

Yuma Field Office

Record of Decision

Approved Resource Management Plan

Yuma Field Office

United States Department of the Interior
Bureau of Land Management
January 2010



Public Lands USA: Use, Share, Appreciate

ABSTRACT

The Yuma Field Office Approved Resource Management Plan (RMP) describes the plan for managing approximately 1.3 million acres of Bureau of Land Management (BLM)–administered land in southwestern Arizona and southeastern California. Information provided by the public, other agencies, Native American tribes, organizations, and BLM personnel was used to develop this RMP. The Approved RMP seeks to provide an optimal balance between authorized resource uses and the protection and long-term sustainability of sensitive resource values within the planning area. Major issues addressed in the RMP include the management of special designations, fish and wildlife habitat management, wild horse and burro management, recreation management, travel management, the maintenance of wilderness characteristics, and lands and realty.

MISSION STATEMENT

The BLM is responsible for the balanced management of BLM-administered lands and resources and their various values so that they are considered in a combination that will best serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield, a combination of uses that take into account the long-term needs of future generations for renewable and nonrenewable resources. These resources include recreation, range, timber, minerals, watershed, fish and wildlife, wilderness and natural, scenic, scientific, and cultural values.



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Yuma Field Office
2555 E. Gila Ridge Road
Yuma, Arizona, 85635
www.blm.gov/az/



In Reply Refer To:
1610 (AZC020)

Dear Reader:

We are pleased to announce that after 5 years of hard work and collaborative effort, the revision of the Yuma Field Office Resource Management Plan (RMP) is complete. This document provides guidance for the management of 1.3 million acres of Bureau of Land Management (BLM)-administered lands in southwestern Arizona and southeastern California. These lands are within the BLM Colorado River District in La Paz, Maricopa, and Yuma counties in Arizona and Imperial and Riverside counties in California.

The attached Record of Decision (ROD) and RMP have been prepared in accordance with the Federal Land Policy Management Act and the National Environmental Policy Act. The ROD and RMP have been sent to members of the public who requested a copy and to pertinent local, State, Federal, and Tribal governments. The ROD finalizes the proposed decisions presented in the Yuma Field Office Proposed RMP/Final Environmental Impact Statement (FEIS) that was released in April 2008 and was subject to a 30-day protest period. Seven protest letters were received and reviewed by the BLM Assistant Director for Renewable Resources and Planning in Washington, D.C. After careful consideration of all points raised in the protest letters, the Assistant Director concluded that the planning team and responsible decision makers followed all applicable laws, regulations, policies, and pertinent resource considerations in developing the Proposed RMP in the FEIS. Minor modifications or points of clarification incorporated into the RMP in response to issues raised during the protest process and final BLM review are discussed in the ROD under the sections entitled Modifications and Clarifications. The protest review did not result in any significant changes to the RMP.

This ROD serves as the final decision for the land use planning decisions described in the attached RMP. Now that the ROD is signed, we look forward to your assistance and participation as we implement the decisions contained in this RMP.

Copies of the ROD and RMP can be obtained on the web at http://www.blm.gov/az/st/en/fo/yuma_field_office.html. Additional printed or CD copies may be obtained at the address above or requested by email at YFOWEB_AZ@blm.gov or by telephone at (928) 317-3200.

We greatly appreciate all who contributed to the completion of this RMP, including other Federal agencies and Tribal, State, and local governments. This includes the many Cooperating Agencies named in Section 1.7.1 of this RMP. We also appreciate the extensive public

involvement during this time by groups, organizations, and individuals. Public input informed and improved the planning documents and we hope you will continue to work with us as we implement the decisions in this RMP. If you need information or have questions, please contact us at (928) 317-3200.

Sincerely,

James T. Shoaff
Field Manager

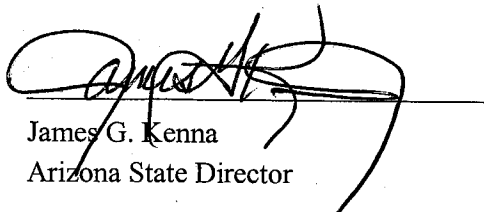
Yuma Field Office

Record of Decision and Approved Resource Management Plan

Prepared by
U.S. Department of the Interior
Bureau of Land Management
Colorado River District
Yuma Field Office
Arizona

January 2010

Approved by:


James G. Kenna
Arizona State Director

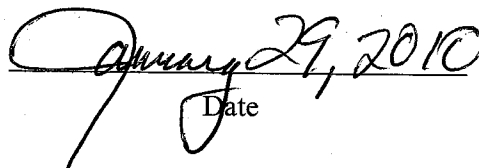

Date

TABLE OF CONTENTS

Abstract and Mission Statement

Dear Reader Letter

RECORD OF DECISION

1.0 Introduction	ROD-1
1.1 Results of Protest Review	ROD-1
1.2 Decision	ROD-2
1.2.1 What the Decision/Approved RMP Provides	ROD-3
1.2.2 Key Decisions in the Approved RMP	ROD-4
1.2.3 What the Decision/Approved RMP Does Not Provide	ROD-5
1.2.4 Implementation Decisions	ROD-6
1.2.5 Modifications	ROD-6
1.2.6 Clarifications	ROD-7
1.3 Overview of the Alternatives	ROD-8
1.3.1 Alternative A (No Action Alternative)	ROD-9
1.3.2 Alternative B	ROD-9
1.3.3 Alternative C	ROD-9
1.3.4 Alternative D	ROD-9
1.3.5 Alternative E (Proposed Plan)	ROD-9
1.4 Management Considerations in Selecting the Approved RMP	ROD-11
1.5 Mitigation Measures	ROD-12
1.6 Plan Monitoring	ROD-12
1.6.1 Implementation Monitoring	ROD-13
1.6.2 Effectiveness Monitoring	ROD-13
1.6.3 Validation Monitoring	ROD-13
1.7 Implementation of the RMP	ROD-14
1.8 Consistency Review	ROD-14
1.9 Public Involvement	ROD-14
1.10 Availability of the Plan	ROD-15
Signature Page	ROD-16

TABLE OF CONTENTS (CONT.)

APPROVED RESOURCE MANAGEMENT PLAN

EXECUTIVE SUMMARY	ES-1
CHAPTER 1.0—INTRODUCTION	1-1
1.1 Vision	1-1
1.2 Purpose and Need for a Resource Management Plan Revision	1-2
1.2.1 Purpose	1-2
1.2.2 Need	1-5
1.3 Planning Area	1-5
1.3.1 Bureau of Reclamation Project Lands	1-6
1.3.2 Historical Overview of Planning Area	1-7
1.4 Planning Process	1-7
1.4.1 Steps in the Process	1-7
1.4.2 Public Involvement	1-9
1.5 Planning Criteria and Legislative Constraints	1-10
1.5.1 General Planning Criteria	1-10
1.5.2 Program-Specific Planning Criteria	1-12
1.6 Public Scoping Issues	1-16
1.6.1 Issues Addressed in this Approved RMP	1-17
1.6.2 Issues Not Addressed in this Approved RMP	1-19
1.6.3 Laws and Regulations	1-19
1.7 Collaboration and Partnerships	1-20
1.7.1 Cooperating Agencies	1-21
1.7.2 Consultation with Native American Tribes	1-22
1.7.3 Consultation with USFWS	1-24
1.8 Related Plans	1-24
1.9 Plan Implementation	1-25
1.9.1 Immediate Decisions	1-25
1.9.2 One-Time Decisions	1-25
1.9.3 Long-Term Guidance/Life of Plan Direction	1-25
1.9.4 General Implementation Schedule of “One-Time” Actions	1-26
1.9.5 Implementation Updates	1-26
1.9.6 Maintaining the Plan	1-26
1.9.7 Changing the Plan	1-27
1.10 Plan Evaluation and Adaptive Management	1-27
1.10.1 Plan Evaluation	1-27
1.10.2 Adaptive Management	1-28
1.10.3 Administrative Actions	1-29
1.10.4 Monitoring and Evaluation	1-29

TABLE OF CONTENTS (CONT.)

CHAPTER 2.0—MANAGEMENT DECISIONS	2-1
2.1 Introduction	2-1
2.1.1 Decision Lettering	2-2
2.2 Land Health Standards	2-3
2.2.1 Standard 1 for Upland Sites	2-3
2.2.2 Standard 2 for Riparian–Wetland Sites	2-4
2.2.3 Standard 3 for Desired Resource Conditions	2-5
2.3 Special Designations Management	2-5
2.3.1 National Landscape Conservation System	2-6
2.3.2 National Recreation Trail	2-12
2.3.3 National Byways	2-12
2.3.4 Areas of Critical Environmental Concern	2-15
2.4 Coordinated Management Areas	2-28
2.4.1 Fortuna Pond CMA	2-35
2.4.2 Limitrophe CMA	2-35
2.4.3 Mittry Lake Wildlife Area	2-37
2.5 Vegetation Management	2-38
2.5.1 Desired Plant Communities	2-40
2.5.2 Vegetation Habitat Management Areas	2-42
2.5.3 BLM Sensitive Plant Species	2-46
2.5.4 Priority Plant Species	2-48
2.5.5 Invasive Non-Native Plants	2-49
2.5.6 Vegetative Use Authorization	2-50
2.6 Wildland Fire Management	2-52
2.7 Fish and Wildlife Management	2-56
2.7.1 Priority Species	2-59
2.7.2 Wildlife Habitat Management Areas	2-64
2.8 Special Status Species Management	2-71
2.8.1 Federally Listed Species and Designated Critical Habitat	2-73
2.8.2 Federal Candidate Species	2-80
2.8.3 State-Listed Species	2-81
2.9 Livestock Grazing Management	2-87
2.10 Wild Horse and Burro Management	2-93
2.11 Recreation Management	2-97
2.11.1 Planning Area-Wide Management	2-97
2.11.2 Recreation Management Allocations	2-101

TABLE OF CONTENTS (CONT.)

2.12 Travel Management	2-118
2.12.1 OHV Management Areas	2-118
2.12.2 YFO Transportation System	2-126
2.12.3 Travel Management Areas	2-131
2.13 Visual Resource Management	2-135
2.14 Wilderness Characteristics Management	2-139
2.15 Cultural Resource Management	2-145
2.15.1 Special Cultural Resource Management Areas	2-147
2.15.2 Allocation to Use Categories	2-152
2.16 Paleontological Resource Management	2-157
2.17 Air, Water, and Soil Management	2-159
2.17.1 Air Resource Management	2-159
2.17.2 Water Resource Management	2-160
2.17.3 Soil Resource Management	2-162
2.18 Lands and Realty Management	2-163
2.18.1 Land Use Authorizations	2-164
2.18.2 Land Tenure	2-175
2.19 Mineral Resource Management	2-178
2.19.1 Leasable Minerals	2-178
2.19.2 Locatable Minerals	2-179
2.19.3 Salable Minerals	2-181
2.20 Public Health and Safety Management	2-183
2.20.1 Abandoned Mines	2-183
2.20.2 Unexploded Ordnance	2-184
2.20.3 International Boundary Issues	2-184
2.20.4 Hazardous Materials	2-185

FIGURE

1-1: Conceptual Planning Process & BLM Documents	1-8

TABLES

2-1: Approved RMP Special Designations	2-6
2-2: Approved RMP National Scenic and Back Country Byways Nominations	2-13
2-3: Approved RMP Coordinated Management Areas	2-28
2-4: Approved RMP Vegetation Habitat Management Areas	2-45
2-5: Approved RMP Firewood Collection Closures	2-52
2-6: Approved RMP Wildlife Habitat Management Areas	2-67
2-7: Goals and Criteria for Categories I, II, and III of Sonoran Desert Tortoise Habitat Areas	2-85

TABLE OF CONTENTS (CONT.)

TABLES (CONT.)

2-8:	Approved RMP Livestock Grazing Availability	2-87
2-9:	Approved RMP Wild Horse and Burro Herd and Herd Management Areas	2-93
2-10:	Approved RMP Recreation Management Allocations	2-101
2-11:	Approved RMP Desired Future Conditions for Recreation Management	2-102
2-12:	Approved RMP OHV Management Area Designations	2-119
2-13:	Approved RMP VRM Designations	2-135
2-14:	Approved RMP Identification of Lands that will be Managed to Maintain Wilderness Characteristics	2-139
2-15:	Approved RMP SCRMA's	2-147
2-16:	Approved RMP Lands and Realty Decisions	2-163
2-17:	Approved RMP Community Pit Names and Sizes	2-181

GLOSSARY OF TERMS

REFERENCES CITED

ACRONYMS

INDEX

APPENDICES

A:	Laws and Executive Orders
B:	Best Management Practices
C:	USDOI: Biological Opinion for the Yuma Field Office Resource Management Plan
D:	Areas of Critical Environmental Concern Evaluation Reports
E:	Lists of Federally Protected, State Listed, Special Status, Priority, and Invasive Species in Planning Area
F:	Special Ephemeral Rule
G:	Description of the Route Evaluation Tree Process©
H:	Special Cultural Resource Management Areas
I:	Lands Identified for Disposal

TABLE OF CONTENTS (CONT.)

MAPS

1-1:	Project Planning Area	1-3
2-1:	Special Designations	2-7
2-1-1:	Special Designations—Big Marias ACEC Detail	2-19
2-1-2:	Special Designations—Dripping Springs ACEC Detail	2-23
2-1-3:	Special Designations—Sears Point ACEC Detail	2-25
2-2:	Fortuna Pond Coordinated Management Area	2-29
2-3:	Limitrophe Coordinated Management Area	2-31
2-4:	Mittry Lake Coordinated Management Area	2-33
2-5:	Vegetation Management	2-43
2-6:	Wildlife Habitat Management Areas	2-65
2-7:	Livestock Grazing Management	2-89
2-8:	Wild Horse and Burro Management	2-95
2-9:	Prescribed Recreation Settings	2-103
2-10:	Recreation Management Allocations	2-105
2-11:	Travel Management	2-121
2-12:	Closed OHV Management Areas	2-123
2-13:	Visual Resource Management	2-137
2-14:	Wilderness Characteristics	2-141
2-15:	Special Cultural Resource Management Areas	2-149
2-16:	Lands and Realty/Minerals	2-165

TRAVEL MANAGEMENT AREA MAPS

(AVAILABLE ELECTRONICALLY ONLY—CD LOCATED INSIDE BACK COVER SLEEVE)

TMA-1	Ehrenberg/Cibola Travel Management Area
TMA-2	La Posa Travel Management Area
TMA-3	Yuma East Travel Management Area
TMA-4	Gila River Valley Travel Management Area
TMA-5	Greater Yuma Travel Management Area

RECORD OF DECISION

1.0 INTRODUCTION

This Record of Decision (ROD) approves the Bureau of Land Management's (BLM) proposal to manage the BLM-administered public lands within the Yuma Field Office (YFO) as presented in the attached Approved Resource Management Plan (Approved RMP). This Approved RMP was described as Alternative E in the April 2008 YFO Proposed Resource Management Plan and Final Environmental Impact Statement (PRMP/FEIS) (United States Department of the Interior [USDOI] BLM 2008). The ROD provides the background on development of the plan and rationale for approving the proposed decisions contained in Alternative E, and describes the clarifications and modifications made to resolve the protests received.

1.1 RESULTS OF PROTEST REVIEW

The BLM received seven protest letters during the 30-day public protest period provided for the proposed land use plan (LUP) decisions contained in the YFO PRMP/FEIS, in accordance with 43 Code of Federal Regulations (CFR) 1610.5-2. The following planning area stakeholders submitted protests on the YFO PRMP/FEIS:

1. Animal Welfare Institute
2. Morriset, Schlosser, Jozwiak & McGaw, on behalf of the Quechan Tribe
3. Tamarack Lagoon Corporation
4. Arizona Wilderness Coalition, Center for Biological Diversity, Sierra Club-Grand Canyon Chapter, Western Watersheds Project, The Wilderness Society, and Yuma Audubon Society
5. Mr. Mark Skousen
6. Ms. Andrea Martinez
7. Western Watersheds Project

The protest letters focused on special area designations, fish and wildlife, special status species management, livestock grazing management, travel management, wilderness characteristics management, and cultural resources management. Protesting parties made the following observations and suggestions:

- The YFO RMP revision must follow applicable laws, regulations, policy, and guidance, including the National Environmental Policy Act (NEPA), Federal Land Policy and

Management Act (FLPMA), Administrative Procedure Act, Wild Free-Roaming Horses and Burro Act, Endangered Species Act (ESA), National Historic Preservation Act (NHPA), and the BLM *Land Use Planning Handbook*.

- The protective and recovery needs of listed, special status species, state-sensitive species, and herpetofauna need to be fully addressed.
- Continuous year-long grazing is not a feasible grazing management strategy on Sonoran Desert public lands, nor is seasonal/ephemeral grazing necessarily appropriate. The Eagletail and Bishop allotments should not be available for grazing.
- There is a need to take a hard look at the direct, indirect, and cumulative impacts to resources from livestock grazing and travel management.
- There is a need to take a hard look at the direct, indirect, and cumulative impacts to recreation and travel management from the closure of desert washes to off-highway vehicle (OHV) travel.
- Additional acreage in the planning area should be designated as Closed OHV Management Areas. All lands with wilderness characteristics and Areas of Critical Environmental Concern (ACECs) should be closed to OHV use.
- YFO should not use the Route Evaluation Tree in its travel management planning.
- Additional acreage within the planning area should be allocated to the cultural resource use category of Traditional Use.
- Additional measures should be taken to protect cultural resources, including designating additional ACECs, withdrawing areas from mineral entry, and eliminating resource uses (e.g., Right-of-Way [ROW] Corridors) in culturally sensitive areas.

These and other issues were discussed in the seven protest letters. The BLM Director of Renewable Resources and Planning in Washington, D.C., addressed all protests without making significant changes to the Proposed Plan, although minor adjustments, corrections, and clarifications were made and have been explained in this ROD. The Modification (Section 1.2.5) and Clarification (Section 1.2.6) sections describe these adjustments.

1.2 DECISION

The decision is hereby made to approve the attached plan as the Approved RMP for BLM-administered public lands located in California and Arizona that are administered by the YFO (see Map 1-1 in the Approved RMP). The Approved RMP replaces relevant decisions in the Yuma District RMP, as amended (1987a); Lower Gila South RMP, as amended (1988); *Lower*

Gila North Management Framework Plan (1983a); and the *Approved Amendment to the Lower Gila North Management Framework Plan*, as amended (1983b).

The plan was prepared under the regulations of 43 CFR Part 1600, which implements FLPMA of 1976. An Environmental Impact Statement (EIS) was prepared for this Approved RMP in compliance with NEPA of 1969. The plan is nearly identical to the one presented in the PRMP/FEIS published in April 2008. Management decisions and guidance for public lands under the jurisdiction of the YFO are presented in the section titled Management Decisions in the Approved RMP attached to this ROD.

All decisions covered by the ROD are land use planning decisions that were protestable under the land use planning regulations (43 CFR Part 1610).

1.2.1 WHAT THE DECISION/APPROVED RMP PROVIDES

Many LUP decisions are implemented or become effective upon approval of the Approved RMP. According to the BLM Land Use Planning Handbook, LUP decisions are broad-scale decisions which guide future land management actions and subsequent site-specific implementation decisions. LUP 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. LUP decisions fall into two categories: Desired Future Conditions (Goals and Objectives) and Management Actions (Allowable Uses) to achieve outcomes. For each resource, additional guidance is presented in the form of Administrative Actions. Administrative Actions are not land use planning decisions, but are a key component of the overall RMP.

A. 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.

B. 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 the planning area. The Approved RMP includes specific land use restrictions to meet Desired Future Conditions and may exclude certain land uses to protect resource values. Because the Approved RMP 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.

C. ADMINISTRATIVE ACTIONS

Administrative Actions are not RMP-level decisions. However, they are day-to-day activities conducted by BLM often required by FLPMA that to be accomplished do not require a NEPA analysis or a decision by a responsible official. Examples of Administrative Actions include mapping, surveying, inventorying, monitoring, collecting needed information such as research and studies, and completing project-specific or implementation-level plans. Administrative Actions are included in this Approved RMP because they guide future programs and budget planning.

1.2.2 KEY DECISIONS IN THE APPROVED RMP

Listed below are the key management decisions in the Approved RMP.

- Nominates two National Back Country Byways totaling 21 miles in coordination with two other BLM field offices.
- Nominates 64 miles of United States (U.S.) Highway 95 between the Town of Quartzsite and Yuma, Arizona, as a National Scenic Byway.
- Designates three ACECs covering 44,700 acres.
- Identifies three Coordinated Management Areas (CMAs) covering 8,330 acres.
- Allocates three Vegetation Habitat Management Areas covering 22,900 acres.
- Closes 153,000 acres to firewood collection.
- Allocates five Wildlife Habitat Management Areas (WHA) covering 1,526,200 acres (some WHA acreages overlap).
- Makes 428,300 acres available to livestock grazing within the YFO; makes 215,200 acres available to livestock grazing within the BLM Lake Havasu Field Office (LHFO); and makes 889,700 acres unavailable to livestock grazing in the YFO.
- Manages 179,000 acres as the Cibola-Trigo Herd Management Area (HMA) for wild horses and burros.
- Allocates five Special Recreation Management Areas (SRMAs) covering 1,150,500 acres; allocates 22 Recreation Management Zones (RMZs) within the five SRMAs; and allocates 167,500 acres as Extensive Recreation Management Areas (ERMAs).
- Designates 400 acres as an Open OHV Management Area; designates 172,900 acres of Closed OHV Management Areas; and designates 1,144,700 acres of Limited OHV Management Areas.

