neighboring public lands where feasible, using approved protocol for surface-

disturbing activities where avoidance is not possible; and (5) removing tamarisk and other nonnative invasive plant species using mechanical methods and herbicide applications in accordance with BLM policy.

Wildlife Resource Management

Goals and Objectives: (1) Maintain viable populations of all native wildlife species; (2) maintain habitat connectivity to limit habitat fragmentation and support transfer of genetic material among sub-populations, promoting and maintaining healthy key habitats (e.g., microphyll woodlands and psammophytic scrub) and associated wildlife assemblages; (3) reducing human-caused disturbance to habitats that result in animal mortalities or undesirable effects to populations of priority species during critical times, such as breeding or drought; and (4) managing nonnative invasive plants where their presence threatens the integrity of general wildlife populations.

LUP Decision: Classify microphyll woodlands as avoidance areas for all commercial and noncommercial surface-disturbing activities and land use authorizations.

Implementation Decision: Implement actions described below for the *Transportation and Public Access Management* Resource Category.

Future Implementation Actions: (1) Restore native species habitat distribution and occurrence (especially for priority species); (2) authorize reintroductions, transplants, and supplemental stockings of native wildlife populations in current or historic ranges to maintain populations, distributions, and genetic diversity, conserve threatened or endangered species, restore or enhance native wildlife diversity and distribution, and maintain isolated populations; (3) manage nonnative invasive species; (4) pursue land acquisition options to consolidate important wildlife habitats; (5) maintain habitat connectivity throughout the planning area; (6) consider construction of new wildlife guzzlers; and (7) other actions specific to raptors, nongame migratory birds, bats, invertebrates, and game animals.

Special Status Species Management

Goals and Objectives: (1) Maintain, enhance, and restore habitats for the survival and recovery of listed species; (2) prevent proposed or candidate species from becoming listed; (3) perform management actions that contribute to recovery and delisting of listed species; (4) achieve stable or increasing populations of special status species over time with adequate recruitment and survivorship and maintain desired habitat conditions or restore degraded habitats to promote reproductive success and survival; and (5) protect sensitive species habitat.

LUP Decision: Close critical habitat, Areas of Critical Environmental Concerns (ACECs), other special area designations, and camping and staging areas to surface occupancy.

Implementation Decision: Allow camping only in designated areas within BLM sensitive species habitat.

Future Implementation Actions: (1) Authorize reintroductions, transplants, and supplemental stockings of special status species populations in current or historic ranges to maintain populations, distributions, and genetic diversity, conserve threatened or endangered species, restore or enhance diversity and distribution, and maintain isolated populations; (2) maintain or restore an appropriate amount, distribution, and characteristics of life-stage habitats for special status plant species; (3) manage populations of non-native invasive plants in occupied and potential special status plant habitat; and (4) analyze impacts of all projects occurring within occupied sensitive species' habitat and require that projects mitigate the impacts accordingly.

Wildland Fire Management

Goals and Objectives: Protect human life and communities, property, and the natural resources on which they depend and scale the management response to wildfire to the values, risks and other factors present.

LUP Decision: None

Implementation Decision: None

Future Implementation Actions: (1) Implement fuels reduction/treatment programs where needed; (2) identify and implement post-fire stabilization and rehabilitation actions in burned areas to restore a functional landscape to meet the natural resource management objectives; (3) utilize wildland fire suppression methods with lesser ground disturbance to minimize potential adverse impacts on special status species, critical habitat, desired plant communities, and cultural resources; and (4) use fire retardants or chemicals adjacent to waterways in accordance with established standards.

Cultural Resource Management

Goals and Objectives: (1) Identify, preserve, and protect significant cultural resources, districts, and landscapes and ensure they are available for appropriate uses by present and future generations; (2) provide and encourage research opportunities on cultural resources that would contribute to the understanding of the ways humans have used and influenced natural systems and processes; and (3) seek to reduce imminent threats, direct and indirect impacts to cultural resources, and resolve potential conflicts from natural or human-caused deterioration or potential conflict with other resource uses.

LUP Decision: None

Implementation Decision: None

Future Implementation Actions: (1) Maintain current cultural resource data in a geographic information system (GIS) format and increase knowledge of cultural resources within the Planning Area through proactive surveys; (2) work cooperatively with the California State

Historical Preservation Office on data sharing, information management, and promotion and enhancement of public education; (3) provide for and/or increase interpretive educational opportunities at selected cultural and historic sites; and (4) implement protection measures to stop, limit, or repair damage to cultural sites.

Paleontological Resource Management

Goals and Objectives: (1) Protect and conserve significant paleontological resources as they are discovered on public lands; (2) manage paleontological resources in ways that prioritize research needs; (3) facilitate educational and recreational needs; (4) protect important sites; and (5) develop specific objectives and management actions for fossil localities.

LUP Decisions: None

Implementation Decisions: (1) Restrict the collection of all vertebrate fossils and noteworthy invertebrate and plant fossils to legitimate scientific or educational uses in accordance with permitting procedures; (2) allow recreational collecting of common invertebrate and plant fossils in accordance with BLM policy; and (3) require immediate notification if paleontological resources are encountered during project ground-disturbing activities.

Future Implementation Actions: Evaluate paleontological resources as they are discovered, considering their scientific, educational, and recreational values.

Visual Resource Management

Goals and Objectives: Designate visual resource management (VRM) classes ranging from Class I to IV, and ensure all future projects and actions adhere to the following VRM class objectives as appropriate:

Class I: Preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.

Class II: Retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Class III: Partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention, but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Class IV: Provide for management activities, which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and replication of the basic elements.

LUP Decisions: Assign all lands in the planning area to a VRM class. Wilderness Areas (WAs) will be designated as Class I. A Class II designation will be assigned to lands managed for recreation and public purposes as lands that provide a relatively high level of natural landscape setting, while allowing for certain recreational components. ACECs will be designated as Class II or in some cases as Class III. Class III and IV designations will be assigned to areas with high potential for renewable energy resource uses, areas that will be managed for high recreational value, and other areas that will continue to be managed primarily for habitat values, regardless of scenic quality. The majority of the SRMA, except the WA, will be designated as Class II. The majority of Class III and Class IV lands are in the ERMA and in intensively used recreation areas, respectively. See section 2.3.12, Table 2-10 and Map 2-2 in the PRAMP for acreages and location of lands in each VRM class.

Implementation Decisions: Future proposed actions will be evaluated through the VRM Contrast Rating System to meet management objectives for the applicable VRM Class.

Special Designations

Goals and Objectives: For WAs, (1) provide for the long-term protection and preservation of the area's wilderness character under the principle of non-degradation (i.e., the area's naturalness and untrammeled condition, opportunities for solitude, opportunities for primitive and unconfined types of recreation, and any ecological, geological, or other features of scientific, educational, scenic, or historic value would be managed so that they remain unimpaired); (2) meet minimum requirements necessary for the administration of the area for the purpose of the Wilderness Act (including measures required in emergencies involving the health and safety of persons within the area); and (3) manage any newly designated WAs in accordance with the designation authority. For ACECs, provide protection for relevant and important special status species, wildlife, scenic values, and significant cultural resources.

LUP Decisions: (1) Maintain the existing boundaries and uses for the Plank Road ACEC; (2) reduce the East Mesa ACEC from 6,454 acres to 5,802 acres; and (3) remove the North Algodones Dunes ACEC (25,756 acres) to eliminate conflicting management prescriptions between this ACEC and the North Algodones Dunes WA. See section 2.3.13, Table 2-13 and Map 2-6 in the PRAMP for acreages and locations of the WA and East Mesa ACEC. See Figure 5 in BLM 1987b for the location of the Plank Road ACEC. The portion of the East Mesa ACEC that would be removed from ACEC designation is within the ERMA on the west side of the SRMA.

Implementation Decisions: Update ACEC and wilderness monitoring plans. Maintain existing signage and vehicle barriers at WA boundaries and within Plank Road ACEC.

Future Implementation Actions: Implement management actions identified in future ACEC and WA management plans.

Mineral Resource Management

Goals and Objectives: Manage mineral resources in accordance with BLM's policies and national energy policies.

LUP Decisions: (1) Maintain the planning area, excluding the WA, as open to locatable (e.g., gold, silver, copper, lead, gypsum, and mica) mineral entry; (2) classify the ERMA as available for geothermal minerals leasing; (3) exclude the SRMA and donated lands from geothermal leasing; (4) prohibit surface occupancy within critical habitat, ACECs, other special area designations, and camping and staging areas; (5) maintain the SRMA as closed and the ERMA as open to salable (e.g., sand, gravel, and building stone) minerals; and (6) prohibit mineral sales or free use permits within the SRMA. See section 2.3.14, Table 2-16 and Map 2-11 in the PRAMP for acreages and locations of lands available for geothermal minerals leasing.

Implementation Decisions: None

Future Implementation Actions: Mining operations, leasing, or sale of minerals would only be authorized after analysis of impacts to listed species or other special status species and a determination of no effect on listed species.

Recreation Resource Management

Goals and Objectives: (1) Set a framework for achieving sustainable experiences and quality of life outcomes for individuals, communities, and the environment; (2) sustain the diversity, distinctive character, and capacity of BLM recreation settings; and (3) increase the economic stability and sustainability of the BLM California recreation program.

LUP Decisions: (1) Maintain the planning area's current designation as a destination SRMA managed as a regional or national destination through collaborative partnerships, and (2) maintain the remainder of the planning area as a limited use ERMA. See Map 2-12 in the PRAMP for the locations of the SRMA and ERMA.

Implementation Decisions: Designate Recreation Management Zones (RMZs) in the planning area that represent public lands with a distinctive recreation niche (activities, experiences, and benefits). The allocation of the SRMA and RMZs provides the planning area with an activity-level planning framework for recreation management. RMZs have not previously been allocated.

Four RMZs will be designated within the planning area. Upon approval of the ROD for the RAMP, the BLM proposes to reopen five interim closure areas totaling approximately 49,300 acres, and implement recreation management in the ISD through the designation of these RMZs and OHV Management Areas (MAs) (discussed below). See "Environmental Baseline" section below for more discussion of the interim closure areas. See section 2.3.15, Table 2-18 and Map 2-18 in the PRAMP for acreages and locations of the RMZs.

- The Open RMZ (127,416 acres) will be managed for OHV and other motorized recreational opportunities (i.e., camping) while conserving natural and cultural resources. The PRAMP proposes to designate the majority of the SRMA as an Open RMZ. While camping is generally allowed in the Open RMZ, the PRAMP proposes to include the microphyll woodlands south of Wash 44 and north of Wash 70 in the Open RMZ but close this area to camping.

- The Resource Protection RMZ (9,046 acres) will be managed for its natural qualities to provide opportunities for expansive non-motorized recreational activities (i.e., hiking, wildlife viewing, and photography). No entry or access roads are designated within this RMZ. The PRAMP proposes to include all Peirson's milk-vetch critical habitat within the Resource Protection RMZ.

- The Limited RMZ (52,370 acres) will be managed for its limited motorized recreational opportunities (i.e., camping within 300 feet of designated routes and motorized vehicle use limited to designated routes or areas with seasonal restrictions) and for natural qualities. The PRAMP proposes to include the ERMA and the area used to access Dune Buggy Flats Campground (Gordon Wells area) in the Limited RMZ; however, camping will continue to be prohibited in the area used to access Dune Buggy Flats Campground per mitigation measures in environmental assessment CA-067-EC95-041 for the flat-tailed horned lizard.

- The North Algodones Dunes Wilderness RMZ (26,098 acres) will be managed to sustain its natural wilderness characteristics and provide for non-motorized recreation opportunities (i.e., hiking, wildlife viewing, and photography). The PRAMP proposes to include the North Algodones Dunes WA within this RMZ.

Transportation and Public Access Management

Goals and Objectives: The PRAMP outlines several objectives related to this Resource Category including (1) continuing to provide essential motorized access to non-Federal lands, prior existing rights on BLM lands, and private in-holdings surrounded by BLM lands; (2) continuing to provide adequate motorized access for the maintenance of wildlife guzzlers and for dispersed recreation activities such as hunting; (3) continuing to provide for a wide variety of recreational and other opportunities (e.g., OHV recreation, non-motorized recreation, filming, and commercial activities); (4) reducing or halting the unauthorized incursions into closed areas; and (5) minimizing impacts to identified sensitive cultural, natural, biological, and visual resources.

LUP Decisions: Designate the planning area as Open, Closed, or Limited OHV MAs. See section 2.3.16, Table 2-19 and Map 2-26 in the PRAMP for acreages and locations of OHV use area designations.

- The Open OHV MA (127,416 acres) permits all types of vehicle uses at all times, anywhere in the area. The PRAMP proposes to include the SRMA, except Peirson's milk-vetch critical habitat and the WA, as an Open OHV MA. The Open OHV MA corresponds to the Open RMZ.

- The Closed OHV MA (35,144 acres) prohibits OHV use by the public, and limits access to administrative uses or for emergency purposes. The PRAMP proposes to include all Peirson's milk-vetch critical habitat and the North Algodones Dunes WA in a Closed OHV Management Area. The Closed OHV Management Area corresponds to the Resource Protection RMZ and the North Algodones Dunes Wilderness RMZ.

- The Limited OHV MA (52,370 acres) is restricted at certain times, in certain areas, and/or to certain vehicular use. These restrictions may be of any type, but can generally be accommodated within the following categories: numbers of vehicles, types and sizes of vehicles, time or season of vehicle use, permitted or licensed use only, use on existing roads and trails, use on designated roads and trails, limited to administrative use only, and other restrictions. In accordance with the CDCA Plan, as amended, stopping, parking, and vehicle camping is allowed within 300 feet of the centerline of a route, except within sensitive areas (such as ACECs) where the limit would be 100 feet. This would be monitored on a continuing basis. If monitoring results show effects that exceed limits of acceptable change, the distance allowed for motorized vehicles to pull off from a designated route may be modified. The PRAMP proposes to include the ERMA and the area used to access Dune Buggy Flats Campground (Gordon Wells area) as a Limited OHV MA. The Limited OHV MA corresponds to the Limited RMZ.

Implementation Decisions: The BLM proposes (1) continuing public use of Niland-Glamis and Ted Kipf roads along with other unpaved roads; and (2) allowing emergency vehicles to utilize a drivable wash to access a site and, where no roads exist, authorizing, on a case-by-case basis, emergency vehicles to travel cross-country to avoid the need for road building. Any new roads needed for emergency vehicle access will be no wider than needed for reliable access, and BLM specifications will be used to reduce erosion. Only the management actions proposed to use and maintain the currently designated routes of travel in the planning area are fully analyzed under this programmatic biological opinion. Since emergency vehicle access is an unpredictable discretionary action, BLM's approval of cross-country travel by emergency vehicles where no roads exist would undergo emergency consultation under section 7 of the Act if BLM determines that the action may affect listed species and/or critical habitat. See section 2.3.16, Table 2-20 and Map 2-27 in the PRAMP for the mileages and locations of the designated routes of travel.

Designated routes of travel will be maintained to reduce or improve impacts to air quality, soil, and water through the following: (1) Treating high-use routes of travel with water for dust

control during high-use weekends; (2) treating OHV staging areas, primary pull-outs, and vender areas near the Glamis Flats, Gecko, and Dune Buggy Flats camping areas for dust control multiple times per day during high-use weekends; (3) maintaining dirt roads in the planning area by re-shaping, compacting, and blading; and (4) maintaining authorized vehicle routes in a manner that will promote natural hydrology and protect water quality through application of BMPs. Watering will not extend beyond the road bed and would allow for moistening of the soil but not result in standing water, and maintenance of dirt roads will not extend beyond 100 feet of the roadbed.

The approximately 228 miles of designated routes of travel currently existing in the planning area were developed through the NECO and WECO plans and are being brought forward in the PRAMP as valid, existing implementation decisions. Designated routes of travel occur primarily in the ERMA and the west side of the SRMA. The routes of travel within the ERMA have been designated as Limited, and routes within the SRMA have been designated as Open. No designated routes of travel currently exist in the North Algodones Dunes Wilderness or Resources Protection RMZs, and no new routes of travel are being proposed as part of the PRAMP.

Lands and Realty Management

Goals and Objectives: The lands and realty management program consists of four distinct parts: land tenure, land use authorizations (including solar and wind energy), withdrawals, and utility corridors. Land tenure focuses on disposing of and acquiring lands or interests in lands. Public lands would be retained in Federal ownership, unless as a result of land use planning it is determined that disposal of a particular parcel would serve the national interest. Land use authorization focuses on public demand requests for ROWs (e.g., for access roads, power lines, and communications facilities), permits (i.e., temporary filming permits), and communications sites.

LUP Decisions: (1) Open a portion of the ERMA (35,115 acres) for solar and wind energy development; (2) exclude the SRMA and a portion of the ERMA, including Peirson's milk-vetch critical habitat, flat-tailed horned lizard MAs, donated lands, and ACEC(s) (153,717 acres) from solar and wind energy development; and (3) exclude Peirson's milk-vetch critical habitat for all other types of land use authorizations. See section 2.3.17, Tables 2-22 and 2-23, and Maps 2-32 and 2-36 in the PRAMP for acreages and locations of lands available for solar and wind energy development.

The PRAMP does not propose disposal of any lands. Also, the PRAMP does not propose any new utility corridors or communications sites in the planning area, only continued use of the four existing communications sites and two utility corridors in the planning area: one along Interstate 8 (I-8) and another (a contingency corridor) along the Union Pacific Railroad on the eastern

boundary of the planning area. See Map 2-28 in the PRAMP for locations of existing communications sites and utility corridors.

Implementation Decisions: None

Public Health and Safety Management

Goals and Objectives: The PRAMP outlines several objectives related to this Resource Category, such as, (1) improving the health and safety of visitors, employees, and nearby residents by working with local, State, and Federal agencies and interest groups; (2) promoting safety through education about the rules and regulations within the planning area; and (3) promoting safety through law enforcement activities to improve compliance with the rules and regulations of the planning area.

LUP Decisions: None

Implementation Decisions: None

Conservation Measures

The PRAMP proposes various management actions that will avoid, minimize, and compensate for impacts to listed and sensitive species and habitats. The following section provides additional clarification (beyond what is outlined in the PRAMP and Biological Assessment [BA]) on how several of these management actions that will avoid, minimize, and compensate for impacts to Peirson's milk-vetch, its critical habitat, and the desert tortoise will be implemented under the PRAMP.

<u>Peirson's Milk-vetch</u>

CM 1. Upon approval of the ROD, and in coordination with the Service, implement a monitoring plan for Peirson's milk-vetch as described in Appendix F of the PRAMP. The frequency of full-scale monitoring will correspond to years in which adequate precipitation (equal to or greater than the 1.82-inch rainfall threshold) occurs between October and December. In years where the rainfall threshold is not met, BLM does not expect to implement a full-scale monitoring effort but expects instead to implement a smaller-scale effort. In years where the rainfall threshold is met, and an extensive germination event occurs, BLM expects to monitor for such information as Peirson's milk-vetch density or seed bank estimates. The numbers of transects and locations of transects will be determined each year that monitoring is implemented to ensure that the highest quality data are collected. See Appendix F of the PRAMP for additional details on Peirson's milk-vetch monitoring.

CM 2. Prohibit motorized vehicle use, except as needed for administrative and emergency access, within critical habitat in the ISD by including critical habitat in a Resource

Protection RMZ, and designating this RMZ and the North Algodones Dunes Wilderness RMZ as Closed OHV MAs. To implement the closure of critical habitat, BLM will (1) install and maintain signage along the critical habitat boundary; (2) maintain outreach and education activities; (3) enforce the critical habitat boundary, particularly during peak recreation periods; and (4) through records of citations, document noncompliance events. Signs closing critical habitat to OHV recreation will be placed within line of sight of each other or closer in areas where incursion could occur. Signs will be installed within six months of approval of the ROD and inspected regularly. Missing or damaged signs will be replaced during inspections. BLM will develop outreach and education materials, including maps of the critical habitat closure areas, within 1 year of approval of the ROD and distribute these materials to visitors. Education materials will also be available at kiosks and ranger stations in the ISD.

Mojave Desert Tortoise

CM 3. Reduce the attraction of predators through proper management of garbage. To implement this action, BLM will ensure that within 1 year of approval of the ROD, BLM-provided trash receptacles in the ISD have self-closing lids to prevent wind, common ravens, and mammals from opening containers. All trash receptacles will be regularly inspected and emptied to prevent spillage and maintain sanitary conditions.

CM 4. Reduce and report take of individuals through the following measures:

a. Within 1 year of approval of the ROD, BLM will develop outreach and education materials on the desert tortoise which will include, at a minimum, information on species distribution, general behavior, and habitat preferences, species sensitivity to human activities, ways to avoid and minimize impacts to the species (e.g., habitats to avoid and procedures to follow if an individual is encountered), instructions to allow visitors to report sightings, and legal protection and penalties for violation of State and Federal laws. These materials will be available at information kiosks and ranger stations in the ISD.

b. BLM will contact the California Department of Fish and Game and Service within 1 working day of receipt of the carcass of a road-killed desert tortoise for guidance on disposal or storage of the carcass.

CM 5. Reduce take of individuals resulting from maintenance of designated routes of travel. To implement this action, BLM will do the following during ground-disturbing maintenance activities along roads in suitable desert tortoise habitat:

a. During ground-disturbing route maintenance activities, a Qualified Biologist, approved by the Service, will perform a pre-work clearance survey of the work area following Service protocols (Service 2009a or more recent). All equipment

operators will be provided with desert tortoise awareness training prior to conducting on-the-ground activities. The Qualified Biologist will have authority from the BLM to halt any action that might result in harm to a desert tortoise. Any occupied burrows identified by the Qualified Biologist will be avoided. If a desert tortoise is observed in the work area, work in the area will cease until the individual has moved out of harm's way under its own accord. Desert tortoises will not be handled without prior authorization from the Service.

b. The area of disturbance will be confined to the smallest practical area, considering topography, location of burrows, public health and safety, and other limiting factors. Work area boundaries will be delimited with flagging or other marking prior to the start of ground-disturbing maintenance activities to minimize surface disturbance associated with vehicle straying. Special habitat features, such as burrows, identified by the Qualified Biologist will be avoided.

c. All trash and food items will be promptly contained within self-closing, raven-proof containers. These containers will be removed regularly from the work area during maintenance activities to reduce the attractiveness of the area to ravens and other desert tortoise predators. All raven-proof containers used during maintenance activities will be removed after completion of activities.

CM 6. Reduce take of individuals associated with use of future wildlife guzzlers by ensuring that all future guzzlers proposed for construction in tortoise habitat will be constructed to prevent entrapment of tortoises.

CM 7. BLM shall prepare and provide to the PSFWO an annual report by September 30 of each year of implementation of the RAMP. The annual report shall document, but not be limited to, the following:

a. Compliance with conservation measures outlined in this biological opinion.

b. Any activities determined to be out of compliance with conservation measures outlined in this biological opinion and the corrective measures implemented to bring the project back into compliance.

c. Summary of the results of Peirson's milk-vetch monitoring conducted in the ISD during the reporting year.

d. The number of eggs, juveniles, subadults, or adult tortoises found alive, injured, or dead in the ISD for the reporting year as outlined in the "Terms and Conditions" section of this biological opinion.

e. The amount and location of suitable tortoise habitat (e.g., microphyll woodlands) disturbed by activities addressed in the PRAMP during the reporting year, and changes in patterns of disturbance across the years.

f. Status of signage along Peirson's milk-vetch critical habitat boundaries (i.e., installation and repair); status of development and distribution of Peirson's milk-vetch and tortoise outreach and education activities; status of enforcement actions taken to avoid and minimize unauthorized vehicle incursions into Peirson's milk-vetch critical habitat boundaries; status of vehicle noncompliance events into Peirson's milk-vetch critical habitat boundaries (i.e., documented through records of citations).

Action Area

The implementing regulations to section 7(a)(2) of the Act describe the action area to be all areas affected directly or indirectly by the Federal action and not merely the immediate area affected by the proposed project (50 CFR §402.02). The action area is the area of potential direct or indirect effects of the proposed action and any interrelated or interdependent actions; the direct and indirect effects of these activities include associated physical, chemical, and/or biological effects of considerable likelihood (Service and NMFS 1998). Indirect effects are those that are caused by the proposed action and are later in time but are still reasonably certain to occur (Service and NMFS 1986). Analyses of the environmental baseline, effects of the action on the species and designated critical habitat, cumulative effects, and the impacts of the incidental taking, are based upon the action area as determined by the Service (Service and NMFS 1998).

The action area for this consultation encompasses the entire 214,930-acre ISD PRAMP area encompassing the 138,111-acre ISD SRMA, the 26,098-acre North Algodones Dunes Wilderness (located within the SRMA), and the 50,722-acre ERMA, a 1-mile limited use area around the entire SRMA. The action area also includes privately owned in-holdings within the boundaries of the SRMA and ERMA.

STATUS OF THE SPECIES/CRITICAL HABITAT

Peirson's milk-vetch

The following section summarizes the best available information about Peirson's milk-vetch legal/listing status, life history, distribution and population trends, current threats, and status of critical habitat as discussed in the Service's critical habitat designation (Service 2008a) and 12-month finding on a petition to delist the taxon (Service 2008b). Please refer to those documents for detailed discussions of these topics.

In December 2008, and January 2009, two parties filed separate complaints against the Service challenging the 2008 critical habitat designation. On August 5, 2010, the court ruled in favor of the Service and upheld the 2008 critical habitat designation.

Desert tortoise

The following section summarizes information about the desert tortoise on the legal/listing status, distribution and population trends, and current threats as discussed in the Service's 5-year review and revised recovery plan (Service 2010, 2011b). Please refer to those documents for detailed discussion of these topics.

ENVIRONMENTAL BASELINE

Regulations implementing the Act (50 CFR §402.02) define the environmental baseline as the past and present impacts of all Federal, State, or private actions and other human activities in the action area. Also included in the environmental baseline are the anticipated impacts of all proposed Federal projects in the action area that have undergone section 7 consultation, and the impacts of State and private actions which are contemporaneous with the consultation in progress.

As discussed in the "Action Area" section above, the action area includes the entire 214,930-acre ISD, encompassing the 138,111-acre SRMA, the 26,098-acre North Algodones Dunes Wilderness (located within the SRMA), and the 50,722-acre ERMA (a 1-mile limited use area around the entire SRMA), and privately owned in-holdings within the boundaries of the SMRA and ERMA. The following description of the environmental baseline in the action area is primarily based on information in the BA for the Draft Recreation Area Management Plan (BLM 2009) and in the PRAMP (BLM 2012).

The ISD contains the largest mass of sand dunes in California. This dune system extends for more than 40 miles along the eastern edge of the Imperial Valley agricultural region in a band averaging approximately 5 miles in width. It is roughly bordered to the west by the Coachella Canal and to the east by Wash Road, Ted Kipf Road, the Union Pacific Railroad tracks, and flood control dikes. The International Boundary with Mexico is the southern border of the action area. Two major highways, I-8 and State Route 78 (SR-78), and the All-American Canal bisect the ISD. The All-American Canal and I-8 are located along the southern portion of the action area, and SR-78 bisects the central portion. The Coachella Canal runs along the western boundary of the SRMA from the All-American Canal at the southern end of the action area near I-8.

Existing Biological Conditions

The dunes in the ISD formed primarily due to opposing seasonal winds. Winter winds come from the northwest, but often reverse to the southeast in summer. The stronger winter winds are slowly pushing the dune system southeastward. The east and west sides of the dune system differ substantially in character. West side sands are composed of material that is generally heavier and coarser than the lighter, finer sands carried further east in the prevailing winds. The coarse sands form the largest, tallest dunes, which are located in the western two-thirds of the dune system. These constitute the primary dunes. The tallest dunes are found toward the center

of the overall dune mass, in the eastern half of the primary dune area. East of the primary dunes are the secondary dunes, smaller dunes composed of finer sands and having more vegetative cover.

The following vegetative communities occur in the action area: psammophytic scrub, creosote bush scrub, microphyll woodland, and canal-influenced vegetation (see BLM [2009] for a description of common plant species of each community). Psammophytic scrub occurs within the interior dune system where active and partially stabilized dunes are found, and occurs most frequently between active dunes in depressions that are commonly termed "bowls." The soils in these areas consist primarily of fine sand. As the dunes shift from year to year, the bowls generally shift as well. Vegetation is adapted to relatively high sand mobility and deep water percolation. Most of the plants in this vegetative community are capable of rapid growth given favorable soil moisture conditions. Psammophytic scrub covers approximately 106,247 acres of the action area.

The creosote bush scrub community, generally characterized by relatively barren ground between widely spaced shrubs, occurs on the relatively stable soils along the periphery of the dune system, and rarely occurs in the central portion of the action area, where shifting dunes are prevalent. To the west of the action area, the community consists of almost pure stands of creosote bush. On the eastern boundary of the action area, the vegetation is more diverse due to the topographic relief of the dunes and runoff from the nearby Chocolate and Cargo Muchacho Mountains. The creosote bush scrub within the alluvial fan between the desert washes forms a transitional zone with the microphyll woodland vegetation community. The creosote scrub vegetation community covers approximately 80,981 ac of the action area.

The microphyll woodland community occurs on the east side of the action area, in the large alluvial fan draining the Chocolate and Cargo Muchacho Mountains. The alluvial fan is dissected by numerous ephemeral washes and separated by expansive, level interfluves. Microphyll woodlands are generally found along the margins of these dry channels and around the cul-de-sac sinks of their termini and are typically best developed in the larger drainages where dense stands of a variety of trees occur. This vegetation community covers approximately 21,992 acres of the action area.

Both the Coachella and All-American Canals support hydrophytic (water-loving) vegetation that is subject to periodic eradication efforts. Although the canals are lined, some seepage occurs and promotes the growth of this type of vegetation in the immediate vicinity of the canals.

The planning area is located in the desert of southeastern California, an area marked by long, hot summers and meager rainfall. Surface water in the extended vicinity of the ISD includes the Salton Sea, Colorado River, and Gulf of California. Other than the Coachella and All-American Canals, and several surface water wildlife guzzlers (water retaining structures), no impounded water sources (e.g., lakes or reservoirs) occur in the ISD. Ephemeral surface flows and pools form in the washes and low points in the eastern transition areas after infrequent storm events

that typically occur in the springtime of wet years, but can also occur at other times. However, pools do not remain for long periods due to the permeable nature of the soils in this area.

Existing Land Use Conditions

The ISD has been a recreational area since the 1950s. During this time, the use of the land has shifted from being completely open to visitor use to having some areas closed to OHV recreation, some areas with restricted visitor use, and some areas remaining fully open to visitor use.

Interim Closures

As part of legal stipulations due to a lawsuit filed in 2000 against the BLM regarding impacts to federally listed species as a result of activities authorized under the CDCA plan, the BLM closed five specific areas of the ISD to recreational motorized vehicle use in October 2001 (Figure 1; BLM 2001). These five closed areas, referred to as interim or temporary closure areas, total approximately 49,300 acres that will remain closed until the ROD for the RAMP is signed. Prior to establishment of these interim closure areas, all areas of the ISD, except the WA, were open to motorized vehicle use. The on-the-ground boundaries of each interim closure area are identified by sign posts. As a result of the interim closures, recreation patterns have shifted and newly formed "sand highways" have developed along the borders of the interim closure areas where roads/trails have been created by users. The areas outside of the interim closures continue to be used for recreational purposes. Once the ROD for the RAMP is approved, these interim closures will be eliminated. Figure 1 identifies the locations of the interim closure areas in the ISD.

Visitor Use Areas

The overall planning area is currently designated as a destination SRMA, managed as a regional or national destination, and includes a 1-mile limited use area (ERMA) around the entire SRMA. Three ACECs and one congressionally designated WA (overlapping one of the ACECs) currently exist within the planning area. Under the remanded 2003 RAMP (BLM 2003), the ISD was divided into MAs. While no longer in use, we refer to these formerly designated MAs throughout the “Environmental Baseline” section to maintain consistency with previous documents that reference these MAs, including the Service’s proposed and final Peirson’s milk-vetch critical habitat rules (Service 2007a, 2008b). Figure 1 identifies the location of the current WA, ACECs, and formerly designated MAs in the ISD.

The North Algodones Dunes ACEC (referred to as the North Algodones Dunes Wilderness MA in BLM 2003) was designated by the CDCA Plan Amendment 13 in 1989 and 1990, prior to its 1994 designation as the North Algodones Dunes WA. The ACEC/WA is closed permanently to OHVs and other mechanized use, with hiking and horseback access permitted. Primitive camping is allowed, but developed camping sites or facilities are not available. No commercial uses are permitted, and the use of motorized vehicles of any kind is prohibited. Most use in the

ACEC/WA takes the form of short photographic and sightseeing walks from SR-78, although hiking, backpacking, and nature study trips also occur. BLM also conducts guided hikes into the North Algodones Dunes ACEC/WA for the local community and school field trips as staffing allows. Solitude and primitive recreation are the primary land uses within the wilderness. While recreational OHV use is not allowed, unauthorized trespass sometimes occurs. Most vehicle use results from Border Patrol activities. Five wildlife guzzlers are located within this ACEC/WA along the eastern portion within the microphyll woodlands. None of the ACEC/WA is in an interim closure area.

The East Mesa ACEC was designated as an ACEC in 1980 to protect habitat for the flat-tailed horned lizard, which was proposed for listing under the Act as a threatened species, but withdrawn from consideration on March 15, 2011. The flat-tailed horned lizard is currently listed as a BLM sensitive species and is managed under the *Flat-tailed Horned Lizard Range-wide Management Strategy* (Flat-tailed Horned Lizard Interagency Coordinating Committee 2003). The majority of this ACEC is located west and outside of the planning area, with only a small portion (approximately 652 acres) occurring in the ISD ERMA.

The Plank Road ACEC is an approximately 7-mile long by 200-foot wide strip along Plank Road near I-8 in the Buttercup area. This ACEC was designated in 1985 to protect cultural resources and other resource values and contains the last intact remnant of what was once an important east-west vehicle route across the ISD.

The Mammoth Wash area (referred to as the Mammoth Wash MA in BLM 2003) is the most remote OHV recreation area within the planning area due to its northern location and is accessed by Niland-Glamis Road. The distance from the pavement to the staging area is approximately 13 miles. This area is used for camping, hunting, ROWs, motion picture/television filming and OHV recreation but lacks visitor facilities such as camping pads, improved roads, latrines, or vendors. One wildlife guzzler is located on the east side of this area. A portion of the Mammoth Wash area is in an interim closure area. Visitation is usually low in this area, and visitors to this area enjoy the remote location away from the intensively utilized areas of the planning area. Outside the interim closure area, OHV recreational use is usually low on holidays and weekends and minimal during the week. On weekends during the recreation season (October to May), visitors tend to be residents from the nearby communities of Niland and Calipatria.

The Gecko area (generally in the area referred to as the Gecko MA in BLM 2003) is located on the west side of the ISD, just south of SR-78. Portions of the Gecko area are in two interim closure areas. Outside of the interim closure areas, this area is the most intensively utilized OHV recreation area in the ISD and contains numerous developed campgrounds and other facilities along Gecko Road, including the Cahuilla Ranger Station, Gecko Campground, Keyhole Campground, Roadrunner Campground, 10 hardened camping pads, a vendor area, vault toilets, trash facilities, and kiosks.

The Glamis area (generally in the area referred to as the Glamis MA in BLM 2003) is located directly east of the Gecko area, just south of SR-78. This area contains minimal facilities and

provides for open desert camping. The main access into the Glamis area is via Wash Road. The Glamis and Palo Verde Flats areas are open desert camping areas accessed from SR-78. The BLM provides trash facilities, law enforcement, emergency medical services, and toilet facilities. While primarily undeveloped, several staging areas in the Glamis area, primarily within creosote bush scrub and microphyll woodland, have been heavily impacted by recreation activities (e.g., devegetation and soil compaction). Portions of the Glamis area are in two interim closure areas.

The Dune Buggy Flats area (generally in the area referred to as the Dune Buggy Flats MA in BLM 2003) is located in the southern portion of the planning area north of I-8. The main access into the area is via the Gordons Well exit off I-8 and an improved dirt road. Portions of the Dune Buggy Flats area are in two interim closure areas. Outside of the interim closure areas, OHV recreation is intensive, similar to the Glamis/Gecko area. Facilities located within this area include kiosks, signs, trash facilities, camp hosts, toilets, and a portable ranger station trailer staffed by BLM staff on holiday weekends. Camping and intensive OHV riding in and around staging areas has resulted in severe devegetation and soil compaction.

The central dunes area (generally in the area referred to as the Adaptive MA in BLM 2003) is located east of the former Dune Buggy Flats MA north of I-8. No camping, facilities, or staging areas are located within this area, and historical use consisted of dispersed OHV use. Almost all of the central dunes area is in an interim closure area. Likely due to the lack of facilities or staging areas and the large interim closure area, visitation in this area is low.

The Ogilby area (generally in the area referred to as the Ogilby MA in BLM 2003) is located in the southeastern area of the planning area and includes the Ogilby and Dunes Vista camping areas. Access to this area is via the Ogilby Road and a dirt/sand road. This area is similar to Mammoth Wash, and there are no facilities or services except BLM patrols. Portions of the Ogilby area are in two interim closure areas. Visitation is low to moderate, with most use occurring on weekends and holidays.

The Buttercup area (generally in the area referred to as the Buttercup MA in BLM 2003) is located south of I-8 and north of the United States-Mexico border and is generally used for camping, OHV recreation, sightseeing, commercial vending, education, filming, and ROWs. A small portion of the Buttercup area is in an interim closure area. Outside of the interim closure, the area generally receives relatively high visitation. Buttercup Ranger Station is located here and provides visitor information (maps, education materials, information about the ISD) and emergency medical services. Permits are sold here (there is a kiosk for busy weekends) and the station serves as a law enforcement facility during busy weekends. Grays Well Road provides access to Buttercup, Midway, and the Plank Road camping areas. All three camping areas have vault toilets and trash facilities. At Plank Road, a metal protective barrier and interpretive signs surround the remnants of the old wooden road built in 1916 that enabled vehicles to cross the ISD. This area is readily accessible from I-8 but receives reduced use in less accessible portions of the interior. In addition to OHV impacts, this area also is heavily used by the Border Patrol to control illegal immigrant traffic along I-8. The area is isolated from the larger dune system and

East Mesa by the All-American Canal. The Mexican portion of the Algodones Dunes is contiguous with this area but is bounded by the developed area associated with Ciudad Morelos.

Within the ERMA, the area 1 mile from the SRMA, OHV recreation opportunities are limited (i.e., camping within 300 feet of designated routes, motorized vehicle use limited to designated routes or areas with seasonal restrictions). Within the ERMA, the area west of the Coachella Canal and adjacent to Gordons Well Road has been closed to camping since March 2002 to protect the flat-tailed horned lizard and its habitat. This closure was implemented to offset impacts associated with construction and operation of the Herman Schneider Memorial Bridge that opened in April 2001 and provides OHV access across the All-American Canal and the shared use (OHV and street-legal vehicles) of the Gordons Well overpass. The bridge allows OHV enthusiasts legal access across I-8 from the Buttercup Valley to the Dune Buggy Flats area. The land east of and adjacent to the closed area is privately owned and supports an OHV-oriented private business as well as campgrounds and residences. None of the ERMA is in an interim closure area.

Visitation

The majority of the visitation in the ISD occurs from October through May. Summer visitation level is low due to extremely high temperatures, although some OHV activity does occur during the summer nights. Typically, the planning area experiences high levels of visitation during Halloween, Thanksgiving, New Year's Eve/Day, Martin Luther King Jr. Day, Presidents' Day, and Easter holiday weekends.

In addition to the camping areas within the ISD, visitors have historical congregation sites, most of which are along major access roads. Vendor row (alternatively known as the mall) is an area in Glamis Flats that has been historically used for vending of commercial goods and services. The vendors set their sites along the south side of SR-78 between the Glamis Flats off-ramp and the Glamis private property line. Rows of vendors often form, facing each other with OHV traffic flowing between them. Additional rows, similar in design, generally follow along the west private property boundary of Glamis.

There are also historical gathering areas farther into the dunes. Some of these sites are Competition Hill, Oldsmobile Hill, Patton Valley, Test Hill, and Buttercup Valley. Visitors meet at these locations to test their OHVs and riding skills. Visitation at these sites peaks during different times of the day, and they are usually busiest during the holidays.

The ISD is located within a 3-hour drive from Los Angeles, Riverside, San Diego, and Phoenix and is a highly valued and unique recreation resource within the southwestern United States for two reasons: (1) It is a sand dune ecosystem of unparalleled size and height; and (2) it fills a unique and valued niche for providing the largest acreage of dune-oriented motorized recreational opportunities in the United States. The ISD has far more acreage than the 10 other dune areas that are located within 1,500 miles.

Continued population growth in southern California, expanding popularity of OHV recreation (108-percent increase since 1980 in California; California State Parks 2002), and a decrease in the acreage available to OHV recreation in the California desert have resulted in a steady increase in visitation within the action area. Due to the increased demand for OHV recreation, there has been a need for increased law enforcement.

The ISD provides for many types of recreational experiences, with OHV recreation as the dominant activity. The OHV enthusiasts who visit on holiday weekends experience large crowds, noise, and intensive, 24-hour OHV activity in areas such as Glamis, Gecko, Dune Buggy Flats, and Buttercup. There are other locations within the ISD where OHV recreation is less intense on holiday weekends, and visitors can have a quieter, less intensive experience (i.e., Mammoth Wash or the Ogilby areas).

The ISD is managed to provide both non-motorized and motorized recreational opportunities to area residents and visitors. In addition to OHV recreation, the ISD provides other recreational opportunities including hiking, horseback riding, wildlife and scenery viewing, picnicking, photography, nature study and environmental education, camping, sightseeing, and driving for pleasure.

The types of vehicles that are utilized within the ISD include OHVs and street-legal vehicles. The vehicle types that can be found include: sand rails, dune buggies, all-terrain vehicles, motorcycles, 4 wheel-drive (WD) pickups, 2WD pickups, sport utility vehicles, and custom built off-road vehicles. Private, law enforcement, military, commercial, and rescue aircraft frequently fly over the dunes at low altitudes.

Average annual visitation for fiscal years 2004 through 2009 was estimated at 1.4 million visitors (see section 3.15.6, Table 3-17 in the PRAMP), with peak visitation between October and April. Visitation is unevenly distributed throughout the year, with the highest visitation occurring during the major holiday weekends. The visitation estimates for the major holiday weekends often exceed 100,000 visitors. For example, the average visitation during Thanksgiving weekend for fiscal years 2004 through 2009 was 179,677. Approximately 35 percent of the annual visitation occurs during 25 percent of the recreation season (i.e., two out of 8 months in the season).

Facilities

The sandy terrain limits access to most of the ISD for vehicle camping. The acreage that is suitable is primarily along Gecko Road, a portion of the Glamis area, the western side of the Mammoth Wash area, Dune Buggy Flats, the eastern portion of the Ogilby area, and the area adjacent to Grays Well Road in Buttercup (Figure 1).

The ISD has two developed campgrounds adjacent to Gecko Road. It consists of north and south loops that extend out into a rolling sand dunes area. Roadrunner Campground is located at the terminus of Gecko Road. It consists of one loop that extends out into a flat sandy area. The

southern portion of the Roadrunner loop and the northern loop of Gecko Campground are filled in with hard dirt/gravel material to provide camping space. These two campgrounds are the only developed camping areas (e.g., contain vault toilets) in the ISD.

BLM has constructed nine dirt/gravel pads in order to provide additional camping areas for 2WD vehicles. The rest of the camping in the ISD is relatively dispersed, although visitors tend to stay in historically used areas such as Glamis, Gecko, Buttercup, and Dune Buggy Flats. These areas provide trash dumpsters and have vault toilets.

Cahuilla Ranger Station is located on Gecko Road near SR-78. The station provides interpretive services and information to visitors. It also serves as the incident command center during holiday weekends for the BLM and a contact point for emergency services. There is also a maintenance shed to accommodate BLM OHVs, emergency vehicles, and supplies. Buttercup Ranger Station, located in the Buttercup area south of I-8, provides visitor information (i.e., maps, education materials, and information about the ISD) and emergency medical services.

Species Abundance in the Action Area

Peirson's milk-vetch

Within the action area, Peirson's milk-vetch is restricted to about 53,000 acres in a narrow band running 40 miles northwest to southeast along the western portion of the ISD. Plants are generally scattered throughout the dune complex with a higher abundance along the central and western aspect of the dunes (BLM 2009). Milk-vetch surveys were conducted in 1977 and again annually between 1998 and 2007 (see Service 2008a and 2008b for a detailed description and results of all Peirson's milk-vetch survey efforts in the ISD up to 2007). Surveys were not conducted in 2008, 2009, 2010, or 2011 due to insufficient rainfall (D. Steward, BLM, pers. comm. 2011a; A. Trouette, BLM, pers. comm. 2012). As discussed in Service (2008a, 2008b), the disparity between the different survey methods and the data collected make it difficult to assess status and trends of the Peirson's milk-vetch population. However, the Service considers the surveys conducted by BLM to be the most extensive and precise effort to determine overall population abundance and distribution of this species. The amount of data gathered in 2005 was the result of an exceptionally good rainfall year and extraordinary monitoring effort and represents the best available estimate of the potential population and extent of habitat for Peirson's milk-vetch in the ISD (Service 2008a, 2008b). The 2005 effort effectively covered all areas containing Peirson's milk-vetch. Table 1 below outlines the number of plants estimated to occur inside and outside of critical habitat and in the interim closure areas outside of critical habitat in each MA. As discussed above, while no longer in use, we refer to the MAs designated under the remanded 2003 RAMP to maintain consistency with previous documents that reference these MAs, including the Service's proposed and final Peirson's milk-vetch critical habitat rules (Service 2007a, 2008b).

Table 1. Number of plants estimated to occur inside and outside of Peirson's milk-vetch final critical habitat and in each interim closure area outside of critical habitat in each MA (as designated in the remanded 2003 RAMP).

MA (visitor use areas as discussed in the 2003 RAMP)	Estimated Number of Plants[a]			
	In Critical Habitat	Outside of Critical Habitat	Total In and Outside of Critical Habitat	In Interim Closure Areas Outside of Critical Habitat
Mammoth Wash MA (Mammoth Wash area)	32,625	4,252	36,877	2,060
North Algodones Dunes Wilderness MA (North Algodones Dunes WA)	58,192	5,286	63,478	-----[b]
Gecko and Glamis MAs (generally includes the Gecko and Glamis areas)	-----[c]	82,997	82,997	51,043
Dune Buggy Flats MA (generally includes the Dune Buggy Flats area)	-----[c]	0	0	0
Adaptive and Ogilby MAs (generally includes the central dunes and Ogilby areas)	504,384	20,290	524,674	12,020
Buttercup MA (generally includes the Buttercup area)	30,011	1,768	31,779	0
Total	625,212	114,593	739,805	65,123

[a] Estimated number of plants based on our calculations using BLM's 2005 raw survey data as described in Service (2008a, 2008b). [b] No interim closure areas in this MA. [c] Critical habitat was not designated in this MA.

Peirson's Milk-vetch Critical Habitat

Critical habitat occurs in the Mammoth Wash (Subunits 1A and 1B), North Algodones Dunes Wilderness (Subunits 1C and 1D), Adaptive and Ogilby (Subunits 3A, 3B, and 3C), and Buttercup (Unit 4) MAs. Approximately 6,757 acres of the 12,105 acres of critical habitat designated in the ISD is within interim closure areas in Mammoth Wash, Adaptive, and Ogilby MAs that have been closed to OHV use since 2001. The information presented below on numbers and density of Peirson's milk-vetch and habitat quality is summarized from the

Service's critical habitat designation (Service 2008a) and constitutes the best available information on the status of Peirson's milk-vetch critical habitat.

Habitat in Subunits 1A and 1B (Mammoth Wash MA) supports the largest numbers of Peirson's milk-vetch in this MA, contains a higher density of standing plants than adjacent areas, and likely supports a large seed bank. All of Subunit 1A is currently open to motorized recreation, including OHV use and camping. A portion of Subunit 1B is in an interim closure area closed to motorized recreation. Motorized recreation is allowed in the remainder of Subunit 1B but is limited to designated routes of travel only. As discussed in the "Visitor Use Areas" section above, visitation in the Mammoth Wash area is generally low.

Habitat in Subunits 1C and 1D (North Algodones Dunes WA) retains the most natural and pristine features of the dunes ecosystem, and includes the best remaining example of a dune system undisturbed by intensive OHV recreation in the ISD. These subunits support the largest numbers of Peirson's milk-vetch in the North Algodones Dunes WA, contain a higher density of standing plants than adjacent areas, and likely support a large seed bank. All of Subunits 1C and 1D have remained closed to motorized recreation since the area was designated as a WA in 1994.

Habitat in Subunits 3A, 3B, and 3C (Adaptive and Ogilby areas) represents the largest, widest, and highest sand dune fields within the dunes. These subunits support the largest numbers of Peirson's milk-vetch dunes-wide, contain a higher density of standing plants than adjacent areas, and likely support large seed banks. All of Subunit 3A and the northern portion of Subunit 3B (in the Adaptive MA) are in an interim closure area closed to motorized recreation. The southern portion of Subunit 3B and all of Subunit 3C (in the Ogilby MA) are currently open to motorized recreation, including OHV use and camping. As discussed in the "Visitor Use Areas" section above, visitation in the areas of the Ogilby MA outside of the interim closure area is generally low to moderate.

Habitat in Unit 4 (Buttercup MA) supports the largest number of Peirson's milk-vetch in the MA, contains a higher density of standing plants than adjacent areas, and likely supports a large seed bank. All of Unit 4 is currently open to motorized recreation, including OHV use and camping. As discussed in the "Visitor Use Areas" section above, visitation in the Buttercup MA is generally high.

Desert Tortoise

Roughly half of the northeastern portions of the Mammoth, North Algodones Dunes, and Glamis MAs, and a small portion of the Adaptive MA, occur in the Colorado Desert Recovery Unit per the species revised recovery plan (Service 2011b). The nearest critical habitat unit, the Chuckwalla Unit, occurs approximately 6 miles from the ISD (Service 1994). Beginning in the 1980s and into the 1990s, over 100 desert tortoises were relocated to the area south of Mesquite Mine along Ogilby Road and Vista Mine Road, within 0.5 to 2 miles of the ISD. Abundant desert tortoises (from 0 to 59 desert tortoises per square mile) occur in the vicinity of Mesquite Mine about 3 miles east of the ISD (Nicholson 1984), and an average desert

tortoise density of 20 desert tortoises per square mile was reported for the proposed Mesquite Regional Landfill site directly to the east of ISD. However, tortoise densities in the ISD are considered low based on the rarity of sightings and sign. Fall 2002 surveys conducted by BLM on the eastern side of the ISD yielded two live desert tortoises, nine burrows, four pallets, six scats, one shell fragment, and two sets of tracks (Wright 2003). Almost all (92 percent) of the tortoise sign, including both live tortoises, was found east of railroad tracks/Ted Kipf Road and south of SR-78 in the vehicular open area. West of the railroad tracks/Ted Kipf Road, two burrows and two scats were found during the survey. Incidental records of desert tortoise sightings in the general area include: one found in the Buttercup MA in the late 1980s (J. Watkins, BLM, pers. comm. 1991), one on Vista Mine Road about 0.5 miles from the ISD in 2001 (D. Himmerich, BLM, pers. comm. 2001) and several others along Vista Mine Road outside of the ISD in 2008 (D. Steward, BLM, pers. comm. 2011b), and one between Ted Kipf Road and the railroad approximately 1 mile north of Clyde also in 2001 (G. Heine, BLM, pers. comm. 2001). In addition, a possible desert tortoise burrow was seen in the open area several miles southwest of the Glamis area in the spring of 2002 (G. Wright, BLM, pers. comm. 2002). The few tortoises observed have been on the east side of the ISD or east of the ISD, primarily associated with microphyll woodland and creosote bush scrub habitat. The history and increasing trend of motorized vehicle recreation likely contributes to the rarity of tortoises in suitable habitat within the ISD.

Factors Affecting the Species' Environment within the Action Area

Before the desert tortoise and Peirson's milk-vetch were listed in 1980 and 1998, respectively, activities occurred that have eliminated or fragmented habitat for these species, including but not limited to: the Yuma Reclamation Project to realign and line the Coachella Canal completed in the early 1980s, the Coachella Canal completed in 1949, the All-American Canal built between 1934 and 1940, the construction and ongoing operation of SR-78 and I-8, and the construction of the Gray's Well Bridge. Potential habitat also has been eliminated or fragmented by ongoing Border Patrol activities and motorized vehicle recreation in the ISD, both of which have increased over the years. This elimination and fragmentation of the habitat is part of the baseline.

As discussed in the "Existing Land Use Conditions" section above, five areas in the ISD have been closed to motorized recreation since 2001. These interim closures have shifted the baseline of recreational use, closing approximately 49,300 acres to motorized vehicle use in areas that were previously open to such use. Along the borders of the interim closure areas are newly formed "sand highways" where roads/trails have been created by users. This recreational use shift and creation of "sand highways" has had no effect on the baseline for desert tortoises due to the lack of habitat and infrequent sightings of tortoises. However, this recreational shift has impacted Peirson's milk-vetch by concentrating OHV-use within relatively narrow bands through areas occupied by Peirson's milk-vetch that were formerly exposed to more dispersed OHV-use. This recreational shift is part of the baseline.

In 2003, the Service issued a biological opinion analyzing the effects of implementing the 2002

RAMP on Peirson's milk-vetch and desert tortoise. Then in 2005, the Service issued a new biological opinion for the final 2003 RAMP addressing impacts to Peirson's milk-vetch critical habitat, designated in 2004, and several other issues. However, due to a lawsuit, the 2003 RAMP and associated documents, and the 2005 biological opinion for the 2003 RAMP were vacated and remanded. Since the vacatur and remand, the BLM has managed the ISD using a compilation of authorizations, including the approved 1987 RAMP; measures implemented pursuant to, but before, the 2003 RAMP was invalidated; and wilderness designation. Despite management of the ISD using this compilation of authorizations, minimization measures, and wilderness designation, Peirson's milk-vetch and desert tortoise have continued to be impacted, primarily as a result of direct mortality and habitat loss/degradation associated with OHV-use and construction and operation of visitor facilities. The impacts that have occurred due to management of the ISD prior to the PRAMP are part of the baseline.

Recent Federal actions potentially impacting Peirson's milk-vetch in the action area include construction of 19 vault toilets in established recreational areas (Service 2009b). During informal consultation with the BLM in 2009, we determined that the vault toilet project was not likely to adversely affect Peirson's milk-vetch or its critical habitat based on absence of the taxon and its critical habitat in the project area and the measures proposed as part of the project to minimize impacts to the taxon if encountered during the project.

Recent Federal actions potentially impacting tortoises in the action area include maintenance along Wash Road (Service 2009c). During informal consultation with the BLM in 2009, we determined that maintenance of Wash Road was not likely to adversely affect desert tortoises based on absence of the species in the project area and the measures proposed as part of the project to minimize impacts to the species if encountered during the project.

EFFECTS OF THE ACTION

Effects of the action refer to the direct and indirect effects of an action on the species or critical habitat that would be added to the environmental baseline, along with the effects of other activities that are interrelated or interdependent with that action. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration. Indirect effects are those that are caused by the proposed action and are later in time, but are still reasonably certain to occur. In contrast to direct effects, indirect effects can often be more subtle, and may affect species and habitat quality over an extended period of time, long after project activities have been completed. Indirect effects are of particular concern for long-lived species such as the tortoise, because project-related effects may not become evident in individuals or populations until years later.

This biological opinion does not rely on the regulatory definition of "destruction or adverse modification" of critical habitat at 50 CFR 402.02. Instead, we have relied upon the statute and the August 6, 2004, Ninth Circuit Court of Appeals decision in *Gifford Pinchot Task force v.*

U.S. Fish and Wildlife Service (No. 03-35279) to complete the following analysis with respect to critical habitat.

The PRAMP proposes various management decisions and actions that may affect listed species and designated critical habitat over a large area. In such cases, we frequently do not have extensive data upon which to base our analyses. In developing this biological opinion, we used the best available information, as required in the Act and its implementing regulations. Specifically, 50 CFR § 402.14(d) requires the Federal action agency requesting formal consultation to provide us "with the best scientific and commercial data available or which can be obtained during the consultation for an adequate review of the effects that an action may have upon listed species or critical habitat." If we determine "that additional data would provide a better information base from which to formulate a biological opinion, [we] may request an extension of formal consultation and request that the Federal agency obtain additional data to determine how or to what extent the action may affect listed species or critical habitat" [50 CFR § 402.14(f)]. The consulting Federal agency bears the responsibility "to the extent practicable," to obtain the required data "which can be developed within the scope of the extension" [50 CFR § 402.14(f)]. Finally, 50 CFR § 402.14(g)(8) states that "In formulating its Biological Opinion, any reasonable and prudent alternatives, and any reasonable and prudent measures, the Service will use the best scientific and commercial data available and will give appropriate consideration to any beneficial actions taken by the Federal agency or applicant, including any actions taken prior to the initiation of consultation."

This section analyzes the effects of implementing the PRAMP on listed species and designated critical habitat. We did not analyze the effects of any site-specific future actions that are beyond the scope of this plan amendment. As the PRAMP notes, site-specific actions may be allowed after they are analyzed pursuant to the NEPA and section 7(a)(2) of the Act, as appropriate. Of the management decisions and actions proposed under the 17 Resource Categories, only those proposed under the *Recreation Resource Management* and the *Transportation and Public Access Management* Resource Categories, except those associated with administrative and emergency vehicle access, are fundamentally authorized by the PRAMP and become effective with the signing of the ROD for the RAMP. Therefore, we conducted our analysis of the effects of implementing these management decision and actions, whether beneficial or adverse, to Peirson's milk-vetch and its critical habitat and the desert tortoise within the action area in relation to their survival and recovery needs and to the role and function of designated critical habitat. For management decisions and actions proposed in the PRAMP under the remaining Resource Categories, we provide a general analysis of effects to the listed species and critical habitat at a programmatic level.

Though this biological opinion may conclude that implementation of the PRAMP is not likely to jeopardize the continued existence of listed species or adversely modify critical habitat, a specific action may be proposed in the future that could result in a finding of jeopardy or adverse modification of critical habitat. Such a circumstance could occur when permit applications contain project-specific details that cannot be evaluated at this programmatic level.

Resource Categories Not Likely to Adversely Affect Listed Species or Critical Habitat

Management decisions and actions proposed under the following Resource Categories are not anticipated to adversely affect listed species or designated critical habitat, or they would cause only potential beneficial effects. As such, these Resource Categories will not be addressed further in this biological opinion.

Air Resources Management

The PRAMP proposes to maintain or improve air quality by complying with State of California air emission standards. Several actions described under *Transportation and Public Access Management* would also serve to maintain or improve air quality; the effects of those actions are discussed below. With proper implementation of these standards, we do not anticipate adverse effects to listed species or the function and conservation role of critical habitat at the programmatic level.

Soil Resources Management

The PRAMP proposes to maintain or improve soil quality by adopting regional standards for rangeland health related to soils and adopting appropriate BMPs included in Appendix C of the PRAMP. Several actions described under *Transportation and Public Access Management* would also serve to maintain or improve soil quality; the effects of those actions are discussed below. With proper implementation of the BMPs, we do not anticipate adverse effects to listed species or the function and conservation role of critical habitat at the programmatic level.

Water Resources Management

The PRAMP proposes to prevent or reduce water quality degradation through implementation of applicable BMPs or other mitigation measures. Several actions described under *Transportation and Public Access Management* would also serve to maintain or improve water quality; the effects of those actions are discussed below. With proper implementation of the BMPs, we do not anticipate adverse effects to listed species or the function and conservation role of critical habitat at the programmatic level.

Cultural Resource Management

The PRAMP does not propose any LUP or Implementation decisions but proposes several future implementation actions related primarily to data collection and sharing, educational outreach, or protection of cultural sites. Since these actions would not result in ground-disturbance, or likely only minimal disturbance, we do not anticipate adverse effects to listed species or the function and conservation role of critical habitat at the programmatic level.

Paleontological Resource Management

The PRAMP proposes to restrict the collection of all vertebrate fossils and noteworthy invertebrate and plant fossils to legitimate scientific or educational uses, allow recreational collecting of common invertebrate and plant fossils, and require immediate notification if paleontological resources are encountered during project ground-disturbing activities. While minimal paleontological resources occur in the active dunes, some fossils may occur in the remainder of the planning area (N. Hamada, BLM, pers. comm. 2011). Given that recreational collection of invertebrate and plant fossils would be done by hand (i.e., picking fossils up off the ground) with minimal surface disturbance, we do not anticipate adverse effects to listed species or the function and conservation role of critical habitat at the programmatic level.

Visual Resource Management

The PRAMP proposes to assign all lands in the planning area to a VRM class. This classification system analyzes the visual impacts from proposed land uses, is a classification system only, and does not allow on-the-ground actions to proceed upon approval of the RAMP. Therefore, we do not anticipate adverse effects to listed species or the function and conservation role of critical habitat at the programmatic level from assigning lands to a VRM class.