- Commits the YFO to comprehensively designating 4,600 miles of inventoried routes in the planning area through implementation-level Travel Management Plans (TMPs) within five years. Limits motorized travel to 4,600 miles of inventoried routes until the route designation process is complete; and, after the route designation process is complete, limits motorized travel to designated routes only.
- Designates 167,800 acres as Visual Resource Management (VRM) Class I; 618,600 acres as VRM Class II; 512,400 acres as VRM Class III; and 19,200 acres as VRM Class IV.
- Identifies 48,400 acres where wilderness characteristics will be maintained.
- Allocates 10 Special Cultural Resource Management Areas (SCRMA) covering 28,500 acres.
- Identifies 11,900 acres as available for disposal.
- Designates eight ROW Corridors totaling 465 miles.
- Designates 10 communications sites.
- Continues existing withdrawals from mineral development across 174,300 acres; proposes to withdraw an additional 5,500 acres from mineral development; and applies surface occupancy restrictions throughout 212,500 acres.
- Identifies five community pits for salable minerals extraction within 700 acres.

The ROD serves as the final decision establishing the LUP decisions outlined in the Approved RMP and is effective on the date it is signed. No further administrative remedies are available for these LUP decisions.

1.2.3 WHAT THE DECISION/APPROVED RMP DOES NOT PROVIDE

The Approved RMP 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. Examples of these types of decisions are discussed below.

A. STATUTORY REQUIREMENTS

The decision will not change the BLM's responsibility to comply with applicable laws and regulations.

B. NATIONAL POLICY

The decision will not change the BLM's obligation to conform to current or future national policy.

C. FUNDING LEVELS AND BUDGET ALLOCATIONS

Funding levels and budget allocations are determined annually at the national level and are beyond the control of the YFO.

D. MONITORING STRATEGIES TO DETERMINE THE EFFECTIVENESS OF THESE DECISIONS IN ACHIEVING PLAN GOALS AND OBJECTIVES

Monitoring strategies will be addressed in specific activity-based plans that will be completed to implement the Approved RMP.

1.2.4 IMPLEMENTATION DECISIONS

Implementation Decisions generally constitute the BLM's final approval allowing on-the-ground actions to proceed. These types of decisions require site-specific planning and NEPA analysis. They may be incorporated into implementation plans (activity or project plans) or may exist as stand-alone decisions. At this time, YFO has not identified specific implementation-level decisions within this Approved RMP. Future activity-level plans will address the implementation of the Approved RMP.

1.2.5 MODIFICATIONS

Modifications were made to the Approved RMP based on the review and resolution of the protest letters. The agreed upon modifications to the decisions are provided below.

- Due to the change in status of the bald eagle (*Haliaeetus leucocephalus*) after printing the PRMP/FEIS, the Approved RMP was updated.
- The BLM has provided the correct source report citation in Section 2.8.3-E: *Compensation for the Desert Tortoise Report* (Desert Tortoise Compensation Team 1991).
- The BLM has modified Section 2.12.2-C in response to a protest issue. The additional Administrative Action coded AA-219v will read:
 - Consider a range of alternative route designations in future TMPs, including alternatives that consider closing a majority of non-essential routes that were created without authorization and a majority of non-essential drivable desert washes.

1.2.6 CLARIFICATIONS

As the result of protests and continued internal review, the BLM made clarifications in the Approved RMP, which are noted below.

- Clarifications, reclassifications, and reorganization of the PRMP/FEIS Desired Future Conditions, Management Actions, and Administrative Actions were made in order to present the information in a decision document format for the Approved RMP. Introductory texts, graphics, and appendices were included as needed to support the Approved RMP decisions.
- Additional text was added to adopt and implement the Bonytail Chub Recovery Goals (USDOI U.S. Fish and Wildlife Service [USFWS] 2002a).
- The BLM clarified sections 2.12.1-C and 2.12.2-A in response to a protest issue. The decisions coded TM-012 and TM-028 read as follows:
 - TM-012: Limit motorized use within Limited OHV Management Areas to existing inventoried routes appearing on the YFO route inventory maps (Maps TMA-1 to TMA-5). Motorized travel will not be allowed on roads, trails, and drivable washes that are not included on the YFO route inventory maps. After the YFO Transportation System is finalized, limit motorized use within Limited OHV Management Areas to designated routes only.
 - TM-028: During the development of the YFO Transportation System, provide additional opportunities for interested stakeholders to identify existing roads, trails, and drivable washes that do not appear on Maps TMA-1 to TMA-5.
- The BLM clarified Section 2.12.2-B in response to a protest issue. The decisions coded TM-030 and TM-031 read as follows:
 - TM-030: Prior to beginning each individual TMP, interested stakeholders are provided with opportunities to submit written scoping comments, including recommendations as to how specific routes should be designated. Specific route designation recommendations should be accompanied with a rationale as to why the BLM should adopt the designation. Route designations that will be considered include, but are not limited to:
 - Open to Motorized Use,
 - Limited to Particular Types of Vehicles, such as all-terrain vehicles, motorcycles, rock crawlers, etc.,
 - Limited to Authorized Users Only, such as mining claimants, grazing permittees, ROW holders, etc.,

- Limited to Non-Motorized Uses, such as hiking, mountain biking, and horseback riding,
 - Limited seasonally, or
 - Closed.
- o TM-031: Prior to approving each individual TMP, interested stakeholders are provided with opportunities to submit written comments, including recommendations as to how specific routes should be designated. Specific route designation recommendations should be accompanied with a rationale as to why the BLM should adopt the designation. Route designations that will be considered include, but are not limited to:
- Open to Motorized Use,
 - Limited to Particular Types of Vehicles, such as all-terrain vehicles, motorcycles, rock crawlers, etc.,
 - Limited to Authorized Users Only, such as mining claimants, grazing permittees, ROW holders, etc.,
 - Limited to Non-Motorized Uses, such as hiking, mountain biking, and horseback riding,
 - Limited seasonally, or
 - Closed.

1.3 OVERVIEW OF THE ALTERNATIVES

Five alternatives, including a No Action Alternative, were analyzed in detail in the Draft RMP/Draft EIS (DRMP/DEIS) and PRMP/FEIS (USDOI BLM 2006 and 2008). The alternatives were developed to address major planning issues identified through the scoping process and to provide direction for resource programs influencing land management.

Each alternative is composed of a set of components (decisions) that can be identified as a general theme. Each theme represents a distinct concept for management using a variety of land use planning decision types (including Land Use Allocations and Designations, Special Designations, Desired Future Conditions, and Management Actions). These decisions provide management direction at a broad scale and guide future actions to govern management of BLM-administered public lands.

1.3.1 ALTERNATIVE A (NO ACTION ALTERNATIVE)

Alternative A (No Action) described the continuation of the present management of the planning area and provided a baseline from which to identify potential environmental consequences when compared to the proposed action alternatives. This alternative described current resource and land management plan direction as represented in the Yuma District RMP, as amended (1987a); Lower Gila South RMP, as amended (1988); and *Approved Amendment to Lower Gila North Management Framework Plan*, as amended (1983b). This alternative resulted in no revision to the existing plans.

1.3.2 ALTERNATIVE B

Alternative B generally placed an emphasis on consumer-driven uses and the widest array of uses, emphasizing recreation, mineral, and energy development. It identified areas most appropriate for these various uses. It placed a greater emphasis on developed and motorized recreation opportunities and less on remote settings and primitive recreation.

1.3.3 ALTERNATIVE C

Alternative C provided visitors with opportunities to experience natural and cultural resource values of the planning area. It allowed visitation and development within the planning area, while ensuring that resource protection was not compromised. It was generally managed with decisions that had a greater balance of multiple uses. Alternative C identified a combination of natural processes and active management techniques for resource and use management and it provided for both motorized and non-motorized recreation opportunities.

1.3.4 ALTERNATIVE D

Alternative D generally placed emphasis on preservation of the planning area's natural and cultural resources through limited public use and discontinuation of livestock grazing. It focused on natural processes and other unobtrusive methods for natural resource use and management. It proposed greater opportunities for dispersed non-motorized recreation and fewer motorized and developed recreation opportunities.

1.3.5 ALTERNATIVE E (PROPOSED PLAN)

Alternative E was the BLM's Proposed Plan in the PRMP/FEIS. Using the Preferred Alternative in the DRMP/DEIS, the BLM revised the alternative to incorporate comments received during the 90-day public comment period. The resultant alternative with some additional modifications and clarifications is the Approved RMP attached to this ROD. In the most comprehensive manner, the Approved RMP is designed to respond to each of the issues and management concerns recognized during the planning process. The BLM has determined that the decisions presented in the Approved RMP will provide an optimal balance between authorized resource use and the protection and long-term sustainability of sensitive resources within the planning area. As with Alternatives A through D, the Approved RMP is the summation of its Desired Future Conditions, Land Use Allocations, Management Actions, and Administrative Actions.

The Approved RMP reflects the best combination of decisions to achieve BLM goals and policies, meet the purpose and need of the RMP revision, address the identified planning issues, and consider the recommendations of the public and cooperating agencies. The Approved RMP includes the management of recreation, wildlife, minerals, cultural resources, livestock grazing, land tenure, designation of ACECs, access to public lands, and other topics.

The Approved RMP is considered the preferable alternative when taking into consideration the social, economic, and natural components of the human environment. The U.S. Council on Environmental Quality (CEQ) has defined the preferable alternative as the alternative that will promote the national environmental policy as expressed in Section 101 of NEPA. This section lists six broad policy goals for all Federal plans, programs, and policies:

1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
3. Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
4. Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
5. Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Based on these criteria, identification of the preferable alternative involved balancing current and potential resource uses with the need to protect resources, as well as consideration of the human environment. Alternative B could be viewed as the least environmentally preferable alternative, as it offered the most intensive, active management for use of the area, which may have impacted other resource values the most or limited the rate of ecosystem recovery. However, this alternative could have provided the greatest economic benefit to the region in the short term. Alternative C would have been more environmentally preferable than Alternative A or Alternative B. This alternative would have provided a balance between sustainable economic benefits and resource protection. Alternative D would have been more protective of natural and biological values than Alternatives A, B, or C, but would have provided for fewer uses with more restrictions on those uses. The Approved RMP provides a balanced approach with protection for the environment while also providing economic and recreational activities.

1.4 MANAGEMENT CONSIDERATIONS IN SELECTING THE APPROVED RMP

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 (EOs) are listed in Appendix A.

Due to the diversity of community needs and stakeholders affected by management of BLM-administered lands, there has been both support and opposition to certain components of the Proposed Plan that were presented in the PRMP/FEIS. The BLM's objective in choosing Alternative E as the Approved RMP was to address these diverse needs and concerns in a fair manner and provide a practical and workable framework for management of BLM-administered public lands. The BLM is ultimately responsible for preparing a plan consistent with its legal mandates that reflects its collective professional judgment, incorporating the best from competing viewpoints and ideas. The Approved RMP (Alternative E as modified in consideration of public and agency comments and internal review) 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 Approved RMP proposes management that will improve and sustain properly functioning resource conditions while considering needs and demands for existing or potential resource commodities and values. In the end, resource use is managed 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 Approved RMP responds to issues related to managing for healthy rangelands and riparian and upland vegetation while still providing for livestock grazing and fish and wildlife habitat. The Approved RMP achieves this end by making 428,300 acres of the planning area available for livestock grazing, as long as *Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (Standards and Guidelines)* continue to be met, and by restricting grazing where it is incompatible with resource values.

The Approved RMP specifies conditions for permitted activities such as communication uses, and other commercial uses as appropriate, at the LUP level to resolve concerns regarding impacts of commercial uses. Impacts on uses as a result of protective management were disclosed in the PRMP/FEIS, and considered in conjunction with impacts to resource values. The Approved RMP provides the best balance in allowing for uses to occur while providing for protection of resource values and public health and safety. The Approved RMP responds to issues regarding noxious weeds and invasive species by maintaining the BLM's integrated management approach, as well as emphasizing the reestablishment and restoration of native plants during project activities and as a part of the watershed assessment process.

Concerns about specific resource values are addressed throughout the Approved RMP. Since standard management contained in the Approved RMP protects many of the relevant and

important values in the planning area, only three areas were designated as ACECs where additional special management is necessary.

The Approved RMP responds to increasing demands for recreation on BLM-administered public lands while adhering to FLPMA's mandate for multiple use management and the sustained yield of renewable resources.

The Approved RMP responds to travel management and access issues by providing a mechanism for route designation under TMPs, to be completed in five years. Pending completion of route designation, travel is restricted to existing inventoried routes of travel with a network of transportation routes that tie into roads administered by the counties, the states of Arizona and California, and Federal agencies. Users who value non-motorized areas for hunting, hiking, and solitude, are accommodated by areas that are closed to motorized or mechanized travel, as in designated Wilderness.

1.5 MITIGATION MEASURES

Measures to avoid or minimize environmental harm were built into the Approved RMP where practicable and appropriate. Many of the standard management provisions will minimize impacts when applied to activities proposed in the planning area. The *Standards and Guidelines* will be used as the base standards to assess the health of BLM-administered lands in the planning area. *Standards and Guidelines* will be applied as appropriate. When applicable, the Best Management Practices (BMPs) described in Appendix B will be used for a number of land uses, including livestock grazing, mineral development, recreation management, and realty actions. Additional measures to mitigate environmental impacts may also be developed during subsequent NEPA analysis at the activity-level planning and project stages, or through legally mandated consultations covering those same proposed actions.

As a part of this planning effort, the BLM executed ESA Section 7 consultation with the USFWS. The USFWS provided the BLM with a *Biological Opinion (BO) for the Yuma Field Office Resource Management Plan*, January 29, 2009 (USDOI USFWS 2009). The Approved RMP adopts and implements the conservation measures from the USFWS' BO (Appendix C). As this plan's decisions are implemented, actions determined through environmental analysis to potentially affect species listed or candidate species for listing under the ESA would trigger additional site-specific consultation on those actions.

1.6 PLAN MONITORING

Monitoring is the repeated measurement of activities and conditions over time with the implied purpose to use this information to adjust management if needed to achieve or maintain resource objectives. The BLM planning regulations (43 CFR Part 1610.4-9) call for monitoring RMPs on a continual basis and establishing intervals and standards based on the sensitivity of the resource to the decisions involved. CEQ regulations implementing NEPA state that agencies may provide

for monitoring to assure that their decisions are carried out and should do so in important cases (40 CFR Part 1505.2(c)).

There are three types of monitoring. These include implementation, effectiveness, and validation monitoring, as described below.

1.6.1 IMPLEMENTATION MONITORING

Implementation monitoring is the most basic type of monitoring and simply determines whether planned activities have been implemented in the manner prescribed by the plan. Some agencies call this compliance monitoring. This monitoring documents the BLM's progress toward full implementation of the LUP decision. There are no specific thresholds or indicators required for this type of monitoring, but progress towards plan compliance will be evaluated and reported at a five-year interval from the date of plan approval. Aspects of the following two monitoring types may also be addressed in this report.

1.6.2 EFFECTIVENESS MONITORING

Effectiveness monitoring is aimed at determining if the implementation of activities has achieved the Desired Future Conditions (or Goals and Objectives). Effectiveness monitoring asks the question: Was the specified activity successful in achieving the objective? This requires knowledge of the objectives established in the Approved RMP as well as indicators that can be measured. Indicators are established by technical specialists to address specific questions, and thus avoid collection of unnecessary data. Success is measured against the benchmark of achieving the objectives (Desired Future Conditions) established by the plan, which may include regulated standards for resources such as endangered species, air, and water. The interval between these efforts will vary by subject and expected rate of change, but effectiveness monitoring progress will generally be reported to the Field Office Manager on an annual basis with trends and conclusions when appropriate and also incorporated in five-year evaluation reports.

1.6.3 VALIDATION MONITORING

Validation monitoring is intended to ascertain whether a cause-and-effect relationship exists among management activities or resources being managed. It confirms whether the predicted results occurred and if assumptions and models used to develop the plan are correct. This type of monitoring can also be done by a partner, contract with other agencies, academic institutions, or other entities.

Since LUP monitoring is the process of (1) tracking the implementation of land use planning decisions and (2) collecting and assessing data/information necessary to evaluate the effectiveness of land use planning decisions, monitoring related to the Approved RMP will consist of implementation and effectiveness monitoring.

The BLM will monitor the Approved RMP to determine whether the objectives set forth in this document are being met and if applying the LUP direction is effective. Monitoring for each program area is outlined in the Management Decision section of the Approved RMP. If

monitoring shows LUP actions or BMPs are not effective, the BLM may modify or adjust management without amending or revising the plan as long as assumptions and impacts disclosed in the analysis remain valid and broad-scale goals and objectives are not changed (see the discussion entitled Maintaining the Plan in Section 1.9.6 of the Approved RMP). Where the BLM considers taking or approving actions that will alter or not conform to the overall direction of the plan, the BLM will prepare a plan amendment or revision and environmental analysis of appropriate scope (see the discussion entitled Changing the Plan in Section 1.9.7 of the Approved RMP).

1.7 IMPLEMENTATION OF THE RMP

Specifically, the process began when the BLM published the Notice of Intent (NOI) to prepare an RMP with EIS in the *Federal Register* on March 30, 2004. The Notice of Availability (NOA) of the Draft RMP and EIS was published on December 15, 2006. The NOA of the PRMP/FEIS was published on April 11, 2008.

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

1.8 CONSISTENCY REVIEW

Neither the Arizona nor the California Governor's Office identified any inconsistencies between the PRMP/FEIS and State or local plans, policies, and programs following the 60-day Governor's Consistency Review of the PRMP/FEIS (initiated March 6, 2008, in accordance with planning regulations at 43 CFR Part 1610.3-2(e)).

Consistency of the Approved RMP with other local, State, Tribal, and Federal plans and policies (which sometimes conflict among themselves) was also considered as a factor in alternative selection. The Approved RMP is consistent with plans and policies of the USDOJ and BLM, other Federal agencies, State government, and local governments to the extent that the guidance and local plans are also consistent with the purposes, policies, and programs of Federal law and regulation applicable to public lands.

1.9 PUBLIC INVOLVEMENT

One of the BLM's primary objectives during development of the YFO's Approved RMP was to understand the views of various publics by providing opportunities for meaningful participation in the resource management planning process. The BLM interdisciplinary planning team used the scoping process to identify issues relevant to the YFO planning area. Through communication media such as meetings, newsletters, and news releases, the public was provided

opportunities to identify issues that needed to be addressed in the RMP revision. The goal was for this process to result in an increased sense of the planning process, the decisions that result from it, and the importance of collaborative stewardship as a strategy for implementation.

Additionally, CEQ regulations mandate that Federal agencies responsible for preparing NEPA analysis and documentation do so “in cooperation with State and local governments” and other agencies with jurisdiction by law or special expertise. In support of this mandate, the BLM invited a broad range of local, State, Tribal, and Federal agencies to establish cooperating agency status with the BLM. Cooperating agency status offers the opportunity to assume additional roles and responsibilities beyond the collaborative planning processes of attending public meetings and reviewing and commenting on plan documents. Several Federal, State, Tribal, and local agencies signed Memoranda of Understanding to serve as cooperating agencies for the YFO RMP. These agencies are listed in Section 1.7.1 of the Approved RMP.

The BLM facilitated public involvement through a series of open houses in 2004 and 2005, and another series of meetings was held to announce and discuss the Draft RMP and EIS in 2007. The YFO also maintained a national mailing list of approximately 1,600 individuals, agencies, interest groups, and Tribes who expressed interest in the planning process. The BLM mailed planning bulletins to those on the mailing list to keep them informed of project status. Additionally, public meetings were announced at least 15 days prior to the event in local news media. The BLM also participated in numerous meetings with cooperating agencies, other Federal agencies, Native American tribes, and State and local governments. Additional details concerning the coordination process are included in the Approved RMP in the section entitled Planning Process, and in the PRMP/FEIS.

1.10 AVAILABILITY OF THE PLAN

Copies of the ROD and the YFO Approved RMP are available by request from the following locations: The BLM YFO, 2555 East Gila Ridge Road, Yuma, Arizona, 85365, (928) 317-3200, and on the BLM Arizona Web site at www.blm.gov/az.

Field Manager Recommendation

Having considered a full range of alternatives, associated effects, and public input, we recommend adoption and implementation of the attached Yuma Field Office Resource Management Plan.



James T. Shoaff
Field Manager
Yuma Field Office

1/29/2010

Date

District Manager Concurrence

I concur with the adoption and implementation of the Yuma Field Office Resource Management Plan.



Rebecca Heick
District Manager
Colorado River District

1/29/2010

Date

State Director Approval

In consideration of the foregoing, I approve the Yuma Field Office Resource Management Plan.



James G. Kenna
Arizona State Director

1/29/2010

Date

APPROVED RESOURCE MANAGEMENT PLAN—EXECUTIVE SUMMARY

INTRODUCTION

The Bureau of Land Management (BLM) Yuma Field Office (YFO) has prepared the *Approved Resource Management Plan* (Approved RMP) for the YFO planning area (hereafter planning area). The Approved RMP will direct management of Federal surface and mineral estate managed by the YFO within Yuma, La Paz, and Maricopa counties in Arizona, and portions of Imperial and Riverside counties in California. The planning area encompasses over 1.3 million acres along the lower Colorado River in southwest Arizona and southeast California, and extends eastward into Maricopa County in Arizona.

The Approved RMP was prepared in compliance with BLM's planning regulations Title 43 Code of *Federal Regulations* (CFR) 1600 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 Regulations for Implementing the NEPA* (40 CFR 1500-1508), and requirements of BLM's *NEPA Handbook* 1790-1.

This document (including the Route Inventory maps described in Chapter 2 under Travel Management) is also available on the Internet at:
<http://www.blm.gov/az/st/en/prog/planning/yuma_plan.html> and on compact disc.

PURPOSE AND NEED

The purpose of this RMP is to establish management directions for the balanced uses of resources within the planning area, including: rangeland, wildlife, wilderness, recreation, cultural resources, and other natural, scenic, scientific, and historical values. There were three RMPs (with amendments) which previously provided for the administration and management of the resources within the planning area. This RMP consolidated those three plans and guides the overall management of activities, as well as the use and protection of BLM-administered resources within the planning area. Subsequent site-specific and more detailed planning will take place for certain geographic areas and resources within the planning area in conformance with this RMP. The RMP creates a framework for future planning and decision making.