Special Designations

The PRAMP proposes to remove the existing North Algodones Dunes Wilderness ACEC, maintain the existing Plank Road ACEC boundaries and uses, and reduce the portion of the existing East Mesa ACEC that overlaps within the planning area. The existing North Algodones Dunes WA boundaries and uses would continue to be maintained per the WA designation. The North Algodones Dunes Wilderness ACEC directly overlaps the boundaries of the North Algodones Dunes WA (Figure 1). Therefore, removal of the ACEC designation from this area would not change the authorized uses currently allowed under the WA designation and would not adversely affect listed species or the conservation role of critical habitat. We also do not anticipate adverse effects to listed species or the function and conservation role of critical habitat as a result of maintaining the existing boundaries and uses of the Plank Road ACEC since no listed species or critical habitat occurs in or near the ACEC.

The 652-acre area proposed to be removed from the East Mesa ACEC is in the ERMA (Figure 1). Under the PRAMP, lands in this portion of the ERMA would be available to geothermal mineral leasing but with no surface occupancy, open to locatable and salable minerals, and within a Limited RMZ and OHV MA. However, since no listed species or critical habitat occur in this area; we do not anticipate adverse effects to listed species or the function and conservation role of critical habitat as a result of the removal of this 652-acre area in the planning area that would be removed from the East Mesa ACEC.

Resource Categories Likely to Adversely Affect Listed Species or Critical Habitat

Rangeland Health Standards Management

The PRAMP proposes to continue to use national policy and regional standards to maintain rangeland health. With proper implementation of these standards, we do not anticipate adverse effects to listed species or the function and conservation role of critical habitat at the programmatic level. In fact, application of these standards would likely benefit listed species and designated critical habitat because they would improve ecological conditions of BLM lands. The PRAMP also proposes to document rangeland health throughout the planning area by conducting surveys (visual and photographic). Since these surveys would be conducted at 30 sites every 10 years using designated routes of travel or open travel areas, be conducted outside of the spring growing season, and avoid deep bowls in the dunes and large individual Peirson's milk-vetch plants, we anticipate such surveys would have only minimal impacts on Peirson's milk-vetch and no effects to the taxon's critical habitat. However, travel to conduct these surveys in potential tortoise habitat (i.e., microphyll woodland and creosote) could affect desert tortoises (i.e., trampling or destruction of animals and habitat and the disturbance of breeding behavior). Since travel would be along designated routes or open travel areas, the impacts of conducting these surveys would be similar to those resulting from recreational and transportation activities as discussed below. However, the impacts would be of a lesser magnitude because of the scale of the survey effort (less than 10 people surveying 30 sites every 10 years) relative to the scale of recreational and transportation activities currently occurring in the ISD.

Vegetation Resource Management

The DPRAMP proposes to (1) classify microphyll woodlands as avoidance areas for all commercial and noncommercial surface-disturbing activities and land use authorizations; (2) implement future actions such as removal of nonnative invasive plant species, including tamarisk, using mechanical and chemical applications and restoration of degraded native plant communities; and (3) allow OHV recreation but close camping in microphyll woodland south of Wash 44 and north of Wash 70. The general effects of these actions, except #3, are discussed below. The effects of allowing OHV recreation but closing camping in microphyll woodland are discussed below under *Recreation Resource Management*.

Peirson's milk-vetch critical habitat does not occur in microphyll woodland; therefore, classifying microphyll woodlands as avoidance areas would not affect critical habitat. However, desert tortoises may occur and Peirson's milk-vetch does occur in microphyll woodland habitat in the planning area. Several Peirson's milk-vetch plants have been found in microphyll woodland in the Mammoth Wash and Glamis areas. These occurrences likely represent individuals occupying a transition area where remnant dunes overlap microphyll woodland habitat. Therefore, classifying microphyll woodlands as avoidance areas for all commercial and noncommercial surface-disturbing activities and land use authorizations would benefit both species since permits, leases, or ROWs (e.g., for renewable energy projects, new utility corridors, communication sites, mineral leasing or sales, filming, special recreation [competitive or special

events, etc.], and agricultural use) would not be authorized in these areas unless no other practicable alternatives (within the scope of the RAMP) for the authorization exist.

While commercial and noncommercial surface-disturbing activities and land use authorizations could be authorized in avoidance areas if not other practicable alternatives exist, authorization of activities that would significantly reduce or degrade microphyll woodland habitat is unlikely. The PRAMP recognizes microphyll woodland as a "desired plant community" and "key" habitat (see sections 2.3.6.1.1 and 2.3.7.1.1 "Goals and Objectives" in the PRAMP) and outlines goals and objectives to promote and maintain healthy microphyll woodland in the Planning Area for its intrinsic value and for its value as wildlife habitat. Also, under the FLPMA of 1976, BLM must manage public lands "in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition, that will provide food and habitat for fish, wildlife, and domestic animals…" Because BLM prioritizes protection of microphyll woodland as a "desired" or "key" habitat under the PRAMP and as an important resource under FLPMA (D. Steward, BLM, pers. comm. 2012), we consider it unlikely that BLM would authorize activities that cause significant adverse impacts to the tortoise or Peirson's milk-vetch.

Nonnative invasive plant removal and habitat restoration activities would negatively affect listed species and critical habitat. Removal of nonnative invasive plants using chemical herbicides could kill or injure listed species if used in close proximity or inappropriately. Some chemicals could also eliminate or substantially reduce the abundance of pollinators, thereby likely reducing the reproductive success of Peirson's milk-vetch. However, chemical herbicides would likely only be used to combat those nonnative invasive plant species that would, by their nature, pose a threat to listed species. Mechanical removal of nonnative plants could kill or injure listed species if they are crushed, buried, or, in the case of Peirson's milk-vetch, misidentified during removal activities. Vegetation removal may also render habitats unusable for foraging, breeding, and cover by desert tortoises while native vegetation regenerates. However, since chemical and mechanical removal would be conducted using BMPs for minimizing or eliminating any threats to listed species, we anticipate that these activities pose a low level of threat to Peirson's milk-vetch, its critical habitat, and desert tortoises and that adverse effects are unlikely to occur.

Along with removal of nonnative invasive plants, restoration of degraded habitat would be accomplished by such actions as imprinting, contouring, debris and brush replacement, and revegetation. Depending on the magnitude of the restoration activities and the type of equipment used, listed species could be impacted as a result of such actions as direct crushing or burial by equipment or soil piles. However, effects to tortoises would likely be minimal based on the low densities in the planning area, and application of species-specific BMPs would minimize or eliminate threats to both the tortoise and the Peirson's milk-vetch and its critical habitat. Also, restoration activities would likely have a positive effect on both species over the long-term by improving their habitat.

Wildlife Resource Management

The PRAMP proposes to (1) classify microphyll woodlands as avoidance areas for all commercial and noncommercial surface-disturbing activities, and (2) implement future actions specific to maintaining, enhancing, and protecting populations of raptors, nongame migratory birds, bats, invertebrates, and game animals. Future actions include but are not limited to: (a) restoring native species habitat distribution and occurrence (especially for priority species); (b) authorizing reintroductions, transplants, and supplemental stockings of native wildlife populations in current or historic ranges; (c) managing nonnative invasive species; (d) pursuing land acquisition options to consolidate important wildlife habitats; (e) maintaining habitat connectivity throughout the planning area; and (f) considering construction of new wildlife guzzlers.

The effects of classifying microphyll woodlands as avoidance areas for all commercial and noncommercial surface-disturbing activities on listed species and critical habitat are discussed above under *Vegetation Resource Management*. The proposed future actions may affect listed species depending on the type and location of actions implemented but would likely have neutral or positive benefits on listed species given the intent of these actions to maintain and enhance populations of native wildlife, including listed species, and restore their habitats. One exception would be that the presence of existing wildlife guzzlers and construction of new guzzlers could result in death of tortoises in the planning area due to drowning. We anticipate that, similar to existing guzzlers, new guzzlers would be constructed to allow for escape of wildlife, including tortoises, thereby minimizing the likelihood of drowning. However, the artificial water source provided by existing and new guzzlers may also increase the presence of ravens, a known tortoise predator, resulting in death or injury of juvenile tortoises in and around the planning area. Raven populations in the desert southwest have increased over the past 25 years, probably in response to increased food and water subsidies associated with human activities. Though the addition of artificial water sources in the planning area could attract additional ravens from nearby urban areas, the copious supplies of fresh water associated with irrigated agriculture nearby suggest any effect would not be significant or measurable.

Special Status Species Management

The PRAMP proposes to (1) close critical habitat, ACECs, other special area designations, and camping and staging areas to surface occupancy; (2) allow camping only in designated areas within BLM sensitive species habitat; and (3) implement future actions. Future actions include but are not limited to: (a) authorizing reintroductions, transplants, and supplemental stockings of special status species populations in current or historic ranges; (b) maintaining or restoring habitat; (c) managing nonnative invasive plants; (d) analyzing impacts of all projects occurring within occupied sensitive species' habitat; and (d) requiring that projects mitigate the impacts accordingly.

The effects of closing critical habitat, ACECs, other special area designations, and camping and staging areas to surface occupancy are discussed below under *Mineral Resource Management*,

and the effects of allowing camping only in designated areas within BLM sensitive species habitat are discussed below under *Recreation Resource Management*. The effects of proposed future actions on special status species would be similar to those discussed under the *Wildlife Resource Management* section above.

Wildland Fire Management

The PRAMP proposes to implement future actions such as (1) fuels reduction/treatment programs where needed; (2) post-fire stabilization and rehabilitation actions in burned areas; (3) utilizing wildland fire suppression methods with lesser ground disturbance to minimize potential adverse impacts on special status species, critical habitat, desired plant communities, and cultural resources; and (4) using fire retardants or chemicals adjacent to waterways in accordance with established standards.

The psammophytic scrub habitat that supports Peirson's milk-vetch is too sparse to support a wildfire, so any effects from fire suppression activities on the taxon or its critical habitat are highly unlikely. Any effects from fire suppression activities would occur in creosote scrub or microphyll woodland habitats that may be occupied by desert tortoises. If suppression activities involve ground disturbance, such as building of fire breaks with bulldozers or by hand, tortoises could be impacted by crushing, trampling, burial, or degradation of habitat needed for foraging, breeding, and sheltering. Tortoise habitat could be also be degraded or altered by the use of fire retardants or chemicals which could provide added nutrients, causing an increase in the abundance of nonnative plant species. However, the low density of tortoises in the planning area reduces the likelihood that fire control lines would be placed through occupied habitat or that any alteration of the habitat through the introduction of nonnative plants would affect the species. The normally low frequency of fires in the planning area should ensure that the chemistry of the soils is not substantially changed by the associated low concentrations of fire retardants.

Mineral Resource Management

The PRAMP proposes to (1) maintain the planning area, excluding the WA, as open to locatable (e.g., gold, silver, copper, lead, gypsum, mica) mineral entry; (2) classify the ERMA as available for geothermal minerals leasing; (3) exclude the SRMA and donated lands from geothermal leasing; (4) prohibit surface occupancy within critical habitat, ACECs, other special area designations, and camping and staging areas; (5) maintain the SRMA as closed and the ERMA as open to salable (e.g., sand, gravel, building stone) minerals; and (6) prohibit mineral sales or free use permits within the SRMA. The PRAMP also proposes to prohibit mineral sales or free use permits within the SRMA and to authorize mining operations, leasing, or sale of minerals in the planning area only after analysis of impacts to listed species or other special status species and a determination of no effect on listed species.

Direct impacts from mining and prospecting may occur as claimants access their claims as well as through ground-disturbing activities (e.g., drilling, blasting, digging, and storing and piling soil) or indirectly as habitat features are changed. Impacts to Peirson's milk-vetch from mining

activities include direct removal of plants and seeds in the soils, crushing or trampling of individuals, destruction of habitat, changes in habitat structure, burial under overburden and spoils, loss of habitat as access roads are developed, and interference with pollination and seed dispersal mechanisms. Impacts to tortoise from mining activities include direct crushing or trampling of individuals on the surface or in burrows, burial of burrows under overburden and spoils, destruction of habitat, and loss of habitat as access roads are developed.

Under the PRAMP, Peirson's milk-vetch and its critical habitat would not be impacted by geothermal leasing or extraction of salable minerals since these actions would only being allowed in the ERMA where neither the taxon nor its critical habitat occur. Milk-vetch critical habitat would not be impacted by extraction of locatable minerals since the PRAMP proposes to prohibit surface occupancy in critical habitat, thereby preventing ground-disturbance associated with locatable mineral extraction. However, Peirson's milk-vetch outside of critical habitat, and tortoises (outside of the WA) could be adversely impacted by locatable mineral entry allowed in the SRMA. Also, tortoises could be adversely impacted by geothermal leasing, extraction of salable minerals, and locatable mineral entry allowed in the ERMA. However, the absence of historical mining activities suggests limited resource potential and threats in the future, and the sparse population densities of tortoises and the relatively low numbers of Peirson's milk-vetch outside of critical habitat in the SRMA (approximately 15 percent) indicate that potential impacts would not pose significant adverse effects on the rangewide scale of the species' distribution.

Recreation Resource Management

The PRAMP proposes to maintain the planning area as a destination SRMA and the 1-mi area around the SRMA as an ERMA. The PRAMP also proposes to designate lands in the planning area as one of four RMZs (Open, Limited, Resource Protection, and North Algodones Dunes Wilderness) and one of three OHV MAs (Open, Closed, Limited). The designation of OHV MAs (proposed under the *Transportation and Public Access Management* Resource Category) would overlap with the RMZs such that the Open RMZ would be an Open OHV MA, the Limited RMZ would be a Limited OHV MA, and the Resource Protection and North Algodones Dunes Wilderness RMZs would be Closed OHV MAs. The designation of RMZs identifies the types of recreational uses allowed in a given area (e.g., camping and motorized or non-motorized vehicle use). The designation of OHV MAs identifies areas in the ISD where OHV use specifically would be allowed, prohibited, or limited. Therefore, the effects of all recreation, (i.e., camping and OHV use) associated with designating RMZs and OHV MAs are discussed in this section.

Under the PRAMP, approximately 59 percent of the planning area would be in an Open RMZ and Open OHV MA, managed for OHV use and motorized recreational opportunities (i.e., camping). Approximately 25 percent of the planning area would be in a Limited RMZ and Limited OHV MA managed for limited motorized recreational opportunities (i.e., camping and OHV use). The remaining approximately 16 percent (in the WA and critical habitat combined) would be managed for non-motorized recreational activities (i.e., hiking, wildlife viewing, and photography).

Recreation in the ISD ranges from low intensity recreation of hiking, horseback riding, wildlife and scenery viewing, picnicking, photography, nature study to medium intensity recreation of tent and recreation vehicle (RV) camping to high intensity recreation of OHV use. While camping is allowed throughout much of the ISD, tent and RV camping occur primarily in areas containing visitor services (e.g., pit toilets and trash dumpsters) and easily accessible access roads. Recreational activities could directly affect Peirson's milk-vetch and tortoises through trampling or crushing of sensitive habitat and individuals, and indirectly through reduced reproductive success due to chronic disturbance during the breeding season, habitat abandonment due to prolonged disturbance, and habitat alteration or degradation associated with ongoing surface disturbance. Recreation activities may also facilitate the establishment of nonnative invasive plant species via ground disturbance and transfer of seeds resulting in habitat alteration.

Peirson's milk-vetch and Critical Habitat

While low and mid-intensity recreation activities (e.g., hiking, wildlife and scenery viewing, picnicking, photography, and camping) would have similar potential effects on individual plants as those discussed below for OHV use, these types of low to mid-intensity recreation activities likely have only minimal effects on the taxon relative to the scale of OHV activities currently occurring in the ISD. OHV use could result in direct death or injury of Peirson's milk-vetch due to crushing, uprooting, or burial of plants and seeds, and by reducing reproductive output of those that survive. Also, OHV use could indirectly impact Peirson's milk-vetch by degrading or destroying its habitat, including the plant community the taxon is associated with, thereby reducing reproductive output.

Longer-term monitoring indicates that plants exposed to OHV activity have a reduced likelihood of survival. In a study monitoring individual plant fates in an area closed to OHV use through a growing season, Groom et al. (2007) compared plants purposely struck with an OHV to those not struck. Results indicate that plants with canopies less than 18 in that were struck had a 33 percent lower survival rate than plants in the control group that were not struck. In a follow-up study, Service biologists continued to track survivorship by monitoring individual plants in two study areas, one in an OHV-open area and one in an OHV-closed area. Plants in the OHV-open area were 20 percent less likely to survive the entire study period than plants in the OHV-closed area (Service 2007b). Overall, areas within the dunes subject to intensive OHV use have a lower abundance of Peirson's milk-vetch plants whereas areas subject to less OHV use in the interior portions of the dunes and interim closure areas have a higher abundance of plants.

Most of the studies, and in particular Groom et al. (2007) and the follow-up Service study (Service 2007b); indicate that individual plants can be damaged by OHV activity. While the exact process is not understood, we postulate that repeated depletion of pre-flowering seedlings depletes the seed bank, elimination of standing seed-producing plants diminishes and eventually extinguishes input to the seed bank, and/or untimely or excessive scarification of the seeds by the additional grinding actions of sand moved by OHVs causes seeds to desiccate (Service 2008b).

In addition, the coincidence of timing of seedling establishment and the cooler months preferred by OHV enthusiasts increases the susceptibility of Peirson's milk-vetch to impacts from OHVs (Romspert and Burk 1979). The period of plant sensitivity, approximately late October to late February, includes seed germination and emergence (Barneby 1964; Phillips and Kennedy 2002). Aside from the direct crushing of the delicate seedlings, OHVs in close proximity to the seedlings may indirectly affect germinating seedlings by accelerating soil desiccation that can result in root desiccation (Lathrop and Rowlands 1983). The roots of seedlings are especially sensitive to drying out if the plants or sand surface are disturbed. Seedling death may result from both types of impacts. Seedlings damaged but not killed may produce fewer flowers and seeds than undamaged seedlings leading to a gradual diminishment of the seed bank (Pavlik 1979). This period of sensitivity directly overlaps with peak holiday visitation periods to the ISD. Roughly 44 percent of the annual visitation occurs during 19 percent of the recreation season (i.e., 6 weeks out of 8 months in the season) (BLM 2009).

OHV use in the action area also could result in indirect impacts to Peirson's milk-vetch due to habitat degradation and destruction, and a subsequent decrease in reproductive success. OHV use can (1) disrupt the natural processes that support dune formation, movement, and structure, thus reducing the available habitat needed for individual and population growth; (2) cause the collapse of dune faces and ridges, which could bury or expose the seed bank resulting in decreased seed germination; (3) disturb the sand such that soil moisture is lost resulting in decreased seed germination or desiccation of plants resulting in premature death; and (4) degrade the psammophytic scrub plant community that provides habitat for pollinators required for reproduction (Service 2008a).

To minimize direct and indirect impacts to Peirson's milk-vetch and its critical habitat from OHV use, the PRAMP proposes to include all critical habitat (12,105 acres) in the Resource Protection and North Algodones Dunes Wilderness RMZs and designate these RMZs as Closed OHV MAs, closed to all OHV use. The North Algodones Dunes Wilderness RMZ includes the entire North Algodones Dunes WA, which has been and will continue to be closed to OHV use because of the area's wilderness designation. The remaining critical habitat is proposed for closure to OHV use under the PRAMP and is distributed along the length of the ISD within the Mammoth Wash, Adaptive, Ogilby, and Buttercup MAs (Figure 1). As discussed above in the "Environmental Baseline" section, the MAs designated under the remanded 2003 RAMP are no longer in use; however, we discuss Peirson's milk-vetch critical habitat relative to the MAs to maintain consistency with the descriptions of the Peirson's milk-vetch critical habitat units provided in the Service's proposed and final critical habitat rules (Service 2007a and 2008b).

Closure of critical habitat to OHV use would avoid approximately 85 percent of the Peirson's milk-vetch known to occur in the ISD (Table 1). In addition, closure of critical habitat to OHV use would protect areas identified as containing high-density core populations, a large extent of high quality habitat, a large seed bank, and therefore, areas important for the recovery of the species (Service 2008a). While wildlife viewing, hiking, photography, and non-motorized camping would continue to be allowed in critical habitat, and could impact Peirson's milk-vetch due to crushing, trampling, or burial, these types of low-intensity activities occur on a

significantly smaller scale relative to OHV use (Hamada, pers. comm. 2011) and would have minimal effects on the population. While closure of critical habitat would avoid OHV-related impacts to the majority of the Peirson's milk-vetch distributed throughout the ISD, plants outside of critical habitat, approximately 15 percent of the known population, would continue to be impacted by OHV use and other recreational activities. Also, Peirson's milk-vetch in critical habitat, as well as the primary constituent elements of the critical habitat, could be impacted by unauthorized OHV intrusions. However, based on citation numbers, the BLM considers unauthorized OHV intrusions in closed areas, particularly wilderness to be low (N. Hamada, BLM, pers. comm. 2012). Three violation citations were issued in wilderness from 2007 to 2009. While violation citations in interim closure areas were higher than in wilderness during this period (57 in 2007, 35 in 2008, and 20 in 2009), the number of citations each year has decreased due to increased compliance and enforcement in these areas. Therefore, we anticipate that the extent to which Peirson's milk-vetch and the primary constituent elements in critical habitat may be impacted by unauthorized OHV intrusions will be low.

Along with closure of critical habitat to OHV use, approval of the RAMP would remove the interim closure areas (approximately 49,300 acres) established in 2001. Areas formerly in interim closure areas that are not designated as critical habitat would be designated as Open RMZs and Open OHV MAs under the RAMP and therefore subject to recreational use. However, the removal of the interim closures would impact a relatively small proportion of the total population, approximately 9 percent (Table 1). Also, since critical habitat encompasses areas containing high-density core populations of Peirson's milk-vetch that would be closed to OHV use, the removal of the interim closures would impact relatively small proportions of the populations in the areas where critical habitat was not designated, approximately 6 percent of the total estimated in Mammoth Wash area and 2 percent in Adaptive/Ogilby areas (Table 1). Since critical habitat does not occur in the Gecko/Glamis areas, removal of the interim closure areas would allow for OHV-related impacts to a higher proportion, approximately 61 percent, of the population occurring in those areas (Table 1). However, the Gecko/Glamis areas are the most developed areas in the ISD and typically have the highest average annual visitation of the areas open to OHV use and Peirson's milk-vetch have continued to occupy the portions of these areas open to OHV use (Service 2007a). Therefore, we anticipate that some plants will continue to persist after removal of the interim closures and anticipated increase in recreational (primarily OHV) use in the Gecko/Glamis areas.

Removal of the interim closure areas in the Gecko/Glamis areas and the anticipated increase in recreational (primarily OHV) use in these areas also could result in increased population fragmentation. Since the Gecko/Glamis areas are located approximately in the middle of the ISD (Figure 1), declines in the Peirson's milk-vetch population in these areas could result in some disruption of gene flow between populations to the north and south. However, as discussed above, despite heavy recreational use, Peirson's milk-vetch have continued to occupy these areas. We anticipate plants likely would persist at sufficient densities (in areas inside and outside of the interim closure areas) to contribute to genetic diversity and maintain gene flow over the long-term between adjacent Peirson's milk-vetch populations to the north and south (Service 2008a).

To minimize impacts to Peirson's milk-vetch due to recreational uses, upon approval of the ROD, the BLM would develop, in coordination with the Service, a monitoring and adaptive management program designed to monitor the status of the taxon in and outside of critical habitat (CM 1). While BLM expects to conduct full-scale monitoring in years when the rainfall threshold [equal to or greater than 1.82 in is met between October and December of the previous year, the extent of the monitoring effort would be dependent on funding and staffing levels in any given year. BLM's monitoring plan, as described in Appendix F of the PRAMP, does not commit to full-scale monitoring in adequate rainfall years or establish success criteria or thresholds for detecting changes in the Peirson's milk-vetch population over time across the dunes. However, as discussed in the final critical habitat rule and the 12-month finding on the petition to delist Peirson's milk-vetch (Service 2008a, 2008b), BLM has monitored the Peirson's milk-vetch population from 1998 to 2002 and 2004 to 2007. Surveys were not conducted in 2008, 2009, 2010, or 2011 due to insufficient rainfall. While the survey effort has varied over these years (i.e., size of survey area), the BLM has continued to consistently monitor at least some portion of the population since 1998, providing data to estimate population abundance. Therefore, our analysis of effects on Peirson's milk-vetch and its critical habitat resulting from recreational (primarily OHV) use is based on our assumption that BLM would continue to monitor Peirson's milk-vetch populations (i.e., in open and closed OHV use areas) in a manner sufficient to detect changes in the overall population in the ISD over time and ensure that the closure of critical habitat to OHV use continues to protect the majority of the Peirson's milk-vetch population over time. If monitoring indicates a noticeable decline in the species abundance, BLM has the management authority to temporarily suspend recreational use in areas showing species decline.

Along with closing critical habitat to OHV use, the BLM would implement several additional management actions to minimize impacts to Peirson's milk-vetch and its critical habitat resulting from recreational activities. These actions would include maintaining signage along the critical habitat boundaries, conducting outreach and education activities, and ensuring adequate law enforcement along the critical habitat boundaries, particularly during peak recreation periods (CM 2).

In addition to minimizing direct and indirect impacts to critical habitat from OHV use, closure of critical habitat would maintain the conservation role and function of critical habitat by maintaining the primary constituent elements: (1) Intact, active sand dune systems; (2) the associated co-adapted psammophytic scrub plant community that provides habitat for insect pollinators required for reproduction; and (3) areas within intact, active sand dune systems between occupied bowls, swales, and slopes that allow for pollinator movement and wind dispersal of fruit and seeds. Critical habitat could be directly impacted by non-motorized recreation such as hiking, camping, wildlife viewing, and photography. However, as discussed above, these low-intensity activities are unlikely to have more than a minimal effect on the taxon and the role and function of its critical habitat based on the number of people participating in these activities relative to OHV-use and the minimal ground-disturbance associated with these activities. Also, while OHV-use adjacent to critical habitat could cause the collapse of dune faces and ridges onto psammophytic scrub in adjacent critical habitat, degrading or destroying

the scrub and thus reducing pollinator habitat, we anticipate these indirect impacts would be minimal based on BLM's efforts aimed at visitor outreach and education (CM 2).

Desert Tortoise

While low and medium-intensity recreation activities (e.g., hiking, wildlife and scenery viewing, picnicking, and photography) could affect tortoises in similar ways as camping and OHV use, the effects of these types of low and medium recreation would likely be minimal relative to the effects of OHV use and camping since, as discussed above, these types of low-intensity activities occur on a significantly smaller scale relative to OHV use. In general, OHV use and camping in desert tortoise habitat would be expected to affect tortoises through death or injury of individuals by vehicle collisions, damage to habitat, and by increased potential for collection. Trash associated with camping and other uses attracts desert tortoise predators, such as coyotes and ravens. Domestic dogs, which also kill and injure desert tortoises, would be brought to the ISD by visitors. Owing to the apparent low density of desert tortoises in the ISD, such incidences are expected to be rare.

To minimize the impacts of recreational activities on the tortoise and its habitat, the BLM proposes several management actions, including prohibiting camping in microphyll woodland south of Wash 44 and north of Wash 70, designating the ERMA as a Limited RMZ (which would limit motorized vehicle use and camping in the creosote-dominated ERMA), ensuring all trash receptacles are raven-proof (CM 3), and developing an outreach and education program specific to the tortoise (CM 4) with the intent of reducing impacts to tortoises (if the public cooperates in avoiding sensitive habitats and refrains from damaging vegetation or collecting desert tortoises).

While camping would be prohibited in microphyll woodland south of Wash 44 and north of Wash 70 and motorized vehicle use would be limited in the ERMA, the majority of desert tortoise habitat (microphyll woodland and creosote scrub) in the ISD would be in an Open or Limited RMZ and Open or Limited OHV MA. Over half (55 percent) of the approximately 21,992 acres of microphyll woodland in the ISD would be in the Open RMZ and Open OHV MA and open to camping and OHV use. Approximately 30 percent of microphyll woodland would be in the North Algodones Dunes Wilderness RMZ and closed to OHV use but open to non-motorized camping. Of the approximately 40,147 acres of creosote scrub that occurs on the eastern side of the ISD, the majority (65 percent) would be in the Limited RMZ and Limited OHV MA and available for limited motorized vehicle use and camping. Approximately 21 percent of the creosote scrub would be in an Open RMZ and Open OHV MA and open to camping and OHV use. In the North Algodones Dunes Wilderness RMZ, approximately 4 percent of the creosote scrub would be closed to OHV use but open to non-motorized camping. Under the PRAMP, microphyll woodland and creosote scrub in portions of the Mammoth Wash and Adaptive MAs that are in interim closure areas would be designated as an Open OHV MA, and therefore open to OHV use. However, the approximately 11,165-acre area south of Wash 44 and north of Wash 70 (in the former Adaptive MA under the 2003 RAMP) would be closed to camping (Figure 1).

While the majority of the microphyll woodland in the ISD and of the creosote scrub in the eastern half of the ISD would be open to OHV use and camping to some extent, and tortoises in these areas would be directly and indirectly impacted by these activities, we anticipate incidents impacting tortoises would be rare because of the low density of tortoises in the area. BLM's proposed measure to develop an outreach and education program (CM 4) would also reduce impacts to tortoises if the public cooperates in avoiding sensitive habitats and refrains from damaging vegetation or collecting desert tortoises. We also anticipate few impacts to desert tortoises because no mortalities have been documented due to recreational uses in the ISD to date.

Transportation and Public Access Management

The PRAMP proposes to (1) designate the planning area as Open, Closed, or Limited OHV MAs; (2) maintain existing designated routes of travel in the planning area; and (3) allow emergency vehicles to use drivable washes for access and, where no roads exist, travel cross-country to avoid the need for road building.

Maintenance of existing designated routes of travel would be conducted by (1) treating high-use routes of travel with water for dust control during high-use weekends; (2) treating OHV staging areas, primary pull-outs, and vender areas near the Glamis Flats, Gecko, and Dune Buggy Flats camping areas for dust control multiple times per day during high-use weekends; (3) maintaining dirt roads in the planning area by re-shaping, compacting, and blading; and (4) maintaining authorized vehicle routes in a manner that will promote natural hydrology and protect water quality through application of BMPs.

Only the management actions associated with designating OHV MAs and using and maintaining the existing designated routes of travel in the planning area are fully analyzed under this biological opinion. Since emergency vehicle access is an unpredictable discretionary action, BLM's approval of cross-country travel by emergency vehicles where no roads exist would undergo emergency consultation under section 7 of the Act if BLM determines that the action may affect listed species and/or critical habitat. The effects on listed species and critical habitat of OHV use associated with designating OHV MAs in the planning area are discussed above under *Recreation Resource Management*.