This RMP was needed to respond to the changed conditions and circumstances which occurred in the planning area and which may not have been previously addressed, as set forth in the *Yuma District RMP*, as amended (United States Department of the Interior [USDOI BLM] 1987a); the *Lower Gila South RMP*, as amended (USDOI BLM 1988a), and the *Lower Gila North Management Framework Plan*, as amended (USDOI BLM 1983). Those portions of previous management which are responsive to changed conditions and circumstances were carried forward to this Approved RMP.

ENVIRONMENTAL SETTING

The planning area extends northward along the lower Colorado River from the United States of America (U.S.)–United Mexican States (Mexico) border at San Luis, Arizona, to north of Blythe, California, and Ehrenberg, Arizona. The YFO manages a diverse combination of land and resources. Within the planning area there are four Wilderness Areas in Arizona and portions of four other Wilderness Areas in California. The planning area encompasses lands within five counties: three in Arizona (La Paz, Maricopa, and Yuma) and two in California (Imperial and Riverside).

Several hundred thousand acres of land in the planning area are withdrawn by Reclamation to accommodate Boulder Canyon and related projects from Davis Dam to Mexico. These Reclamation-withdrawn or -acquired lands that constitute a corridor along the lower Colorado River as identified in the *Lower Colorado River Land Use Plan* of 1964 are jointly managed by Reclamation and BLM for specific purposes as outlined by 613 *Departmental Manual* (DM 613) 1.1 and the joint *Memorandum of Understanding* (MOU) of July 15, 1991.

PUBLIC SCOPING

The Notice of Intent to prepare the *Draft Resource Management Plan and Draft Environmental Impact Statement* (DRMP/DEIS) was published in the *Federal Register* on March 30, 2004. YFO held four open houses during 2004 and solicited comments using comment forms and informational flyers (distributed by mail and by hand). YFO also invited public participation in the planning process through the use of the BLM website. Prior to the DRMP/DEIS, approximately 860 comments were received from agencies, organizations, the public, and other interested stakeholders. Of the comments received, a large number concerned transportation planning and use of off-highway vehicles (OHV), recreation issues, management of habitat for threatened and endangered species and other wildlife, and management of lands with wilderness characteristics.

The balance of the comments addressed a wide range of opinions and concerns, some of which are beyond the scope of YFO's land use planning and this RMP. Most scoping comments, however, are reflected in some fashion in one or more of the PRMP/FEIS alternatives.

To meet BLM's goal "to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations," the PRMP/FEIS focuses on the following topics and the potential decisions needed to influence future actions:

- Land Health Standards
- Special Designations Management
- Coordinated Management Areas
- Vegetation Management
- Wildland Fire Management
- Fish and Wildlife Management

- Special Status Species Management
- Livestock Grazing Management
- Wild Horse and Burro Management
- Recreation Management
- Travel Management
- Visual Resource Management
- Wilderness Characteristics Management
- Cultural Resources Management
- Paleontological Resource Management
- Air, Water, and Soil Management
- Lands and Realty Management
- Mineral Resource Management
- Public Health and Safety Management

GOVERNMENT AND PUBLIC INVOLVEMENT

Public participation is essential in making informed decisions. BLM believes that extensive public involvement improves communication, develops enhanced understanding of different perspectives, and identifies solutions to issues and problems.

In addition to the public, there are numerous individuals within BLM and other Federal agencies who take an active role in the planning process. A wide variety of individuals both internal and external to BLM participate in the planning process. While most of the work occurs at the Field Office level, many individuals at higher levels of the organization are involved in the planning process as well.

The Approved RMP was developed with the following Cooperating Agencies: the Arizona Department of Transportation; Arizona Game and Fish Department; Bureau of Reclamation; Cibola, Imperial, and Kofa National Wildlife Refuges; City of Yuma; Cocopah Indian Tribe; Federal Highway Administration; Fort Yuma Quechan Tribe; Marine Corps Air Station, Yuma; Town of Quartzsite; U.S. Army Yuma Proving Ground; U.S. Department of Agriculture Natural Resources Conservation Service; U.S. Department of Homeland Security, Customs and Border Patrol; Yuma County Department of Public Works; Wellton-Mohawk Irrigation and Drainage District; and Yavapai-Apache Nation.

BLM also consulted with Native American 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. Three Native American tribes (the Cocopah Indian Tribe, Colorado River Indian Tribes, and Fort Yuma Quechan Tribe) currently reside within or adjacent to the boundaries of the planning area. A number of other Native American tribes also have recognized cultural ties to these lands.

ALTERNATIVES

The basic goal of developing alternatives was to prepare different combinations of management to address issues and to resolve conflicts among uses. Alternatives had to meet the purpose and need; be reasonable; provide a mix of resource protection, use, and development; be responsive to the issues; and meet the established planning criteria. Each alternative presented in the Proposed RMP/Final EIS was a complete land use plan that provided a framework for multiple-use management of the full spectrum of resources, resource uses, and programs present in the planning area.

Two types of land use planning decisions were found under each topic for each alternative: Desired Future Conditions (resource goals and objectives) and Management Actions (prescriptions to help achieve management objectives). Below is a summary of the alternatives considered in the Proposed RMP/Final EIS.

Alternative A (No Action)

Alternative A (No Action) described the continuation of the present management of the planning area and provides a baseline from which to identify potential environmental consequences when compared to the Action Alternatives. This alternative described current resource and land management plan direction as represented in the Yuma District Resource Management Plan (1987), as amended; Lower Gila South Resource Management Plan (1988), as amended; and Lower Gila North Management Framework Plan (1983), as amended. This alternative resulted in no revision to the existing plans.

Alternative B

Alternative B generally placed an emphasis on consumer-driven uses and the widest array of uses, emphasizing recreation, mineral, and energy development. It identified areas most appropriate for these various uses. It placed a greater emphasis on developed and motorized recreation opportunities and less on remote settings and primitive recreation.

Alternative C

Alternative C provided visitors with opportunities to experience natural and cultural resource values of the planning area. It allowed visitation and development within the planning area, while ensuring that resource protection was not compromised. It was generally managed with decisions that had a greater balance of multiple uses. Alternative C identified a combination of natural processes and active management techniques for resource and use management and it provided for both motorized and non-motorized recreation opportunities.

Alternative D

Alternative D generally placed emphasis on preservation of the planning area's natural and cultural resources through limited public use and discontinuation of livestock grazing. It focused on natural processes and other unobtrusive methods for natural resource use and management. It proposed greater opportunities for dispersed non-motorized recreation and fewer motorized and developed recreation opportunities.

Alternative E (Proposed Plan)

Alternative E (Proposed Plan) reflects the best combination of decisions to achieve BLM goals and policies, meets the Interdisciplinary Team (ID Team) purpose and need, addresses the planning issues, and considers the recommendations of cooperating agencies and BLM specialists. The Proposed Plan actions include, but are not limited to, management of recreation, wildlife, minerals, cultural resources, livestock grazing, and land tenure; designation of Areas of Critical Environmental Concern; access to public lands; and other topics.

PUBLIC REVIEW OF DRMP/DEIS

Notice of the release of the DRMP/DEIS for a 90-day public review period was published in the Federal Register on December 15, 2006. Five formal public meetings were held during the public comment period on the DRMP/DEIS. These meetings were held February 5 through 8, 2007, in Wellton, Town of Quartzsite, Yuma, and Tucson, Arizona, and in Blythe, California. The meetings provided an opportunity for interested members of the public to learn more about the analysis contained in the DRMP/DEIS, as well as provided an opportunity for attendees to submit comments, written and oral, on the document.

All comments received during the public comment period were reviewed and considered. Comments that presented new data or addressed the adequacy of the document, the alternatives, or the analysis are responded to in Chapter 5 of this PRMP/FEIS pursuant to BLM policy. There were also many comments received which requested further clarification in the document. Although not required to be addressed, these comments requesting clarification may have resulted in additional language or revisions throughout the PRMP/FEIS.

RESULTS OF PROTEST REVIEW

The BLM received seven valid protest letters on a variety of proposed land use plan decisions included in the YFO PRMP/FEIS that was released for a 30-day public protest period in April 2008. Diverse individuals, organizations, and tribes exercised their right to protest the PRMP/FEIS in accordance with 43 Code of Federal Regulations (CFR) 1610.5-2; and the protests were reviewed by the BLM Director of Renewable Resources and Planning in Washington, D.C.

Protest letters raised a variety of concerns. All protests were addressed without making significant changes to the PRMP, though minor modifications and clarifications were made and have been explained in the Record of Decision (ROD). The Modification (Section 1.2.4) and Clarification (Section 1.2.5) sections of the ROD describe the adjustments.

KEY DECISIONS IN THE APPROVED RMP

Listed below are the key management decisions in the Approved RMP.

- Nominates two National Back Country Byways totaling 21 miles in coordination with two other BLM field offices.
- Nominates 64 miles of U.S. Highway 95 between the Town of Quartzsite and Yuma, Arizona, as a National Scenic Byway.
- Designates three ACECs covering 44,700 acres.
- Identifies three Coordinated Management Areas covering 8,330 acres.
- Allocates three Vegetation Management Areas covering 22,900 acres.
- Closes 153,000 acres to firewood collection.
- Allocates five Wildlife Habitat Management Areas (WHA) covering 1,526,200 acres (some WHA acreages overlap).
- Makes 428,300 acres available to livestock grazing within the YFO; makes 215,200 acres available to livestock grazing within the BLM Lake Havasu Field Office. Makes 889,700 acres unavailable to livestock grazing in the YFO.
- Manages 179,000 acres as the Cibola-Trigo Herd Management Area for wild horses and burros.
- Allocates five Special Recreation Management Areas (SRMA) covering 1,150,500 acres; allocates 22 Recreation Management Zones within the five SRMAs; and allocates 167,500 acres as Extensive Recreation Management Areas.
- Designates 400 acres as an Open OHV Management Area; designates 172,900 acres of Closed OHV Management Areas; and designates 1,144,700 acres of Limited OHV Management Areas.
- Commits the YFO to comprehensively designating 4,600 miles of inventoried routes in the planning area through implementation-level Travel Management Plans within five years. Limits motorized travel to 4,600 miles of inventoried routes until the route designation process is complete; and, after the route designation process is complete, limits motorized travel to designated routes only.
- Designates 167,800 acres as Visual Resource Management (VRM) Class I; 618,600 as VRM Class II; 512,400 acres as VRM Class III; and 19,200 acres as VRM Class IV.
- Identifies 48,400 acres where wilderness characteristics will be maintained.
- Allocates 10 Special Cultural Resource Management Areas covering 28,500 acres.
- Identifies 11,900 acres as available for disposal.
- Designates eight Right-of-Way Corridors totaling 465 miles and designates 10 communications sites.

- Continues existing withdrawals from mineral development across 174,300 acres; proposes to withdraw an additional 5,500 acres from mineral development; and applies surface occupancy restrictions throughout 212,500 acres.
- Identifies five community pits for salable minerals extraction within 700 acres.

The ROD serves as the final decision establishing the land use plan decisions outlined in the Approved RMP and is effective on the date it is signed. No further administrative remedies are available for these land use plan decisions.

CHAPTER 1.0

INTRODUCTION

The BLM YFO has prepared the Approved RMP for the YFO planning area (hereafter planning area). The Approved RMP will direct management of Federal surface and mineral estate managed by the YFO within Yuma, La Paz, and Maricopa counties in Arizona, and portions of Imperial and Riverside counties in California. The planning area encompasses over 1.3 million acres along the lower Colorado River in southwest Arizona and southeast California, and extends eastward into Maricopa County in Arizona (Map 1-1).

This plan represents years of ongoing, coordinated efforts on the part of BLM YFO staff, BLM Arizona State Office staff, representatives of communities located within the planning area, cooperating and collaborating government agencies, special interest and user groups, and hundreds of concerned citizens. The decisions outlined in this document will enable the BLM to manage the resources and uses of BLM-administered public lands located within the YFO planning area as a comprehensive unit.

In accordance with BLM's planning regulations at 43 CFR Part 1600, and in fulfillment of the BLM's obligations under NEPA of 1969, the BLM prepared an EIS to analyze the effects of BLM's Approved Plan and a reasonable range of alternatives. The BLM complied with all Federal requirements and agency policies while developing a reasonable range of alternatives for the analysis of Management Actions for BLM-administered surface and mineral estate within the planning area. The analysis of resources and values within the planning area permitted the development of recommendations in alternatives for actions that would be taken on BLM-administered lands to enhance management of resources adjacent to and within the planning area. BLM distributed the DRMP/DEIS in December 2006 and the PRMP/FEIS in April 2008.

1.1 VISION

The vision of the YFO in constructing this Approved RMP 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 sustains the health, diversity, and productivity of public lands for the use and enjoyment of present and future generations. YFO has considered the public's needs and stakeholder values in the management programs of resources in this Approved RMP.

1.2 PURPOSE AND NEED FOR A RESOURCE MANAGEMENT PLAN REVISION

1.2.1 PURPOSE

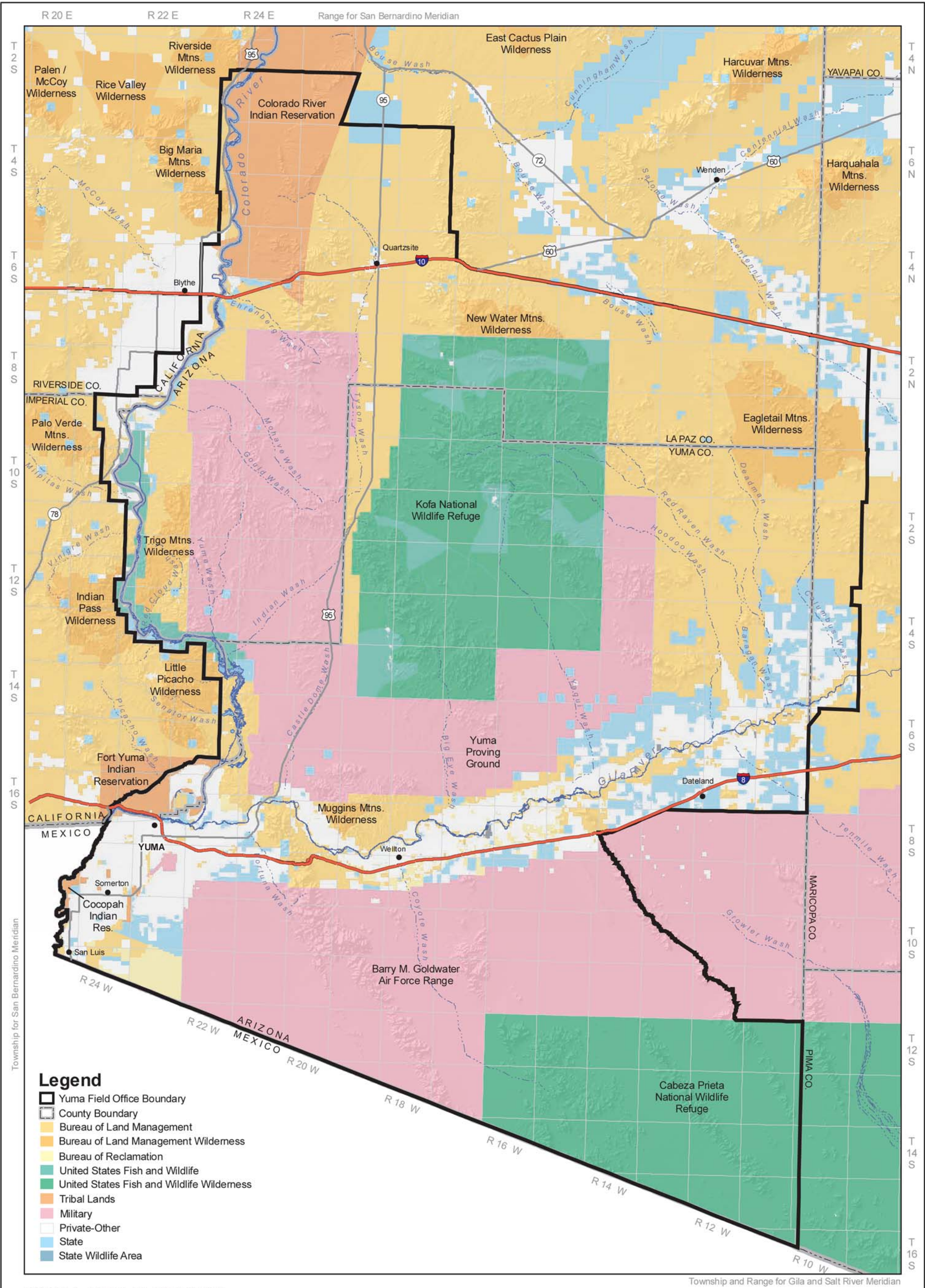
The purpose of this RMP is to establish management directions for the balanced uses of resources within the planning area, including: rangeland, wildlife, wilderness, recreation, cultural resources, and other natural, scenic, scientific, and historical values. There were three RMPs (with amendments) which previously provided for the administration and management of the resources within the planning area. This RMP consolidated those three plans and guides the overall management of activities, as well as the use and protection of BLM-administered resources within the planning area. Subsequent site-specific and more detailed planning will take place for certain geographic areas and resources within the planning area in conformance with this RMP. The RMP creates a framework for future planning and decision making.

FLPMA of 1976, as amended (43 U.S. Code [USC] 1711), requires BLM “to develop, maintain, and, when appropriate, revise land use plans” (43 USC 1712 [a]). FLPMA directs BLM to manage public lands and their various resource values for multiple use and sustained yield to ensure that they are utilized in a manner that would best meet the present and future needs of the public. As required by FLPMA and current BLM policy, YFO has prepared this RMP to establish management directions for the balanced uses of such renewable and non-renewable resources as rangeland, wildlife, wilderness, recreation, cultural resources, and other natural, scenic, scientific, and historical values within the planning area.

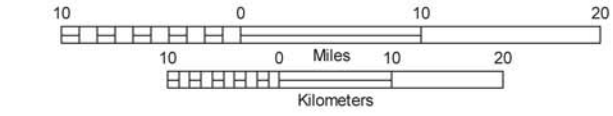
In many cases, existing management decisions that are still effective and valid are carried forward. In other cases, existing management decisions are outdated and inconsistent. The revised RMP provides the YFO an opportunity to consolidate three RMPs and several plan amendments. The RMP has been developed in compliance with FLPMA and current BLM policy as set forth in the 2005 BLM H-1601-1 *Land Use Planning Handbook*.

The objective of the planning effort was to produce an Approved RMP that achieved the following:

- Created a common vision for the planning area;
- Updated existing management decisions for BLM-administered land within the planning area;
- Addressed new uses of public land that occurred since the 1986 and 1987 Records of Decision (RODs) for the Yuma District RMP, associated amendments, and management/activity plans were implemented;
- Analyzed and incorporated data related to use of public lands that have become available since the 1987 Yuma District RMP, associated amendments, and management/activity plans were implemented;
- Addressed land incorporated into the planning area from the Lower Gila South and Lower Gila North planning areas; and
- Provided forward-looking, cohesive, and consistent land management through collaboration with neighboring communities, general public, interested groups, and all levels of government. Collaborators/partners will be involved in RMP implementation.



**YUMA FIELD OFFICE
RECORD OF DECISION
APPROVED RESOURCE MANAGEMENT PLAN**



U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Yuma Field Office
January 2010



Map 1-1: Project Planning Area

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

1.2.2 NEED

This RMP was needed to respond to the changed conditions and circumstances which occurred in the planning area and which may not have been previously addressed, as set forth in the Yuma District RMP, as amended (USDOI BLM 1987a); the Lower Gila South RMP, as amended (USDOI BLM 1988), and the *Lower Gila North Management Framework Plan*, as amended (USDOI BLM 1983b). Those portions of previous management which are responsive to changed conditions and circumstances were carried forward to this Approved RMP.

A LUP evaluation for the planning area was completed in December 2000. The evaluation concluded that a majority of RMP decisions were either being implemented or had been implemented. Resources within the planning area administered by the BLM were previously managed under three LUPs and their nine amendments.

Additional conditions and changing circumstances which relate to the management of BLM resources within the planning area were considered. These included:

- Population growth and changing demographics;
- Increased and conflicting demands on the planning area's resources and resource uses;
- Increased complexity of resource management issues; and
- Increased OHV use on public lands.

This Approved RMP comprehensively addresses these issues to balance resource uses in a way that satisfies both public demand and FLPMA's requirements of multiple-use and sustained yield approach for natural resource management.

1.3 PLANNING AREA

The planning area extends northward along the lower Colorado River from the U.S.–United Mexican States (Mexico) border at San Luis, Arizona, to north of Blythe, California, and Ehrenberg, Arizona. The eastern boundary extends past the eastern side of the Eagletail Mountains Wilderness Area in Maricopa County and south to the northern boundary of the Luke Air Force–Barry M. Goldwater Range (BMGR). The western boundary generally parallels the Colorado River to the west and includes land in California (see Map 1-1).

The YFO manages a diverse combination of land and resources. The lower Colorado River is a destination for visitors seeking camping, year-round water-related recreation, and off-highway travel. On average, 250,000 winter visitors use the La Posa Long-Term Visitor Area (LTVA) and the five surrounding 14-day campgrounds on an annual basis. Within the planning area there are four Wilderness Areas in Arizona and portions of four other Wilderness Areas in California. The YFO maintains an active lands and realty program to oversee ROWs for major corridors connecting energy-rich states such as Texas, Wyoming, and New Mexico to California, through Arizona. The planning area encompasses lands within five counties: three in Arizona (La Paz, Maricopa, and Yuma) and two in California (Imperial and Riverside). RMP-related impacts are most likely to occur in Yuma and La Paz counties, where approximately 95 percent of the

planning area lands are located.

Adjacent land jurisdictions that require management coordination in this RMP include Arizona Game and Fish Department (AGFD), Arizona State Lands, BMGR, BLM Field Offices (Lake Havasu, Lower Sonoran, and El Centro), Bureau of Reclamation (Reclamation), California Department of Fish and Game (CDFG), Cibola National Wildlife Refuge (NWR), Cocopah Indian Reservation, Colorado River Indian Tribes (CRIT), Fort Yuma–Quechan Indian Reservation, Imperial NWR, Kofa NWR, Marine Corps Air Station–Yuma (MCAS–Yuma), U.S. Army Yuma Proving Ground (YPG), and private land including regional irrigation districts.