The use and maintenance of existing routes of travel may affect listed species. However, of the approximately 228 miles of designated routes of travel, none occur in Peirson's milk-vetch critical habitat, and the closest route (SR-78) is approximately 226 feet from the nearest critical habitat boundary. Therefore, since no routes occur in critical habitat and maintenance activities would be limited to 100 feet from the roadbed, we do not anticipate that route maintenance activities would impact critical habitat. While no Peirson's milk-vetch are known to occur in or directly adjacent to designated routes, plants could establish in suitable habitat adjacent to designated routes and therefore be impacted by maintenance activities. However, given that a

relatively small number of plants, if any, may become established within the 100 feet from the roadbed where maintenance activities would occur, we anticipate impacts to the population due to road maintenance activities would likely be minimal.

Use and maintenance of existing routes of travel would impact desert tortoises in ways similar to those discussed above under *Recreation Resource Management*, including death and injury of individuals due to vehicle crushing during route use and maintenance. Watering road beds could result in standing water, attracting ravens (a juvenile tortoise predator) to the area. However, impacts to tortoises would be minimized since maintenance activities would be limited to within 100 feet of the roadbed and watering would be limited to roadbeds and not result in standing water. Also, work areas would be flagged, a Service-approved Authorized Biologist would conduct tortoise clearance surveys prior to commencement, any occupied burrows would be avoided, and any tortoises would be moved out of harm's way (CM 5). Therefore, given the sparse densities of desert tortoises in the area and the proposed actions to minimize impacts to desert tortoises, we anticipate the impact to the species from use and maintenance of designated routes of travel would likely be minimal.

Lands and Realty Management

The PRAMP proposes to (1) open 35,115 acres of the 50,722-acre ERMA for solar and wind energy development; (2) exclude the 138,111-acre SRMA from solar and wind energy development; and (3) exclude Peirson's milk-vetch critical habitat from all other types of land use authorizations (e.g., access roads, power lines, and communications facilities). The PRAMP does not propose disposal of any lands. Also, the PRAMP does not propose any new utility corridors or communications sites in the planning area, only continued use of the existing communications sites and utility corridors.

Impacts to Peirson's milk-vetch critical habitat from solar and wind energy development and other types of land use authorizations would be avoided due to the exclusion of these activities in critical habitat. Impacts to Peirson's milk-vetch outside of critical habitat and to tortoises in the majority of the planning area due to solar and wind energy development also would be avoided due to the exclusion of these activities from the SRMA. However, desert tortoises and their habitat could be impacted by solar and wind energy development projects that would be allowed in the approximately 25,915 acres of creosote scrub in the ERMA on the eastern side of the ISD.

Milk-vetch outside of critical habitat and tortoises also could be impacted by other types of land use authorizations (e.g., access roads, power lines, and communications facilities) and future development in the existing utility corridors. Milk-vetch (approximately 15,450 plants) and its critical habitat (approximately 304 acres) occur in the designated utility corridor along the I-8 and could therefore be impacted by future utility development projects in ways similar to the impacts that may result from recreational and transportation activities. Desert tortoise habitat (approximately 5,582 acres of microphyll woodland and 34,370 acres of creosote scrub) occurring in the contingency corridor along Ted Kipf Road on the eastern side of ISD could be impacted by future utility development projects in that corridor. However, given the sparse

densities of desert tortoises in the planning area, we anticipate impacts to the species from solar and wind energy development projects in the ERMA, other types of land use authorizations allowed in the SRMA, and future utility development in the contingency corridor likely would be relatively minor on the rangewide scale of the species' distribution.

Public Health and Safety Management

The PRAMP proposes to address the following public health and safety concerns in the Planning Area: law enforcement to ensure public health and safety, unexploded ordnance (UXO), international border issues, hazardous materials, and noise. Many law enforcement activities have beneficial effects on listed species (e.g., enforcing area closures and regulations that are designed to protect species and habitats). However, law enforcement actions can have adverse effects as well. When pursuing violators, rangers sometimes need to drive cross-country, including through areas where OHV use would be prohibited. Surveying for and removal of UXO also can adversely affect listed species, particularly if crews need to drive cross-country to find and remove unexploded material. These activities can result in impacts such as the trampling or destruction of individual plants, crushing of animals on the surface or in burrows, destruction of habitat, and disturbance of breeding, feeding, or sheltering behavior.

Due to the changing locations of these activities, a variety of sites may be affected. The potential impacts to species and critical habitat from public health and safety activities are similar to the impacts that may result from recreational and transportation activities as described below. However, the impacts would likely be of a lesser magnitude because public health and safety activities likely occur less frequently and to a lesser extent than recreational and transportation activities currently occurring in the ISD.

Effect on Recovery

Per section 2(b), the primary purposes of the Act are to provide a means whereby the ecosystems upon which listed species depend may be conserved and to provide a program for the recovery of listed species. Per section 2(c), Congress established a policy requiring all Federal agencies to use their authorities in seeking to recover listed species in furtherance of the purposes of the Act. Consistent with these purposes and Congressional policy, sections 3(5), 4(f), 7(a)(1), the implementing regulations (50 CFR §402.02) to section 7(a)(2), and related preamble at 51 FR 19926-57 generally require Federal agencies to further the survival and recovery of listed species in the use of their authorities. Pursuant to these mandates, our analysis assesses (1) whether the proposed action adequately offsets its adverse effects to the species' environmental baseline; and (2) the extent to which the proposed action would cause "significant impairment of recovery efforts" or adversely affect the "…species' chances for survival to the point that recovery is not attainable" (51 FR 19934).

Peirson's milk-vetch and Critical Habitat

Overall, the PRAMP would allow for elevated impacts to Peirson's milk-vetch in the ISD, primarily as a result of ongoing and increasing OHV use. Because OHV use would be allowed in areas occupied by Peirson's milk-vetch over the life of the RAMP, continued implementation of the CDCA Plan, as amended by the RAMP, would adversely affect the survival and reproduction of individual plants principally through crushing by OHVs and habitat degradation. However, the closure of all Peirson's milk-vetch critical habitat to OHV use would avoid impacts to approximately 85 percent of the population in the ISD. The closure of critical habitat to surface occupancy for locatable mineral entry and all other forms of land use authorization, and its closure to geothermal leasing, wind and solar development, salable minerals, mineral sales and free use permits (through closure of the SRMA to these activities) would also avoid additional impacts to the taxon and its critical habitat due to these non-recreation activities. Also, while Peirson's milk-vetch occupying the middle portion of the ISD (Gecko/Glamis MA) would continue to be impacted by OHV use since no critical habitat occurs in that area, we anticipate the taxon will persist at sufficient densities to contribute to genetic diversity and maintain gene flow over the long-term between adjacent populations to the north and south (Service 2008a).

Closure of critical habitat would protect areas containing high-density core populations, a large extent of high quality habitat, and a large seed bank that are important for recovery (Service 2008a). Therefore, based on the avoidance and minimization measures proposed in the PRAMP, we have determined that implementation of the PRAMP would provide an overall conservation benefit to the Peirson's milk-vetch and improve the likelihood of the species' recovery.

Desert Tortoise

Overall, the PRAMP would allow for elevated impacts to tortoises in the ISD, primarily as a result of ongoing and increasing motorized recreational use and use and maintenance of designated routes of travel in microphyll woodland and creosote scrub on the eastern portion of the planning area. Because recreational use would be allowed over the life of the RAMP in areas of suitable tortoise habitat where tortoises have been observed, continued implementation of the CDCA Plan, as amended by the RAMP, could adversely affect survival and reproduction of individual tortoises principally through crushing by motorized vehicles and habitat degradation.

Camping would be prohibited in microphyll woodland south of Wash 44 and north of Wash 70, and motorized vehicle use and camping would be limited in the ERMA. However, the majority of tortoise habitat in the ISD would be open to OHV use and camping, and several heavily used routes of travel occur in tortoise habitat. Also, while closure of the SRMA to geothermal leasing, wind and solar development, salable minerals, mineral sales and free use permits would avoid impacts to tortoises due to these non-recreation activities, tortoises in the ERMA could be impacted by these activities. Tortoises in the SRMA and ERMA could also be impacted by locatable mineral entry.

The revised recovery plan calls for focused management in existing tortoise conservation areas or other important areas (e.g., areas needed to maintain genetic linkages) to ensure that populations remain distributed throughout the species' range (Service 2011b). Existing tortoise conservation areas include, but are not limited to, critical habitat and Desert Wildlife Management Areas (DWMAs). The nearest critical habitat unit, the Chuckwalla Unit, occurs approximately 6 mi from the ISD (Service 1994). Also, as previously stated, the ISD occurs at the extreme southwestern edge of the species range in the United States and along the boundary of the Colorado Desert Recovery Unit (Service 2011b). The partial barriers created by the railroad, Ted Kipf Road, and flood control dikes reduce the potential for desert tortoise movement into the ISD from the more plentiful populations to the east. While a lack of demographic augmentation from the east could increase the potential for extirpation within the ISD, the ISD is located along the edge of the range of the species and is peripheral to established conservation strategies for the species. Therefore, the overall population of the desert tortoise is not likely to be affected by implementation of the PRAMP.

While tortoises could be impacted by the actions proposed in the PRAMP, the number of tortoises that may be killed or adversely impacted is unknown. However, given the apparent sparse density of tortoises likely due to long-term, ongoing recreational use of the area and the location of the ISD at the edge of the species' range, we anticipate the probability of death or injury of tortoises to be relatively low. Also, BLM's efforts aimed at visitor outreach and education would lessen the adverse effects of recreation on tortoises, and additional measures proposed in the PRAMP would minimize effects associated with raven predation and route maintenance. Therefore, based on the sparse densities of desert tortoises in the action area, the fact that the ISD is on the edge of the species' range and is peripheral to established conservation strategies for the species, and the avoidance and minimization measures proposed in the PRAMP, we have determined that implementation of the PRAMP would not impair recovery of the species.

CUMULATIVE EFFECTS

Approximately 159,000 acres of the ISD is managed by the BLM. The remainder is under private, State, and other Federal ownership. Based on information from BLM, our records, and contact with people in the area, we are unaware of any future State, Tribal, local, or private actions proposed in the ISD action area.

CONCLUSION

It is our biological opinion that implementation of the CDCA Plan, as proposed to be amended by the PRAMP and subsequent revisions agreed upon during the consultation process, is not likely to jeopardize the continued existence of Peirson's milk-vetch or the desert tortoise; nor is it likely to destroy or adversely modify critical habitat for the Peirson's milk-vetch. We reached these conclusions for the following reasons:

1. Levels of habitat loss and disturbance by existing/anticipated recreational activities, and the use and maintenance of designated routes of travel, are not expected to significantly affect Peirson's milk-vetch, its critical habitat, or the desert tortoise. As discussed in the "Effects of the Action" section above, the limited amount of disturbance associated with these activities is not expected to appreciably change the numbers, distribution, or population growth of either species, nor appreciably affect the primary constituent elements of designated critical habitat.

2. All discretionary activities, except those related to recreation and designated routes of travel that affect listed species would be addressed (as required) under subsequent section 7 consultations on a project-by-project basis. This would provide opportunities to evaluate project-specific effects and implement alternative designs and avoidance and minimization measures.

3. As described above in the "Description of the Proposed Action" and "Effects of the Action" sections above, BLM would implement numerous protective measures that would reduce potential adverse effects associated with existing/anticipated recreational activities and use/maintenance of designated routes of travel to a level that is not expected to appreciably change the numbers, distribution, or population growth of these listed species nor appreciably affect the primary constituent elements of designated critical habitat.

Peirson's milk-vetch and Critical Habitat

4. Closure of critical habitat to OHV use would avoid approximately 85 percent of the Peirson's milk-vetch known to occur in the ISD. Under the PRAMP, BLM would also implement a monitoring plan and analyze data to compare trends in species abundance due to different types of impacts in the areas in the planning area subject to different uses. This monitoring program would contribute to improved management and protection of the Peirson's milk-vetch population. If monitoring indicates a noticeable decline in the species abundance, BLM has the management authority to temporarily suspend specific uses in areas showing species decline.

Desert tortoise

5. Desert tortoise habitat in the ISD constitutes a small portion of the species' Colorado Desert Recovery Unit (which includes the 1,020,600-ac Chuckwalla Critical Habitat Unit, overlapping a majority of the approximately 1,000,000-ac Joshua Tree National Park, and additional lands). The ISD is approximately 6 mi from the nearest DWMA.

6. Although tortoise habitat (microphyll woodland and creosote scrub) occurs within the boundaries of the ISD and tortoises are known to occur east of the planning area, few tortoises have been recorded in the ISD. Because of the low population levels and

infrequent observations or reports of any adverse effects, we conclude that there will be no effect at a population scale, although individual desert tortoises may be affected by encounters during recreational activities (i.e., OHV use and camping).

INCIDENTAL TAKE STATEMENT

Section 9 of the Act, and Federal regulation pursuant to section 4(d) of the Act, prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Harass is defined as an intentional or negligent act or omission that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this incidental take statement.

The measures described below for desert tortoise are nondiscretionary and must be undertaken by the BLM for the exemption in section 7(o)(2) to apply. The BLM has a continuing duty to regulate the activity covered by this incidental take statement. If the BLM fails to assume and implement the terms and conditions, the protective coverage of section 7(o)(2) may lapse. To monitor the impact of incidental take, the BLM must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement [50 CFR§ 402.14(i)(3)].

AMOUNT AND EXTENT OF TAKE

Section 9 of the Act does not address the incidental take of listed plant species. Because the Act does not address the take of listed plant species, this biological opinion does not contain an incidental take statement, reasonable and prudent measures, or terms and conditions for the Peirson's milk-vetch. BLM should be aware that the Act prohibits the removal of endangered plants from Federal lands and their reduction to possession, the malicious damaging, or destruction on such lands; by regulation, the Service extended this prohibition to threatened species. Section 9(a)(2)(B) prohibits any person from removing, cutting, digging up, or damaging or destroying individuals of an endangered listed plant species in knowing violation of any law or regulation of any State or in the course of any violation of a State criminal trespass law.

We anticipate incidental take of desert tortoises in the ISD will be difficult to detect for the following reasons: (1) We cannot anticipate the precise numbers of tortoises that may be killed or injured because comprehensive surveys have not been conducted in the ISD; (2) desert

tortoises are cryptically colored to avoid predation and are often in burrows or buried to avoid environmental extremes or predation; (3) eggs and juveniles are especially difficult to detect and quantify because of small size; (4) the population numbers can fluctuate in response to weather patterns and other biotic and abiotic factors; (5) the ISD is large and tortoises are patchily distributed in this part of the species' range; and (6) we cannot predict where and when the unmonitored recreational activities described herein will injure or kill desert tortoises. Incidental take may occur due to vehicle collision, collection associated with increasing levels of visitor use, changes in raven or other predator abundance associated with presence of people or trash, and/or loss of cover from vehicle use. As a result, finding dead or injured individuals within the action area is difficult as animals may be crushed or buried underground in burrows that were not found or inspected and otherwise hard to recognize/detect for the reasons discussed above. However, we anticipate that the number of tortoises (adults, juveniles, or eggs) that may be taken would be low due to the small number of tortoises found within the action area and the anticipated effectiveness of the conservation measures described as part of the proposed action.

While we cannot provide precise numbers of tortoises that may occur in the ISD, we have established an anticipated level of incidental take that, if exceeded, will trigger reinitiation of consultation.

Take of the desert tortoise is anticipated and exempted as follows:

- While we cannot quantify the precise numbers of tortoises that may be killed or injured as a result of recreational activities and use and maintenance of designated routes of travel for the reasons discussed above, we anticipate the number of tortoises in all age classes (adults, juveniles, or eggs) that may be killed or injured will be small because very few tortoises have been found in the action area, indicating an apparently small population, and the proposed conservation measures would minimize the likelihood of physical injury of tortoises. Using our best professional judgment in light of best available information, we anticipate that implementation of actions associated with recreation management and use and maintenance of designated routes of travel will result in incidental take of relatively few tortoises, perhaps on the order of one or two adults or juveniles, and a small but unquantifiable number of eggs per year. We are exempting this anticipated level of incidental take. However, based on the difficulty of detecting individual tortoises, we anticipate each report of incidental taking could represent the actual death or injury of more than one tortoise (including a small number of juveniles and eggs). Accordingly, if more than one adult or juvenile tortoise per year is found injured or dead due to recreational activities, or use and maintenance of designated routes of travel managed by BLM, the anticipated level of incidental take will be exceeded.

IMPACT OF THE INCIDENTAL TAKING OF THE SPECIES

In the accompanying biological opinion, the Service determined that these levels of anticipated take are not likely to result in jeopardy to or adversely affect the recovery of the desert tortoise.

REASONABLE AND PRUDENT MEASURES

The BLM is implementing conservation measures as part of the proposed action to minimize the taking of desert tortoises. The Service's evaluation in the biological opinion includes consideration of the measures developed by the BLM to reduce the adverse effects of the proposed project on this species. The following reasonable and prudent measure is intended to supplement the protective measures that were proposed by BLM as part of the proposed action, and is necessary and appropriate to minimize the impact of the taking on the species. Any subsequent changes in the conservation measures proposed by BLM or in the conditions under which these activities currently occur may constitute a modification of the proposed action and may warrant re-initiation of formal consultation, as specified at 50 CFR § 402.16.

- BLM shall monitor and report the levels of incidental take of desert tortoises to the PSFWO throughout implementation of the RAMP and report on the effectiveness of the project minimization measures to reduce the impact of incidental take of this species.

TERMS AND CONDITIONS

To be exempt from the prohibitions of section 9 of the Act, BLM must comply with the following term and condition, which implements the reasonable and prudent measure described above. This term and condition is nondiscretionary and designed to minimize the impact of incidental taking on the species.

To implement the reasonable and prudent measure above:

BLM shall prepare and provide to the PSFWO an annual report by September 30 of each year on implementation of the RAMP. The annual report shall document, but not be limited to, the following:

- The number of eggs, juveniles, subadults, or adult tortoises found by members of the public or by BLM employees during the reporting year, the date observed, their status when observed (e.g., traveling east, in a burrow, injured or dead on road), and a map and GIS coordinates (NAD 83) indicating their location when observed.

- The number of tortoises killed or injured during the reporting year and a description of the circumstances leading to the death or injury of individuals.

Disposition of Sick, Injured, or Dead Specimens

The PSFWO is to be notified immediately at 760-322-2070 if any tortoises are found sick, injured, or dead in the project area. Immediate notification means verbal (if possible) and written notice within 1 workday and must include the date, time, and location of the carcass, and any other pertinent information. Care must be taken in handling sick or injured individuals to

ensure effective treatment and care and in handling dead specimens to preserve biological material in the best possible state.

The PSFWO should also be notified immediately at 760-322-2070 if any endangered or threatened species not addressed in this biological opinion is found dead or injured within the action area during implementation of the RAMP. The same reporting requirements also shall pertain to any healthy individual(s) of any threatened or endangered species found on the action area and handled to remove the animal to a more secure location.

Reporting Requirements

Please refer to the "Terms and Conditions" section above for details on reporting procedures.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to use their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

- Create a research coordinator position to oversee the overall monitoring and adaptive management program for the ISD.

REINITIATION NOTICE

This concludes formal consultation on the effects of implementation of the PRAMP on desert tortoises. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal involvement or control over the action has been retained (or is authorized by law) and if (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action.

If you have any questions regarding this document, please contact Tannika Engelhard of the Carlsbad Fish and Wildlife Office at 760-431-9440, or Pete Sorensen of the PSFWO, 777 East Tahquitz Canyon Way, Suite 208, Palm Springs, California 92262 at 760-322-2070.

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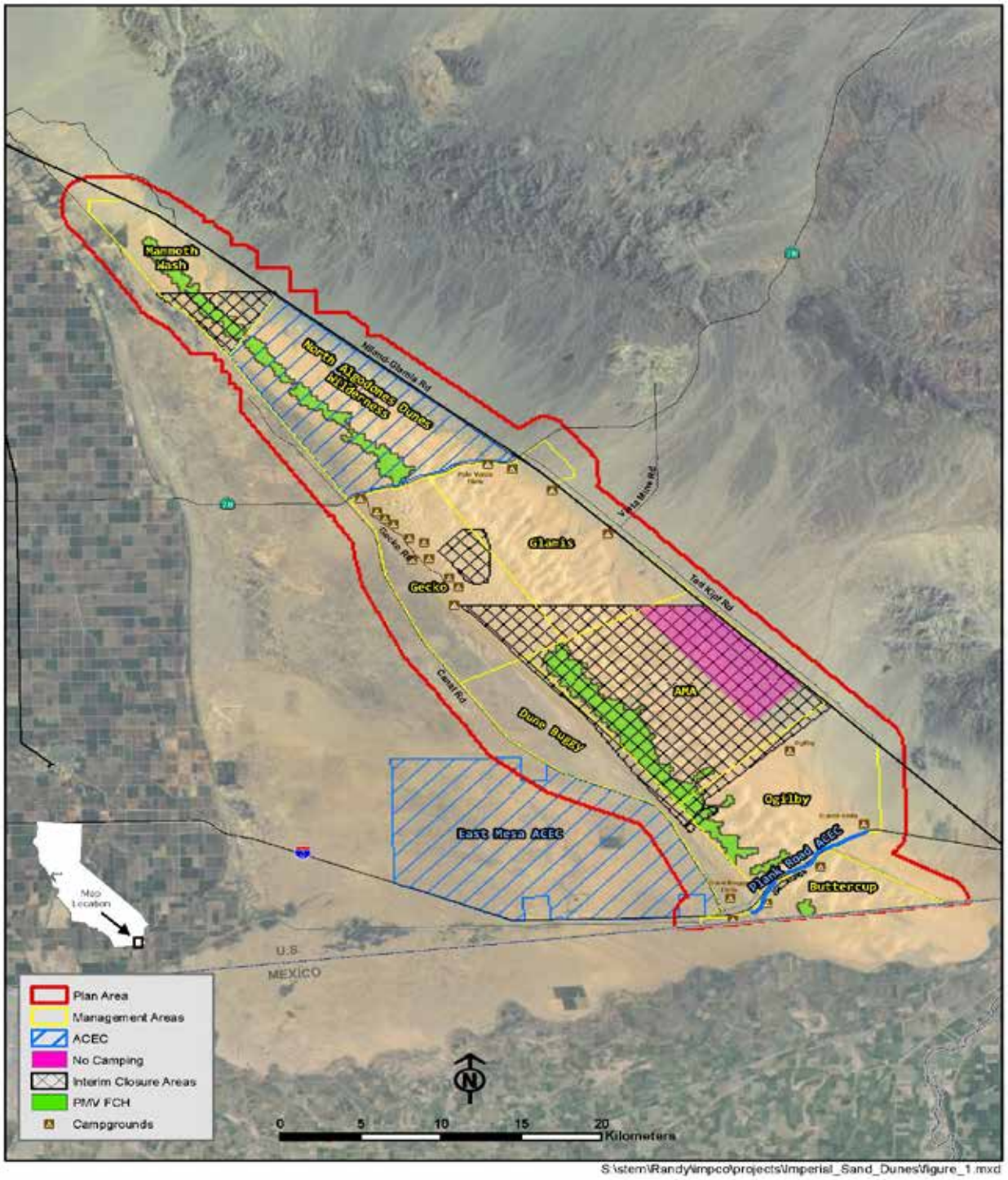

Figure 1. Location of Areas of Critical Environmental Concern (ACECs), the North Algodones Dunes Wilderness Area, Management Areas (MAs, as designated under the 2003 remanded RAMP), camping closure area, interim closure areas, and Peirson's milk-vetch final critical habitat (PMV FCH) in the Imperial Sand Dunes Recreation Area, Imperial County, California

APPENDIX B

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Routes of Travel

All routes have been classified as motorized or non-motorized. Motorized routes are open to all vehicles, including OHVs. Some motorized routes may have additional limitations on use, including vehicle size, vehicle type, and season of use, or by limiting use to administrative vehicles only. Non-motorized routes will be closed to motorized vehicles, including OHV, but open to biking, hiking, and equestrian use.

Implementation-level Decisions

Routes of travel within the OHV limited use area surrounding the ISD SRMA have been designated as open (motorized) routes, except for Grays Well Road, Luis Aguilar Road, Wash Road, and Gecko Road, which are limited to street legal vehicles only. To minimize impacts to sensitive species, stopping, parking, and camping along the open routes in the Flat-tailed Horned Lizard Management Area is limited to within 50 feet on either side of the route centerline. Routes within the ISD SRMA, excluding the wilderness, have also been designated as open, except for Grays Well Road, Luis Aguilar Road, Wash Road, and Gecko Road, which are limited to street legal vehicles only. Open routes are available to motorized vehicles. Limited routes may have additional limitations on use including vehicle size, vehicle type, and season of use. Closed routes would be closed to motorized vehicles, including OHVs, but open to biking, hiking, and equestrian use. There are a total of approximately 191.4 miles of motorized routes within the Planning Area. See also Section 2.22.2, Table 2-7, of the RAMP for additional details of goals and objectives, and management actions for routes of travel. Map 2-8 illustrates the locations of the various routes of travel.

Management Actions for Designated Routes of Travel

To minimize impacts to sensitive resources, reduce conflicts between users, and provide for visitor safety, the following will apply to designated routes and surrounding lands within the Planning Area:

TPA-08 Maintain, and where necessary, improve Wash Road.

TPA-09 Allow primary motorized vehicle travel only on designated routes. Emergency vehicles may utilize a drivable wash to access a site. Where no roads exist, vehicles could be authorized on a case-by-case basis to travel cross-country to avoid the need for road building, with appropriate environmental analysis.

TPA-10 Ensure that designated routes within the Planning Area are adequately signed and mapped for public use.

TPA-11 Where new roads are considered in the future, roadbeds will be no wider than needed for reliable access. Proposed new roads would be considered only after

appropriate environmental analysis and will use BLM specifications and BMPs to minimize impacts to resources and reduce erosion.

TPA-12 Reduce vehicle incursions or trespass on closed routes or in closed areas by restoring lands to their pre-disturbance conditions as rapidly as funding permits. Sensitive resources in immediate danger or those that have been damaged by linear disturbances will be a high priority for restoration. Typically, the restoration will be limited to that portion of the route of trespass that is in line of sight from an open route. Each route will be evaluated on a case-by-case basis, and the most appropriate method of restoration will be used based on geography, topography, soils, hydrology, and vegetation. The methods of restoration will include:

- Not repairing washed-out routes
- Using natural barriers, such as large boulders
- Using rocks and dead and downed wood to obscure the route entryway
- Employing mulching, chipping, and raking to disguise evidence of routes
- Ripping up the route bed and reseeding with vegetation native to that area
- Utilizing fences or barriers
- Providing signage, including information to OHV users, on the need and value of resource protection
- Converting closed motorized two-track routes into non-motorized single track routes

Administrative Remedies for Appeals

A person who wishes to appeal to the ISD ROD and RAMP must file a notice expressing the wish to appeal in the office of the officer who made the decision. A person served with the decision being appealed must transmit the Notice of Appeal in time for it to be filed in the office where is required to be filed within 30 days after the date of service. If a decision is published in the *Federal Register*, a person not served with the decision must transmit a Notice of Appeal in time for it to be filed within 30 days after the date of publication (43 CFR 4.411 and 4.413).

The *Federal Register* notice announcing the availability of this ROD and RAMP will initiate the 30-day appeal period for the implementation-level decisions on Routes of Travel. The *Notice of Appeal* should state the specific route(s), as identified in Section 2.18.2, Table 2-7, Routes of Travel Designations of the ROD and RAMP, on which the decision is being appealed. Map 2-8 illustrating the routes of travel is included in this ROD/RAMP and are also available at BLM's web site: (http://www.blm.gov/ca/st/en/fo/elcentro.html) or the El Centro Field Office (1661 South 4th Street, El Centro, California 92243) or by calling 760-337-4400.

APPENDIX C

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Laws, Regulations, and Executive Orders

BLM must comply with the mandate and intent of the following federal laws (and any applicable regulations) and Executive Orders that apply to BLM-administered lands and resources in the Planning Area.

Air

A. Clean Air Act, 42 USC 7401 et seq.

The primary objective of the Clean Air Act is to establish federal standards for various pollutants from both stationary and mobile sources and to provide for the regulation of polluting emissions via state implementation plans. In addition, the amendments are designed to prevent significant deterioration in certain areas where air quality exceeds national standards, and to provide for improved air quality in areas which do not meet federal standards (non-attainment areas).

Federal facilities are required to comply with air quality standards to the same extent as nongovernmental entities. Part C of the 1977 amendments stipulates requirements to prevent significant deterioration of air quality and, in particular, to preserve air quality in national parks, national wilderness areas, national monuments and national seashores.

The amendments establish Class I, II and III areas, where emissions of particulate matter and sulfur dioxide are to be restricted. The restrictions are most severe in Class I areas and are progressively more lenient in Class II and III areas.

Mandatory Class I federal lands include all national wilderness areas exceeding 500 acres. Federal land managers are charged with direct responsibility to protect the air quality and related values (including visibility) of Class I lands and to consider, in consultation with Environmental Protection Agency, whether proposed facilities will have an adverse impact on these values.

Native American Tribes

A. American Indian Religious Freedom Act, 42 USC 1996

This act recognizes that freedom of religion for all people is an inherent right and that traditional American Indian religions are an indispensable and irreplaceable part of Indian life. Establishing federal policy to protect and preserve the inherent right of religious freedom for Native Americans, this act requires federal agencies evaluate their actions and policies to determine if changes should be made to protect and preserve the

religious cultural rights and practices of Native Americans. Such evaluations are made in consultation with native traditional religious leaders.

B. Consultation and Coordination with Indian Tribal Governments, Executive Order 13175, November 6, 2000

In formulating or implementing policies that have tribal implications, agencies shall respect Indian tribal self-government and sovereignty, honor tribal treaty and other rights, and strive to meet the responsibilities that arise from the unique legal relationship between the federal government and Indian tribal governments.

C. Indian Sacred Sites, Executive Order 13007, May 24, 1996

In managing federal lands, agencies shall, to the extent practicable, permitted by law, and not inconsistent with agency functions, accommodate Indian religious practitioners' access to and ceremonial use of Indian sacred sites. Agencies are to avoid adversely affecting the physical integrity of these sites, maintaining the confidentiality of such sites, and informing tribes of any proposed actions that could restrict access to, ceremonial use of, or adversely affect the physical integrity of, sacred sites.

D. Native American Graves Protection and Repatriation Act, 25 USC 3001-13

This act establishes requirements for the treatment of Native American human remains and sacred or cultural objects found on federal land.

In any case where such items can be associated with specific tribes or groups of tribes, the agency is required to provide notice of the item in question to the tribe or tribes. Upon request, each agency is required to return any such item to any lineal descendant or specific tribe with whom such item is associated. There are various additional requirements imposed upon the Secretary.