Where urban interface issues are present, YFO collaborates with cities and towns adjoining public land including the City of Yuma and Town of Quartzsite; Arizona communities of San Luis, Somerton, Dateland, Wellton, Ehrenberg, and Hyder; and California communities of Blythe and Palo Verde, all of which have worked with YFO on various issues.

1.3.1 BUREAU OF RECLAMATION PROJECT LANDS

Several hundred thousand acres of land in the planning area are withdrawn by Reclamation to accommodate Boulder Canyon and related projects from Davis Dam to Mexico. These Reclamation-withdrawn or -acquired lands that constitute a corridor along the lower Colorado River as identified in the *Lower Colorado River Land Use Plan* of 1964 (USDOI) are jointly managed by Reclamation and BLM for specific purposes as outlined by *Departmental Manual* (DM) 613 1.1 and the joint Memorandum of Understanding (MOU) of July 15, 1991.

The Secretary of the Interior has assigned recreation and wildlife management responsibilities on Reclamation-withdrawn lands to the BLM. These activities are conducted in coordination with Reclamation, and the provisions of this arrangement are found in DM 613 1.1. The Secretary of the Interior, acting through Reclamation, retains the role of Watermaster for the lower Colorado River and for operation of the various dams, river works, and irrigation project facilities authorized by Congress.

BLM has the responsibility to maximize opportunities for recreation, wildlife, and other purposes not specified by Reclamation. Reclamation retains the responsibility for operation and maintenance of works and facilities, and environmental mitigation and enhancement associated with its mission of water delivery on the lower Colorado River. Throughout the planning process, YFO has coordinated with Reclamation to ensure that the Approved RMP does not contain planning decisions that conflict with existing and planned Reclamation project activities. YFO will continue to coordinate and consult with Reclamation, as components of the Approved RMP are implemented on Reclamation project lands.

1.3.2 HISTORICAL OVERVIEW OF PLANNING AREA

The Lower Colorado River Land Use Office (Land Use Office) was established in Yuma by the USDOl in 1961 by Secretarial Order 2854. The *Lower Colorado River Land Use Plan* was published in 1964 by the USDOl for 265 river miles between Davis Dam and the International Boundary. This multi-jurisdictional plan addresses trespass and water-based recreation issues to resolve illegal occupancy including trailer homes, shacks, commercial resorts, and agricultural development.

In December 1968, the Land Use Office was assigned to the BLM to implement the plan. The Yuma District Office was established on August 23, 1972. The district included Reclamation-withdrawn lands of the Land Use Office along the lower Colorado River corridor and large areas of public land to the east in Arizona. Management issues on public lands included recreation, grazing, mining, wildlife, and realty actions.

In October of 1997, through a reorganization of BLM lands within the State of Arizona, the Yuma District was split into the Yuma and Lake Havasu field offices. The YFO planning area expanded to manage 1.3 million acres, including portions of the Lower Gila North and South planning areas. In 2005, Arizona BLM reorganized to form a three-tiered organization composed of field offices, districts, and the Arizona State Office. The Colorado River District was formed, which includes the Yuma, Lake Havasu, and Kingman field offices. Planning area boundaries remained the same for each field office.

A block of BLM-administered land on U.S. Highway 95 (Highway 95) about 10 miles north of the Town of Quartzsite was transferred to the State Land Trust 30 years ago at the request of the Governor of Arizona and under the direction of the Secretary of the Interior to enable the State Land Department to benefit from future growth in the Colorado River area. The block of land was transferred to the State Land Department after a special study by BLM, the State Land Department, and other Federal and State agencies in 1972. The study determined that this, along with several other blocks of BLM-administered lands along the lower Colorado River in Arizona, should be transferred to State Land Trust's ownership.

1.4 PLANNING PROCESS

1.4.1 STEPS IN THE PROCESS

The BLM uses a multi-step process when developing a LUP. Some of the steps may occur concurrently. Some situations may require the manager to supplement previous work as additional information becomes available. These steps have been fully integrated with the NEPA process and CEQ guidelines, as depicted in Figure 1-1, and described below.

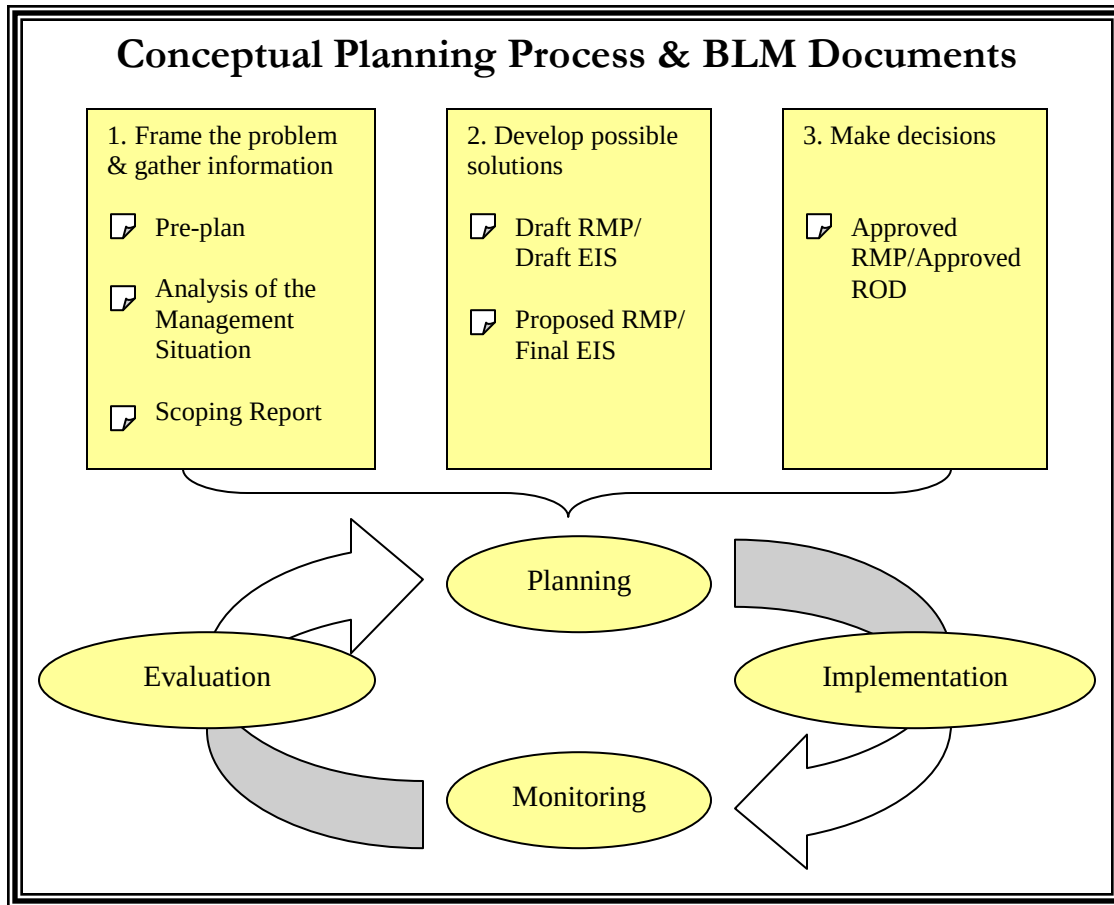


Figure 1-1

A. IDENTIFICATION OF ISSUES

- Issue a NOI in the *Federal Register* to begin the scoping process to identify issues and develop planning criteria and to begin public participation.
- Identify issues. This sets the tone and scope for the entire planning process and is done with full public participation.

B. DEVELOP PLANNING CRITERIA

- Establish constraints and guides, and determine what will or will not be done or considered during the planning process.
- Produce a scoping report for public review, including final planning criteria.

C. INVENTORY DATA AND INFORMATION COLLECTION

- Collect an inventory of data and information, which is an ongoing activity and not governed solely by the planning process.

D. ANALYZE THE MANAGEMENT SITUATION

- Gather information on the current management situation. Describe pertinent physical and biological characteristics and evaluate the capability and condition of the resources.

E. FORMULATE ALTERNATIVES

- Alternative formulation is the step where the success of the planning effort hinges on clearly identified reasonable alternatives.

F. ESTIMATE EFFECTS OF ALTERNATIVES

- Estimate the impact or effects of each alternative on the environment and management situation.

G. SELECT PREFERRED ALTERNATIVE

- Select the Preferred Alternative, which in the judgment of management best resolves the planning issues and promotes balanced multiple use objectives.
- Issue a NOA of DRMP/DEIS for the 90-day public review.

H. SELECT THE RESOURCE MANAGEMENT PLAN

- Review and analyze public comments, opinions, suggestions, and recommendations and use the important information/data in preparing the PRMP/FEIS.
- Issue a NOA of PRMP/FEIS for the 30-day protest period, concurrent with the 60-day Governor's review.
- Issue a NOA for the ROD/Approved Plan after protests are resolved.

I. TIERING TO THE RESOURCE MANAGEMENT PLAN

- Tiering is the incorporation by reference of the content of previous plans into future implementation level project planning. The Approved RMP identifies the need to develop several implementation-level management plans in compliance with NEPA that will be tiered to this Approved RMP and ROD, including TMPs and ACEC Management Plans.
- If a proposed project or site-specific action does not conform to or achieve consistency with the terms, conditions, and decisions in the Approved RMP, the YFO may deny the proposal or prepare an RMP amendment in the form of an Environmental Assessment (EA) or EIS.

1.4.2 PUBLIC INVOLVEMENT

The RMP provides numerous opportunities for the public to be involved in the process.

- Public scoping meetings are initially held to assist the BLM in assessing the scope of the RMP proposed actions and alternatives to be considered.

- Public meetings are held once the DRMP/DEIS is released to garner public comments on the draft.
- A public protest period is held after the PRMP/FEIS is finished to allow for public input before the decisions are finalized in the ROD/Approved Plan.

Public participation is essential in making informed decisions. BLM believes that extensive public involvement improves communication, develops enhanced understanding of different perspectives, and identifies solutions to issues and problems.

In addition to the public, there are numerous individuals within BLM and other Federal agencies who take an active role in the planning process. A wide variety of individuals both internal and external to BLM participate in the planning process. While most of the work occurs at the Field Office level, many individuals at higher levels of the organization are involved in the planning process as well.

1.5 PLANNING CRITERIA AND LEGISLATIVE CONSTRAINTS

The BLM planning regulations (43 CFR 1610.4-2) require the development of planning criteria to guide preparation of the RMP. Planning criteria are the constraints or ground rules that guide and direct plan preparation. They ensure that the plan is tailored to the identified issues, and that unnecessary data collection and analyses are avoided. Planning criteria are based on applicable laws and regulations, agency guidance, the result of consultation and coordination with the public, other Federal, State, and local agencies, and Native American tribes.

1.5.1 GENERAL PLANNING CRITERIA

The following criteria were developed and distributed to all interested parties collaborating in the planning process.

- The plan has been completed in compliance with FLPMA, the ESA, NEPA, and all other relevant Federal laws and EOs (including wilderness legislation) and management policies of the BLM.
- The plan resulted in determinations as required by special program- and resource-specific guidance detailed in Appendix C of the BLM's *Land Use Planning Handbook* (H-1601-1).
- Planning decisions from the existing RMP that remain valid were carried forward into the plan. Relevant decisions and alternatives proposed in previous studies of the planning area were brought forward into the plan for reassessment.
- The planning team worked collaboratively with the State of Arizona, Yuma, La Paz, Imperial, Riverside, and Maricopa counties, Tribal governments, municipal governments, other Federal agencies, the Resource Advisory Council, and all other interested groups, agencies, and individuals. Decisions in the plan strived to be compatible with existing plans and policies of adjacent local, State, Tribal, and Federal agencies, and consistent with Federal

laws and regulations as long as the decisions are in conformance with legal mandates on management of public lands.

- Native American Tribal consultations were conducted in accordance with policy. Tribal concerns were given due consideration.
- Coordination occurred with the USFWS through the Section 7 consultation process to protect and enhance known habitat for threatened and endangered species and assist in the recovery of listed species to maintain biological diversity within the planning area. Special status species were reviewed, including species proposed for listing under the ESA, throughout the planning area to conserve habitat through inventory, monitoring, and adoption of conservation measures needed to curtail listing.
- Coordination occurred with the Arizona and California State Historic Preservation Officers (SHPOs) throughout the planning process.
- The plan recognizes the States' responsibilities to manage wildlife populations, including uses such as hunting and fishing, within the planning area.
- The plan establishes new guidance and identifies existing guidance upon which the YFO will rely in managing public lands within the planning area.
- The Approved RMP applies the following existing plans, plan amendments, and their decisions: *Standards for Rangeland Health* (USDOI BLM 1997) as Land Health Standards applicable to all resources and activities, *Guidelines for Livestock Grazing Management* (USDOI BLM 1997), and *Proposed Northern and Eastern Colorado Desert Coordinated Management Plan* (USDOI BLM 2002).
- The Approved RMP carries forward existing Wilderness Areas; national trails; Back Country Byways; wild and scenic river suitability recommendations; and, as appropriate, existing ACECs.
- Geospatial data was automated within a Geographic Information System (GIS) to facilitate discussions of the affected environment, alternative formulation, analysis of environmental consequences, and display of results.
- Resource allocations are reasonable, achievable, supported by technology, and within budgetary constraints. Resource allocations are consistent with current BLM policy.
- The lifestyles and concerns of area residents are recognized in the plan.
- Under the Clean Air Act (CAA), BLM-administered lands were given a Class II air quality classification unless reclassified by the states of California and Arizona. This classification allows moderate deterioration associated with moderate well-controlled industrial and population growth. Actions within the Yuma County particulate matter (PM₁₀) non-attainment area are assessed for conformance with air quality standards.
- The public will be protected from known safety hazards of abandoned mine lands (AML₁) and hazardous materials sites within the planning area. As identified in the draft Instruction Memorandum (IM) titled *Mitigating and Remediating Physical Safety Hazards at Abandoned Mine Land Sites*, the YFO will address closure or signage of all AML₁ sites close to Recreation Information Management System sites. Closures and signage include temporary and remedial measures.
- YFO incorporated the Discovery Process®, developed by James Kent and Associates, to detect emerging issues affecting public land by engaging local citizens in the land use planning process.

1.5.2 PROGRAM-SPECIFIC PLANNING CRITERIA

A. RIPARIAN AREAS, FLOODPLAINS, AND WETLANDS

Riparian areas, floodplains, and wetlands will be managed to protect, improve, and restore their natural functions to benefit water storage, groundwater recharge, water quality, and fish and wildlife values. All management practices were designed to maintain or improve the integrity of these high priority values, in accordance with the Clean Water Act (CWA), EO 11988 (Floodplain Management), and *Standards and Guidelines*. Additional criteria are found in the *Lower Colorado River Multi-Species Conservation Program* (LCR MSCP), priority wildlife habitat designations, existing activity plans, and the current *Lower Colorado River Fire Management Plan*.

B. WATER QUALITY

Section 319 of the CWA obligates Federal agencies to be consistent with state Nonpoint Source Management Program plans and relevant water quality standards. Section 313 requires compliance with State Water Quality Standards. YFO coordinated with the Arizona Department of Environmental Quality (ADEQ) regarding their Total Maximum Daily Load (TMDL) program and other relevant water quality programs. YFO incorporated applicable BMPs or other conservation measures for specific programs and activities into the RMP. Water quality will be maintained or improved in accordance with State and Federal standards.

C. SOIL

Soils will be managed to protect long-term productivity. BMPs were incorporated into other programs to minimize soil erosion and compaction resulting from Management Actions.

D. VEGETATION

Vegetation will be managed to achieve desired plant communities (considering the ecological site potential) that provide for: biodiversity; protection and restoration of native species; and non-consumptive uses including plant protection (fuel collection), visual quality, and watershed protection. The desired plant communities will provide wildlife habitat, watershed protection and stability, and forage for livestock and wildlife. Water quality will be given priority in all vegetation management decisions.

There are several treatment methods and standard operating procedures that may be used in a vegetation treatment program. BLM policies and guidance for public land treatments will be followed in implementing all treatment methods. Many guidelines are provided in Manual Section 1740, *BLM Standards and Guidelines*, programmatic documents such as BLM's *Environmental Impact Statement for Vegetation Treatments, Watersheds and Wildlife Habitats on Public Lands Administered by the BLM in the Western United States, Including Alaska* (USDOI BLM 1991), and other general and specific program policies, procedures, and standards pertinent to implementation of renewable resource improvements.

E. FISH AND WILDLIFE

Fish and wildlife habitat will be managed to maintain and/or improve the existing habitats including designated priority wildlife habitat. Management Actions should minimize the extent of disturbance to fish and wildlife habitat. Vegetation management practices will be considered to achieve desired future conditions.

F. THREATENED, ENDANGERED, AND SPECIAL STATUS SPECIES

Management Actions authorized, funded or implemented by BLM will be implemented not to jeopardize the continued existence of federally listed threatened or endangered plant or animal species or result in the destruction or adverse modification of critical habitat. Candidate species, species proposed for Federal listing, and BLM and State sensitive species will be given equal consideration as listed species. The intent will be to recover listed species and maintain healthy populations of all other species and therefore avoid the need for further Federal listing. As an agency operating within the USDO, the BLM will adhere to the LCR MSCP, approved by Secretary Gale Norton on April 5, 2005.

G. WILDLAND FIRE

Fire management prescriptions will be consistent with the Federal Wildland Fire Policy, *National Fire Plan*, and *Lower Colorado River Fire Management Plan*. Fire suppression will be accomplished with the least amount of surface disturbance to protect significant cultural or paleontological values. Public lands and resources affected by fire will be rehabilitated in accordance with the multiple use objectives identified for the affected area, subject to BLM policies and available funding.

H. CULTURAL RESOURCES

Management of cultural resources is an integrated system of identifying and evaluating cultural resources, deciding on their appropriate uses, and administering them accordingly, both on public lands and on other lands where BLM decisions could affect cultural resources. All management for cultural resources in this plan comply with the NHPA of 1966, as amended; BLM Manual 8100; and other applicable cultural resource laws, regulations, EOs, guidance, and policy. Areas with high cultural resource sensitivity were evaluated for the new SCRMA allocation. The plan will ensure that management measures are implemented in a manner that protects and provides access to sacred places in accordance with the American Indian Religious Freedom Act and EO 13007.

I. PALEONTOLOGICAL RESOURCES

This plan has developed appropriate management strategies that are based upon the best scientific information available. Management of paleontological resources emphasizes: the non-renewable nature of fossils; their usefulness in deciphering ancient and modern ecosystems; the public benefits and public expectations arising from their scientific, recreational, and educational

values; the BLM's interest in the continued advancement of the science of paleontology; and the importance of minimizing resource use conflicts within a multiple use framework.

J. VISUAL RESOURCES

VRM classifications were conducted to address the public's concerns about open space and natural vistas. Some areas may be subject to special measures to protect resources or reduce conflicts among uses.

K. WILDERNESS CHARACTERISTICS

The YFO reviewed lands to be managed to maintain wilderness characteristics. The YFO has the authority to address lands with wilderness characteristics and describe protective management prescriptions in the RMP. In keeping with the public involvement process that is part of all land use planning efforts, the YFO was committed to considering public input regarding lands to be managed to maintain wilderness characteristics. As appropriate, the YFO identified lands to be managed to maintain wilderness characteristics.

L. LIVESTOCK GRAZING

Livestock grazing will be managed through existing laws, regulations, and policies. The plans incorporated the statewide *Standards and Guidelines* established by the Arizona BLM State Director and were approved by the Secretary of the Interior. They include a strategy for ensuring that proper grazing practices are followed, while preserving habitats for sensitive plant and wildlife species. Appropriate BMPs will be followed to protect rangeland resources and, where necessary, to mitigate any conflicts with other uses and values. Administrative Actions to assure compliance with existing permit/lease requirements, to modify permits and leases, to monitor and supervise grazing use, and to remedy unauthorized grazing use will continue.

M. MINERALS

Minerals management is consistent with FLPMA and existing policy and regulation including the Mining and Minerals Policy Act of 1970, Section 102(a)(12) of FLPMA, the National Materials and Minerals Policy, Research and Development Act of 1980, and current BLM Mineral Resources Policy. Lands open to salable, leasable, and locatable minerals are identified in the plan. Areas within the planning area may also be subject to constraints to surface use. Areas proposed to be closed to mineral entry will continue to be subject to valid existing rights for mining claims, leases, and salable permits that currently exist within these areas.

N. RECREATION

Existing designated recreation sites are carried forward and evaluated for additional facilities. Other public lands were evaluated for their suitability for recreational development.

O. TRAVEL MANAGEMENT

Motorized and other access on public lands in the planning area will be managed in accordance

with existing law, EOs, proclamation, regulation, and policy. OHV use areas will be designated as open, limited, and closed designations. A network of roads and trails will be designated for all limited areas at least five years after the ROD is signed.

P. LANDS AND REALTY

All public lands will be retained in Federal ownership, unless determined that disposal of a particular parcel(s) would serve the public interest. Lands were identified for withdrawal, disposal by sale, or exchange. Decisions to acquire private lands from willing sellers will be based on public benefits, management considerations, and public access needs. Specific actions to implement RMP land tenure decisions will include full public participation. There will be no net loss of public ownership along the lower Colorado River.

Q. RIGHT-OF-WAY CORRIDORS

Public lands are generally available for transportation and utility ROWs subject to NEPA evaluation, except where specifically prohibited by law or regulation or in areas specifically identified for avoidance and exclusion to protect significant resource values. ROW Corridors avoid areas of designation such as priority wildlife habitat, special status species management areas, ACECs, Wilderness Areas, and cultural areas.