E. Religious Freedom Restoration Act, 42 USC 2000bb

This act is aimed at preventing laws which substantially burden a person's free exercise of their religion. The Religious Freedom Restoration Act reinstated the Sherbert Test, mandating that strict scrutiny be used when determining if the Free Exercise Clause of the First Amendment to the U.S. Constitution, guaranteeing religious freedom, has been violated. In this, the courts must first determine whether a person has a claim involving a sincere religious belief, and whether government action has a substantial burden on the person's ability to act on that belief. If these two elements are established, then the

government must prove that it is acting in furtherance of a compelling state interest, and that it has pursued that interest in the manner least restrictive, or least burdensome, to religion.

Antiquities/Archaeology

A. Antiquities Act, 16 USC 431–433

This act authorizes the President to designate as National Monuments objects or areas of historic or scientific interest on lands owned or controlled by the United States. The act required that a permit be obtained for examination of ruins, excavation of archaeological sites and the gathering of objects of antiquity on lands under the jurisdiction of the Secretaries of Interior, Agriculture, and Army, and provided penalties for violations.

B. Archeological and Historic Preservation Act, 16 USC 469–469c

This law was enacted to carry out the policy established by the Historic Sites Act, directed federal agencies to notify the Secretary of the Interior whenever they find a federal or federally assisted, licensed or permitted project may cause loss or destruction of significant scientific, prehistoric or archaeological data. The act authorized use of appropriated, donated and/or transferred funds for the recovery, protection and preservation of such data.

C. Archaeological Resources Protection Act, 16 USC 470aa–470ll

This act largely supplanted the resource protection provisions of the Antiquities Act for archaeological items. It established detailed requirements for issuance of permits for any excavation for or removal of archaeological resources from federal or Indian lands. It also established civil and criminal penalties for the unauthorized excavation, removal, or damage of any such resources; for any trafficking in such resources removed from federal or Indian land in violation of any provision of federal law; and for interstate and foreign commerce in such resources acquired, transported or received in violation of any state or local law.

D. Historic Sites, Buildings and Antiquities Act, 16 USC 461–462, 464–467

This act declared it a national policy to preserve historic sites and objects of national significance. It provided procedures for designation, acquisition, administration and protection of such sites. Among other things, National Historic and Natural Landmarks are designated under authority of this act.

E. National Historic Preservation Act, 16 USC 470 et seq.

This act provided for preservation of significant historical features (buildings, objects and sites) through a grant-in-aid program to the states. It established the National Register of Historic Places and a program of matching grants under the existing National Trust for Historic Preservation. The act established an Advisory Council on Historic Preservation, which was made a permanent independent agency in1976. Federal agencies are directed to take into account the effects of their actions on items or sites listed or eligible for listing in the National Register of Historic Places.

F. Preserve America, Executive Order 13287, March 3, 2003

Agencies shall provide leadership in preserving America's heritage by actively advancing the protection, enhancement, and contemporary use of the historic properties owned by the federal government.

Each agency is to provide and maintain an assessment of the status of its inventory of historic properties and their ability to contribute to community economic development initiatives.

Where consistent with its mission and governing authorities, and where appropriate, agencies shall seek partnerships with state and local governments, Indian tribes, and the private sector to promote the unique cultural heritage of communities and of the nation and to realize the economic benefit that these properties can provide; and cooperate with communities to increase opportunities for public benefit from, and access to, federally owned historic properties.

G. Protection and Enhancement of Cultural Environment, Executive Order 11593, May 13, 1971

Federal agencies are to provide leadership in the preservation, restoration, and maintenance of the historic and cultural environment. Agencies are to locate and evaluate all federal sites under their jurisdiction or control which may qualify for listing on the National Register of Historic Places or sites that qualify. Agencies are to initiate procedures to maintain such federally owned sites. The Advisory Council on Historic Preservation must be allowed to comment on the alteration, demolition, sale, or transfer of property which is likely to meet the criteria for listing as determined in consultation with the SHPO.

Environment—General

A. Environmental Quality Improvement, Act 42 USC 4371 et seq.

Ensures each federal agency conducting or supporting public works activities affecting the environment implements policies established under existing law principally by establishing the Office of Environmental Quality to provide assistance to, and oversight of, federal agencies.

B. Federal Land Policy and Management Act, 43 USC 1701 et seq.

The "Organic Act" for the BLM, this act provides for the inventory and planning of the public lands to ensure that these lands are managed in accordance with the intent of Congress under the principles of multiple use and sustained yield. The lands are to be managed in a manner that protects the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values that, where appropriate, will preserve and protect certain public lands in their natural conditions, that will provide food and habitat for fish and wildlife and domestic animals, and that will provide for outdoor recreation and human occupancy and use by encouraging collaboration and public participation throughout the planning process.

In addition, the public lands must be managed in a manner that recognizes the Nation's need for domestic sources of minerals, food, timber, and fiber from the public lands. Many old laws were repealed but rights obtained under those laws are protected. New authority for the disposal of appropriate public lands through sale or exchange is provided. Right-of-way granting procedures are provided for both the BLM and the U.S. Forest Service. The regulations contained in 43 CFR Part 1600 govern the BLM planning process.

C. National Environmental Policy Act, 42 USC 4321 et seq.

NEPA encourages productive and enjoyable harmony between man and his environment and promotes efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of humans; enriches the understanding of the ecological systems and natural resources important to the nation.

NEPA requires that for recommendations or reports on proposals for legislation and other major actions significantly affecting the quality of the human environment that federal agencies through a systematic, interdisciplinary approach which will insure the

integrated use of the natural and social sciences and the environmental design arts in planning and in decision making which may have an impact on the human environment; include a detailed statement by the responsible official on: the environmental impact of the proposed action; any adverse environmental effects which cannot be avoided should the proposal be implemented; alternatives to the proposed action; the relationship between local short-term uses of the human environment and the maintenance and enhancement of long-term productivity; and any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.

D. Protection and Enhancement of Environmental Quality, Executive Order 11514, March 5, 1970

Federal agencies shall initiate measures needed to direct their policies, plans and programs so as to meet national environmental goals of protecting and enhancing the quality of the nation's environment to sustain and enrich human life.

Agencies should monitor, evaluate, and control on a continuing basis their agencies' activities so as to protect and enhance the quality of the environment. Such activities shall include those directed to controlling pollution and enhancing the environment and those designed to accomplish other program objectives which may affect the quality of the environment.

Agencies shall ensure the fullest practicable provision of timely public information and understanding of federal plans and programs with environmental impact in order to obtain the views of interested parties. This will include, whenever appropriate, provision for public hearings, and shall provide the public with relevant information, including information on alternative courses of action.

E. Federal Action to Address Environmental Justice in Minority Populations and Low-income Populations, Executive Order 12898, February 11, 1994

Agencies shall make achieving environmental justice part of its mission by identifying and addressing disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.

Fire

A. Timber Protection Act, 16 USC 594

This act authorizes the Secretary of the Interior to protect timber on lands under the department's jurisdiction from fire, disease and insects

Fish and Wildlife

A. Animal Damage Control Act, 7 USC 426–426c

This act, as amended, gives the Secretary of Agriculture broad authority for investigation, demonstrations and control of mammalian predators, rodents and birds.

B. Bald Eagle Protection Act, 16 USC 668–668d

This law provides for the protection of the bald eagle (the national emblem) and the golden eagle by prohibiting, except under certain specified conditions, the taking, possession and commerce of such birds.

C. Conservation of Migratory Birds, Executive Order 13186, January 10, 2001

Executive Order 13186 creates a more comprehensive strategy for the conservation of migratory birds by the federal government. The order provides a specific framework for the federal government's compliance with its treaty obligations to Canada, Mexico, Russia, and Japan. The order provides broad guidelines on conservation responsibilities and requires the development of more detailed guidance in Memorandum of Understanding within two years of its implementation. The order will be coordinated and implemented by the USFWS. The Memorandum of Understanding will outline how federal agencies will promote conservation of migratory birds. The order will requires the support of various conservation planning efforts already in progress; incorporation of bird conservation considerations into agency planning, including NEPA analyses; and reporting annually on the level of take of migratory birds.

D. Endangered Species Act, 16 USC 1532 et seq.

This act provides for the conservation of ecosystems upon which threatened and endangered species of fish, wildlife, and plants depend, both through federal action and by encouraging the establishment of state programs. The act: authorizes the determination and listing of species as endangered and threatened; prohibits unauthorized taking, possession, sale, and transport of endangered species; provides authority to acquire land for the conservation of listed species, using land and water

conservation funds; authorizes establishment of cooperative agreements and grants-in-aid to states that establish and maintain active and adequate programs for endangered and threatened wildlife and plants; authorizes the assessment of civil and criminal penalties for violating the act or regulations; and authorizes the payment of rewards to anyone furnishing information leading to arrest and conviction for any violation of the act or any regulation issued there under.

Section 7 of the Endangered Species Act requires federal agencies to insure that any action authorized, funded or carried out by them is not likely to jeopardize the continued existence of listed species or modify their critical habitat.

E. Exotic Organisms, Executive Order 11987, May 24, 1977

Agencies, to the extent permitted by law, are to: restrict the introduction of exotic species into the natural ecosystems on lands and waters owned or leased by the U.S.; encourage states, local governments, and private citizens to prevent the introduction of exotic species into natural ecosystems of the U.S.; restrict the importation and introduction of exotic species into any natural U.S. ecosystems as a result of activities they undertake, fund, or authorize; and restrict the use of federal funds, programs, or authorities to export native species for introduction into ecosystems outside the U.S. where they do not occur naturally.

F. Migratory Bird Treaty Act of 1918, amended in 1936, 1960, 1968, 1969, 1974, 1978, 1986, and 1998

The Migratory Bird Treaty Act implements treaties and conventions between the U.S., Canada, Japan, Mexico, and Russia for the protection of migratory birds. Unless otherwise permitted by regulations, the act makes it unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. The act also make it unlawful to ship, transport or carry from one state, territory or district to another, or through a foreign country, any bird, part, nest or egg that was captured, killed, taken, shipped, transported or carried contrary to the laws from where it was obtained; and import from Canada any bird, part, nest or egg obtained contrary to the laws of the province from which it was obtained. The Department of the Interior has authority to arrest, with or without a warrant, a person violating the act.

G. Neotropical Migratory Bird Conservation Act, Public Law 106–247

This act provides grants to countries in Latin America, the Caribbean, and the U.S. for the conservation of neotropical migratory birds that winter south of the border and summer in North America. The law encourages habitat protection, education, researching, monitoring, and capacity building to provide for the long-term protection of neotropical migratory birds.

H. Recreational Fisheries, Executive Order 12962, June 7, 1995

Agencies shall improve the quantity, function, sustainable productivity, and distribution of U.S. aquatic resources for increased recreational fishing opportunities by such activities as: developing and encouraging partnerships between governments and the private sector to advance aquatic resource conservation and enhance recreational fishing opportunities, identifying recreational fishing opportunities that are limited by water quality and habitat degradation and promoting restoration to support viable, healthy, and, where feasible, self-sustaining recreational fisheries, fostering sound aquatic conservation and restoration endeavors to benefit recreational fisheries, supporting outreach programs designed to stimulate angler participation in the conservation and restoration of aquatic systems, and implementing laws under their purview in a manner that will conserve, restore, and enhance aquatic systems that support recreational fisheries.

Land

A. Desert Land Act, 43 USC 321 et seq.

This act allows entry of up to 320 acres of desert land where the entryman intends to reclaim the land for agricultural purposes within three years. Lands must be determined to be available and classified pursuant to 43 USC 315f before such an entry can be allowed.

B. Exchanges of Public Land for Non-federal Land, 43 USC 1716

Allows the exchange of public land, or interests therein, for non-federal lands where it is determined (the Secretary finds) that the public interest will be well served by making the exchange. Values of the disposed and acquired lands must be equal in value.

C. Federal Land Exchange Facilitation Act, 43 USC 1716, August 20, 1988

Amends the exchange provisions of FLPMA to streamline and facilitate land exchange procedures and to expedite exchanges.

D. Federal Land Transaction Facilitation Act, Public Law 106–248, July 25, 2000

Provides a more expeditious process for disposal and acquisition of land to facilitate a more effective configuration of land ownership patterns.

Funds from the sale of specified land is deposited in a special fund available to acquire land and to process additional land sales.

E. Recreation and Public Purposes Act, 43 USC 869 et seq.

This act provides for the lease or disposal of public lands, and certain withdrawn or reserved lands, to state and local governments and qualified non-profit organizations to be used for recreational or public purposes. Prices that are charged for land use or acquisition are normally less than market value of the specific lands. The act allows for reversion of the lands under certain conditions.

F. Sales of Public Lands, 43 USC 1713

Allows the sale of public lands found suitable for use other than frazing or the production of forage crops that also:

- is difficult and uneconomic to manage, or
- the tract was acquired for a purpose for which the tract is no longer necessary, or
- disposal of the tract will serve important public objectives.

Mining and Mineral Leasing

A. General Mining Law, 30 USC 21 et seq.

This authority sets forth rules and procedures for the exploration, location and patenting of lode, placer, and mill site mining claims. Claimants must file notice of the original claim with the BLM as well as annual notice of intention to hold, affidavit of assessment work or similar notice.

B. Mining and Mineral Policy Act, 30 USC 21a

This act expressed the national policy to foster and encourage private enterprise in the development of economically sound and stable domestic mining, minerals, metal and mineral reclamation industries, the orderly and economic development of domestic mineral resources, reserves, and reclamation of metals and minerals to help assure satisfaction of industrial, security and environmental needs, mining, mineral, and metallurgical research, including the use and recycling of scrap to promote the wise and efficient use of our natural and reclaimable mineral resources, and the study and development of methods for the disposal, control, and reclamation of mineral waste products, and the reclamation of mined land, so as to lessen any adverse impact of mineral extraction and processing upon the physical environment that may result from mining or mineral activities.

C. Stock Raising Homestead Act, 43 USC 291–299

Patents issued under this authority reserved minerals to the U.S. as well as the right to prospect for, mine, and remove said minerals. Certain conditions exist to protect the patentee's improvements.

D. Mineral Leasing Act, 30 USC 181 et seq.

This act authorizes and governs leasing of public lands for development of deposits of coal, oil, gas and other hydrocarbons, sulphur, phosphate, potassium and sodium.

E. Federal Coal Leasing Amendments Act, 30 USC 201

This act made major changes in the way coal leases tracts are established, economic and environmental considerations, sale/leasing procedures, and penalties for violations.

F. Surface Mining Control and Reclamation Act, 30 USC 1201 et seq.

This act establishes a program for the regulation of surface mining activities and the reclamation of coal-mined lands, under the administration of the Office of Surface Mining, Reclamation and Enforcement in the Department of the Interior.

The law sets forth minimum uniform requirements for all coal surface mining on federal and state lands, including exploration activities and the surface effects of underground mining. Mine operators are required to minimize disturbances and adverse impact on fish, wildlife and related environmental values and achieve enhancement of such resources where practicable. Restoration of land and water resources is ranked as a priority in reclamation planning.

G. Geothermal Steam Act, 30 USC 1001 et seq.

This act authorizes and governs the lease of geothermal steam and related resources on public lands.

H. Mineral Leasing Act for Acquired Lands, 30 USC 351 et seq.

This act authorizes and governs mineral leasing on acquired lands.

I. Materials Sales Act, 30 USC 601–604

This act provides for the disposal of materials on public lands and requires the Secretary, under such rules and regulations as he may prescribe, may dispose of mineral materials (including but not limited to common varieties of the following: sand, stone, gravel, pumice, pumicite, cinders, and clay) and vegetative materials (including but not limited to yucca, manzanita, mesquite, cactus, and timber or other forest products) on public lands of the United States. Such materials may be disposed of upon the payment of adequate compensation. The Secretary is authorized in his discretion to permit any federal, state, or territorial agency, unit or subdivision, including municipalities, or any association or corporation not organized for profit, to take and remove, without charge, materials and resources for use other than for commercial or industrial purposes or resale.

Pollution—General

A. Comprehensive Environmental Response Compensation and Liability Act (Superfund), 42 USC 9601 et seq.

The Superfund statute was enacted in 1980; major amendments were enacted in 1983 and in 1986. The 1980 statute authorized, through 1985, the collection of taxes on crude oil and petroleum products, certain chemicals, and hazardous wastes. It also established liability to the U.S. government for damage to natural resources over which the U.S. has sovereign rights and requires the President to designate federal officials to act as trustees for natural resources. Use of Superfund monies to conduct natural resource damage assessments was provided.

The 1983 amendments established a comprehensive system to react to releases of hazardous substances and to determine liability and compensation for those affected. The President is authorized to notify federal and state natural resource trustees of potential damages to natural resources and to coordinate related assessments.

Amendments enacted in 1986 (known as the Superfund Amendment and Reauthorization Act, among others, 1) added effects on natural resources as a criterion for determining facilities to be placed on the National Priorities List, 2) mandated the designation of federal officials to act as trustees for natural resources and to assess damages and injury to, as well as destruction of, or loss of, natural resources, 3) stipulated that Superfund monies may only be used for natural resource damage claims if all administrative and judicial remedies to recover costs from liable parties have been exhausted, 4) clarified that federal facilities are subject to the same cleanup requirements and liability standards as non-governmental entities, and 5) eliminated the authorization for use of Superfund monies to conduct damage assessments.

B. Federal Environmental Pesticide Control Act, 7 USC 136

This act, in simple terms, provided for a program for controlling the sale, distribution, and application of pesticides through an administrative registration process and for classifying pesticides for "general" or "restricted" use. Restricted pesticides may only be applied by or under the direct supervision of a certified applicator

C. Federal Compliance with Pollution Control Standards, Executive Order 12088

To ensure federal compliance with applicable pollution control standards, this executive order provides as follows: 1) the head of each executive agency is responsible for ensuring that all necessary actions are taken for the prevention, control, and abatement of environmental pollution with respect to federal facilities and activities under the control of the agency, and 2) the head of each executive agency is responsible for compliance with applicable pollution control standards. Applicable pollution control standards means the same substantive, procedural, and other requirements that would apply to a private person.

D. Superfund Implementation, Executive Order 12580

This Executive Order delegates to various federal officials the responsibilities vested in the President for implementing the Comprehensive Environmental Response Compensation and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986. This Executive Order and the National Contingency Plan (the implementing regulations of the act) are the basis of the Department of Energy’s authority to implement the act at Department of Energy facilities. The Executive Order delegates the authority and responsibility to the Department of Energy, while the National Contingency Plan describes the Environmental Protection Agency’s procedures for implementing the Comprehensive Environmental Response Compensation and Liability Act program. The Department of Energy is required to carry out a number of key

functions, including, providing representatives to the National Response Team, the interagency organization responsible for planning for and responding to Comprehensive Environmental Response Compensation and Liability Act releases; acting as a natural resource trustee for land that the Department of Energy manages; performing natural resource damage assessments; and assuming authority for response actions resulting from releases of hazardous substances on, over, or under land that the Department of Energy manages.

E. Federal Compliance with Right to Know Laws and Pollution Prevention Requirements, Executive Order 12856, August 3, 1993

Requires agencies to comply with the provisions of the Pollution Prevention Act and to assure all necessary actions are taken to prevent pollution. The CEQ provided guidance on pollution prevention in the Federal Register of January 29, 1993.

F. Resource Conservation and Recovery Act, 42 USC 6901 et seq.

This act regulates the treatment, transportation, storage, and disposal of solid and hazardous wastes. The BLM is required to comply with standards for wastes generated at its facilities. The key provisions include:

- Identification and listing of hazardous waste and standards applicable to hazardous waste. This requires reporting of hazardous waste, permitting for storage, transport, and disposal, and it includes provisions for oil recycling and federal hazardous waste facilities inventories.
- Management for solid waste, including landfills.
- Applicability of federal, state, and local laws to federal agencies.
- Management, replacement, and monitoring of underground storage tanks.

G. Toxic Substances Control Act, 15 USC 2601 et seq.

This act authorized the Environmental Protection Agency to obtain data from industry on health and environmental effects of chemical substances and mixtures. If unreasonable risk or injury may occur, the Environmental Protection Agency may regulate, limit or prohibit the manufacture, processing, commercial distribution, use and disposal of such chemicals and mixtures.

H. Pollution Prevention Act, 42 USC 13101 et seq.

This act encourages manufacturers to avoid the generation of pollution by modifying equipment and processes, redesigning products, substituting raw materials, and making improvements in management techniques, training and inventory control.

I. Solid Waste Disposal Act, 42 USC 6901 et seq.

Establishes a national policy that, wherever feasible, the generation of hazardous waste is to be reduced or eliminated as expeditiously as possible. Waste that is nevertheless generated should be treated, stored, or disposed of so as to minimize the present and future threat to human health and the environment. It directs the Environmental Protection Agency to provide guidelines for the treatment, handling, and storage of such wastes.

Rangelands

A. Federal Noxious Weed Act, 7 USC 2801 et seq.

This act provides the Secretary of Agriculture authority to designate plants as noxious weeds by regulation, and prohibits the movement of all such weeds in interstate or foreign commerce except under permit. The Secretary also has authority to inspect, seize and destroy products, and to quarantine areas, if necessary to prevent the spread of such weeds. The Secretary is also authorized to cooperate with other federal, state and local agencies, farmers associations and private individuals in measures to control, eradicate, or prevent or retard the spread of such weeds.

Each federal land-managing agency is to designate an office or person adequately trained in managing undesirable plant species to develop and coordinate a program to control such plants on the agency's land.

B. Invasive Species, Executive Order 13112, February 3, 1999

The purpose is to prevent the introduction of invasive species and provide for their control, as well as to minimize the economic, ecological, and human health impacts that invasive species cause.

Agencies whose actions may affect the status of invasive species shall: 1) identify such actions, 2) use relevant programs and authorities to prevent, control, monitor, and research such species, and 3) not authorize, fund, or carry out actions that it believes are likely to cause or promote the introduction or spread of invasive species in the U.S. or elsewhere

C. Noxious Plant Control Act, 43 USC 1241–43

Authorizes agencies to allow, and pay for, state authorities to enter federal land for the control/destruction of noxious plants.

Recreation

A. Off-Road Vehicles, Executive Order 11644, February 8, 1972 and Executive Order 11989, May 24, 1977

These orders require public land managers "to establish policies and procedures that will ensure that the use of off-highway vehicles on public lands will be controlled and directed to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize conflicts among the various uses of those lands."

B. Federal Lands Recreation Enhancement Act, 16 USC 6801 et seq.

The Federal Lands Recreation Enhancement Act was enacted by Congress as part of the 2005 Omnibus Appropriations Bill. The act limits fees to sites that have a specified minimum level of development and meet specific criteria. Additional safeguards include provisions that require the use of Recreation Resource Advisory Committees and specific requirements to provide the public with information about fees and how fee revenues will be used. The act provides agencies with recreation fee authority for 10 years, which will allow the agencies to improve the efficiency of the program, provide better facilities and services to the visitors, employ greater use of technology, and enter into more fee management agreements with counties and other entities to provide additional services to visitors.

The act benefits visitors to federal public lands by:

- Providing a consistent, interagency fee program that reduces confusion over differing national fee programs and passes
- Providing more opportunities for public involvement in determining recreation fee sites and fees levels
- Providing focused criteria and limits on areas and sites in which recreation fees can be charged
- Providing a revenue source to enhance visitor services and address the backlog of maintenance needs at recreation facilities

- Providing more opportunities for cooperation with gateway communities through fee management agreements for visitor and recreation services, emergency medical services and law enforcement services

Rights-of-Way

With the passage of FLPMA in 1976, BLM was left with existing rights-of-way ("Pre-FLPMA" rights-of-way) and three basic authorities under which public lands may be used or dedicated to various types of rights-of-way.

A. Pre-FLPMA Rights-of-way, 43 USC 1701 Savings Provision

Various laws provided for rights-of-way ranging from ditches and canals through communications to railroads. Some are indefinite in term and will remain under the pre-FLPMA authority until abandoned. Others have definite terms and will come under current authorities if amended or renewed.

B. Oil and Gas Pipeline Rights-of-way, 30 USC 185

The Mineral Leasing Act of 1920, as amended, contains provisions for the issuance of rights-of-way for the transportation of natural gas and oil or products derived there from. The term of the right-of-way is limited to 30 years but is renewable. Where an application involves land administered by two or more federal agencies, the Secretary of the Interior has delegated the decision making to the BLM. Federal agencies are not eligible under this authority.

C. FLPMA Rights-of-way, 43 USC 1761 et seq.

Title V of FLPMA gives the BLM authority to authorize most types of right-of-way use, other than oil and gas Rights-of-way, on the public lands. The term of the right-of-way is determined by need and conditions; it may be indefinite but usually is around 30 years. Rights-of-way may be renewed.

D. Federal Aid Highways, 23 USC 317

Where Federal Aid Highways are involved, the Secretary of Transportation may appropriate federal land for such highway projects. Applications or requests are usually filed by the State Department of Transportation through the local office of the Federal Highway Administration. If BLM does not disapprove such a request within 120 days, the appropriation is automatic. When BLM issues a letter "consenting" to the appropriation reasonable terms and conditions may be included.

E. Energy Supply, Distribution, or Use, Executive Order 13211, May 18, 2001

This order requires an impact and alternative analysis for any proposed rule that would have an adverse impact on energy supply, distribution, or use.

F. Environmental Stewardship and Transportation Infrastructure Project Reviews, Executive Order 13274, September 18, 2002

Agencies shall take appropriate actions, to the extent consistent with applicable law and available resources, to promote environmental stewardship in the nation's transportation system and expedite environmental reviews of high-priority transportation infrastructure projects.

For transportation infrastructure projects, agencies shall, in support of the Department of Transportation, formulate and implement administrative, policy, and procedural mechanisms that enable each agency required by law to conduct environmental reviews with respect to such projects to ensure completion of such reviews in a timely and environmentally responsible manner.

Renewable Energy

A. Action to Expedite Energy Related Projects, Executive Order 13212, May 18, 2001

For energy-related projects, agencies shall expedite their review of permits or take other actions as necessary to accelerate the completion of such projects, while maintaining safety, public health, and environmental protections. The agencies shall take such actions to the extent permitted by law and regulation, and where appropriate.

B. Energy Policy Act, Public Law 109–58

On August 8, 2005, the Energy Policy Act of 2005 (Public Law 109-58) was signed into law. Section 211 of the act states, “It is the sense of the Congress that the Secretary of the Interior should, before the end of the 10-year period beginning on the date of enactment of this Act, seek to have approved non-hydropower renewable energy projects located on the public lands with a generation capacity of at least 10,000 megawatts of electricity.” This act also contains a multitude of provisions covering energy production, distribution, storage, efficiency, conservation, and research. Other topics of note include renewable energy, expansion of the Strategic Petroleum Reserve, fuel production access in federal lands, the ban of drilling in the Great Lakes, electricity reliability, hydrogen vehicles, vehicle efficiency and alternative fuels, ethanol, and motor fuels.

Trails

A. National Parks and Recreation Act of 1978, Public Law 95–625

This act provides for increases in appropriations ceilings, development ceilings, land acquisition, and boundary changes in certain federal park and recreation areas, and for other purposes. It provides for the establishment of new units of the national park system, numerous boundary changes, and authorization increases for existing units of the national park system, and designated portions of a number of existing national park system areas as wilderness. It also established a new category in the National Trails System labeled National Historic Trails and would designate additional national scenic trails.

B. National Trails System Act, 16 USC 1241–1249

This act provides for establishment of National Recreation Trails, National Scenic Trails, and National Historic Trails.

National Recreation Trails may be established by the Secretaries of Interior or Agriculture on land wholly or partly within their jurisdiction, with the consent of the involved state(s), and other land managing agencies, if any. National Scenic Trails and National Historic Trails may only be designated by an Act of Congress.

Water—General

A. Clean Water Act, Public Law 95–217

The Clean Water Act extensively amended the federal Water Pollution Act. Of particular significance were the following provisions:

- Development of a Best Management Practices Program as part of the state area wide planning program
- Authority for the U.S. Army Corps of Engineers to issue general permits on a state, regional, or national basis for any category of activities which are similar in nature, will cause only minimal environmental effects when performed separately, and will have only minimal cumulative adverse impact on the environment
- Exemption of various activities from the dredge and fill prohibition including normal farming, silviculture, and ranching activities (33 USC 1344(f))
- Procedures for state assumption of the regulatory program.

The Clean Water Act requires the Environmental Protection Agency to establish water quality standards for specified contaminants in surface waters and forbids the discharge of pollutants from a point source into navigable waters without a National Pollutant Discharge Elimination System permit. These permits are issued by the Environmental Protection Agency or the appropriate state if it has assumed responsibility. Section 404 of the Clean Water Act establishes a federal program to regulate the discharge of dredged and fill material into waters of the United States. Section 404 permits are issued by the U.S. Army Corps of Engineers.

B. Federal Water Pollution Control Act, 33 USC 1251 et seq.

The original 1948 statute, the Water Pollution Control Act, authorized the Surgeon General of the Public Health Service, in cooperation with other federal, state and local entities, to prepare comprehensive programs for eliminating or reducing the pollution of interstate waters and tributaries and improving the sanitary condition of surface and underground waters. During the development of such plans, due regard was to be given to improvements necessary to conserve waters for public water supplies, propagation of fish and aquatic life, recreational purposes, and agricultural and industrial uses. The original statute also authorized the Federal Works Administrator to assist states, municipalities, and interstate agencies in constructing treatment plants to prevent discharges of inadequately treated sewage and other wastes into interstate waters or tributaries.

Since 1948, the original statute has been amended extensively either to authorize additional water quality programs, standards and procedures to govern allowable discharges, funding for construction grants or general program funding. Amendments in other years provided for continued authority to conduct program activities or administrative changes to related activities.

C. Flood Control Act, 16 USC 460d et seq.

This act, as amended and supplemented by other flood control acts and river and harbor acts, authorizes various U.S. Army Corps of Engineers water development projects. This statute expressed Congressional intent to limit the authorization and construction of navigation, flood control, and other water projects to those having significant benefits for navigation and which could be operated consistent with other river uses. The authority to construct, operate and maintain public park and recreational facilities in reservoir areas was also provided.

D. Floodplain Management, Executive Order 11988, May 24, 1977

The purpose of this Executive Order is to prevent agencies from contributing to the "adverse impacts associated with the occupancy and modification of floodplains" and the "direct or indirect support of floodplain development."

In the course of fulfilling their respective authorities, agencies "shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains."

Before proposing, conducting, supporting or allowing an action in a floodplain, each agency is to determine if planned activities will affect the floodplain and evaluate the potential effects of the intended actions on its functions. Agencies shall avoid siting development in a floodplain "to avoid adverse effects and incompatible development in the floodplains,"

E. Oil Pollution Act, 33 USC 2701 et seq.

This act established new requirements and extensively amended the federal Water Pollution Control Act to provide enhanced capabilities for oil spill response and natural resource damage assessment

Among other provisions are that federal trustees shall assess natural resource damages for natural resources under their trusteeship. Federal trustees may, upon request from a state or Indian tribe, assess damages to natural resources for them as well. Trustees shall develop and implement a plan for the restoration, rehabilitation, replacement, or acquisition of the equivalent of natural resources under their trusteeship.

F. Protection of Wetlands, Executive Order 11990, May 24, 1977

Similar to Floodplain Management, agencies are directed to consider alternatives to avoid adverse effects and incompatible developments in areas of wetlands. New construction is to be avoided if possible.

G. Safe Drinking Water Act, 42 USC 300h

This act establishes a program to monitor and increase the safety of all commercially and publicly supplied drinking water. This act was amended in 1986 to require the Environmental Protection Agency to establish Maximum Contaminant Levels, Maximum Contaminant Level Goals, and Best Available Technology treatment techniques for organic, inorganic, radioactive, and microbial contaminants, and turbidity. In 1996,

current federal Maximum Contaminant Level Goals and Best Available Technology treatment techniques in public drinking water supplies were set.

H. Water Quality Act, Public Law 100–4

This act provided the most recent series of amendments to the federal Water Pollution Act. Provisions included:

- Requirement that states develop strategies for toxics cleanup in waters where the application of Best Available Technology discharge standards is not sufficient to meet state water quality standards and support public health,
- Increase in the penalties for violations of Section 404 permits, and
- Requirement that the Environmental Protection Agency study and monitor the water quality effects attributable to the impoundment of water by dams.

I. Water Resources Planning Act, 42 USC 1962a–1962(a)(4)(e)

This act established a Water Resources Council to be composed of Cabinet representatives, including the Secretary of the Interior. It also established River Basin Commissions and stipulated their duties and authorities.

The Council was empowered to maintain a continuing assessment of the adequacy of water supplies in each region of the United States. In addition, the Council was mandated to establish principles and standards for federal participants in the preparation of river basin plans and in evaluating federal water projects. Upon receipt of a river basin plan, the Council was required to review the plan with respect to agricultural, urban, energy, industrial, recreational and fish and wildlife needs.

J. Water Rights, 43 USC 666

This act waives the sovereign immunity of the U.S. where there is a suit designed to establish the rights to a river or other source of water, or the administration of such rights, and the U.S. appears to own or be in the process of acquiring rights to any such water. (The effect is to permit state courts to adjudicate federal water rights claims under state law.)

Wilderness

A. California Desert Protection Act, Public Law 103–433

This act designated lands in the BLM California Desert District as wilderness, established Death Valley and Joshua Tree National Parks, and established the Mojave National Preserve. Each designated wilderness area would be administered by BLM in accordance with the provisions of the Wilderness Act, except that any reference to the effective date of the Wilderness Act shall be deemed to be a reference to the effective date of this title.

B. Wilderness Act, 16 USC 1131 et seq.

This act established a National Wilderness System of areas to be designated by Congress. It directed the Secretary of the Interior, within 10 years, to review every roadless area of 5,000 or more acres and every roadless island (regardless of size) within National Wildlife Refuge and National Park Systems and to recommend to the President the suitability of each such area or island for inclusion in the National Wilderness Preservation System, with final decisions made by Congress. The Secretary of Agriculture was directed to study and recommend suitable areas in the National Forest System.

The act provides criteria for determining suitability and establishes restrictions on activities that can be undertaken on a designated area. Criteria set by Congress within this act states that wilderness areas have the following characteristics: 1) Generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; 2) has outstanding opportunities for solitude or a primitive and confined types of recreation; 3) has at least 5,000 acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and 4) may also contain ecological, geological or other features of scientific, educational, scenic or historical value. The Wilderness Act also set the accepted uses of designated wilderness areas and what uses are prohibited. The act sets special provisions for an agency's continuing management of existing or grandfathered rights such as mining and grazing and other agency mission related activities.

Other

A. Federal Advisory Committee Act, Public Law 92–463

The Federal Advisory Committee Act is a federal law (Public Law 92-463, October 6, 1972) which governs the behavior of advisory committees. In particular it restricts the

formation of such committees to only those which are deemed essential, limits their powers to provision of advice to officers and agencies in the executive branch of the federal government, and limits the length of term during which any such committee may operate. The Federal Advisory Committee Act declared that all administrative procedures and hearings were to be public knowledge. Also see "sunshine clause" and "Administrative Procedure Act Section 553."

B. Federal Power Act, 16 USC 791–828c

Established what is now the Federal Energy Regulatory Commission. Studies water related power development possibilities. Licenses and oversees the development of water power project on federal and non-federal land. On federal land coordinates with agencies and, for some agencies they may dictate conditions to be included in licenses.

The Federal Energy Regulatory Commission also regulates interstate electric transmission lines and interstate oil and gas pipelines. Issues “certificates of public convenience” for these interstate facilities.

C. Federalism, Executive Order 13132, August 4, 1999

In formulating and implementing policies that have federalism implications, agencies shall be guided by the following principles:

- Federalism is rooted in the belief that issues that are not national in scope or significance are most appropriately addressed by the level of government closest to the people.
- The people of the states created the national government and delegated to it enumerated governmental powers. All other sovereign powers, save those expressly prohibited the states by the Constitution, are reserved to the states or to the people.
- The Framers recognized that the states possess unique authorities, qualities, and abilities to meet the needs of the people and should function as laboratories of democracy.
- The nature of our constitutional system encourages a healthy diversity in the public policies adopted by the people of the several states according to their own conditions, needs, and desires. One-size-fits-all approaches to public policy problems can inhibit the creation of effective solutions to those problems.
- Policies of the national government should recognize the responsibility of—and should encourage opportunities for—individuals, families, neighborhoods, local governments, and private associations to achieve their personal, social, and economic objectives through cooperative effort.

- The national government should be deferential to the states when taking action that affects the policymaking discretion of the states and should act only with the greatest caution where state or local governments have identified uncertainties regarding the constitutional or statutory authority of the national government.

D. Freedom of Information Act, Public Law 85–619

The Freedom of Information Act is the implementation of freedom of information legislation in the United States. The act explicitly applies only to federal government agencies. These agencies are under several mandates to comply with public solicitation of information. Along with making public and accessible all bureaucratic and technical procedures for applying for documents from that agency, agencies are also subject to penalties for hindering the process of a petition for information. However, there are nine exemptions, ranging from a withholding "specifically authorized under criteria established by an Executive Order to be kept secret in the interest of national defense or foreign policy" and trade secrets to "clearly unwarranted invasion of personal privacy." In all cases, the President has unlimited power in declaring something off-limits or necessarily classified in the concern of national safety.

E. Land and Water Conservation Fund, 16 USC 460l–460l-11

This fund is derived from various types of revenue (primarily Outer Continental Shelf oil monies) and appropriations from the fund may be used for 1) matching grants to states for outdoor recreation projects and 2) land acquisition for various federal agencies.

F. Intergovernmental Review of Federal Programs, Executive Order 12372

In order to foster an intergovernmental partnership and a strengthened federalism by relying on state and local processes, the provisions of Executive Order 12372, July 14, 1982, provides that: 1) federal agencies shall provide opportunities for consultation by elected officials of those state and local governments that would provide the non-federal funds for, or that would be directly affected by, proposed federal financial assistance or direct federal development, and 2) To the extent the states, in consultation with local general purpose governments, and local special purpose governments they consider appropriate, develop their own processes or refine existing processes for state and local elected officials to review and coordinate proposed federal financial assistance and direct federal development.

G. Privacy Act of 1974, Public Law 93–579

The Privacy Act states in part, that no agency shall disclose any record which is contained in a system of records by any means of communication to any person, or to

another agency, except pursuant to a written request by, or with the prior written consent of, the individual to whom the record pertains. However, there are specific exceptions for the record allowing the use of personal records. These exceptions are as follows: 1) for statistical purposes by the Census Bureau and the Bureau of Labor Statistics, 2) for routine uses within a U.S. government agency, 3) for archival purposes "as a record which has sufficient historical or other value to warrant its continued preservation by the U.S. government," 4) for law enforcement purposes, 5) for Congressional investigations, and(6) other administrative purposes. The Privacy Act mandates that each U.S. government agency have in place an administrative and physical security system to prevent the unauthorized release of personal records.

H. Regulatory Impact Analysis, Executive Order 12866, September 30, 1993

Requires agencies to analyze the economic impact of proposed rules.

I. Takings, Executive Order 12630, March 15, 1988

The Fifth Amendment of the U.S. Constitution provides that private property shall not be taken for public use without just compensation. Government historically has used the formal exercise of the power of eminent domain, which provides orderly processes for paying just compensation, to acquire private property for public use. Supreme Court decisions, however, in reaffirming the fundamental protection of private property rights provided by the Fifth Amendment and in assessing the nature of governmental actions that have an impact on constitutionally protected property rights, have also reaffirmed that governmental actions that do not formally invoke the condemnation power, including regulations, may result in a taking for which just compensation is required.

Agencies shall evaluate carefully the effect of their actions on constitutionally protected property rights to prevent unnecessary takings and should account in decision-making for those takings that are necessitated by statutory mandate.

J. Actions to Expedite Energy-Related Projects, Executive Order 13212

On May 18, 2001, the President signed Executive Order 13212, “Actions to Expedite Energy-Related Projects,” which states that “the increased production and transmission of energy in a safe and environmentally sound manner is essential” (Federal Register, Volume 66, page 28357, May 22, 2001). Executive departments and agencies are directed to “take appropriate actions, to the extent consistent with applicable law, to expedite projects that will increase the production, transmission, or conservation of energy.” Executive Order 13212 further states that “For energy-related projects, agencies shall expedite their review of permits or take other actions as necessary to accelerate the completion of such projects, while maintaining safety, public health, and

environmental protections. The agencies shall take such actions to the extent permitted by law and regulation and where appropriate."

K. Federal Leadership Environmental, Energy, and Economic Performance, Executive Order 13514

On October 5, 2009, the President signed Executive Order 13514, "Federal Leadership in Environmental, Energy, and Economic Performance," which requires that federal agencies take efforts to align their policies to advance local planning efforts for energy development, including renewable energy (Federal Register, Volume 74, page 52117, Oct. 5, 2009). Specifically, the order states that agencies shall "advance regional and local integrated planning by . . . aligning federal policies to increase the effectiveness of local planning for energy choices such as locally generated renewable energy."

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APPENDIX D

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Monitoring Plan

The BLM would monitor and evaluate management strategies and resource conditions and trends to determine the effectiveness of the RAMP and to ensure that its implementation is achieving the desired results. Information on resource conditions obtained through monitoring would be used to assess the effectiveness of management strategies and evaluate whether or not management should be adapted to accommodate new information, changes in demands on resources, or other considerations.

The BLM would monitor the Planning Area to quantify the number of recreational visits, types of recreational activities and use patterns, accomplishment of management objectives, and potential adverse impacts to resources and visitor experiences from recreational use. The results of the monitoring would provide an opportunity to identify actions to protect resources, enhance visitor experiences, and deal with health and safety needs in the area.

The monitoring program would include such actions as:

- Monitoring vehicle counters to observe visitation levels
- Wildlife water (guzzler) monitoring to observe wildlife use levels
- Migratory bird surveys to assess bird populations and overall ecosystem health

Monitoring would help the BLM to detect and document natural and human-induced changes in resource conditions and visitor experiences, and offer insights into the effectiveness of resource management policies and objectives. It would also help agency personnel understand what might be driving the changes requiring intervention (corrective management actions or strategies).

Land use plan monitoring is conducted in two stages. The first is to ensure that decisions are implemented in accordance with the approved plan and ROD. This type of monitoring is conducted as plan decisions become effective or when decisions to approve implementation-level plans or to implement site-specific projects are approved or implemented.

As stated in the BLM Land Use Planning Handbook H-1601-1, (page 33):

> Implementation monitoring is the process of tracking and documenting the implementation (or the progress toward implementation) of land use plan decisions. This should be done at least annually and should be documented in the form of a tracking log or report. The report must be available for public review

(one way to accomplish this is an annual planning update which can be sent to those who participated in the planning process or have expressed an interest in receiving the report). The report should describe management actions proposed or undertaken to implement land use plan decisions and can form the basis for annual budget documents. In subsequent years, reports should document which management actions were completed and what further actions are needed to continue implementing land use plan decisions.

The next stage of monitoring is to determine whether land use plan decisions are achieving the desired effects. Effectiveness monitoring provides an empirical database on impacts of decisions and effectiveness of mitigation. Effectiveness monitoring is also useful for improving analytical procedures for future impact analyses and for designing or improving mitigation and enhancement measures.

Effectiveness monitoring is the process of collecting data and information to determine whether or not desired outcomes (expressed as goals and objectives in the land use plan) are being met (or progress is being made toward meeting them) as the allowable uses and management actions are being implemented.

A monitoring strategy must be developed as part of the land use plan that identifies indicators of change, acceptable thresholds, methodologies, protocols, and timeframes that would be used to evaluate and determine whether or not desired outcomes are being achieved. The monitoring process should collect information in the most cost-effective manner and may involve sampling or remote sensing.

Monitoring could be so costly as to be prohibitive if it is not carefully and reasonably designed. Therefore, it is not necessary or desirable to monitor every management action or direction. Unnecessary detail and unacceptable costs can be avoided by focusing on key monitoring questions and proper sampling methods. The level and intensity of monitoring would vary, depending on the sensitivity of the resource or area and the scope of the proposed management activity.

This monitoring plan is a dynamic document. Based on periodic reviews of the quality of the data collected and the usefulness of the data for making management decisions, it would be amended as necessary in order to ensure that the most important information is available to the manager for decision-making.

Table D-1 includes examples of monitoring that periodically occur within the Planning Area and outlines an approach to monitoring based on needs identified in this RAMP. Monitoring would be directed at areas in which specific and important resource values and visitor experiences could be threatened.

TABLE D-1
MONITORING PLAN FOR IMPERIAL SAND DUNES RAMP/CDCA PLAN AMENDMENT

Type of Monitoring	How Often?	Where Will it Take Place?	Purpose?
Colorado Desert fringe-toed lizard monitoring	As funding and staffing levels allow (individual sightings to be recorded)	Areas to be determined	To assess Colorado Desert fringe-toed lizard population levels and overall ecosystem health
Flat-tailed horned lizard sighting recordation	As sightings occur	Areas to be determined	To aid in assessment of flat-tailed horned lizard population levels and overall ecosystem health
Peirson's milk-vetch monitoring	In years when 1.82-inch rainfall threshold during October, November, and December is met	Areas to be determined	To assess Peirson's milk-vetch population levels, aid in recovery of the species, and assess overall ecosystem health
Algodones Dunes sunflower; Wiggins' croton; Other special status species monitoring	As funding and staffing levels allow	Areas to be determined	To assess Algodones Dunes sunflower, Wiggins' croton, and other special status plant populations and overall ecosystem health
Invertebrate monitoring	As funding and staffing levels allow	Areas to be determined	To assess invertebrate populations and overall ecosystem health
Mojave population of desert tortoise monitoring	As funding and staffing levels allow (individual sightings to be recorded)	Areas to be determined	To assess desert tortoise population levels and overall ecosystem health
Wildlife guzzler monitoring	Each year	Each documented wildlife guzzler within the Planning Area boundary	To assess proper functioning condition of the wildlife guzzler and monitor wildlife use
Microphyll woodlands migratory bird monitoring	Each spring and fall	Microphyll woodlands	To assess bird populations and overall ecosystem health
Tamarisk removal/monitoring	Each year	Each documented infestation site	To boost overall ecosystem health and eradicate an invasive species; to improve wildlife habitat

TABLE D-1
MONITORING PLAN FOR IMPERIAL SAND DUNES RAMP/CDCA PLAN AMENDMENT

Type of Monitoring	How Often?	Where Will it Take Place?	Purpose?
Wilderness monitoring	Each year	Each wilderness boundary in the Planning Area	To monitor activity in and around the wilderness, and ensure wilderness objectives are being met
Law enforcement patrols/monitoring	Year-round	All BLM lands in the Planning Area	To monitor legal and illegal activity occurring in the Planning Area, stop illegal activity, and promote resource protection
Vehicle counters	Year-round	Gecko Road, Glamis Flats, Osborne Overlook, Wash Road, Buttercup, Dunebuggy Flats, and Ogilby access road	To monitor visitor use patterns at various sites in the Planning Area
Campground monitoring	During fall/winter/spring high season use	Buttercup, Gray's Well, Keyhole, Midway, Gecko, Roadrunner, and Dunebuggy Flats campgrounds	To monitor visitor use patterns at developed and primitive campgrounds in the Planning Area
Cultural resources monitoring	Year-round	All BLM lands in the Planning Area	To monitor cultural sites for visitor use and vandalism/theft
Closure boundary monitoring	Year-round	Peirson's milk-vetch closure boundaries	To monitor for incursions into the Peirson's milk-vetch critical habitat closure
Rainfall monitoring	Year-round	Remote area weather stations located at Buttercup and Cahuilla Ranger stations	To monitor rainfall amounts for effects on special status plant and animal species.
Track cover density monitoring	Every 3–5 years, dependent on conditions	Throughout the Planning Area	To monitor visitor use patterns

Special Status Species

This appendix provides the methodology that would be used to monitor special status species and habitats of concern in the Planning Area, as well as visitor use patterns. Through research, monitoring, and analysis of the monitoring data, BLM would determine visitor use patterns and impacts to species and habitats of concern due to various land uses in the Planning Area, and use this information to make management changes, if necessary.

BLM would coordinate with the USFWS or other agencies to develop and implement the most up-to-date scientific approaches to monitor species.

A Colorado Desert Fringe-toed Lizard

In the past, BLM has completed survey transects during spring and fall to estimate the density of Colorado Desert fringe-toed lizards (*Uma notata*) in a comparison of open and closed areas in terms of OHV recreation.

BLM anticipates monitoring for fringe-toed lizards on an as-needed basis. Monitoring may include transects and/or study plots, or another protocol to be developed, depending on best scientific methods.

B Flat-tailed Horned Lizard

Data from years past appear to indicate that the flat-tailed horned lizard is less abundant in the dunes than in surrounding areas. The density and cryptic nature of flat-tailed horned lizard make full-scale monitoring ineffective in the Planning Area.

The BLM became a signatory to the Flat-tailed Horned Lizard Range-wide Management Strategy in 2003. In that document, flat-tailed horned lizard management areas were designated in the El Centro Resource Area on the East Mesa, West Mesa, and Yuha Desert. BLM does not anticipate monitoring for flat-tailed horned lizard in the ISD SRMA, but would monitor west of the ISD SRMA, in the East Mesa management area, as funding and staffing levels allow. All sightings in the Planning Area would be reported to the wildlife biologist and dates and locations would be saved in a database as to better understand their range and habitat use.

C Mojave Population of Desert Tortoise

While desert tortoise are not known to occur regularly in the Planning Area, they are known to regularly occur (although at a very low density) in the area east of the Planning Area. Monitoring for the Mojave population of desert tortoise is anticipated to occur during or before each ground disturbing project that takes place in or adjacent to documented desert tortoise habitat in the Planning Area.

BLM does not anticipate monitoring for desert tortoise in the Planning Area on an annual basis, but would monitor at the project level in order to prevent take of desert tortoises.

D Special Status Plant Monitoring and Management

The ISD supports numerous dune-endemic plants. Species whose distribution is restricted to the dunes or whose status indicates that special management is necessary to ensure the ongoing persistence of the species are of special interest. These species include:

- Peirson's milk-vetch (*Astragalus magdalenae* var. *peirsonii*)—Federally Listed as Threatened
- Algodones Dunes sunflower (*Helianthus niveus* spp. *tephrodes*)—State Rare
- Wiggins' croton (*Croton wigginsii*)—State Rare

Peirson's milk-vetch would receive the highest level of priority, since this species was federally listed as threatened primarily due to threats posed by OHV activity. The monitoring and research pertaining to Peirson's milk-vetch would provide information that may be useful in managing all target plant and animal species in the dunes.

D.1 Peirson's Milk-vetch Monitoring

The frequency of full-scale monitoring would correspond to years in which adequate precipitation occurs between October and December. The rationale for reducing the frequency of monitoring to good-rainfall years (above a 1.82-inch threshold) is that the abundance of Peirson's milk-vetch in any spring is highly correlated with the amount of rainfall in the growing season immediately preceding that spring (Willoughby 2001). Between wetter years, the Peirson's milk-vetch population declines as plants die and are not replaced due to lack of germination. Monitoring during poor rainfall years could result in a lower encounter rate for Peirson's milk-vetch plants that is not reflective of the species' status. Monitoring during poor rainfall years could, however, provide information concerning the persistence of adult plants and the relative importance of these plants to seed bank contributions.

D.1.1 Sampling Methodology

The type/method of sampling Peirson's milk-vetch would depend largely on the extent of the germination event that triggers it. In years where the monitoring threshold is not met, BLM does not expect to implement a full-scale monitoring effort. In these years, BLM would implement a smaller scale, less formal monitoring regime to get a feel for the conditions on the ground, the numbers of Peirson's milk-vetch germinating, if any, and the areas where germination is occurring. The type of monitoring implemented each year would be based on precipitation levels, funding availability, and staffing availability.

Should there be a large amount of rainfall (much greater than the 1.82-inch monitoring threshold), and an extensive germination event occurs, it is possible that BLM would monitor for such information as Peirson's milk-vetch density or seed bank estimates. This could be accomplished through monitoring of belt transects (long, narrow quadrats), which are accepted as the best way to monitor for a plant that is often found in clumps, as Peirson's milk-vetch often is found, or other widely accepted sampling methods. Return trips to transects monitored in 2005, 2006, and 2007 could also provide valuable data and may also be employed. The numbers of transects and locations of transects would be determined each year that monitoring is implemented to ensure that the highest quality data is collected.

The following information may be collected for Peirson's milk-vetch: 1) total number of individuals observed; 2) number of flowering individuals; 3) number of non-flowering individuals; 4) number of individuals older than 1 year (this can be determined by the presence of basal leaf/branch scars); 5) number of individuals with apparent physical damage from OHVs; and 6) number of individuals with damage from other sources (e.g., insects).

D.2 Other Special Status Plant Monitoring

Other special status plants in the Planning Area, including Algodones Dunes sunflower and Wiggin's croton are of special interest because their distribution is largely restricted to the ISD, and because they are listed as rare by the CDFW.

BLM would monitor these species as funding and staffing levels allow.

Invertebrate Inventory/Monitoring

The Planning Area is home to several endemic invertebrates, and invertebrate inventory results from the 2008 and 2009 field season indicated that over 1,000 species of invertebrates occur in the Planning Area.

The BLM would continue inventory/monitoring for invertebrates as funding and staffing levels allow.

Precipitation Monitoring

Long-term weather stations in the region do not completely capture the actual growing season precipitation occurring in the dunes. These weather stations are some distance from the Planning Area, the seasonal precipitation totals vary greatly between stations, and there is strong indication that precipitation varies considerably within the Planning Area during the same growing season (Willoughby 2000 and 2001). For these reasons, two remote area weather stations (RAWS) were set up in the Planning Area in fall 2000, one at the Cahuilla Ranger Station in the northwest part of the Planning Area and one at Buttercup Campground in the southern part of the Planning Area. These stations began collecting weather data on November 16, 2000. It is not uncommon for the Cahuilla Ranger Station RAWS to collect differing amounts of rainfall than the Buttercup Ranger Station RAWS. Because of this variability and the importance of precipitation in controlling the abundance of special status plants, the Colorado Desert fringe-toed lizard, and the flat-tailed horned lizard, more weather stations are necessary to enable good interpretation of the monitoring data collected.

Recreation Monitoring

OHV recreation levels and identification of high density areas would be estimated by means of several methods: vehicle counters, visitor surveys, and aerial photography.

There are currently seven vehicle counters placed throughout the Planning Area at Gecko Road, Glamis Flats, Osborne Overlook, Wash Road, Buttercup, Dunebuggy Flats, and Ogilby. The vehicle counters are used to estimate visitation levels at campgrounds throughout the Planning Area. The BLM would continue to monitor each vehicle counter. Counters would be monitored more often during the high use season (October through April), and less often during the summer months when visitation slows dramatically.

The BLM, along with other management partners, routinely engage ISD visitors through visitor surveys to ascertain patterns, preferences, and demographics, and also routinely perform fee compliance checks in campgrounds throughout the SRMA. These monitoring efforts are used to ascertain visitation levels, and to monitor fee compliance throughout the SRMA. The BLM would continue to conduct demographic studies to obtain data on the willingness-to-pay and actual expenditure data by OHV recreation visitors under different management regimes. These elements respond to the need to account for the economic impact of OHV recreation visitors on local and regional communities.

BLM law enforcement and recreation staffs routinely patrol the Planning Area, most often during the high use season. Law enforcement and recreation staffs monitor closure

boundaries for compliance, and law enforcement rangers issue citations to violators. BLM staff would continue to monitor closure boundaries for compliance.

In past years, BLM has also obtained aerial photos to use as a tool to monitor visitor use patterns. Air photo transects were established in 1998 throughout the Planning Area to obtain a sample of the distribution and intensity of OHV recreation through the measurement of vehicle tracks. Because of the ephemeral nature of vehicle tracks in sand, it is necessary to take the photographs during a weekend of relatively high vehicle use. Aerial photographs would be sampled by means of a grid of points to estimate the cover of vehicle tracks. The size of the grid and number of points per transect would be determined based on the sampling objectives. OHV recreation data would be used to make inferences concerning the effects of different levels of OHV recreation on particular species. The photographic information collected would be used to assess changes in OHV recreation levels and OHV recreation patterns.

A Comparative Evaluation between Peirson's Milk-vetch and OHV Recreation Surveys

In the past, BLM has compared Peirson's milk-vetch abundance to OHV recreation surveys through the use of both Peirson's milk-vetch density surveys and aerial photography-aided OHV recreation surveys.

As described in the Peirson's milk-vetch monitoring section, belt transects have been established. These transects would subsequently be identified on aerial photographs developed for OHV monitoring. Peirson's milk-vetch abundance would be compared to OHV recreation levels. The correlative studies described above allow inferences to be made regarding effects of OHVs on Peirson's milk-vetch.

Microphyll Woodland Migratory Bird Surveys

BLM has performed migratory bird point counts in the microphyll woodland habitats on the east side of the Planning Area for several years. Over 100 species have been identified during these surveys, and have served as a good indicator of overall ecosystem health.

The BLM would continue monitoring bird populations in the microphyll woodlands as funding and staffing levels allow. Monitoring would be conducted in accordance with variable circular plot protocols.

Wildlife Guzzler Monitoring

There are six wildlife guzzlers in the Planning Area, with plans for installation of additional wildlife guzzlers in the future. BLM staff regularly visits these wildlife guzzlers to assess proper functioning condition and to monitor wildlife use.

BLM would continue to monitor these wildlife guzzlers as funding and staffing levels allow.

Invasive Species Monitoring

Due to the rapid spread of certain invasive species, it has become necessary in recent years to monitor for infestations in the Planning Area. The two most common invasive species in the planning area are tamarisk or salt cedar (*Tamarix* spp.) and Sahara mustard (*Brassica tournefortii*).

BLM would continue to monitor for invasive species throughout the planning area, and perform removal/treatment of these species as funding and staffing levels allow, with a priority on removal from the North Algodones Dunes Wilderness.

Wilderness Monitoring

BLM would continue to monitor recreational activity in the North Algodones Dunes Wilderness, as well as monitor the wilderness boundary for incursions.

Law Enforcement Patrol/Monitoring

BLM would continue to patrol and monitor all areas of the Planning Area as part of law enforcement ranger duties. Special emphasis may be put on high use visitor areas, as well as closure boundaries (wilderness boundary, Peirson's milk-vetch critical habitat boundary) to enforce said closure boundaries to the best of BLM's ability.

Cultural Resources Monitoring

The BLM currently requires all ground-disturbing activities in the Planning Area to undergo a cultural resource survey before any ground disturbance may take place. BLM would continue this policy to avoid disturbance to cultural resources whenever possible.

In addition, periodic monitoring of cultural resources within the Planning Area, especially those in high use areas, would continue as part of the cultural resource program.

APPENDIX E

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Typical Management Actions and Best Management Practices

Vegetation Treatments (Including Fire Management Activities)

The following chemical, mechanical, manual, biological, and fire treatment methods would be used to achieve vegetation management objectives in the Planning Area.

A. Chemical

BLM would use EPA-approved herbicides in accordance with the Environmental Protection Agency's Endangered Species Pesticide Program covered in the BLM's Vegetation Treatment Using Herbicides on BLM Lands in Seventeen Western States Draft Programmatic EIS (BLM 2007a). These herbicides are: Atrazine; Bromacil; Bromacil + Diuron; 2,4-D, 2,4-DP,Dicamba; Dicamba +2,4_D; Diruon; Glyphosate; Glyphosate + 2,4-D; Hexazinone; Fosamine, Imazapyr; Picloram; Picloram + 2,4-D; Simazine; Tebuthiuron; and Triclopyr.

Buffer zones would be used adjacent to dwellings, domestic water sources, agricultural land, streams, lakes and ponds. A minimum buffer zone of 100 feet would be provided for aerial application, 25 feet for vehicle application, and 10 feet for hand application. Any deviations must be in accordance with the label for the herbicide. Herbicides would be manually applied on individual plants within 10 feet of water where application is critical. The buffer zones described above would provide additional protection to listed, proposed, and candidate species.

BLM would work closely with the USFWS to ensure that herbicide applications would not affect listed or proposed, threatened, and endangered species on a project-level basis. If adverse effects are anticipated during informal consultation, BLM would formally consult on these projects. If USFWS develops herbicide guidance for particular species that improves protection beyond the current BLM design features, BLM would consider and incorporate that guidance as it consults with USFWS on a project-level basis.

The chemicals can be applied by many different methods, and the selected technique depends on a number of variables. Some of these are: 1) the treatment objective (removal or reduction); 2) the accessibility, topography, and size of the treatment area; 3) the characteristics of the target species and the desired vegetation; 4) the location of sensitive areas in the immediate vicinity (potential environmental impacts); 5) the anticipated costs and equipment limitations; and 6) the meteorological and vegetative conditions of the treatment area at the time of treatment. Herbicide applications would be

timed to have the least impact on non-target plants and animals consistent with the objectives of the vegetation management program.

The chemicals would be applied aerially with helicopters or fixed-wing aircraft, or on the ground using vehicles or manual application devices. Helicopters are more expensive to use than fixed-wing aircraft, but they are more maneuverable and effective in areas with irregular terrain and in treating specific target vegetation in areas with many vegetation types. Manual applications are used only for treating small areas or those inaccessible by vehicle.

Rates of herbicide application would depend on the target species, other vegetation present, soil type, depth of the ground water table, and presence of water sources. When target species occur in riparian areas, the application rate would be reduced to minimize injury to non-target species.