R. AREAS OF CRITICAL ENVIRONMENTAL CONCERN

As required by FLPMA, priority was given to the designation and protection of ACECs. The RMP identifies new ACECs where special management attention is needed to protect and prevent irreparable damage to important historic, cultural, and scenic values; fish or wildlife resources; or other natural systems or processes; or to protect human life and safety from natural hazards. The plan re-evaluated the existing Big Marias and Gila River Cultural Area ACECs, to reassess needs for special management attention and re-determine appropriate acreages. Management prescriptions were developed in the plan to guide management of ACECs and to protect key relevant and important values. The plan prescribes future ACEC plans or master interpretive plans for designated ACECs where necessary.

S. WILDERNESS AREAS

Wilderness Areas are designated by Congress and are managed according to the Wilderness Act of 1964, the Arizona Desert Wilderness Act of 1990, the California Desert Protection Act of 1994, regulations for wilderness management at 43 CFR 6300, BLM Manuals 8560 and 8561, BLM Handbook H-8560-1, and Wilderness Management Plans. The RMP does not address reducing or eliminating existing Wilderness Areas, changing existing wilderness boundaries, or allowing motor vehicle or other use of mechanical transportation in any Wilderness Areas not already authorized. Also consistent with policy, the YFO did not establish new Wilderness Study Areas (WSAs), manage any lands not already established as WSAs prior to April 2003 under the FLPMA Section 603 non-impairment standard, or report such areas to Congress.

T. HAZARDOUS MATERIALS

Management Actions consider BMPs which protect the public to the greatest extent through existing policies.

U. SOCIOECONOMICS

Management Actions were evaluated for socioeconomic impacts by using the “Economic Profile System” and other tools such as IMPLAN.

V. ENVIRONMENTAL JUSTICE

The lifestyles of low-income and minority populations, and potential impacts to these residents are considered in the RMP.

W. COORDINATED PLANNING AND MANAGEMENT

YFO collaborated with adjacent Federal, State, Tribal, city, and county governments.

1.6 PUBLIC SCOPING ISSUES

To allow an early and open process for determining the scope of issues and concerns related to preparation of the DRMP/DEIS (40 CFR 1510.7), a public scoping period was provided by BLM. A NOI to prepare the YFO DRMP/DEIS was published in the *Federal Register* on March 30, 2004 (Volume 69, Number 61, Pages 16608-16609 [AZ 050-04-1610-DO; 1610]). Publication of this notice in the *Federal Register* initiated a 90-day public scoping period for the DRMP/DEIS that ended on June 30, 2004.

YFO contacted Federal, State, county, and local agencies to initiate coordination and collaboration efforts. Agencies received postcards and were invited to comment as part of the initial scoping process and during individual agency meetings with YFO management staff. The YFO mailed informational postcards to approximately 1,200 individuals and organizations announcing its intent to prepare a DRMP/DEIS for BLM-administered public lands in the planning area. Public scoping meetings were held by the YFO in Yuma, Quartzsite, and Roll, Arizona, and Blythe, California on June 1 through 4, 2004. Approximately 150 to 210 persons attended the public scoping meetings. A total of 207 responses identifying 626 issues were received during the comment period. Copies of all project notices and comment forms distributed during the scoping period are contained in the *Final Scoping Report* (USDOI BLM 2004a).

Public comments addressed a variety of issues and concerns regarding resources and resource uses, as well as management considerations. A summary of the most common public comments, issues, and management concerns follows.

1.6.1 ISSUES ADDRESSED IN THIS APPROVED RMP

The major emphasis and considerations within this Approved RMP which were identified by the public scoping process include:

- Special Designations;
- Fish and Wildlife Management;
- Recreation Management;
- Travel Management;
- Lands Managed to Maintain Wilderness Characteristics; and
- Lands and Realty Management.

A. SPECIAL DESIGNATIONS

Issues focused on the need to identify and protect special areas and resource values in general and from particular activities, such as oil/gas development, mining, livestock grazing, OHV use, and road construction. ACEC designation was requested for Sonoran pronghorn and desert tortoise habitat. It was also requested that the river corridor be designated as a natural resource area rather than as a general use area.

Comments were also received in opposition to special designations (specifically Wilderness), stating that these designations benefit only those few who are fit enough to hike into the areas to enjoy them, that there should be no additional Wilderness designated within the planning area, and that public access should be provided within all existing specially designated areas.

A considerable number of comments were received concerning Back Country Byway nominations. Several commenters stated they would prefer that no Back Country Byways be nominated in the planning area, because visitor use would increase on these particular routes.

B. FISH AND WILDLIFE

Fish and wildlife issues included habitat fragmentation and impacts from OHV use and development. Impacts to wildlife, specifically ground-nesting birds, and impacts to forage availability and quality from grazing were also mentioned. Several comments were received regarding water catchments, including the desire that these be managed by BLM, concern that there are not enough catchments, and concern that some catchments are sometimes empty and others fenced making them unavailable for use by all wildlife. A few comments emphasized the benefit of agriculture to wildlife for food resources and one commenter expressed concern over policies to control predators and rodents. There were also requests to provide wildlife corridors between this planning area and adjacent areas.

C. RECREATION

Many members of the public used the comment cards to inform the YFO what they felt to be the most important recreation activities on BLM-administered land. These recreation uses included hunting, OHV use, camping, rock hounding, fishing, photography, hiking, wildlife viewing,

scientific research, and shooting. Comments received indicated the need to maintain a multiple-use management approach.

Other recreation comments were received regarding the need to maintain camping areas, including the planning area's two LTVAs. Several comments were received requesting additional equestrian opportunities be provided, expressing a preference both for and against shooting in the area, and requesting trails be designated for specific uses. The need for additional recreational improvements and amenities were specifically mentioned for the Squaw Lake Campground and Day Use Area and the Oxbow Recreation and Wildlife Area.

Comments also stated there should be no fees for the use of public land.

Environmental education was also mentioned in comments. People felt the resources of public lands provide important educational opportunities for themselves and future generations. Commenters also emphasized the importance of educating visitors about environmental stewardship of public lands. Several comments were received about the scientific research and learning opportunities offered by the area, particularly for seed resources and geology.

D. TRAVEL MANAGEMENT

Many public comments were received concerning travel management planning, including motorized and non-motorized public access on public lands. A frequently raised issue was motorized access, with many users commenting that no further restrictions through road closures or Wilderness designation should occur, and that all currently closed roads within the planning area should be reopened. Other issues included: a desire for route designation to manage routes created by the lack of designation and illegal immigrants; the belief that public land should be publicly accessible; and the desire that current access should remain for future generations to enjoy the land. Other comments requested that there be no new roads established.

Several issues with motorized travel were identified by public comments, including damage to natural resources, wildlife, cultural resources, and existing roads from OHV use; a lack of designated open, closed, and/or limited areas; a lack of signs and enforcement; and the need to limit OHVs to certain designated areas. Some OHV supporters felt that OHV is the only way to enjoy remote areas, especially for older or disabled users.

E. LANDS MANAGED TO MAINTAIN WILDERNESS CHARACTERISTICS

The identification of lands where wilderness characteristics would be maintained by the BLM was a frequently mentioned issue. Commenters raised issues concerning the BLM definition of wilderness characteristics and the evaluation process that was used in formulation of the alternatives. Some commenters wanted lands with wilderness characteristics identified, protected, and closed to OHV use and other land disturbing activities. Another public issue was the opposition to managing for wilderness characteristics and the statement that managing for these resources essentially creates new wilderness in violation of Congressional intent.

F. LANDS AND REALTY

Numerous comments were received regarding land tenure and use authorizations and generally covered one of three categories: (1) general policy regarding disposal or exchange, (2) support for disposal, exchange, or lease of specific areas, and (3) agricultural use. Many commenters expressed concern over future disposals or exchanges. They requested no future disposals or exchanges or only limited ones. Some comments stated that wildlife habitat should be considered during potential land exchanges. Specific areas mentioned for disposal/exchange or leases included Harvey's Fishing Hole, Martinez Lake, area along the Colorado River, and BLM-administered land within the Quartzsite town limits. Several comments were received supporting agricultural use in the area for a variety of reasons and expressing concern over potential termination of agricultural leases.

One response discussed ROW Corridors and expressed a need for future corridors to be identified in the plan, but that there should be no amendments for future corridors. The comment also stated that existing corridors should be used instead of creating new ones.

1.6.2 ISSUES NOT ADDRESSED IN THIS APPROVED RMP

Throughout the scoping process, issues were raised by the public that were either not within the jurisdiction of BLM or that could be dealt with administratively and would not require a planning decision. A full discussion of these issues is included in the scoping report. Issues not addressed in this Approved RMP are summarized below by topic.

- **Airspace**—Airspace over public land is managed by other jurisdictions.
- **Fish and Wildlife**—Wildlife population management is under the authority of AGFD and CDFG.
- **Recreation**—Recreation site fees are established through the approval of publicly reviewed YFO Recreation and Visitor Services Business Plans. Special Recreation Permit (SRP) fees for competitive events, organized groups, and commercial uses are established nationally by the BLM Director. Supplementary rules for public conduct within recreation sites and areas have been established through the authority provided by 43 CFR 8365.1-6. YFO may propose additional supplementary rules within the planning area to address resource protection, and public health and safety issues for the life of the Approved RMP, including restrictions related to overnight camping, recreational shooting, and firewood collection.
- **Lands and Realty**—Land authorizations in the Martinez Lake area of the lower Colorado River are not within the jurisdiction of BLM.
- **Travel Management**—Implementation-level TMPs tied to this Approved RMP and its ROD will designate all inventoried routes in the planning area within five years.

1.6.3 LAWS AND REGULATIONS

The BLM planning process is governed by FLPMA and the BLM Planning Regulations in 43 CFR Part 1600. LUPs ensure that public land is managed in accordance with the intent of Congress as stated in FLPMA, under the principles of multiple use and sustained yield. As required by FLPMA, public land must 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, would preserve and protect certain public land in their natural condition; that would provide food and habitat for fish, wildlife, and domestic animals; and that would provide for outdoor recreation and human occupancy and use by encouraging collaboration and public participation throughout the planning process. 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. LUPs are the primary mechanism for guiding BLM activities to achieve the mission and goals outlined in the BLM Strategic Plan. BLM's *Land Use Planning Handbook* (H-1601-1) contains program-specific guidance.

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 EOs that apply to BLM-administered lands and resources in the planning area. The Approved RMP process is intended to develop LUP decisions that resolve such conflicts and meet the multiple use and sustained yield mandate of FLPMA. Appendix A provides a listing of applicable laws and EOs that apply to BLM-administered land and resources in the planning area.

1.7 COLLABORATION AND PARTNERSHIPS

The YFO has utilized a collaborative process to work with all other interested entities and individuals to address common needs and goals within the planning area. The effort involved early identification of the most appropriate, efficient, and productive type of working relationships to achieve meaningful results in land use planning initiatives. The YFO's primary objectives of the proposed collaboration process included providing a comprehensive forum for public involvement to achieve defensible decisions for the RMP. The YFO follows 40 CFR 1501.6 CEQ guidelines on roles of lead and cooperating agencies, as discussed in *A Desk Guide to Cooperating Agency Relationships* (USDOI BLM 2005). This desk guide identifies BLM's regulations for developing the cooperating agency relationship, where "Cooperating Agencies expect and deserve to be given a significant role in shaping plans and environmental analyses—not merely commenting on them—commensurate with their available time and knowledge" (USDOI BLM 2005). Several CFR sections are applicable to the BLM/cooperating agency relationship:

- "The Field Manager will prepare criteria to guide development of the resource management plan to ensure...[i]t is tailored to the issues previously identified.... Planning criteria will generally be based upon applicable law, Director and State Director guidance, the results of public participation, and coordination with any cooperating agencies and other Federal agencies, State and local governments, and federally recognized Indian tribes." (43 CFR 1610.4-2);
- "The Field Manager, in collaboration with any cooperating agencies, will arrange for resource, environmental, social, economic, and institutional data and information to be collected, or assembled if already available." (43 CFR 1610.4-3); and
- "At the direction of the Field Manager, in collaboration with any cooperating agencies, BLM will consider all reasonable alternatives and develop several complete alternatives for detailed study. Nonetheless, the decision to designate alternatives for further development and analysis remains the exclusive responsibility of the BLM." (43 CFR 1610.4-5).

Public meetings in March 2005 were held to gain public input for Alternative Development (March 7, Quartzsite; March 8, Yuma; March 9, Wellton; and March 10, Blythe). Public meetings in July 2005 were conducted for Preliminary Alternatives (July 25, Wellton; July 26, Quartzsite and Blythe; July 27, Yuma; and July 28, Tucson). Information gathered by the YFO at these public meetings has been incorporated into this Approved RMP.

Additionally, YFO met individually with local offices of several Yuma-area agencies to discuss the DRMP/DEIS and to explain the statewide organizational change that BLM Arizona underwent. The YFO staff distributed DRMP/DEIS materials and conducted presentations when requested. The YFO facilitated discussions with the agencies, which generated issues and concerns that are documented in the *Final Scoping Report* (USDOI BLM 2004a) on file at the YFO. Meetings with area agencies were conducted during June, July, and August 2004.

1.7.1 COOPERATING AGENCIES

Numerous Federal, State, and local agencies and Tribal interests were identified by the YFO at the outset of the RMP/EIS effort, and these entities were contacted in writing to determine their interest in serving as cooperators on this RMP. As a part of initiating multiple planning efforts throughout the State, YFO compiled a list of Federal, State, county, and local agencies and Native American tribes that may have a relevant interest in the planning process. Letters were sent to more than 200 agencies to introduce the various RMP/EIS processes within the State of Arizona, identify the upcoming data gathering efforts, and offer an opportunity to become a cooperating agency in the planning effort. An initial cooperating agency meeting was held at the BLM Arizona State Office on October 30, 2002. The purpose of the meeting was to discuss BLM's planning process, collaborative planning, and the meaning and responsibilities of cooperating agencies. The opportunity for involvement in BLM's planning process without becoming a cooperating agency was also discussed. BLM emphasized the goal was to encourage involvement by all interested parties using whatever methods the parties preferred.

In January of 2005, the YFO held a cooperating agency invitation/information meeting. Cooperating agency meetings for the YFO RMP/EIS were conducted in Yuma on June 8, July 20, September 14, October 11, November 16, and December 13–14, 2005; January 12, February 22, and June 27, 2006; and February 27, 2008. The June 8, 2005, cooperating agency meeting included an overview of the BLM cooperating agency status, a review of MOUs, milestones and schedules, and development of issues/alternatives. The July 20, 2005, cooperating agency meeting included discussion of preliminary alternatives. The September 14, October 11, and November 16, 2005, cooperating agency meetings included discussion of alternatives and the internal BLM development of a Proposed Plan for the YFO DRMP/DEIS. The December 13 and 14, 2005, cooperating agency meeting included discussions on Special Designations (potential ACECs and potential Back Country Byways) and an overview of Chapter 3 of the DRMP/DEIS. February 22, 2006, was a review and comment session by cooperating agencies of the draft Chapter 2. At the June 27, 2006, meeting cooperating agencies had an opportunity to provide comments on the draft Chapter 4 and further discuss the draft Chapter 2. On February 27, 2008, YFO shared a print-ready version of the PRMP/FEIS with cooperating agencies.

The BLM has a national Memorandum of Agreement (MOA) with the USFWS to cooperate on Section 7 Consultation for the ESA. AGFD, Arizona Department of Transportation (ADOT), and

the Federal Highway Administration (FHWA) have a statewide MOU with BLM and used this agreement to work collaboratively with the YFO.

The following entities signed MOUs to serve as cooperating agencies for the YFO RMP revision:

A. FEDERAL

- Cibola NWR
- Department of Homeland Security, U.S. Customs and Border Patrol
- Imperial NWR
- Kofa NWR
- MCAS–Yuma
- Reclamation, Yuma Area Office and Lower Colorado Regional Office
- U.S. Army YPG
- U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS)
- U.S. Department of Transportation, FHWA

B. STATE

- ADOT–State
- ADOT–Yuma
- AGFD

C. LOCAL

- City of Yuma
- Town of Quartzsite
- Wellton–Mohawk Irrigation and Drainage District (WMIDD)
- Yuma County Department of Public Works

D. TRIBAL

- Cocopah Indian Tribe
- Fort Yuma–Quechan Tribe
- Yavapai–Apache Nation

1.7.2 CONSULTATION WITH NATIVE AMERICAN TRIBES

YFO initiated coordination and consultation with 30 Native American tribes and groups within Arizona, California, Nevada, New Mexico, Utah, and Oklahoma with a letter dated June 17, 2004. In the letter, YFO requested the opportunity to make a presentation on the RMP/EIS planning process at a Tribal council meeting or a community meeting. At this early stage in the planning process YFO staff met with representatives from three tribes: the Fort Yuma–Quechan Tribe on August 31, 2004; Hualapai Tribe on August 16, 2005; and Tohono O’odham Nation on

July 15, 2004.

Twice during the planning process YFO invited all interested tribes to the YFO office to discuss the plan and to share input on the preliminary alternatives. The first meeting on December 9, 2005, was attended by representatives from the Cocopah Indian Tribe, CRIT, Fort Mojave Indian Tribe, Pueblo of Zuni, and Tohono O’odham Nation. The second meeting was on December 12, 2006, and was attended by representatives from the Hualapai Tribe, Yavapai–Prescott Indian Tribe, Chemehuevi Indian Tribe, and Cocopah Indian Tribe.

Once the DRMP/DEIS was distributed for public comment on December 15, 2007, YFO staff telephoned each interested tribe to offer to meet at either their Tribal offices or at a central location. The purpose of these meetings was to provide Tribal representatives with an opportunity to ask questions about the DRMP/DEIS and to provide verbal input on the plan. At each meeting, YFO staff also shared a presentation that illustrated the differences between alternatives. During the public comment period, YFO met with representatives from the following tribes:

- Cocopah Indian Tribe on February 27, 2007;
- CRIT on February 20, 2007;
- Fort Mojave Tribe on March 1, 2007;
- Fort Yuma–Quechan Tribe on February 12 and March 26, 2007;
- Four Southern Tribes (Ak–Chin Indian Community, Gila River Indian Community, Salt River Pima-Maricopa Indian Community, and Tohono O’odham Nation) on March 16, 2007;
- Hualapai Tribe on March 15, 2007;
- Yavapai–Apache Nation on March 14, 2007; and
- Yavapai–Prescott Indian Tribe on March 14, 2007.

Because several of these meetings occurred around the end of the public comment period, YFO decided to extend the timeframe for comments from the tribes to April 30, 2007. Notification of this extension was sent to each tribe in a letter dated March 22, 2007. On March 5, 2008, the YFO mailed a letter to the Tribes with an electronic copy of the PRMP/FEIS. This mailing provided additional time for Tribes to become familiar with the print-ready Proposed Plan and to review how tribal input was incorporated into the YFO RMP revision.

Documentation of all meetings, written correspondence, and other coordination with the Tribes throughout this planning effort can be found in the administrative record. All tribes with an interest in the planning area were invited to join the planning process as a cooperating agency. The Cocopah, Fort Yuma–Quechan, and Yavapai–Apache tribes signed cooperating agency MOUs.

1.7.3 CONSULTATION WITH USFWS

As a part of this planning effort, the BLM executed ESA Section 7 consultation with the USFWS. In 2005, the BLM and USFWS finalized a consultation agreement to establish an effective and cooperative ESA, Section 7 consultation process. A biological assessment (BA) was prepared and submitted to determine the effect of the DRMP/DEIS on all relevant listed, proposed, and candidate species, and associated critical habitat. All anticipated environmental effects, conservation actions, mitigation, and monitoring were disclosed in the BA, including analysis of all direct, indirect, and cumulative effects of the DRMP/DEIS. The USFWS provided the BLM with a BO of proposed actions on January 29, 2009 (USDOI USFWS 2009). As this plan's decisions are implemented, actions determined through environmental analysis to potentially affect species listed or candidate species for listing under ESA would trigger additional site-specific consultation on those actions.

1.8 RELATED PLANS

Title II, Section 202 of FLPMA provides guidance for the BLM land use planning process to coordinate planning efforts with Native American tribes, other Federal departments, and agencies of State and local governments. To accomplish this directive, BLM is instructed to keep informed of State, local, and Tribal plans; assure that consideration is given to such plans; and to assist in resolving inconsistencies between such plans and Federal planning. The section goes on to state in Subsection (c)(9) that "Land use plans of the Secretary [of the Interior] under this section shall be consistent with State and local plans to the maximum extent he finds consistent with Federal law and the purposes of this Act." The provisions of this section of FLPMA are echoed in Section 1610.3 of BLM Resource Management Planning regulations. In keeping with the provisions of this section, State, local, and Tribal officials were made aware of the planning process through the previously described mailings and meetings. The following is a list of plans reviewed during YFO Approved RMP planning efforts:

- U.S. Department of the Air Force's *Final Environmental Impact Statement for the Barry M. Goldwater Range Integrated Natural Resource Plan* (2006),
- U.S. Army's *YPG Integrated Natural Resources Management Plan* (1995),
- *City of Yuma General Plan* (2002),
- *Imperial County General Plan* (1993),
- *La Paz County Comprehensive Plan* (2005),
- *Lower Colorado River Multi-Species Conservation Program* (USDOI Reclamation et al. 2004),
- *Maricopa County—Managing for Results Strategic Plan* (2005),
- *Riverside County General Plan* (2003), and
- *Yuma County Plan 2010 Comprehensive Plan* (2006).

1.9 PLAN IMPLEMENTATION

Plan implementation is a continuous and active process. Decisions presented in the Management Decisions section of this Approved RMP are of three types: Immediate, One-Time, and Long-Term.

1.9.1 IMMEDIATE DECISIONS

These decisions go into effect upon signature of the ROD and Approved RMP. These include decisions such as the allocation of lands as available or unavailable for disposal, ACEC designations, and OHV designations. Immediate decisions require no additional analysis and provide the framework for any subsequent activities proposed in the planning area. Proposals for actions such as land adjustments and other allocation based actions will be reviewed against these decisions/allocations to determine if the proposal is in conformance with the plan.

1.9.2 ONE-TIME DECISIONS

These decisions include those that are implemented after additional site-specific analysis is completed. Examples are implementation of the development of an ACEC plan or TMP. One-time decisions usually require additional analysis and are prioritized as part of the BLM budget process. Priorities for implementation of “one-time” RMP decisions will be based on several criteria, including:

- Current and projected resource needs and demands
- National and statewide BLM management direction and program emphasis
- Funding

1.9.3 LONG-TERM GUIDANCE/LIFE OF PLAN DIRECTION

RMP decisions become effective upon approval of the ROD. These decisions include the goals, objectives (Desired Future Conditions), and Management Actions (allowable uses and actions to achieve outcomes) established by the plan that are applied during site-specific analyses and activity planning. Examples of decisions that become effective upon approval of the RMP include land use allocation decisions, and special designations such as an ACEC. Management Actions that require additional site-specific project planning as funding becomes available are implementation decisions and will require further environmental analysis. Decisions to implement these projects are subject to administrative review at the time when such decisions are made.

This guidance is applied whether the action is initiated by the BLM or by a non-BLM project proponent. Long-term guidance and plan direction is incorporated into BLM management as implementation-level planning and project analysis occurs. For example, as a result of receipt of a land use application that involves public land, the proposal would need to be in harmony with the goals, allocations, and actions established through this Approved RMP relative to that parcel of land, for the associated biological, VRM, and lands interests. If the proposal was in

compliance with BLM's long-term guidance, it would move onto the next level of assessment. In short, these decisions guide BLM decision-makers in what is, and is not acceptable through the life of the plan.

YFO will continue to involve and collaborate with the public during implementation of this plan. Opportunities to become involved in the plan implementation and monitoring will include development of partnerships and community-based citizen working groups. YFO invites citizens and user groups within the planning area to become actively involved in implementation, monitoring, and evaluation of RMP decisions. YFO 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 public lands.

1.9.4 GENERAL IMPLEMENTATION SCHEDULE OF "ONE-TIME" ACTIONS

Decisions in the Approved RMP will be implemented over a period of years depending on budget and staff availability. Most of these actions require additional analysis and site-specific activity planning. The tentative schedule does not include the decisions which are effective immediately upon approval of the RMP (usually allocations), or the actions which describe the ongoing management that will be incorporated and applied as site-specific proposals are analyzed on an ongoing basis.

The priority list and schedule will assist BLM managers and staff members in preparing budget requests and in scheduling work. However, the proposed priorities must be considered tentative and will be affected by future funding, changing program priorities, non-discretionary workloads, community dynamics, and cooperation by partners and external publics.

1.9.5 IMPLEMENTATION UPDATES

The BLM will prepare an Annual Planning Update Report and Summary on the implementation of the Approved RMP. This report will be released in January of the year following the fiscal year reviewed (for example, January 2009 for Fiscal Year 2008) and will be available to the public on the Internet, with hard copies available upon request. Annual review of the plan will provide consistent tracking of accomplishments and provide information that can be used to develop annual budget requests to continue implementation.

1.9.6 MAINTAINING THE PLAN

LUP decisions and supporting information can be maintained to reflect minor changes in data, but maintenance is limited to refining, documenting, and/or clarifying previously approved decisions. Some examples of maintenance actions include:

- Correcting minor data, typographical, mapping, or tabular data errors.
- Refining baseline information as a result of new inventory data (e.g., changing the boundary of an archaeological district, refining the known habitat of special status species, or adjusting

the boundary of a fire management unit based on updated fire regime condition class inventory, fire occurrence, monitoring data, and/or demographic changes).

The BLM expects that new information gathered from field inventories and assessments, research, other agency studies, and other sources will update baseline data and/or support new management techniques, BMPs, and scientific principles. Adaptive management strategies may be used when monitoring data is available as long as the goals and objectives of the plan are met. In other words, where monitoring shows LUP actions or BMPs are not effective, modifications or adjustments may occur within the plan without amendment or revision of the plan as long as assumptions and impacts disclosed in the analysis remain valid and broad-scale goals and objectives are not changed.

Plan maintenance will be documented in supporting records and reported in annual planning updates. Plan maintenance does not require formal public involvement, inter-agency coordination, or the NEPA analysis required for making new LUP decisions.

1.9.7 CHANGING THE PLAN

The Approved RMP may be changed, should conditions warrant, through a plan amendment or plan revision process. Plan amendments may be established through EAs or EISs developed in compliance with NEPA and BLM planning regulations and policies. A plan amendment may become necessary if major changes are needed or to consider a proposal or action that is not in conformance with the plan. The results of monitoring, evaluation of new data, or policy changes and changing public needs might also provide the impetus for an amendment. Generally, an amendment is issue-specific. If several areas of the plan become outdated or otherwise obsolete, a plan revision may become necessary. Plan amendments and revisions are accomplished with public input and the appropriate level of environmental analysis.

1.10 PLAN EVALUATION AND ADAPTIVE MANAGEMENT

1.10.1 PLAN EVALUATION

Evaluation is a process in which the plan and monitoring data are reviewed to see if management goals and objectives are being met and if management direction is sound. LUP evaluations determine if decisions are being implemented, whether mitigation measures are satisfactory, whether there are significant changes in the related plans of other entities, whether there is new data of significance to the plan, and if decisions should be changed through amendment. Monitoring data gathered over time is examined and used to draw conclusions on whether Management Actions are meeting stated objectives, and if not, why they are failing. Conclusions are then used to make recommendations on whether to continue current management or to identify what changes need to be made in management practices to meet objectives.

The BLM will use LUP evaluations to determine if the decisions in the Approved RMP, supported by the accompanying NEPA analysis, are still valid in light of new information and

monitoring data. Evaluation of the Approved RMP will generally be conducted every five years, unless unexpected actions, new information, or significant changes in other plans, legislation, or litigation triggers an evaluation.

The following estimated evaluation schedule will be followed for the YFO RMP:

- 2013
- 2018
- 2023
- 2028

Evaluations will follow the protocols established by the BLM *Land Use Planning Handbook* (H-1601-1) or other appropriate guidance in effect when the evaluation is initiated.

1.10.2 ADAPTIVE MANAGEMENT

The DOI's Office of Environmental Policy and Compliance defines adaptive management as a system of management practices based on clearly identified outcomes, monitoring to determine if Management Actions are meeting outcomes, and, if not, facilitating management changes that will best ensure that outcomes are met or re-evaluated. The adaptive management process is a flexible process that generally involves four phases: planning, implementation, monitoring, and evaluation (Figure 1-1). This Approved RMP is an integral part of the adaptive management strategy. Adaptive management is a flexible 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.

BLM land use planning uses adaptive management through a four-phase process. The first phase is planning. When planning is finished, the RMP is implemented. Implementation of land use allocations, designations, and allowable-uses occur as soon as a ROD is signed, unless other appropriate NEPA analysis is required. Management Actions occur throughout the life of the plan. Periodically the plan is evaluated (usually every five years) to determine if the decisions are accurate, being implemented, or need to be changed, based on current information.

The Desired Future Conditions listed under each resource program are decisions that provide the parameters by which the BLM manages the lands and resources. The BLM uses continual monitoring of resource conditions to determine if the Management Actions being implemented are achieving the Desired Future Conditions. Adaptive management is applied in cases where the existing management is clearly not meeting those desired conditions or other alternatives could better meet the objectives. In such cases, adaptive management may include revising BMPs, or possibly revising an entire RMP. Periodic RMP amendments are expected to occur as resource

conditions, resource values, or goals and objectives change. RMP evaluations typically occur every five years, which are a complete analysis of existing conditions, anticipated issues, and the current decisions providing for the management of resources. Based on this interdisciplinary evaluation, the authorizing officer determines whether any, some, or all decisions remain appropriate for the management of the area.

A “limit of acceptable change” identifies specific thresholds for a resource that will not be crossed. Should those thresholds be reached adaptive management will be applied to stop or reverse resource degradation.

Based on the YFO’s LUP evaluation in the year 2000, it was determined that many of the decisions were either outdated according to resource conditions, new policies, or future goals. As YFO 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.

Implementation-level planning, such as site-specific ACEC plans or Wilderness Area Plans, is monitored periodically to ensure decisions are valid.

As described in the DRMP/DEIS and the PRMP/FEIS, the YFO Approved RMP fosters “adaptiveness” by the presentation of Desired Future Conditions that focus on reaching outcomes rather than identifying inflexible standards and prescriptions that may not be applicable in certain situations.

1.10.3 ADMINISTRATIVE ACTIONS

Although BLM’s intent and commitment to accomplish Administrative Actions is generally addressed in RMP-level documents, such activities are neither LUP-level decisions nor implementation-level management action decisions. Administrative Actions are day-to-day activities conducted by BLM, often required by FLPMA, but do not require a NEPA analysis or decision by a responsible official to be accomplished. Examples of Administrative Actions include but are not limited to mapping, surveying, inventorying, monitoring, collecting information needed such as research and studies, and completing project specific or implementation level plans.

1.10.4 MONITORING AND EVALUATION

RMP monitoring is conducted in three stages. The first is to ensure that decisions are implemented in accordance with the Approved RMP/ROD. This type of monitoring is conducted as RMP 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 decisions are achieving the desired effects. Effectiveness monitoring provides an empirical data base 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.

The last stage of monitoring is to determine whether a RMP 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. Evaluation monitoring is tied to adaptive management and the results of monitoring may require an update (amendment) to the RMP.

CHAPTER 2.0

MANAGEMENT DECISIONS

2.1 INTRODUCTION

The land use planning decisions established by the Approved RMP are presented in Chapter 2. The chapter is organized by resource, the presence or abundance of which may vary from location to location within the planning area.

According to the BLM *Land Use Planning Handbook*, LUP decisions are broad-scale decisions which guide future land management actions and subsequent site-specific implementation decisions. LUP 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. LUP decisions fall into two categories: Desired Future Conditions (Goals and Objectives) and Management Actions (Allowable Uses) to achieve outcomes. They are described as follows.

- Desired Future Conditions (Goals and Objectives) provide overarching direction for BLM actions in meeting the agency's legal, regulatory, policy, and strategic requirements. Goals and objectives initially were identified during the first workshop and refined through subsequent collaboration with cooperating agencies. Goals are broad statements of desired outcome, 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.
- Management Actions (Allowable Uses) 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 the planning area. The Approved RMP includes specific land use restrictions to meet desired future conditions and excludes certain land uses to protect resource values. Because the Approved RMP identifies whether particular land uses are allowed, restricted, or prohibited, Management Actions often include a spatial (e.g., map) component.

For each resource in the chapter, additional guidance is presented in the form of Administrative Actions. At the back of the chapter, BMPs are described by resource for implementation decisions which may take place throughout the life of the plan. Administrative Actions and Implementation Decisions are described as follows.

- Administrative Actions are not RMP-level decisions. However, they are day-to-day activities conducted by BLM often required by FLPMA that to be accomplished do not require a

NEPA analysis or a decision by a responsible official. Examples of Administrative Actions include mapping, surveying, inventorying, monitoring, collecting needed information such as research and studies, and completing project-specific or implementation-level plans. Administrative Actions are included in this Approved RMP, because they guide future programs and budget planning.

- Implementation Decisions generally constitute the BLM's final approval allowing on-the-ground actions to proceed. Included at the end of the chapter are BMPs which provide a framework for implementation decisions. These types of decisions require site-specific planning and NEPA analysis. They may be incorporated into implementation plans (activity or project plans) or may exist as stand-alone decisions. At this time YFO has not identified specific implementation-level decisions within this Approved RMP.

Through adaptive management, monitoring ensures that Land Use Allocations and Management Actions achieve Desired Future Conditions. The content of the decisions remains as contained in the Proposed RMP, except as described in the Modifications and Clarifications sections of the ROD.

Data used in development of the Approved RMP are dynamic. The data and maps used throughout the Approved RMP are for land use planning purposes and will be refined as site-specific planning and on-the-ground implementation occur. Updating data is considered plan maintenance that will occur over time as the Approved RMP is implemented (see Section 1.9—Plan Implementation). Please note that all acreages presented in the Approved RMP are estimations, even when presented to the nearest acre.

2.1.1 DECISION LETTERING

The management decisions (Desired Future Conditions and Management Actions) under the Approved RMP are numbered and arranged by specific resources and resource uses. Each decision as well as Administrative Actions are assigned one of the following codes:

AA	Administrative Actions
CL	Cultural Resource Management
CM	Coordinated Management Areas
FM	Wildland Fire Management
GM	Livestock Grazing Management
HB	Wild Horse and Burro Management
HM	Public Health and Safety
LH	Land Health Standards
LR	Lands and Realty Management
MI	Mineral Resource Management
PL	Paleontological Resource Management

RR	Recreation Management
SM	Special Designations Management
TE	Special Status Species Management
TM	Travel Management
VM	Vegetation Management
VR	Visual Resource Management
WC	Wilderness Characteristics Management
WF	Fish and Wildlife Management
WS	Air, Water, and Soil Management

Area and length calculations throughout this document are based on the best available GIS data at the time of publication. The GIS is based on the Universal Transverse Mercator Zone 12 projection referencing the North American Datum of 1983. Analysis and calculation have been made on various GIS layers, which may or may not correspond to each other. Differences in area or length correlations between the various calculations in this document are due to minor discrepancies between GIS layers.

2.2 LAND HEALTH STANDARDS

The *Standards and Guidelines* were developed to identify the characteristics of healthy ecosystems on public lands and the management actions that promote them. When approved in 1997, the *Standards and Guidelines* became Arizona BLM policy, guiding the planning for and management of BLM-administered lands. The *Standards and Guidelines*, therefore, have been incorporated into this Approved RMP. The following Arizona BLM Standards for Rangeland Health describe the conditions necessary to encourage proper functioning of ecological processes and are adopted as Land Health Standards that are applicable to all resource programs in Arizona BLM. The Guidelines for Grazing Administration are a series of management practices used to ensure that grazing activities meet the Standards. These Guidelines are incorporated into the Approved RMP in Section 2.9, Livestock Grazing Management.

2.2.1 STANDARD 1 FOR UPLAND SITES

Desired Future Conditions

- LH-001: Upland soils exhibit infiltration, permeability, and erosion rates that are appropriate to soil type, climate and landform (ecological site). Criteria for meeting Standard 1:
 - Soil conditions support proper functioning of hydrologic, energy, and nutrient cycles. Many factors interact to maintain stable soils and healthy soil conditions, including appropriate amounts of vegetative cover, litter, and soil porosity and organic matter.

Under proper functioning conditions, rates of soil loss and infiltration are consistent with the potential of the site.

- o Ground cover in the form of plants, litter, or rock is present in pattern, kind, and amount sufficient to prevent accelerated erosion for the ecological site; or ground cover is increasing as determined by monitoring over an established period of time.
- o Signs of accelerated erosion, as indicated by the factors below, are minimal or diminishing for the ecological site as determined by monitoring over an established period of time.
 - Ground cover
 - Litter
 - Live vegetation, amount and type (e.g., grass, shrubs, trees)
 - Rock
 - Signs of erosion
 - Flow pattern
 - Gullies
 - Rills
 - Plant pedestaling
- o Exceptions and exemptions (where applicable): None.

2.2.2 STANDARD 2 FOR RIPARIAN–WETLAND SITES

Desired Future Conditions

- LH-002: Riparian–wetland areas are in properly functioning condition. Criteria for meeting Standard 2:
 - o Stream channel morphology and functions are appropriate for proper functioning condition for existing climate, landform, and channel reach characteristics. Riparian–wetland areas are functioning properly when adequate vegetation, landform, or large woody debris is present to dissipate stream energy associated with high water flows.
 - o Riparian–wetland functioning condition assessments are based on examination of hydrologic, vegetative, soil and erosion-deposition factors. BLM has developed a standard checklist to address these factors and make functional assessments. Riparian–wetland areas are functioning properly as indicated by the results of the application of the appropriate checklist.
 - o The checklist for riparian areas is in Technical Reference 1737-9 “Process for Assessing Proper Functioning Condition.” The checklist for wetlands is in Technical Reference 1737-11 “Process for Assessing Proper Functioning Condition for Lentic Riparian–Wetland Areas.” The checklists include the factors listed below.
 - Gradient
 - Width/depth ratio
 - Channel roughness and sinuosity of stream channel

- Bank stabilization
- Reduced erosion
- Captured sediment
- Ground water recharge
- Dissipation of energy by vegetation
- o Exceptions and exemptions (where applicable):
 - Dirt tanks, wells, and other water facilities constructed or placed at a location for the purpose of providing water for livestock and/or wildlife and which have not been determined through local planning efforts to provide for riparian or wetland habitat are exempt, and
 - Water impoundments permitted for construction, mining, or other similar activities are exempt.

2.2.3 STANDARD 3 FOR DESIRED RESOURCE CONDITIONS

Desired Future Conditions

- LH-003: Productive and diverse upland and riparian–wetland plant communities of native species exist and are maintained. Criteria for Meeting Standard 3:
 - o Upland and riparian–wetland plant communities meet desired plant community objectives. Plant community objectives are determined with consideration for all multiple uses. Objectives also address native species, and the requirements of the Taylor Grazing Act, FLPMA, ESA, CWA, and appropriate laws, regulations, and policies.
 - o Desired plant community objectives would be developed to assure that soil conditions and ecosystem function described in Standards 1 and 2 are met. They detail a site-specific plant community, which when obtained, would assure rangeland health, State water quality standards, and habitat for endangered, threatened, and sensitive species. Thus, desired plant community objectives, as listed below, would be used as indicators of ecosystem function and rangeland health.
 - Composition
 - Structure
 - Distribution
 - o Exceptions and exemptions (where applicable)
 - Ecological sites or stream reaches on which a change in existing vegetation is physically, biologically, or economically impractical.

2.3 SPECIAL DESIGNATIONS MANAGEMENT

Special designations in BLM land use planning include designated Wilderness, National Historic Trails (NHTs), National Recreation Trails (NRTs), National Byways, and ACECs (Map 2-1). The planning area's Approved RMP special designations are shown below in Table 2-1.

Table 2-1
Approved RMP Special Designations

Special Designation	Approved RMP Acres/Miles
Designated Wilderness (BLM acres)	
Big Maria Mountains (CA)	1,600
Eagletail Mountains (AZ)	98,600
Little Picacho (CA)	2,900
Muggins Mountains (AZ)	7,700
New Water Mountains (AZ)	24,700
Palo Verde Mountains (CA)	800
Riverside Mountains (CA)	1,100
Trigo Mountains (AZ)	30,400
Total Wilderness Acres	167,800
National Historic Trail (total miles)	
Juan Bautista de Anza	111 miles within planning area; 21 miles on BLM lands
National Recreation Trail (total miles)	
Betty's Kitchen	0.5
National Byways (total miles)	
Agua Caliente Back Country Byway	11
Plomosa Back Country Byway	10
Highway 95 Scenic Byway	64
Total Byway Miles	85
Areas of Critical Environmental Concern (total acres)	
Big Marias	4,500
Dripping Springs	11,700
Sears Point	28,500
Total ACEC Acres	44,700

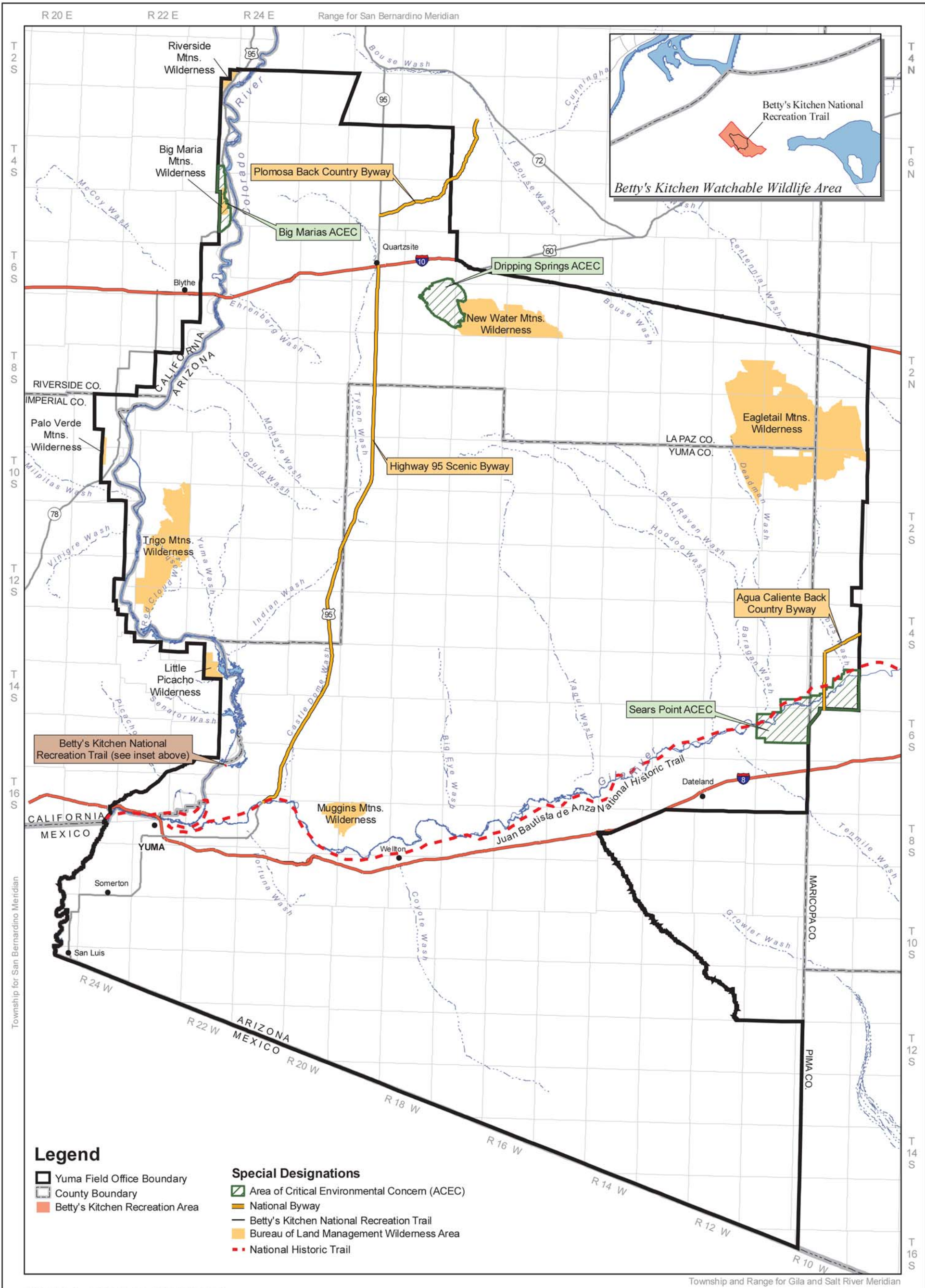
BLM = Bureau of Land Management; CA = California; AZ = Arizona

2.3.1 NATIONAL LANDSCAPE CONSERVATION SYSTEM

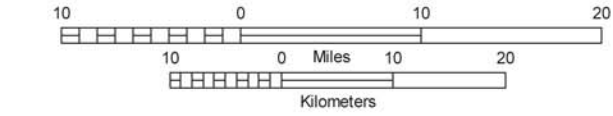
In June 2000, the BLM responded to growing concern over the loss of open space by creating the National Landscape Conservation System (NLCS). Components of the NLCS include National Conservation Areas, National Monuments, Wilderness, WSAs, Wild and Scenic Rivers, and National Historic and Scenic Trails. Wilderness and one NHT are the only components of the NLCS present within the YFO.