During aerial applications, nozzles to reduce drift would be used for all liquid applications. Liquid herbicides would not be applied when wind speed exceeds 5 miles per hour, and granular herbicides would not be applied when wind speed exceeds 10 miles per hour. Herbicides would not be applied when conditions stated on the herbicide label cannot be met and when air turbulence significantly affects the desired spray pattern. Buffer zones to protect water resources would be provided according to guidance mentioned above in this appendix.

Vehicle-mounted sprayer (hand gun or boom) applications would be mainly used in open areas that are readily accessible by vehicle. The boom would be used only where feasible to treat concentrated weed infestations. The hand gun would be used for spot treatment of weeds and only up to the high water line near water bodies. Neither hand guns nor booms would be used in riparian areas where weeds are closely intermingled with native shrubs and trees. Under both hand gun and boom methods, sprays would be applied in a manner that gives the best possible coverage with the least amount of drift, and only when wind velocity is below 8 miles per hour, except in riparian areas where treatment would be applied only at wind speeds below 5 miles per hour. Boom sprayers would not be used within 25 feet of water bodies.

Hand applications could involve backpack spraying, hand wiping application, and cyclone broadcast spreading (granular formulations). Backpack sprayers are operated at low pressure and low volume and release herbicide through a single nozzle held from 0.5 to 2.5 feet above the ground when wind velocities do not exceed 8 miles per hour. Near water, wind velocities cannot exceed 5 miles per hour. Contact systemic herbicides, such as glyphosate, wiped on individual plants, would be used up to the existing high water line. Granular formulations would be applied through broadcast spreaders at about 3.5 feet above the ground and no closer than 10 feet from the high water line of streams and other water bodies.

Herbicide applications are scheduled and designed to minimize potential impacts on non-target plants and animals, while remaining consistent with the objective of the vegetation treatment program. The rates of application depend on the target species, presence, and condition of non-target vegetation, soil type, depth to the water table, presence of other water sources, and the requirements of the label.

In many circumstances, the herbicide chosen, time of treatment, and rate of application of the herbicide are different than the most ideal herbicide application for maximum control of the target plant species in order to minimize damage to the non-target plant species and to ensure minimum risk to human health and safety.

B. Mechanical

Mechanical methods of vegetation treatment employ several different types of equipment to suppress, inhibit, or control herbaceous and woody vegetation (Vallentine 1980). The goal of mechanical treatments is to kill or reduce the cover of undesirable vegetation and thus encourage the growth of desirable plants. BLM uses wheel tractors, crawler-type tractors, mowers, or specially designed vehicles with attached implements for mechanical vegetation treatments. The use of mechanical equipment to reduce fuel hazards would be conducted in accordance with BLM-established procedures. Re-seeding after a mechanical treatment has been applied is important to help ensure that desirable plants would become established on the site and not invasive species. The mechanical treatment and re-seeding should occur at a time to best control the undesirable vegetation and encourage the establishment of desirable vegetation. The best mechanical method for treating undesired plants in a particular location depends on the following factors:

- Characteristics of the undesired species present such as plant density, stem size, woodiness, brittleness, and re-sprouting ability
- Need for seedbed preparation, re-vegetation, and improved water infiltration rates
- Topography and terrain
- Soil characteristics such as type, depth, amount and size of rocks, erosion potential, and susceptibility to compaction
- Climatic and seasonal conditions
- Potential cost of improvement as compared to expected results

Bulldozing is conducted with a wheeled or crawler tractor with a heavy hydraulic controlled blade. Vegetation is pushed over and uprooted, and then left in windrows or piles. Bulldozing is best adapted to removing scattered stands of large brushes or trees. There are several different kinds of blades available depending on the type of vegetation

and goals of the project. The disadvantage of bulldozing is soil disturbance and damage to non-target plant species.

C. Manual

Hand-operated power tools and hand tools are used in manual vegetation treatment to cut, clear, or prune herbaceous and woody species. In manual treatments, workers would cut plants above ground level; pull, grub, or dig out plant root systems to prevent subsequent sprouting and re-growth; scalp at ground level or remove competing plants around desired vegetation; or place mulch around desired vegetation to limit the growth of competing vegetation. Hand tools such as the handsaw, axe, shovel, rake, machete, grubbing hoe, mattock (combination of axe and grubbing hoe), brush hook, and hand clippers are used in manual treatments. Axes, shovels, grubbing hoes, and mattocks can dig up and cut below the surface to remove the main root of plants such as prickly pear and mesquite that have roots that can quickly resprout in response to surface cutting or clearing. Workers also may use power tools such as chain saws and power brush saws.

Manual methods are highly labor intensive, requiring periodic retreatment, ranging from every three weeks during the growing season to annually, depending on the target species. These methods have been successful in controlling annuals and biennials, but are ineffective in controlling creeping perennials.

D. Cultural Resources

Should cultural and/or paleontological resources be encountered during project ground-disturbing activities, work will cease in the area of the discovery, and the BLM cultural resource specialist will be notified immediately. Work may not resume until written authorization to proceed is issued by the BLM cultural resource specialist.

The management of cultural resources on BLM land must be in compliance with several federal laws, including the Antiquities Act of 1906; the National Historic Preservation Act of 1966, as amended; the NEPA of 1969; Executive Order 11593, “Protection and Enhancement of the Cultural Environment,” the FLPMA of 1976; the American Indian Religious Freedom Act of 1978; the Archaeological Resources Protection Act of 1979; the Native American Graves Protection and Repatriation Act of 1990; Executive Order 13007, “Indian Sacred Sites,” and Executive Order 13287, “Preserve America.” In addition, the BLM manages its cultural resources according to BLM Manual 8100, “The Foundation for Managing Cultural Resources,” Manual 8110, “Identifying and Evaluating Cultural Resources,” and Manual 8140, “Protecting Cultural Resources.” These laws and regulations direct BLM to:

- Restrict public information about the locations of sites that are not allocated to public use, as allowed by law and regulation.

- Ensure that all proposed undertakings and authorizations are reviewed and conducted in compliance with applicable federal laws including Section 106 of the National Historic Preservation Act.
- Complete consultations with the California SHPO prior to project implementation, as necessary.
- Ensure that information on Native American religious and cultural issues receives good faith consideration during decision making and that government-to-government consultation procedures are carried out as appropriate for each proposed action.

E. Paleontological Resources

If vertebrate paleontological resources and scientifically significant invertebrate and plant fossil resources are discovered, the user/operator shall suspend all operations that further disturb such materials and immediately contact the authorized officer. User/operators shall not resume until written authorization to proceed is issued by the authorized officer. The authorized officer would evaluate the discovery and inform the operator of actions that would be necessary to prevent loss of significant scientific values. The user/operator shall be responsible for the cost of any mitigation required by the authorized officer. Upon verification from the authorized officer that the required mitigation has been completed, the operator shall be allowed to resume operations.

F. Special Designation Areas

Guidelines and operating procedures for all management activities in wilderness are provided in BLM Manual 8560, Management of Designated Wilderness Areas, and in wilderness management plans, where completed for specific wilderness areas.

ACECs are established through the land use planning process. The desired conditions and management prescriptions for these special areas would be considered in implementing management activities.

Wildland Fire Management

A. Appropriate Management Response

The appropriate management response concept represents a range of available management responses to wildland fires. Responses range from full fire suppression to managing fires for resource benefits (fire use). Management responses applied to a fire would be identified in the fire management plans and would be based on objectives derived from the land use allocations; relative risk to resources, the public and fire fighters; potential complexity; and the ability to defend management boundaries. Any wildland fire can be aggressively suppressed, and any fire that occurs in an area

designated for fire use can be managed for resource benefits if it meets the prescribed criteria from an approved fire management plan.

B. Fire Suppression Actions

Suppression tactics would be utilized that limit damage or disturbance to the habitat and landscape. No heavy equipment would be used (such as dozers), unless approved by the Field Office Manager.

Use of fire retardants or chemicals adjacent to waterways would be accomplished in accordance with the Environmental Guidelines for Delivery of Retardant or Foam Near Waterways: Interagency Standards for Fire and Aviation Operations (National Interagency Fire Center 2009).

The general and species-specific Conservation Measures would be implemented to the extent possible to minimize adverse effects to federally listed, proposed, or candidate species occurring within the action area.

For fire suppression activities in Peirson's milk-vetch critical habitat, a protocol for consultation would be developed as a part of the biological opinion. This programmatic consultation would contain conservation measures and prescriptions for use in fire suppression activities. Emergency consultation should only be needed in the future, if suppression actions fall outside of these prescriptions/measures. The biological opinion would outline coordination needs for emergency response actions that may affect a listed/proposed species and/or critical habitat. The following protocol would apply: BLM would contact the appropriate USFWS biologist as soon as practical once a wildfire starts and a determination is made that a federally protected species and/or its habitat could be affected by the fire and/or fire suppression activities. USFWS would work with BLM during the emergency response to apply the appropriate conservation measures. When conservation measures cannot be applied during the suppression activities, BLM would, after the fact, need to consult on any suppression actions that may have affected the federally protected species or its habitat. If conservation measures are adhered to, BLM would report on the actions taken and effects to the species and its habitat following the fire, but no further consultation on that incident would be required.

In wilderness, minimum impact suppression tactics would be applied and coordinated with wilderness management objectives and guidelines when fire suppression actions are required (National Interagency Fire Center 2009).

C. Cultural Resources

All known cultural resources would be protected from disturbance to the extent possible.

Should cultural resources be encountered during wildland fire suppression, the BLM cultural resource specialist will be notified immediately. Work may not resume until written authorization to proceed is issued by the BLM cultural resource specialist.

D. Paleontological Resources

If vertebrate paleontological resources and scientifically significant invertebrate and plant fossil resources are discovered, during wildland fire suppression, the BLM or appropriate resource advisor will be notified as soon as possible.

Discretionary Construction Activities

The following measures would reduce fugitive dust impacts:

1. All unpaved construction areas shall be sprinkled with water or other acceptable ICAPCD dust control agents during dust-generating activities to reduce dust emissions. Additional watering or acceptable ICAPCD dust control agents shall be applied during dry weather or windy days until dust emissions are not visible.

2. Trucks hauling dirt and debris shall be covered to reduce windblown dust and spills.

3. On dry days, dirt or debris spilled onto paved surfaces shall be swept up immediately to reduce resuspension of particulate matter caused by vehicle movement. Approach routes to construction sites shall be cleaned daily of construction-related dirt in dry weather.

4. On-site stockpiles of excavated material shall be covered or watered.

5. Automatic water or mist or sprinkler system should be installed in areas of rock crushing and conveyor belt systems.

6. Use low pollutant-emitting construction equipment.

7. Equip construction equipment with prechamber diesel engines (or equivalent) together with proper maintenance and operation to reduce emissions of nitrogen oxide, to the extent available and feasible.

8. Use electrical construction equipment, to the extent feasible.

A. Cultural Resources

All known cultural resources would be protected from disturbance.

Should cultural resources be encountered during project ground-disturbing activities, work will cease in the area of the discovery, and the BLM cultural resource specialist will

be notified immediately. Work may not resume until written authorization to proceed is issued by the BLM cultural resource specialist.

The management of cultural resources on BLM land must be in compliance with several federal laws, including the Antiquities Act of 1906; the National Historic Preservation Act of 1966, as amended; the NEPA of 1969; Executive Order 11593, “Protection and Enhancement of the Cultural Environment,” the Federal Land Policy and Management Act of 1976; the American Indian Religious Freedom Act of 1978; the Archaeological Resources Protection Act of 1979; the Native American Graves Protection and Repatriation Act of 1990; Executive Order 13007, “Indian Sacred Sites,” and Executive Order 13287, “Preserve America.” In addition, the BLM manages its cultural resources according to BLM Manual 8100 through 8170, and in accordance with the statewide protocol from the California SHPO and other guidelines from the SHPO. These laws and regulations direct BLM to:

- Restrict public information about the locations of sites that are not allocated to public use, as allowed by law and regulation.
- Ensure that all proposed undertakings and authorizations are reviewed and conducted in compliance with applicable federal laws including Section 106 of the National Historic Preservation Act.
- Complete consultations with the California SHPO prior to project implementation, as necessary.
- Ensure that information on Native American religious and cultural issues receives good faith consideration during decision making and that government-to-government consultation procedures are carried out as appropriate for each proposed action.

B. Paleontological Resources

If vertebrate paleontological resources and scientifically significant invertebrate and plant fossil resources are discovered, the user/operator shall suspend all operations that further disturb such materials and immediately contact the authorized officer. User/operators shall not resume until written authorization to proceed is issued by the authorized officer. The authorized officer would evaluate the discovery and inform the operator of actions that would be necessary to prevent loss of significant scientific values. The user/operator shall be responsible for the cost of any mitigation required by the authorized officer. Upon verification from the authorized officer that the required mitigation has been completed, the operator shall be allowed to resume operations.

C. Special Designation Areas

Guidelines and operating procedures for all management activities in wilderness are provided in BLM Manual 8560—Management of Designated Wilderness Areas and in wilderness management plans, where completed for specific wilderness areas.

ACECs are established through the land use planning process. The desired conditions and management prescriptions for these special areas would be considered in implementing management activities.

D. Visual Resources

There are numerous design techniques for Visual Resources that can be used to reduce the visual impacts from surface-disturbing projects. These techniques should be used in conjunction with BLM's visual resource contrast rating process wherein both the existing landscape and the proposed development or activity are analyzed for their basic elements of form, line, color, and texture. Design techniques are discussed in the BLM VRM Manual (MS 8400) in terms of fundamentals and strategies. The fundamentals and strategies are all interrelated, and when used together, can help resolve visual impacts from proposed activities or developments. Guidance and best management practices for visual resources include the Visual Contrast Rating Handbook H-8431-1, the Programmatic EIS for Wind Energy Development (ROD signed in December 2005), PEIS for Geothermal Energy Development (ROD signed in December 2008), West-wide Corridor Programmatic EIS (November 2008), the Final PEIS for Solar Energy Development in Six Southwestern States (July 2012), and the BLM VRM website (http://www.blm.gov/vrm).

Design fundamentals are general design principles that can be used for all forms of activity or development, regardless of the resource value being addressed. Applying these three fundamentals will help solve most visual design problems:

- Proper siting or location
- Reducing unnecessary disturbance
- Repeating the elements of form, line, color, and texture

Design strategies are more specific activities that can be applied to address visual design problems. Not all of these strategies will be applicable to every proposed project or activity:

- Color selection
- Earthwork

- Vegetative manipulation
- Structures
- Reclamation/restoration
- Linear alignment design considerations

Wildlife Habitat Activities

A. Typical Habitat Improvements

Following is a discussion of typical design features, construction practices, and implementation procedures for habitat improvements that could be constructed following approval of the RAMP/ROD. The extent, location, and timing of such actions would be based on specific management objectives adopted through the evaluation process, interdisciplinary development and analysis of proposed actions, and funding.

Wildlife Waters and Reservoirs: Water developments would include design features to ensure safety and accessibility to water by desirable wildlife. These features will include ramps to allow wildlife to escape, should they become trapped.

Vending

- Vending would continue to be permitted seven days a week at long-term vending areas.
- Vending would be permitted from October 1 through May 31 from noon Thursday through noon Monday at the short-term vending areas. All vending materials, supplies, and related vending material would be required to be physically removed from the Planning Area from Monday at noon to Thursday at noon.
- Vending would be expanded to include seven days a week vending from noon on December 25 through noon on the Monday following January 1.
- Vending would be expanded to include the seven days prior to Easter.
- Vending would be allowed on all observed federal holidays.
- Vending would be allowed from noon the Thursday before Thanksgiving to noon the Monday following Thanksgiving.
- Non-recreational commercial activities (such as filming) would not be routinely allowed during the high use holiday periods.

Wind Energy

The best management practices for wind energy are adopted from the Implementation of a Wind Energy Development Program and Associated Land Use Plan Amendments ROD (December 2005). These best management practices are as follows:

A. Best Management Practices

The best management practices will be adopted as required elements of project-specific plans of development and/or as right-of-way authorization stipulations. They are categorized by development activity: site monitoring and testing, development of the plans of development, construction, operation, and decommissioning. The best management practices for development of the plans of development identify required elements of the plans of development needed to address potential impacts associated with subsequent phases of development.

A.1 Site Monitoring and Testing

- The area disturbed by installation of meteorological towers (i.e., footprint) shall be kept to a minimum.
- Existing roads shall be used to the maximum extent feasible. If new roads are necessary, they shall be designed and constructed to the appropriate standard.
- Meteorological towers shall not be located in sensitive habitats or in areas where ecological resources known to be sensitive to human activities (e.g., prairie grouse) are present. Installation of towers shall be scheduled to avoid disruption of wildlife reproductive activities or other important behaviors.
- Meteorological towers installed for site monitoring and testing shall be inspected periodically for structural integrity.

A.2 Plan of Development Preparation

A.2.1 General

- The BLM and operators shall contact appropriate agencies, property owners, and other stakeholders early in the planning process to identify potentially sensitive land uses and issues, rules that govern wind energy development locally, and land use concerns specific to the region.
- Available information describing the environmental and sociocultural conditions in the vicinity of the proposed project shall be collected and reviewed as needed to predict potential impacts of the project.

- The Federal Aviation Administration-required notice of proposed construction shall be made as early as possible to identify any air safety measures that would be required.

- To plan for efficient use of the land, necessary infrastructure requirements shall be consolidated wherever possible, and current transmission and market access shall be evaluated carefully.

- The project shall be planned to utilize existing roads and utility corridors to the maximum extent feasible, and to minimize the number and length/size of new roads, lay-down areas, and borrow areas.

- A monitoring program shall be developed to ensure that environmental conditions are monitored during the construction, operation, and adaptive management strategies, shall be established at the project level to ensure that potential adverse impacts of wind energy development are mitigated. The monitoring program shall identify the monitoring requirements for each environmental resource present at the site, establish metrics against which monitoring observations can be measured, identify potential mitigation measures, and establish protocols for incorporating monitoring observations and additional mitigation measures into standard operating procedures and best management practices.

- "Good housekeeping" procedures shall be developed to ensure that during operation the site will be kept clean of debris, garbage, fugitive trash or waste, and graffiti; to prohibit scrap heaps and dumps; and to minimize storage yards.

A.2.2 Wildlife and Other Ecological Resources

- Operators shall review existing information on species and habitats in the vicinity of the project area to identify potential concerns.

- Operators shall conduct surveys for federal and/or state-protected species and other species of concern (including special status plant and animal species) within the project area and design the project to avoid (if possible), minimize, or mitigate impacts to these resources.

- Operators shall identify important, sensitive, or unique habitats in the vicinity of the project and design the project to avoid (if possible), minimize, or mitigate impacts to these habitats (e.g., locate the turbines, roads, and ancillary facilities in the least environmentally sensitive areas; i.e., away from riparian habitats, streams, wetlands, drainages, or critical wildlife habitats).

- The BLM will prohibit the disturbance of any population of federally listed plant species.

- Operators shall evaluate avian and bat use of the project area and design the project to minimize or mitigate the potential for bird and bat strikes (e.g., development shall not occur in riparian habitats and wetlands). Scientifically rigorous avian and bat use surveys shall be conducted; the amount and extent of ecological baseline data required shall be determined on a project basis.

- Turbines shall be configured to avoid landscape features known to attract raptors, if site studies show that placing turbines there would pose a significant risk to raptors.

- Operators shall determine the presence of bat colonies and avoid placing turbines near known bat hibernation, breeding, and maternity/nursery colonies; in known migration corridors; or in known flight paths between colonies and feeding areas.

- Operators shall determine the presence of active raptor nests (i.e., raptor nests used during the breeding season). Measures to reduce raptor use at a project site (e.g., minimize road cuts, maintain either no vegetation or nonattractive plant species around the turbines) shall be considered.

- A habitat restoration plan shall be developed to avoid (if possible), minimize, or mitigate negative impacts on vulnerable wildlife while maintaining or enhancing habitat values for other species. The plan shall identify revegetation, soil stabilization, and erosion reduction measures that shall be implemented to ensure that all temporary use areas are restored. The plan shall require that restoration occur as soon as possible after completion of activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.

- Procedures shall be developed to mitigate potential impacts to special status species. Such measures could include avoidance, relocation of project facilities or lay-down areas, and/or relocation of biota.

- Facilities shall be designed to discourage their use as perching or nesting substrates by birds. For example, power lines and poles shall be configured to minimize raptor electrocutions and discourage raptor and raven nesting and perching.

A.2.3 Visual Resources

- The public shall be involved and informed about the visual site design elements of the proposed wind energy facilities. Possible approaches include conducting public forums for disseminating information, offering organized tours of operating wind developments, and using computer simulation and visualization techniques in public presentations.

- Turbine arrays and turbine design shall be integrated with the surrounding landscape. Design elements to be addressed include visual uniformity, use of tubular

towers, proportion and color of turbines, nonreflective paints, and prohibition of commercial messages on turbines.

- Other site design elements shall be integrated with the surrounding landscape. Elements to address include minimizing the profile of the ancillary structures, burial of cables, prohibition of commercial symbols, and lighting. Regarding lighting, efforts shall be made to minimize the need for and amount of lighting on ancillary structures.

A.2.4 Roads

An access road siting and management plan shall be prepared incorporating existing BLM standards regarding road design, construction, and maintenance such as those described in the BLM 9113 Manual (BLM 1985) and the Surface Operating Standards for Oil and Gas Exploration and Development (U.S. Department of the Interior and U.S. Department of Agriculture 2007; i.e., the Gold Book).

A.2.5 Ground Transportation

- A transportation plan shall be developed, particularly for the transport of turbine components, main assembly cranes, and other large pieces of equipment. The plan shall consider specific object sizes, weights, origin, destination, and unique handling requirements and shall evaluate alternative transportation approaches. In addition, the process to be used to comply with unique state requirements and to obtain all necessary permits shall be clearly identified.

- A traffic management plan shall be prepared for the site access roads to ensure that no hazards would result from the increased truck traffic and that traffic flow would not be adversely impacted. This plan shall incorporate measures such as informational signs, flaggers when equipment may result in blocked throughways, and traffic cones to identify any necessary changes in temporary lane configuration.

A.2.6 Noise

Proponents of a wind energy development project shall take measurements to assess the existing background noise levels at a given site and compare them with the anticipated noise levels associated with the proposed project.

A.2.7 Noxious Weeds and Pesticides

- Operators shall develop a plan for control of noxious weeds and invasive species, which could occur as a result of new surface disturbance activities at the site. The plan shall address monitoring, education of personnel on weed identification, the manner in which weeds spread, and methods for treating infestations. The use of certified weed-free mulching shall be required. If trucks and construction equipment are arriving from locations with known invasive vegetation problems, a controlled

inspection and cleaning area shall be established to visually inspect construction equipment arriving at the project area and to remove and collect seeds that may be adhering to tires and other equipment surfaces.

- If pesticides are used on-site, an integrated pest management plan shall be developed to ensure that applications would be conducted within the framework of BLM and Department of the Interior policies and entail only the use of Environmental Protection Agency-registered pesticides. Pesticide use shall be limited to nonpersistent, immobile pesticides and shall only be applied in accordance with label and application permit directions and stipulations for terrestrial and aquatic applications.

A.2.8 Cultural/Historic Resources

- The BLM will consult with Indian tribal governments early in the planning process to identify issues regarding the proposed wind energy development, including issues related to the presence of cultural properties, access rights, disruption to traditional cultural practices, and impacts to visual resources important to the tribe(s).

- The presence of archaeological sites and historic properties in the area of potential effect shall be determined on the basis of a records search of recorded sites and properties in the area and/or, depending on the extent and reliability of existing information, an archaeological survey. Archaeological sites and historic properties present in the area of potential effect shall be reviewed to determine whether they meet the criteria of eligibility for listing on the National Register of Historic Places.

- When any right-of-way application includes remnants of a National Historic Trail, is located within the viewshed of a National Historic Trail's designated centerline, or includes or is within the viewshed of a trail eligible for listing on the National Register of Historic Places, the operator shall evaluate the potential visual impacts to the trail associated with the proposed project and identify appropriate mitigation measures for inclusion as stipulations in the plan of development.

- If cultural resources are present at the site, or if areas with a high potential to contain cultural material have been identified, a cultural resources management plan shall be developed. This plan shall address mitigation activities to be taken for cultural resources found at the site. Avoidance of the area is always the preferred mitigation option. Other mitigation options include archaeological survey and excavation (as warranted) and monitoring. If an area exhibits a high potential, but no artifacts were observed during an archaeological survey, monitoring by a qualified archaeologist could be required during all excavation and earthmoving in the high-potential area. A report shall be prepared documenting these activities. The cultural resources management plan also shall: 1) establish a monitoring program, 2) identify measures to prevent potential looting/vandalism or erosion impacts, and 3) address the

education of workers and the public to make them aware of the consequences of unauthorized collection of artifacts and destruction of property on public land.

A.2.9 Paleontological Resources

- Operators shall determine whether paleontological resources exist in a project area on the basis of the geologic context of the area, a records search for past paleontological finds in the area, and/or, depending on the extent of existing information, a paleontological survey.

- If paleontological resources are present at the site, or if areas with a high potential to contain paleontological material have been identified, a paleontological resources management plan shall be developed. This plan shall include a mitigation plan for collection of the fossils; mitigation could include avoidance, removal of fossils, or monitoring. If an area exhibits a high potential but no fossils were observed during survey, monitoring by a qualified paleontologist could be required during all excavation and earthmoving in the sensitive area. A report shall be prepared documenting these activities. The paleontological resources management plan also shall: 1) establish a monitoring program, 2) identify measures to prevent potential looting/vandalism or erosion impacts, and 3) address the education of workers and the public to make them aware of the consequences of unauthorized collection of fossils on public land.

A.2.10 Hazardous Materials and Waste Management

- Operators shall develop a hazardous materials management plan addressing storage, use, transportation, and disposal of each hazardous material anticipated to be used at the site. The plan shall identify all hazardous materials that would be used, stored, or transported at the site. It shall establish inspection procedures, storage requirements, storage quantity limits, inventory control, nonhazardous product substitutes, and disposition of excess materials. The plan shall also identify requirements for notices to federal and local emergency response authorities and include emergency response plans.

- Operators shall develop a waste management plan identifying the waste streams that are expected to be generated at the site and addressing hazardous waste determination procedures, waste storage locations, waste-specific management and disposal requirements, inspection procedures, and waste minimization procedures. This plan shall address all solid and liquid wastes that may be generated at the site.

- Operators shall develop a spill prevention and response plan identifying where hazardous materials and wastes are stored on-site, spill prevention measures to be implemented, training requirements, appropriate spill response actions for each material or waste, the locations of spill response kits on-site, a procedure for

ensuring that the spill response kits are adequately stocked at all times, and procedures for making timely notifications to authorities.

A.2.11 Storm Water

Operators shall develop a storm water management plan for the site to ensure compliance with applicable regulations and prevent off-site migration of contaminated storm water or increased soil erosion.

A.2.12. Human Health and Safety

- A safety assessment shall be conducted to describe potential safety issues and the means that would be taken to mitigate them, including issues such as site access, construction, safe work practices, security, heavy equipment transportation, traffic management, emergency procedures, and fire control.

- A health and safety program shall be developed to protect both workers and the general public during construction, operation, and decommissioning of a wind energy project. Regarding occupational health and safety, the program shall identify all applicable federal and state occupational safety standards; establish safe work practices for each task (e.g., requirements for personal protective equipment and safety harnesses; Occupational Safety and Health Administration standard practices for safe use of explosives and blasting agents; and measures for reducing occupational electric and magnetic fields exposures); establish fire safety evacuation procedures; and define safety performance standards (e.g., electrical system standards and lightning protection standards). The program shall include a training program to identify hazard training requirements for workers for each task and establish procedures for providing required training to all workers. Documentation of training and a mechanism for reporting serious accidents to appropriate agencies shall be established.

- Regarding public health and safety, the health and safety program shall establish a safety zone or setback for wind turbine generators from residences and occupied buildings, roads, rights-of-way, and other public access areas that is sufficient to prevent accidents resulting from the operation of wind turbine generators. It shall identify requirements for temporary fencing around staging areas, storage yards, and excavations during construction or decommissioning activities. It shall also identify measures to be taken during the operation phase to limit public access to hazardous facilities (e.g., permanent fencing would be installed only around electrical substations, and turbine tower access doors would be locked).

- Operators shall consult with local planning authorities regarding increased traffic during the construction phase, including an assessment of the number of vehicles

per day, their size, and type. Specific issues of concern (e.g., location of school bus routes and stops) shall be identified and addressed in the traffic management plan.

- If operation of the wind turbines is expected to cause significant adverse impacts to nearby residences and occupied buildings from shadow flicker, low-frequency sound, or electric and magnetic fields, site-specific recommendations for addressing these concerns shall be incorporated into the project design (e.g., establishing a sufficient setback from turbines).

- The project shall be planned to minimize electromagnetic interference (e.g., impacts to radar, microwave, television, and radio transmissions) and comply with Federal Communications Commission regulations. Signal strength studies shall be conducted when proposed locations have the potential to impact transmissions. Potential interference with public safety communication systems (e.g., radio traffic related to emergency activities) shall be avoided.

- The project shall be planned to comply with Federal Aviation Administration regulations, including lighting regulations, and to avoid potential safety issues associated with proximity to airports, military bases or training areas, or landing strips.

- Operators shall develop a fire management strategy to implement measures to minimize the potential for a human-caused fire.

APPENDIX F

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Dust Control Plan
Bureau of Land Management

El Centro Field Office
1661 S. 4th Street
El Centro, CA 92243

June 2011

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1.0 Introduction

Air quality is determined by many different factors, such as landforms, amount of contaminants emitted into the atmosphere, and meteorological conditions. In the Imperial Valley, stable atmospheric conditions, low mixing heights, and light winds during the morning and evening hours provide opportunity for dust and other contaminants to accumulate on the low-lying Imperial Valley floor. As a result, the Imperial Valley and all of Imperial County has been classified as a non-attainment area under the Environmental Protection Agency's PM_{10} regulations as set forth in their Clean Air Act of 1990.

PM_{10} is defined as: Any particulate material that exists as solid or liquid in the atmosphere. Particulate matter may be in the form of fly ash, soot, dust, fog, fumes, etc. Small particulate matter, or PM_{10}, is less than 10 microns in size (about one-eighth the diameter of a human hair) and is too small to be filtered by the nose and lungs[1]. Fugitive dust is defined in rule 800 of the ICAPCD rules and regulations as: The Particulate Matter entrained in the ambient air which is caused from man-made and natural activities such as, but not limited to, movement of soil, vehicles, equipment, blasting, and wind.

The primary contributors of PM_{10} under jurisdiction of the Bureau of Land Management El Centro Field office (ECFO) are Off Highway Vehicle Use (OHV), mining operations, geothermal energy operations and various short term construction projects such as installation of pipelines.

1.1 Purpose of Plan

The purpose of the Bureau of Land Management ECFO dust control plan is to identify sources of PM_{10} emissions within our jurisdiction and identify dust control measures that can be implemented to help minimize or eliminate those emissions.

1.2 Document Organization

The remainder of this Plan is organized into the following sections:

Section 2.0 – Actions Requiring Controls
Section 3.0 – Dust Control Measures

2.0 Actions Requiring Control

2.1 Off Highway Vehicle Use

BLM lands are managed under the California Desert Conservation Area Plan, as amended (1980). OHV use is a popular form of recreation in Imperial County. An OHV is defined in the California Vehicle Code Division Provisions[2]. There are four multiple use classes that the Bureau of Land Management employs in order to manage public lands. Lands falling under **Multiple Use Class C** are closed to all motorized vehicle activity. These lands are unavailable for motorized vehicle use and include areas designated by Congress as Federal

[1] www.raqc.org/more/define.htm
[2] 16.5 CVCD Chapter 1§ 38010

Wilderness Areas. Lands falling under **Multiple Use Class L** are classified as Limited Use areas. **Multiple Use Class M is** based on a controlled balance between higher intensity use and protection of public lands. In **Multiple Use Class L** and **M** travel is limited to existing open routes of travel only. In essence, only the trails or routes that are classified as open are allowed to be traveled on. The land in between these routes and trails is closed to vehicle use. Lands that fall under **Multiple Use Class I** are considered open areas. Multiple Use Class I is defined as: "Intensive Use." Its purpose is to provide for concentrated use of lands and resources to meet human needs (California Desert Conservation Area Plan, 1980). This means that the entire area is open to all motor vehicles and all types of travel.

In addition to the Imperial Sand Dunes, Plaster City and Superstition Mountain open areas, the ECFO oversees lands in the East Mesa, West Mesa and Yuha Desert in BLM's, Western Colorado (WECO) planning unit and the Indian Pass area in BLM's North Eastern (NECO) planning unit. WECO and NECO are both limited use areas that fall under BLM Multiple Use Class L and M. Designated routes of travel are found in all of these regions and these are also popular areas for off highway enthusiasts to recreate. Located within Imperial County is the Imperial Sand Dunes Recreation Area, one of the largest OHV recreation areas in the United States. The Imperial Sand Dunes Recreation Area is located in eastern Imperial County with 83,252 acres open to OHV use, the Imperial Sand Dunes Recreation Area attracts hundreds of thousands of off highway enthusiasts each year. There are two other OHV Open Areas under BLM jurisdiction in Imperial County, Plaster City OHV Open Area and Superstition Mountain OHV Open Area, both located in western Imperial County. They are 28,240 and 14,723 acres, respectively. While these areas do not receive the same high visitation rates as the Imperial Sand Dunes Recreation Area, they are still popular recreation destinations for off highway vehicle use.

Off highway vehicle use contributes to PM_{10} emissions in a number of ways. Travel in open areas and along designated routes may contribute to particulate matter in the form of fugitive dust. Travel in open areas adversely affects vegetation by crushing and breaking up the vegetative cover, causing a reduction in the overall vegetative cover. This in turn leaves soils vulnerable to wind erosion and promotes further spreading of wind driven erosion as vegetative cover is reduced.

BLM law enforcement rangers actively patrol the lands under the ECFO jurisdiction. These patrols deter off route unauthorized OHV use. Rangers utilize verbal warnings, written warnings and citations to gain compliance. Reports of unauthorized OHV use suspected of generating PM_{10} in Limited Use Areas will be addressed on a case by case basis.

BLM ECFO Restoration Summary and Techniques

Since 2003 the Bureau of Land Management (BLM), El Centro Field Office has restored 751 closed routes and illegal impacts within Imperial County. The 751 restored areas which cover 65.89 miles with an area of 1,189 acres. Most of the miles of restoration are "line of sight" which means that the closed route or incursion was only restored to visual range. The remaining portion is left for natural restoration. Thus the total amount of area which has been restored is greater than the numbers presented. Techniques used by the BLM in conducting restoration projects are listed below:

Vertical/Horizontal Mulching:
Dead plant material placed at the beginning of closed routes, off of BLM-designated routes, can disguise these routes and deter additional vehicle traffic. Large down Ocotillo's and desert shrubs on the soil surface act as barricades. Similarly, dead shrubs or branches planted upright in the soil make the site blend in with surrounding vegetation. Vertical mulch also benefits restoration by trapping wind-blown seeds and lessening wind erosion just above the ground surface. This work shall be primarily done with hand tools. Little soil disturbance would be needed except where mulch is "planted" and thus requires a small hole to anchor the material.

Fencing and Rocks*:*
Fences may be necessary to cut off travel on closed routes when the route is too wide to be effectively disguised with vertical mulch or blocked by hay bales. Other barricades may consist of a row of large rocks and boulders to deter use. Placement of rocks requires no equipment and little or no soil disturbance is associated with their use. Large Boulders may be used occasionally in high non-compliance areas. These boulders may necessitate the use of heavy machinery (e.g. backhoe, small crane). Fencing in some areas may be used to deter impacts.

Soil Pitting:
Soil pitting, contours the soil to direct water flow and draw wind-blown seeds to focal spots on the ground. Pitting involves creating bowls approximately one to two feet in diameter and six inches deep. This practice creates favorable micro-sites in the bowls that may increase seed germination and small plant growth. In conjunction with pitting, shovels will be used to shave topsoil from under surrounding shrubs (plugging) and transfer the material to the pit hole. Pitting may need to be modified due to the sensitivity of the area. Divots in the soil may be a preferable alternative.

Rainfall Catchments
A rainfall catchment is an ancient method of irrigation used by indigenous peoples in arid environments. These V-shaped, earth or rock, water flow barriers reduce soil erosion and focus water flow on certain spots to aid initial plant recruitment.

Soil Imprinting
Soil imprinting entails raking small trenches to roughen the texture on surface soil and to collect wind-blown seed. Hand tools such as shovels and rakes are used.

Raking:
On closed routes and impacts formed by a single trespass (one person at one time) or routes without trampled vegetation or compacted soil, work crews shall rake, smooth (knock down berms) with the back of a rake, or sweep with a broom the top one inch of soil to hide evidence of tracks. Soils may also be contoured to match surrounding landscape, effectively camouflaging closed routes and impacts.

Terracing with Berms/Check dams:
To prevent the formation of gullies and disperse water to surrounding vegetation, workers may want to contour slopes of hill climb areas. Berms, rock check dams, or terraces slow and disperse water flow. Hand tools will be used to disturb the top one to six inches of soil.

Seeding:
Seed may be spread within rainfall catchments or soil pitting to accelerate natural regeneration. Raking underneath adjacent vegetation or collecting dried seedpods still attached to plants may collect seed. Broadcast seeding may also be done in highly denuded areas. Locally collected seeds will be used. Seeds should be collected from an area within 100 miles, 500 vertical feet, and two inches of annual precipitation of a restoration site. No more than ten percent of the seeds from one individual will be collected and multiple individuals will be harvested to guarantee genetic diversity.

Signing:
To help visitors to stay on designated routes BLM will maintain the route markers and repair or replace as necessary. Maintaining the route network is essential in the success of BLM restoration projects.

2.2 Mining Operations

The BLM oversees roughly 30 sand and gravel mining operations of various sizes, several small recreational mining claims, and one open-pit gold mine (Mesquite Mine) on BLM managed land within Imperial County. Occasionally the El Centro Field Office receives applications for mineral exploration activities for mining, geothermal and geophysical exploration.

Excavation, hauling and processing activities associated with mining, such as digging, loading trucks, crushing and screening all have the potential to produce fugitive dust, including PM_{10} emissions unless adequate mitigation techniques are employed. Dust suppression measures, such as the application of water or fixatives, are generally employed as standard operating procedures, under the approved Plan of Operations required by the BLM. State law requires that all vehicles licensed for highway use be in compliance with specified vehicle emissions standards. Other emission controls may be required for off-highway equipment, such as loaders and bulldozers, and point sources of emissions such as diesel generators. Activities associated with exploration include construction and maintenance of temporary roads and drill pads and minor excavation activities. Fugitive dust and emissions controls for exploration activities are similar to those required for mineral production. Larger permanent and semi-permanent operations may be required to have a separate dust control plan approved by the county. Smaller, temporary operations, such as sand and gravel sales of a few thousand cubic yards may not need an emissions control plan approved by the county, but are required to employ dust control techniques on an as-needed basis.

2.3 Geothermal Power Plants

The El Centro Field Office oversees the lease for one Geothermal Power Plant Complex, Ormesa Geothermal Energy Plant, located on the East Mesa. The Geothermal Power Plant must conform to the following land use planning documents, as amended:

- California Desert Conservation Area (CDCA) Plan, adopted in 1980, as amended.
- EA-067-2006-12. Ormesa Geothermal Projects Continuing Geothermal Lease Operations East Mesa Known Geothermal Resource Area.
- Flat-tailed Horned Lizard Rangewide Management Strategy, 2003 as amended.

There are several unsurfaced access roads in the vicinity of the Ormesa Geothermal Power Plant. These roads are used to access pumps, pipelines and other geothermal facilities. Travel across these unsurfaced roads has the potential to produce fugitive dust and vehicle emissions. Other activities central to geothermal operations such as well pad construction and excavation have the potential to produce fugitive dust emissions, including PM_{10}, unless mitigation measures are taken.

The Imperial County Air Pollution Control District (ICAPCD) regulates stationary sources of air emissions within Imperial County, under both the California and federal Clean Air Acts. The ICAPCD has issued five active state authorities; Authorities to Construct, Permits to Operate, and one Federal Title V major source Permit to Operate to Ormesa which permits regular emission of geothermal gases and binary power plant working fluid. The ICAPCD permit and regulations also require the control of fugitive dust.

All operations would be conducted under Authority to Construct permits and Permits to Operate approved by the Imperial County Air Pollution Control District (ICAPCD). Ormesa has also committed that all disturbed areas within the operations area would be maintained in a manner to minimize dust, and that operations would comply with the applicable requirements of ICAPCD Rule 800 ["Fugitive Dust Requirements for Control of Fine Particulate Matter (PM-10)"]

[EA-067-2006-12, pg 4-7].

There are also several applications for geothermal energy leasing on BLM administered lands. BLM has not approved development of any of these leases at this point in time. If development is approved, the development would require analysis of potential air quality impacts and possibly the development of a dust control plan.

2.4 Miscellaneous Actions

Fugitive dust emissions may also be derived from miscellaneous actions that occur on public lands such as: driving to private property via BLM managed lands, rights-of-way for maintenance of power pole lines and canals, and new construction of pipelines.

These activities produce particulate matter mainly through the use of unpaved roads and use of heavy equipment and machinery during construction and maintenance projects.

3.0 Dust Control Measures

The following measures will be used singularly or in combination to prevent conditions conducive to fugitive dust emissions or to suppress airborne dust should it occur. Dust control measures are those measures that will be taken by the Bureau of Land Management, its lessees and permit holders, for any activity occurring on BLM owned and managed lands.

Potential dust control measures include, but are not limited to:

- Non-toxic stabilization of heavily used areas.
- Enforceable and posted speed limits in heavily used areas.
- Restoration of closed routes per BLM standards.
- Signage of Limited Use Areas to encourage OHV compliance.

Imperial County Air Pollution Control District Requirements and BLM's Plan to address the Requirement:

- Stipulate that all new authorizations for stationary emission sources obtain all necessary permits and satisfy all applicable SIP provisions, including project- or activity- specific BACM.

  (BLM will advise applicants to contact the ICAPCD for appropriate permits and or Dust Plans.)

- A summary that: describes the total miles of BLM roads that are paved, paved with unpaved shoulders, and unpaved, including length and level of usage of each road; prioritize control of road segments based on annual and episodic (e.g. event) usage; describe the location and extent (e.g. acreage) of open areas disturbed by legal and illegal recreational use; prioritize control of these open areas based on annual and episodic (e.g. event) usage; describe plans for control of PM_{10} emissions from these areas.

3.1 Summary of Roads and Routes of Travel

BLM currently manages only two paved roads, Gecko Road and Grays Well Road. Each of these roads are located within the Imperial Sand Dunes Recreation Area (ISDRA). Gecko Road is located in the Northern portion of the ISDRA, perpendicular to Highway 78, on the Western edge of the dunes (see map). Grays Well Road is located in the Southern portion of the ISDRA, parallel to Interstate 8 (see map). Gecko Road is approximately 6 miles long, and Grays Well Road is approximately 4.7 miles long.

BLM currently manages two aggregate roads. Both roads are located within the Imperial Sand Dunes Recreation Area (ISDRA). Wash Road begins at Highway 78 and extends South 5.0 miles to wash 25 (see map). The road parallels the existing Union Pacific Railroad right-of-way. Dune Buggy Flats Road begins at the east end of Gordons Well Road and extends .6 miles into Dune Buggy Flats.

Table 3.1 – Paved Roads Managed by BLM – El Centro Field Office

Name of Road	**Mileage**
Gecko Road	6 miles
Grays Well Road	4.7 miles
Total	10.7 miles

Table 3.2 – Aggregate Road Managed by BLM – El Centro Field Office

Name of Road	**Mileage**
Wash Road	5.0 miles
Dune Buggy Flats Road	.6 miles
Total	5.6 miles

BLM currently manages many off-highway trails or routes of travel in two distinct management areas known as the Northern and Eastern Colorado (NECO) management area and the Western Colorado (WECO) management area (see map). These areas are known as Limited Use areas so travel is limited to open routes of travel only, cross-country travel is prohibited. For this reason, the BLM considers the areas between open routes of travel to be closed to vehicle travel. There are approximately 1,178 miles of open routes and approximately 242 miles of "Limited" routes (open to street legal vehicles only) in the WECO management area. There are approximately 847 miles of open routes and approximately 317 miles of county roads in the NECO management area. Approximately 880,000 acres of the NECO management area falls within Imperial County, and approximately 475,000 acres of the WECO management area falls within Imperial County.

In addition to the limited use areas, BLM manages three Open Areas: Imperial Sand Dunes, Plaster City and Superstition Mountain (see map).

The location and extent of the Open Areas located within the El Centro Resource Area are as follows:

Table 3.3 – Acreage of Open Areas managed by BLM El Centro Field Office

Open Area Name	**Approximate Acreage**
Imperial Sand Dunes	83,252
Plaster City	28,240
Superstition Mountain	14,723
Total	**126,216**

Using the best available data, the best estimate of Off Highway Vehicle caused disturbance in the open areas range from 0 to 93 percent in the Imperial Sand Dunes Recreation Area (Excluding Wilderness and Administrative Closures) and about 8 to 99 percent in the Plaster City and Superstition Open Areas.

The data for the Imperial Sand Dunes Recreation Area was collected utilizing aerial imagery on Presidents Day weekend in 2006. Use on Presidents Day weekend represents one of the

highest visitation periods for the ISDRA and therefore represents an over estimation for most of the year. Also, the purpose of the study was to estimate vehicle use patterns in Peirson's Milk-vetch habitat and is therefore constrained by the sampling area boundaries.

The estimates for Superstition and Plaster City Open Areas are based on vehicle track evidence data collected in 2002. The data collected was in Flat-tailed horned lizard Management Areas (MAs) near the open areas. In the MAs, travel is limited to open routes of travel, cross-country travel is prohibited in these areas. The data collected in the MAs would under-estimate the level of disturbance in the open areas. In the open areas the highest level of disturbance would be expected at staging areas where the level of disturbance can approach 100%. Two methods were used to estimate disturbance, the first method utilized biologists walking transects and recording vehicle tracks. This method estimated that 8.5% of the surface of the Yuha Desert Flat-tailed horned lizard Management Area (MA) had vehicle tracks. The second method utilized black and white aerial photography and was conducted by the United States Fish and Wildlife Service (USFWS) in 2002. The estimate of disturbance in the Yuha Desert MA was 9.7% and the West Mesa MA was 8.0%.

The BLM estimates that none of the routes of travel located in Imperial County on public lands receive more than 50 vehicle trips per day. Certain unpaved areas located in the Imperial Sand Dunes, including Wash Road and Dune Buggy Flats access road receive more than 50 vehicle trips per day during holiday weekends (Halloween, Thanksgiving, New Year's and President's Day) that fall between the months of October and March. BLM will continue to water these areas to reduce dust emissions.

3.2 Plans for Control of PM_{10}

Many dust control measures are employed within the lands managed by El Centro Field Office. As referenced above, Gecko Road and Grays Well Road, located in the ISDRA, are paved roads. Since these roads receive high amounts of vehicle traffic during the cooler months of the year, the fact that they are paved will reduce dust emissions that may have arisen if they had not been paved. There are speed limit signs on both of these roads, which are rigorously enforced. A speed limit of 15 miles per hour is enforced on the new Wash Road to reduce dust emissions. Speed limits are also rigorously enforced within the entire ISDRA "within 50 feet of any campground, campsite, or concentration of people or animals" to 15 miles per hour. These measures also help to keep dust down, as they keep vehicle traffic decelerated.

Five administrative closures are currently in place in the Imperial Sand Dunes Recreation Area (see map). These closures total approximately 49,617 acres. While in place, these closures will also help to reduce PM_{10} emissions in the ISDRA by limiting the area where vehicles are allowed.

Table 3.4 – Administrative Closures at Imperial Sand Dunes Recreation Area

Name of Closure	**Approximate Acreage**
Northern Closure	3,802
Central Closure #1	2,000
Central Closure #2	43,345
Patton Valley Closure	310
Southern Closure	160
Total	**49,617 total acres closed at ISDRA**

The BLM El Centro Field Office manages eight wilderness areas within Imperial County. These wilderness areas were designated by Congress and can be found on both the East and West sides of Imperial County. Travel within Federal Wilderness areas is limited to foot traffic and horseback riding. No motorized vehicles are allowed in Wilderness areas. A significant amount of land that may have produced PM_{10} emissions is closed to vehicle traffic, since a total of approximately 196,082 acres of BLM managed lands in Imperial County are closed as Wilderness areas (see map).

Table 3.5 – Federal Wilderness Areas in Imperial County managed by BLM

Wilderness Area Name	**Total Acres Closed**
Fish Creek Mountains	20,575
Coyote Mountains	18,574
Jacumba	31,171
Palo Verde Mountains	21,149
Indian Pass	31,922
North Algodones Dunes	25,811
Picacho Peak	8,828
Little Picacho	38,052
Total	**196,082** acres closed as Wilderness in Imperial County

Another mitigation measure to help control fugitive dust emissions from BLM lands is a seasonal closure on all routes within the Painted Gorge area from January 1 of each year to June 30th of each year. This seasonal closure takes place each year to protect the Federally Threatened Peninsular Bighorn Sheep (Ovis canadensis), and is an action that also lowers PM_{10} emissions in the area. The Painted Gorge area is located West of the Plaster City Open area and North of Evan Hewes Highway.

Since 2003 the Bureau of Land Management (BLM), El Centro Field Office has restored 751 closed routes and illegal impacts within Imperial County. The 751 restored areas which cover 65.89 miles with an area of 1,189 acres. The closure and restoration of these routes should help reduce PM_{10} emissions in the area by limiting the number of trails that vehicles are allowed to travel on. Wind erosion is also minimized when well-worn trails are restored to their natural state.

The BLM El Centro Field Office manages 14 Areas of Critical Environmental Concern within Imperial County (see map). ACECs are classified as Multiple USE Class L. These areas were set aside as areas that are valuable because of unique cultural, biological or scenic resources.

Table 3.6 – Acreages of Areas of Critical Environmental Concern in Imp. County

Name of ACEC	**Approximate Acreage**
Chuckwalla	262,202
Coyote Mountains Fossil Site	5,861
East Mesa	42,768
Gold Basin/Rand Intaglios	1,884
Indian Pass	1,764
Lake Cahuilla – A	1,231
Lake Cahuilla – B	2,528
Lake Cahuilla – C	5,592
Lake Cahuilla – D	4,723
North Algodones Dunes (also a Wilderness Area)	25,811
Pilot Knob	869
San Sebastian Marsh	7,680
West Mesa	20,294
Yuha Basin	71,847
Total	**455,054**

Control of dust emissions from certain roads and routes per the Classification of Wilderness in the California Desert Protection Act. As stated above, there are no authorized roads in BLM Wilderness Areas. All BLM Wilderness Areas are closed to all motor vehicle traffic. Foot traffic and horseback riding are the only modes of transportation allowed in BLM Wilderness Areas.

Control dust emissions from certain roads and routes as identified through general BLM planning. Certain unpaved areas located in the Imperial Sand Dunes, including Wash Road and the Dune Buggy Flats access road receive more than 50 vehicle trips per day during holiday weekends (Halloween, Thanksgiving, New Year's and President's Day) that fall between the months of October and March. BLM will continue to water these areas to reduce dust emissions.

Implement those PM_{10} control measures required to manage organized off-road events and/or competitions on public lands. BLM will require race organizers to submit a dust plan to the ICAPCD for review and approval prior to permitting of events. The race season is generally from September to June and is limited to the Imperial Sand Dunes, Plaster City and Superstition Mountain open areas.

Use BLM-standard road design and drainage specifications when maintaining existing roads or authorizing road maintenance and new road construction. BLM will require this for new road construction and existing road maintenance.

In addition to the design and land use planning mitigations, BLM will provide the following mitigations:

1. Include public educational information on PM_{10} emissions with BLM open area literature and on information signs in heavily used areas.

   BLM will distribute flyers provided by ICAPCD at the El Centro Field Office and at Ranger Stations.

3.3 Dust Control During Off Highway Vehicle Use

The BLM has agreed to apply the following dust control measures:

Treat the following access roads for dust control to reduce the impact of OHV activities on air quality:

1. Wash Road adjacent to the Union Pacific Railroad and Dune Buggy Flats Road.

2. Certain unpaved areas located in the Imperial Sand Dunes, including Wash Road and the Dune Buggy Flats access road receive more than 50 vehicle trips per day during holiday weekends (Halloween, Thanksgiving, New Years' and Presidents' Day) that fall between the months of October and February. BLM will continue to water these areas to reduce dust emissions.

In January 2003, the BLM approved and signed the Record of Decision (ROD) for the Western Colorado Deserts Routes of Travel Designations (WECO) and in December of 2002 the Record of Decision for the Northern and Eastern Colorado Desert Coordinated Management Plan (NECO) was signed. Both of these Decisions are amendments of the 1980 Bureau of Land Management California Desert Conservation Area (CDCA) Plan. In these plans, BLM set forth control measures to help curb PM_{10} emissions.

As stated in the Western Colorado Desert Routes of Travel Designation
(these are also true for the Northern and Eastern Colorado Routes of Travel Designation):

> "There would be fewer roads designated as open than the current situation. There would be less miles of routes than existing conditions. The vehicle use limitation to street legal vehicles in the Yuha (and other areas) should result in a decrease in the use of this area. In addition to the designation of roads and the enforcement of the designation, land use should result in less off route travel. The off route travel creates new roads which increases the particulate matter emissions due to vehicular use and wind. This alternative also includes the mitigation requirement to restore closed roads to a natural desert landscape. This will result in fewer emissions due to the inability to easily use closed roads and the reduction in emissions due to wind."

BLM is currently implementing this plan. Since 2003 the Bureau of Land Management (BLM), El Centro Field Office has restored 751 closed routes and unauthorized impacts within Imperial County totaling 65.89 miles of routes and 1,189 acres of public land. This restoration has returned the closed trails/routes to natural habitat and reduced the wind erosion for these areas.

3.4 Dust Control Within and During Mining Operations

BLM will require each commercial mining operation to work with the Imperial County APCD to develop a dust control plan that is specific to each mining operation. BLM requires compliance with all applicable air pollution laws in the approved Plan of Operations for all mining operations. This gives BLM the authority to order the operator to come into compliance. If this does not happen, BLM may issue a Notice of Non-Compliance and may ultimately shut down all or part of the operation and revoke the operator's bond.

3.5 Dust Control Within Geothermal Power Plants

The BLM will require the geothermal power plant to work with the Imperial County Air Pollution Control District to develop a dust control plan that is specific to the geothermal power plant, as required by the Imperial County Air Pollution Control District. Highway legal vehicles are required to employ appropriate state-mandated emissions controls.

3.6 Dust Control During Miscellaneous Construction Projects

Miscellaneous construction activities and general access activities tend to produce minimal fugitive dust emissions. Due to this, BLM will not request actions be made for private citizen right-of-ways unless the Imperial County Air Pollution Control District requests that they do so. For major construction projects, BLM will require the project coordinator to submit a dust plan to Imperial County Air Pollution Control District.

APPENDIX G

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U.S. Department of Agriculture
Forest Service
1323 Club Drive
Vallejo, CA 94592

U.S. Department of the Interior
Bureau of Land Management
2800 Cottage Way
Sacramento, CA 95825

November 29, 2006

TO: Area Managers and Forest Supervisors

FROM: California State Director, Bureau of Land Management,
Regional Forester, Pacific Southwest Region Forest Service

Last year, we embarked on the development of an interagency policy for traditional gathering of culturally important plants on lands managed by the Bureau of Land Management, State of California Office (BLM) and the Pacific Southwest Region of the Forest Service (FS). A copy of the policy document is enclosed for your use.

An interdisciplinary team composed of representatives from the California Indian Basketweavers Association (CIBA), the California Indian Forest and Fire Management Council (CIFFMC), and regional and field offices of BLM and the FS was chartered to develop a policy. Six listening sessions with tribal governments and communities were held to hear views throughout the state. Additionally, we formally consulted with tribal governments, organizations and communities. The draft policy documents also benefited from extensive field and line officer review by our two agencies.

This new policy ensures that traditional practitioners have access to plants and such plants are managed in a manner that promotes ecosystem health for the lands managed by the BLM and FS. The policy also emphasizes local collaboration, implementation and issue resolution. Our two agencies will be incorporating this direction into our respective manuals. For more information, please contact Ken Wilson at 916/978-4648 or Sonia Tamez at 707/562-8919.

Bernie Weingardt
Regional Forester
Pacific Southwest Region, Forest Service

Mike Pool
California State Director
Bureau of Land Management

Enclosure

California State Director
and
Pacific Southwest Regional Forester
Traditional Gathering Policy

Purpose:

The purpose of this interagency policy between the USDI Bureau of Land Management, California (BLM) and the USDA Forest Service, Pacific Southwest Region (FS) (collectively referred to as the agencies) is to promote consistency between the agencies and collaboration with Tribes, tribal communities and traditional practitioners regarding support of native traditional gathering and management of culturally utilized plants on approximately 35 million acres of land administered by the two agencies. Traditional native practitioners, affiliated with over 200 federally and nonfederally recognized Tribes rely on public and National Forest system lands managed by the agencies to sustain their traditions and meet their cultural needs. Furthermore, the agencies acknowledge that traditional native gathering and management practices in these lands are sustainable, benefit forest health and are part of our multiple use mandates.

The policy ensures that native traditional practitioners have access to plant and fungal materials and such materials are managed in a manner that promotes ecosystem health and utilizes traditional management practices where appropriate. In general, personal use should have preference over commercial use. We anticipate that given the cultural and biological complexity related to traditional gathering, successful implementation will be developed through local collaboration.

Objectives:

The objectives of this policy are to:

1. Define a consistent policy for the BLM and FS to support native traditional gathering and management of culturally important plants;

2. Ensure that consultation, collaboration and cooperation between the agencies and Tribes, tribal communities, tribal organizations and native traditional practitioners occurs in the management of culturally significant plants and fungi; and

3. Foster good working relationships with Tribes, tribal communities, tribal organizations and native traditional practitioners;

Authorities:

Legislation, Executive Orders and other legal authorities common to the agencies include:

- American Indian Religious Freedom Act of 1978
- Endangered Species Act of 1973
- Executive Order 13007 of 1996
- Executive Order 13175 of2000
- National Environmental Policy Act of 1969, as amended (and CEQ regulations at 40 CFR parts 1500-1509)
- National Historic Preservation Act of 1966, as amended
- Noxious Weed Act of 1974, including Sections 1 and 15
- Plant Protection Act of 2000
- Religious Freedom Restoration Act of 1993
- Wilderness Act of 1964, as amended

Authorities specific to the BLM include:

- Federal Land Management Policy Act of 1976 and implementing regulations
- California Desert Protection Act of 1994
- BLM Manual 5500
- BLM Manual Series 8120 and H-8120-1
- 43 CFR 1600

Authorities specific to the FS include:

- The Multiple-Use Sustained Yield Act of 1960, as amended
- National Forest Management Act of 1976, as amended and implementing regulations
- The Forest and Rangeland Renewable Resources Planning Act of 1974, as amended
- The Materials Act of 1947
- 36 CFR223
- FS Handbook (FSH) 2409.18, Chapter 80
- FS Manual and FSH 1560 and 2360
- FSH 1909.15,31.12 (8c)

Definitions:

Native traditional practitioners: This term derives from the American Indian Religious Freedom Act of 1978, as amended, that supports native traditional cultural beliefs and practices. The term here includes Native American usual and customary values, observances, ceremonies, management, practices, and other traditional actions. Native traditional practitioners could be members of recognized or non-recognized Tribes or tribal communities.

Culturally utilized plants: As used here includes a variety of flora, such as mosses, fungi and vascular, nontimber plants, including, but not limited to: sedge, willow, hazel, redbud, agave, yucca, and sumac.

Traditional Management techniques: These methods may include, but are not limited to burning, pruning, coppicing.

Personal use or non-commercial use of culturally utilized plants is defined as the' amount and type that would be used by an individual or a group for their own use. If their use results in making baskets or other items that might be available for later sale, this would still be considered personal use.

Commercial use can be described as collecting plants for sale to an entity for further processing and resale.

Policy:

- It shall be the policy of the agencies to support traditional native cultural practitioners in gathering culturally utilized plants for personal, community or other non-commercial traditional use on lands administered by the agencies, consistent with applicable laws, regulations, and policy. Gatherers shall have access for traditional practices to lands managed by the agencies.

- Local units shall consider prioritizing local traditional native gathering in land management plans and should consider prioritization in other management documents.

- Free use, without permit, of culturally important plants may be granted for traditional native cultural gathering. Local agreements are encouraged to support such gathering.

- Decisions and issues regarding identification of traditional native cultural gatherers or gathering, access, sustainability and other concerns associated

with implementation of this policy will be addressed by local units in consultation with traditional practitioners, Tribes and tribal communities.

- Local managers of the agencies shall work in collaboration with Tribes, tribal communities, tribal organizations, and traditional practitioners to identify, restore, and enhance traditionally important plant resources. Local FS units can utilize exemptions (FSH 1909.15,31.12 [Sc]) and BLM units can rely on other processes (BLM Manual 5500).

- Local managers of the agencies, in consultation with Tribes, tribal communities and native traditional practitioners, will identify opportunities and tribal partnerships to incorporate tribal traditional management practices to restore, enhance and promote ecosystem health.

This policy will be monitored through consultation and coordination with native traditional practitioners, Tribes and others to ensure policy effectiveness and issue resolution.

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