A. DESIGNATED WILDERNESS

The BLM, Forest Service, National Park Service (NPS), and USFWS all manage Congressionally-designated Wilderness as a part of the National Wilderness Preservation System. There are 167,800 acres of designated Wilderness in the planning area (see Map 2-1). Wilderness in the YFO planning area was designated by the Arizona Desert Wilderness Act of 1990 and California Desert Protection Act of 1994.



YUMA FIELD OFFICE
RECORD OF DECISION
APPROVED RESOURCE MANAGEMENT PLAN



U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Yuma Field Office
January 2010



Map 2-1: Special Designations

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

YFO manages Wilderness in Arizona and shares management with the BLM California Desert District on Wilderness in California. The Little Picacho Wilderness and Palo Verde Mountains Wilderness are managed with the El Centro Field Office; Big Maria Mountains Wilderness and Riverside Mountains Wilderness are managed with the Palm Springs/South Coast Field Office.

Desired Future Conditions

- SM-001: Provide for the long-term protection and preservation of the designated area's wilderness character under the principle of non-degradation. The 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.
- SM-002: Manage uses permitted by the Wilderness Act's special provisions and subsequent laws in a manner that will prevent undue degradation of the area's wilderness character. In managing these uses, emphasis will be placed on maintaining wilderness character.
- CL-005: Within Wilderness, YFO accommodates traditional or sacred uses identified by Native American tribes who traditionally used the area.

Management Actions

- SM-003: Continue management of 167,800 acres of Congressionally designated Wilderness.
- SM-004: Continue implementing decisions from the Eagletail Mountains Wilderness Management Plan, Kofa and New Water Mountains Wilderness Interagency Management Plan, and Muggins Mountains Wilderness Management Plan. Implement decisions from future Wilderness Management Plans once completed.
- FM-014: In Wilderness, when wildland fire suppression occurs, minimum impact suppression tactics identified in the Interagency Standards for Fire and Aviation Operations will be applied.
- RR-005: Limit equestrian use authorized by SRPs to pre-selected trails within Wilderness on a case-by-case basis.
- RR-019: Delineate base camps and install the appropriate facilities adjacent to Wilderness boundaries to accommodate equestrian use and hunting groups.
- TM-014: Prohibit the use of non-motorized wheeled game carriers to retrieve game kills within Congressionally-designated Wilderness.
- TM-061: Within the Eagletail Mountains Wilderness, prohibit recreational equestrian use within one quarter mile of Indian Springs to prevent impacts to wildlife habitat and cultural resource values. At equestrian trailheads, promote low-impact hitching methods that the public can use prior to entering the Indian Springs area.
- VR-008: BLM will designate all Wilderness as VRM Class I.

Administrative Actions

- AA-001: Coordinate with U.S. Customs and Border Protection to consider using horses or other non-invasive means of travel if patrols are needed within Wilderness.
- AA-002: Complete a Minimum Requirements Decision Guide analysis prior to all non-emergency actions within Wilderness.
- AA-003: Arizona BLM will continue to coordinate with the BLM California Desert District on the portions of the Big Maria Mountains Wilderness, Little Picacho Wilderness, Palo Verde Mountains Wilderness, and Riverside Mountains Wilderness that are administered by YFO.
- AA-004: Monitor Wilderness annually for preservation of wilderness values (i.e., naturalness, opportunities for solitude, and unconfined recreation) and the condition of special features found within the area. Baseline conditions for each area will be referenced to analyze change, if any. Existing and future Wilderness Management Plans have focused/will focus on monitoring and management actions through the development of “Limits of Acceptable Change” standards and indicators.

B. NATIONAL HISTORIC TRAIL

The Juan Bautista de Anza NHT (Anza Trail) extends from Mexico to California for a total length of approximately 1,200 miles in the U.S. (see Map 2-1). Congress designated this trail through Public Law 101-365 in 1990 under the authority of the National Trail System Act of 1968. The *Final Environmental Impact Statement Comprehensive Management and Use Plan - Juan Bautista de Anza National Historic Trail, Arizona and California* (1996) authorizes the NPS to provide oversight for coordinated management of the trail. The Anza Trail is currently defined as a one-mile-wide corridor. Approximately 111 miles of the trail corridor are within the planning area and approximately 21 miles of the trail corridor are located on BLM-administered land.

Desired Future Conditions

- SM-005: The Anza Trail provides contiguous recreational connectivity through the planning area between the BLM El Centro and Lower Sonoran field offices.
- SM-006: The Anza Trail accommodates increased recreational use while providing for resource protection and public education regarding the route’s cultural, historical, and natural resource values.
- SM-007: Management activities along Anza Trail are conducted to assure that no adverse impacts occur to those resources and values identified in the legislation designating the trail.
- SM-008: A multiple-use recreational Anza Trail provides adjacent communities with convenient opportunities to exercise and improve their physical fitness.
- SM-009: The Anza Trail corridor inside the Sears Point ACEC is managed for public use while providing protection and preservation for cultural and natural resources.

- SM-010: Public land visitors are provided with recreational connectivity from the Anza Trail to other recreational trails and other points of interest within the Gila River Valley and Greater Yuma Travel Management Areas (TMAs).
- CL-004: Historic trails, including the Anza Trail, Butterfield Overland Mail Route, Gila Trail, and Mormon Battalion Trail, are managed to realize their educational, recreational, and scientific values.

Management Actions

- VM-064: Reduce hazardous fuels and non-native invasive species along the Anza Trail.
- FM-015: Conduct fire management activities along the Anza Trail in a manner that will avoid or minimize adverse impacts to existing resources and values identified in the legislative designation of the trail.
- RR-009: Install NHT signs and interpretive materials in conformance with the NPS Anza Trail Management Plan.
- TM-013: Upon designation of motorized portions of the Anza Trail, use of motor vehicles will be limited to the designated NHT only and will not be allowed to drive 100 feet from the centerline of the route. Motorized use will remain within the route with reasonable use of the shoulder and immediate roadside for vehicle passage, parking/overnight camping, and emergency stopping.
- TM-045: Designate portions of the Anza Trail through BLM-administered lands for motorized and non-motorized recreation as appropriate.
- LR-028: To the extent possible, new transportation ROWs will avoid the Anza Trail. Appropriate mitigation will be required when avoidance is not possible.
- LR-052: Surface occupancy of renewable energy facilities will not be allowed on BLM-administered lands within the Anza Trail corridor.

Administrative Actions

- AA-005: Support the development of an MOU and/or cooperative agreements with interested stakeholders to develop, manage, maintain, and monitor the Anza Trail and its associated facilities within the YFO.
- AA-006: Manage the Anza Trail consistently with the NPS Anza Trail Management Plan and in cooperation with the NPS to the extent practicable.
- AA-007: Work with interested stakeholders to identify the appropriate locations of a recreational Anza Trail and its associated trailheads and campsites.
- AA-008: Work with interested stakeholders to secure legal public access to the Anza Trail and its associated trailheads.
- AA-009: Monitor the Anza Trail corridor to estimate visitor use levels, determine the effectiveness of interpretive materials, identify maintenance requirements for BLM and/or NPS facilities, assess the presence of hazardous fuels and riparian habitat resource values, and to protect at-risk cultural resources.

- AA-010: Nominate the designated Anza Trail for inclusion in the Arizona State Parks Trail System.

2.3.2 NATIONAL RECREATION TRAIL

The existing one-half mile Betty's Kitchen NRT (see Map 2-1) is managed by YFO and will continue to be managed under the Approved RMP.

Desired Future Conditions

- SM-011: The Betty's Kitchen NRT provides universal accessibility to recreational opportunities.

Management Actions

- RR-004: Continue management of the existing 0.5-mile Betty's Kitchen NRT in accordance with the current YFO Recreation and Visitor Services Business Plan.
- RR-009: Install and maintain interpretive signs along the existing Betty's Kitchen NRT, as needed.
- LR-052: Surface occupancy of renewable energy facilities will not be allowed in the Betty's Kitchen Watchable Wildlife Viewing Area and NRT.

Administrative Actions

- AA-011: Continue to provide environmental education and interpretation opportunities related to recreation and wildlife at the Betty's Kitchen NRT.
- AA-012: Monitor Betty's Kitchen NRT and its associated facilities to document visitor use levels, visitor compliance with recreation fee site regulations, facility maintenance, hazardous fuels, and riparian habitat resource values.

2.3.3 NATIONAL BYWAYS

The National Byways program was established by the USDOT/FHWA. To be eligible for designation, a road must meet criteria for at least one of six intrinsic qualities which are considered unique, irreplaceable, or distinctly characteristic of an area: scenic, historic, recreational, cultural, archaeological, and/or natural qualities. The BLM Back Country Byway system is a component of the National Byway System. BLM can nominate National Scenic Byways, but the nominations must be submitted and approved by State government before they are eligible for consideration by the Secretary of Transportation. BLM Back Country and Scenic Byway designations are approved by the State Director within the parameters established for the State byway program. The Approved RMP identifies one National Scenic Byway and two Back Country Byways (see Map 2-1). Additional details of National Scenic Byway and Back Country Byways are shown in Table 2-2.

Table 2-2
Approved RMP National Scenic and Back Country Byway Nominations

Name	Outstanding Resources or Destination	Byway Length (total miles)	Type
National Scenic Byway			
Highway 95	• Views of the Castle Dome, Kofa, Chocolate, Dome Rock, Laguna, Gila, and New Water mountain ranges • Information on the differing missions of BLM, Kofa NWR, and YPG along the route • Connectivity of major winter visitor destinations • Wild horse and burro viewing	64	Paved road
National Back Country Byways			
Agua Caliente	• Wildlife viewing • Views of Gila Bend Mountains • Geologic features such as lava flows and cinder cones • Prehistoric and historic sites • Potential connectivity to the BLM Lower Sonoran Field Office's Back Country Byway nomination	11	Type II
Plomosa	• Adjacent public use cultural site • Views of Plomosa Mountains • Connectivity to the BLM Lake Havasu Field Office's Back Country Byway nomination	10	Type I

BLM = Bureau of Land Management; NWR = National Wildlife Refuge; YPG = Yuma Proving Ground; Type I = Accommodate normal touring cars; Type II = Require high-clearance vehicles

Desired Future Conditions

- SM-012: Byways expose visitors to local recreation opportunities and various multiple-use management programs, and interpret natural, cultural, geological, and scenic features.
- SM-013: Byways provide interconnectivity between local communities and a working partnership for regional development of eco- and recreational tourism.
- SM-014: Byways promote sustainable outdoor ethics to educate OHV users on how to reduce potential impacts to natural and cultural resources.
- SM-015: Byways are managed through partnerships that address the public demand for OHV experiences in a sustainable manner.
- SM-016: Byway plans will strive to minimize impacts to wildlife and will provide appropriate wildlife viewing opportunities.
- VR-005: The long-term scenic quality of BLM-administered lands within the viewsheds of National Byways is maintained through the application of the BLM VRM system.

Management Actions

- SM-017: Nominate 64 miles of Highway 95 between Quartzsite and Yuma, Arizona, as a National Scenic Byway.
- SM-018: Nominate 10 miles of Plomosa Road from Highway 95 to Bouse, Arizona, as a National Back Country Byway in coordination with the BLM LHFO.
- SM-019: Nominate 11 miles of Agua Caliente Road as a National Back Country Byway in coordination with the BLM Lower Sonoran Field Office.
- FM-015: Conduct fire management activities along National Byways in a manner that will avoid or minimize adverse impacts to existing resources and values identified in the legislative designation of the trail.
- LR-052: Surface occupancy of renewable energy facilities will not be allowed within National Byway corridors.

Administrative Actions

- AA-013: Prior to the final designation of Back Country Byways, complete locale-specific visitor use and potential resource impact studies to determine if byway designation is appropriate.
- AA-014: Follow the nomination and designation process for byways outlined within BLM Handbook H-8357-1 by partnering with interested agencies and organizations.
- AA-015: Develop a management plan for each National Byway with cooperating partners to finalize the byway nomination and designation process. Ensure that the following issues are addressed in the byway management plans:
 - Install speed limit, directional, vehicle safety, and interpretive signs to enhance public use, enjoyment, and stewardship of byways;
 - Install byway facilities outside of allocated WHAs;
 - Manage byways for compatibility between minerals and energy development including ROWs, leases, permits, and other resource uses;
 - Coordinate with byway partners to ensure legal public access to and along proposed routes;
 - Maintain road conditions along byways in a manner to protect and maintain air quality;
 - Restore recreational surface disturbances adjacent to byways to deter route proliferation;
 - Coordinate with the AGFD to implement temporary byway closures within WHAs through adaptive management in order to reduce the potential impacts to sensitive wildlife species;
 - If high visitor use along byways is adversely impacting wildlife or other resources, byway use may be limited through issuing permits or other means; and
 - Identification of cultural resources that might be affected by byways will be conducted in compliance with Section 106 of the NHPA and the guidelines specified in BLM AZ IM-2006-043, Section 106 Compliance for Designating Off-Highway Vehicle Routes and Areas in Land Use Plans.

- AA-016: Manage byways for compatibility with the prescribed recreation settings, mining, and other resource uses.
- AA-017: Develop maps and brochures of the byways.
- AA-018: Continuously coordinate with the AGFD to develop limits of acceptable change for resources and road conditions within byway corridors. Monitor for increases in byway width, sensitive cultural resources, and threatened, endangered, and sensitive species habitat, and negative effects to wildlife populations adjacent to byway corridors. If impacts exceed limits of acceptable change, Management Actions will be implemented to reduce resource impacts accordingly. This could include reducing or eliminating use of the byway, until a historic treatment plan is developed and implemented.
- AA-019: For the Plomosa and Agua Caliente byways, the BLM Lake Havasu and Lower Sonoran field offices, respectively, will lead the byway nomination, designation, management, and partnerships-building processes. Additional monitoring requirements for the Plomosa and Agua Caliente byways will be addressed by the Lake Havasu and Lower Sonoran field offices, respectively, during the development of byway management plans.

2.3.4 AREAS OF CRITICAL ENVIRONMENTAL CONCERN

The guidance for ACEC management is included in FLPMA and states that Federal agencies are directed to protect and conserve ecosystems in need of “special management attention” by designating them as ACECs in their land use planning process. ACECs must meet the relevance and importance criteria in 43 CFR 1610.7-2(b) and must require special management to:

- Protect the area and prevent irreparable damage to resources or natural systems, or
- 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 would take precedence over multiple uses.

The Approved RMP designates three ACECs within the planning area. An ACEC Evaluation Report can be found in Appendix D which clarifies special management attention needed for each designated ACEC under the Approved RMP.

Desired Future Conditions Common to All ACECs

- SM-020: Provide protection for relevant and important resource values within designated ACECs, including special status species, wildlife, scenic, riparian, and significant cultural resources.
- VM-001: Vegetation diversity within designated ACECs will be maintained in accordance with ecological site description guides (USDA NRCS 2005).

- TM-010: OHV access within designated ACECs will be managed in a manner which does not damage important cultural resources and wildlife habitat.
- VR-006: The viewsheds and landscape character of ACECs is maintained to the extent practicable through the BLM's VRM system.

Management Actions Common to All ACECs

- SM-021: New land use authorizations within designated ACECs will be discouraged and only authorized when it is necessary for resource protection and/or when no reasonable alternative exists.
- SM-022: Prohibit new routes within designated ACECs except as needed to manage and interpret resources or as required by law, such as access to valid mining claims or private property.
- VM-062: Treatment for hazardous fuels reduction and non-native invasive species will be allowed within designated ACECs. These treatments will be carried out in a manner that avoids or minimizes impacts to important resources.
- FM-015 Conduct fire management activities within ACECs in a manner that will avoid or minimize adverse impacts to existing resources and values identified in the legislative designation of the trail.
- GM-016: Grazing for commercial purposes will not be allowed within designated ACECs.
- RR-005: Issue SRPs for public use of designated ACECs on a case-by-case basis, when it is determined that adverse impacts can be avoided.
- RR-009: Install interpretation within designated ACECs to increase public awareness of resource sensitivity, promote public stewardship, and reduce inadvertent damage to important resources.
- RR-016: Install and maintain traffic counters at main points of access and interest in ACECs.
- TM-013: OHV travel will be limited to existing inventoried routes, until future route evaluation and designation is complete within the ACEC. Upon designation of motorized routes within ACECs, use of motor vehicles will be limited to the designated routes only and will not be allowed to drive 100 feet from the centerline of the route. Motorized use shall remain within the route with reasonable use of the shoulder and immediate roadside for vehicle passage, parking/overnight camping, and emergency stopping.
- TM-020: Limit equestrian use to existing inventoried routes within designated ACECs until the route designation process is complete. If determined necessary, designate equestrian trails and install equestrian trailhead facilities to reduce user and resource conflicts. Limit equestrian use to these trails once they have been designated.
- TM-057: Designate hiking trails within the ACECs to control access to the ACEC and prevent damage to cultural and natural resources. Allow construction, maintenance, and improvement of hiking trails and associated facilities within ACECs as necessary. Once the trails are established, require visitors to stay on designated hiking trails within the Sears Point ACEC interpretive area, Blythe Intaglios Complex, and in the vicinity of the spring at the Dripping Springs ACEC.

- CL-006: Implement protection measures to stop, limit, or repair damage to cultural resource sites. A variety of protection measures described in BLM Manual 8140 may be used to protect the integrity of sites at risk such as signs, fencing or barriers, trash removal, target shooting closures, erosion control, backfilling, repairing, shoring up, or stabilizing structures, restricting uses and access, and closures.
- CL-007: Inventory, document, monitor, and protect cultural resources of importance and relevant features within designated ACECs prior to developing interpretation programs, in order to preserve the future integrity of the resource values prior to public use.
- LR-028: To the extent possible, new transportation ROWs will avoid ACECs. Appropriate mitigation will be required when avoidance is not possible.
- LR-052: Surface occupancy of renewable energy facilities will not be allowed in ACECs.
- LR-063: The YFO will retain Federal lands within ACECs.
- LR-068: Seek to acquire non-Federal lands and interests within or adjacent to lands within the ACECs from willing sellers by purchase, exchange, donation, or other means. Acquisitions will include surface and subsurface rights, and water rights whenever possible. Future acquisitions of inholdings and edgeholdings will be managed in accordance with the designated ACEC.
- MI-008: Protection of resource values within designated ACECs will take precedence over leasable/locatable materials. If an area is not withdrawn from mineral entry, special mitigation will be required to avoid impacts to resources. All locatable mineral actions will require an approved Mining Plan of Operations in accordance with BLM Manual 3809 regulations. Leasable mineral exploration and development will be evaluated on a case-by-case basis.
- MI-023: New salable mineral materials disposal sites will not be authorized within designated ACECs. Existing material sites within designated ACECs will be evaluated and closed, if found to be impacting significant resources.

Administrative Actions Common to All ACECs

- AA-020: Work collaboratively with stakeholders for coordinated management purposes in designated ACECs.
- AA-021: Provide opportunities for participation in ACEC interpretation by Native Americans and other interested entities.
- AA-022: Establish Supplementary Rules to enforce any restrictions within designated ACECs according to the guidelines set forth in 43 CFR 8365.1-6.
- AA-023: Horseback riders within designated ACECs will be encouraged to use weed-free hay and use feed buckets. (Refer to Management Actions in Section 2.5.5 Vegetation Management, Invasive Species).
- AA-024: Ensure that commercial tour operators authorized to work within designated ACECs provide appropriate educational information on archaeological site etiquette and resource conservation to their customers. Tour operators will be required to report any vandalism or damage to resources.

- AA-025: Monitor relevant and important resource values within designated ACECs to detect change and prevent future deterioration. This monitoring will be accomplished primarily under guidance provided from the cultural and biological sections of this document. Monitoring plans associated with future ACEC management plans will be implemented.
- AA-026: Monitor and maintain designated recreational trails to reduce trail use, proliferation, and damage to resources within designated ACECs.

A. BIG MARIAS ACEC

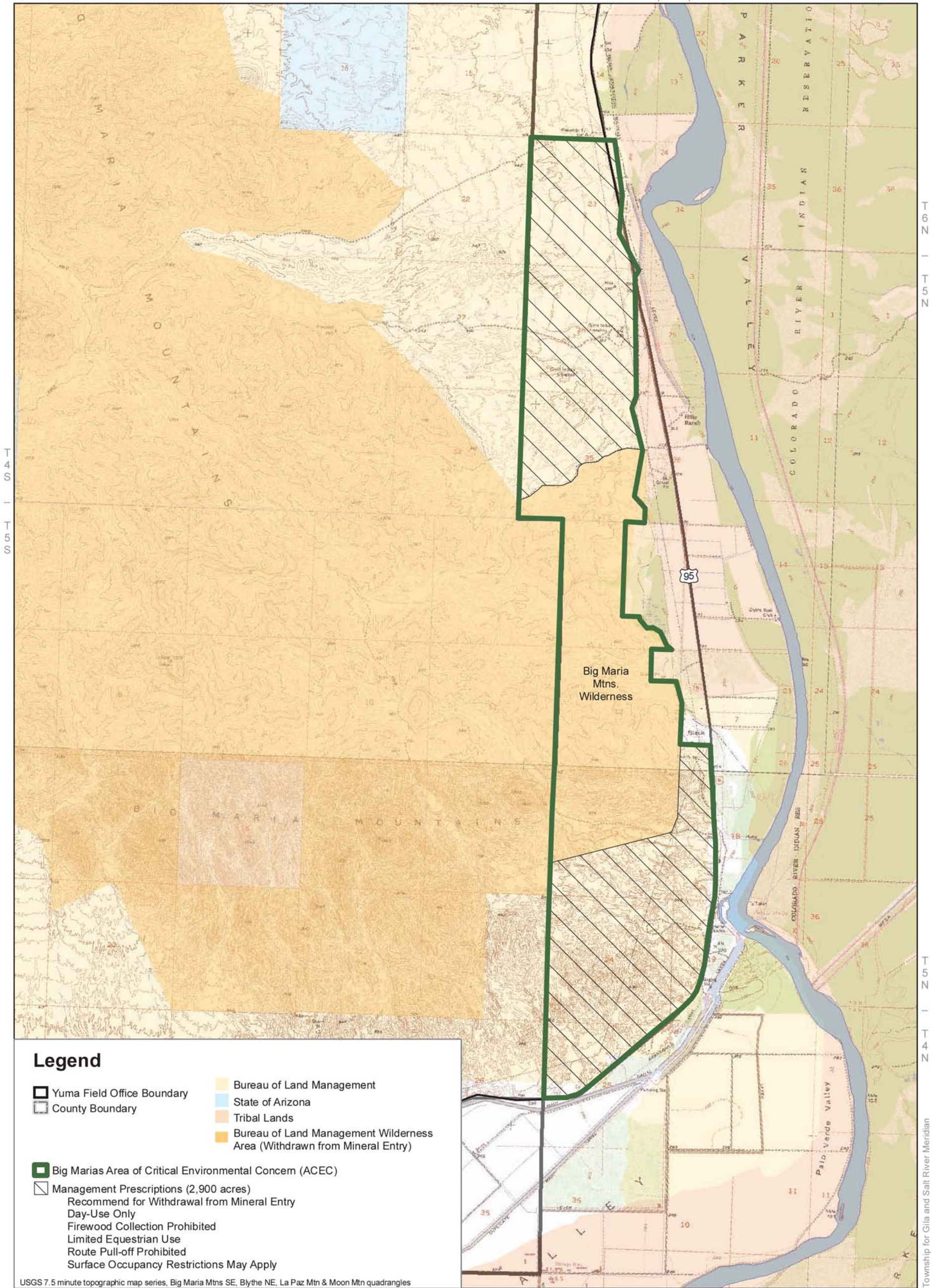
The Big Marias ACEC, located about 12 miles north of Blythe, California, was designated in the 1987 Yuma District RMP (Map 2-1-1). The relevance and importance for this ACEC includes a high concentration of nationally significant intaglio features; a density of other prehistoric archaeological features including petroglyphs, pictographs, trail networks, campsites, and artifact scatters; the National Register of Historic Places (NRHP) listed Blythe Intaglios site; and the presence of sensitive plant species.

Desired Future Conditions

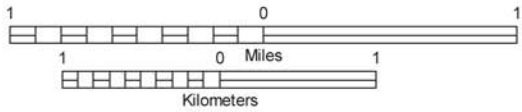
- SM-023: Important cultural resource sites contained within the Big Marias ACEC, including the many rare intaglio features that are situated on the desert pavement covered terraces above the Colorado River, are protected and conserved.
- RR-031: The Blythe Intaglios Complex is promoted as a heritage tourism destination to enhance public understanding and appreciation of relevant and important resource values. Interpretation design and protection measures at the Blythe Intaglios Complex are improved in coordination with interested partners.

Management Actions

- SM-024: Continue management of the existing 4,500-acre Big Marias ACEC.
- VM-073: Prohibit collection of dead, downed, and detached firewood within 2,900 acres of the Big Marias ACEC (see Map 2-1-1).
- VM-078: Close the Big Marias ACEC to all vegetative product sales.
- RR-009: Install and maintain interpretive materials at main points of access and interest within the non-Wilderness portions of the Big Marias ACEC (see Map 2-1-1). Interpretive locations include but are not limited to parking areas, hiking trails, and cultural resource sites.
- RR-013: Limit 2,900 acres of the Big Marias ACEC to day-use only (see Map 2-1-1).
- TM-041: Limit parking within the Blythe Intaglios Complex to designated areas.
- TM-043: Allow construction, maintenance, and improvement of existing or new hiking trails, barriers, and signs in the Big Marias ACEC as necessary.



**YUMA FIELD OFFICE
RECORD OF DECISION
APPROVED RESOURCE MANAGEMENT PLAN**



**Map 2-1-1: Special Designations
Big Marias ACEC Detail**



**U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Yuma Field Office
January 2010**



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

- LR-004: In the event that Reclamation relinquishes their second form withdrawal in the Big Marias ACEC, YFO will propose to withdraw an additional 2,900 acres of Federal land within the Big Marias ACEC from mineral entry.
- LR-038: Restrict utilities within the Big Marias ACEC, to the extent practical, to the Highway 95 ROW corridor.
- LR-046: Restrict any additional communications facilities in the Big Marias ACEC to the currently authorized Big Maria Communications Site boundaries.
- MI-009: No surface occupancy for oil and gas leases will be allowed within the Big Marias ACEC to protect cultural resources.

Administrative Actions

- AA-027: Develop an interpretive plan for the Blythe Intaglios Complex in coordination with interested partners. Consider constructing platforms for visitors to view fenced intaglio areas at the Blythe Intaglios Complex that are allocated to public use.
- AA-028: Develop a Cultural Resource Management Plan for the Big Marias ACEC that addresses appropriate monitoring and protection measures for each known intaglio feature.
- AA-029: Coordinate any modifications or amendments to designated routes in the Big Marias ACEC with the California Desert District.

B. DRIPPING SPRINGS ACEC

The relevance and importance of the Dripping Springs ACEC includes a perennial water source, desert bighorn sheep habitat, an important petroglyph site, and the remains of several historic stone structures (Map 2-1-2). A 640-acre area around the spring will be a core area for management purposes described below.

Desired Future Conditions

- SM-025: Public use and interpretation of the Dripping Springs ACEC are balanced with the conservation of the many relevant and important resource values of the area.

Management Actions

- SM-026: Designate the 11,700-acre Dripping Springs ACEC.
- SM-027: Except for prior existing rights, discretionary Mineral Resource Management (Section 2.19) and Lands and Realty (Section 2.18) actions, including but not limited to mineral materials disposals and ROW facilities, will not be authorized inside the Dripping Springs ACEC 640-acre core area. Discretionary actions within the ACEC, but outside of the core area, will be avoided to the extent practicable. Installation of facilities to protect, interpret, or manage ACEC resource values will be allowed within the entire ACEC, including the core area.

- VM-073: Prohibit collection of dead, downed, and detached firewood within 11,700 acres of the Dripping Springs ACEC (see Map 2-1-2).
- VM-078: Close the Dripping Springs ACEC to all vegetative product sales.
- RR-009: Install and maintain interpretive materials at main points of access and interest within the Dripping Springs ACEC. Interpretive locations include, but are not limited to parking areas, hiking trails, the spring, historic structures, and petroglyph concentrations.
- RR-013: Limit the Dripping Springs ACEC 640-acre core area to day-use only (see Map 2-1-2).
- TM-007: Designate a Closed OHV Management Area within 440 acres of the Dripping Springs ACEC core area (see Map 2-1-2).
- TM-056: Establish a parking area at both the north and south sides of the Dripping Springs ACEC. Install post-and-cable or other barriers as needed to manage access.
- TM-057: Close the Dripping Springs ACEC 640-acre core area around the spring to public use during extreme or severe drought conditions to protect desert bighorn sheep populations, as recommended by AGFD.
- LR-003: Pursue the withdrawal of the Dripping Springs ACEC 640-acre core area (see Map 2-1-2).
- MI-009: No surface occupancy for oil and gas leases will be allowed within the Dripping Springs ACEC 640-acre core area (see Map 2-1-2).

Administrative Actions

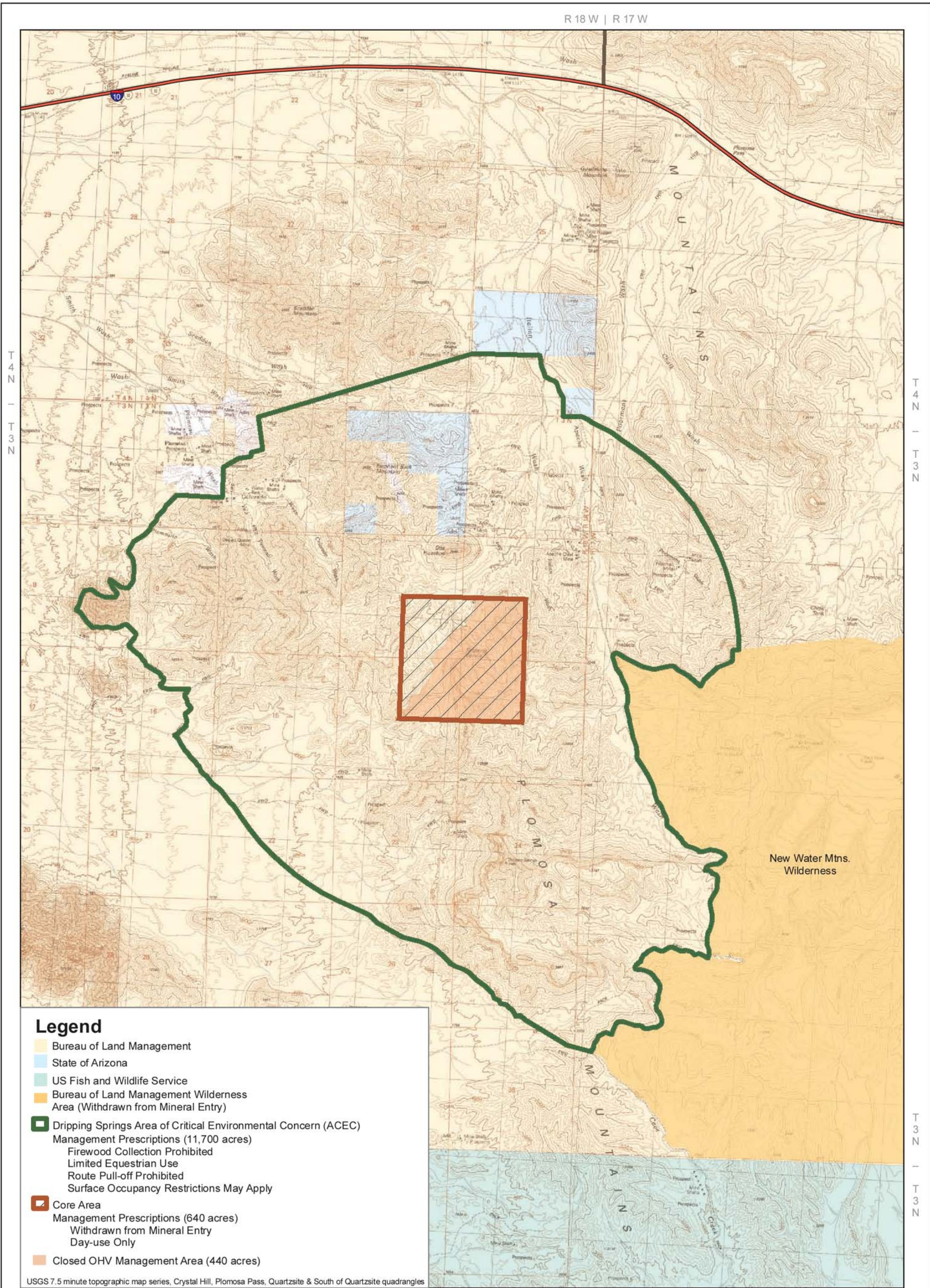
- AA-030: Create a detailed map of the Dripping Springs ACEC interpretive area that shows locations of interpretive and informational signage, protection measures, and the interpretive hiking trail in relation to the natural and cultural resource features.
- AA-031: Develop a Dripping Springs ACEC interpretive plan for the area around the spring in coordination with interested partners.

C. SEARS POINT ACEC

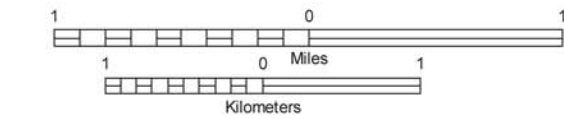
The designation of the Sears Point ACEC in the Approved RMP supersedes previous planning decisions written for the Gila River Cultural Area in 1990 when it was located in the BLM Lower Gila South Planning Area (Phoenix District). The relevance and importance of the Sears Point ACEC includes an NRHP-listed archaeological district with extensive petroglyph displays, prominent basalt mesas, historic trail corridors, and important riparian vegetation including a mesquite bosque and the Fred J. Weiler Greenbelt (Map 2-1-3).

Desired Future Conditions

- SM-009: The Anza Trail corridor inside the Sears Point ACEC is managed for public use while providing protection and preservation for cultural and natural resources.



**YUMA FIELD OFFICE
RECORD OF DECISION
APPROVED RESOURCE MANAGEMENT PLAN**



**Map 2-1-2: Special Designations
Dripping Springs ACEC Detail**



Township and Range for Gila and Salt River Meridian
**U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Yuma Field Office
January 2010**



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

Legend

- Yuma Field Office Boundary

County Boundary

Main Access Route

Secondary Paved Road

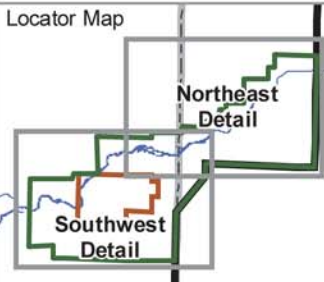
National Historic Trail

Sears Point Area of Critical Environmental Concern (ACEC)
Management Prescriptions (28,500 acres)
Limited Equestrian Use
Route Pull-off Prohibited
Surface Occupancy Restrictions May Apply

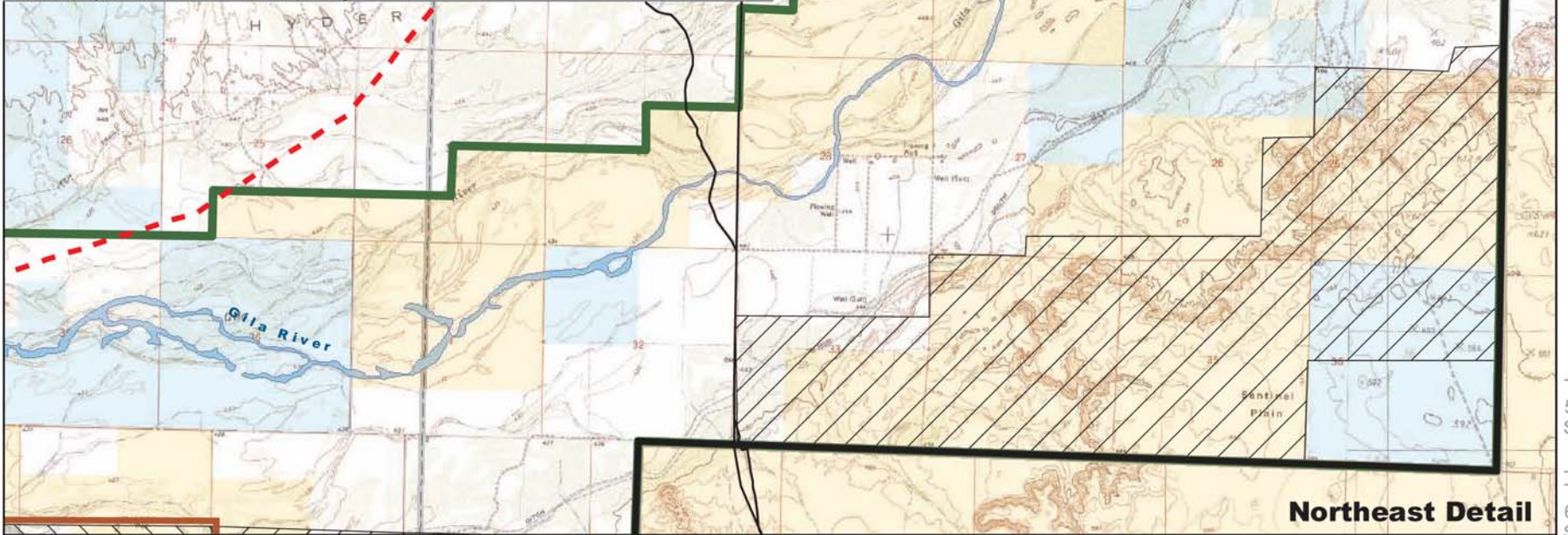
Core Area
Management Prescriptions (3,700 acres)
Day-Use Only
Existing Withdrawal from Mineral Entry
Firewood Collection Prohibited

Management Prescriptions (4,900 acres)
New Withdrawal from Mineral Entry

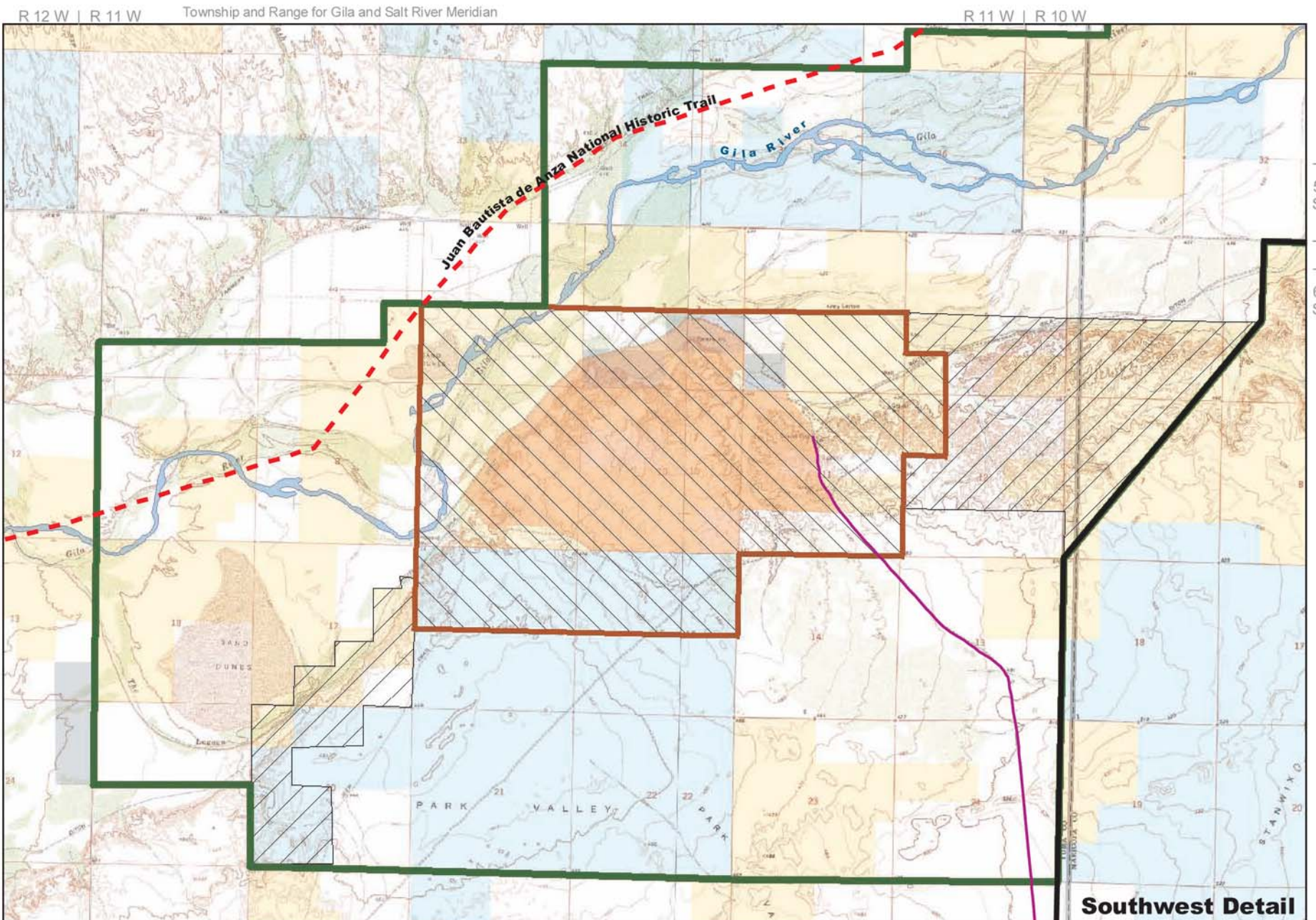
Closed OHV Management Area (1,400 acres)
- Bureau of Land Management
- State of Arizona
- Private - Other



USGS 7.5 minute topographic map series, Agua Caliente, Aztec NW, Hyder, Oatman Mtn & Sentinel Pk quadrangles

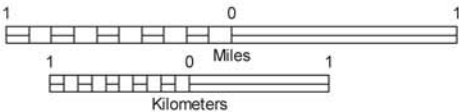


Northeast Detail



Southwest Detail

YUMA FIELD OFFICE
RECORD OF DECISION
APPROVED RESOURCE MANAGEMENT PLAN



U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Yuma Field Office
January 2010



Map 2-1-3: Special Designations
Sears Point ACEC Detail

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

- SM-010: Public land visitors are provided with recreational connectivity from the Anza Trail to other recreational trails and other points of interest within the Sears Point ACEC.
- SM-028: Visitor impacts to Sears Point ACEC values are reduced by enhancing public understanding and appreciation of the cultural resources.
- SM-029: On lands where the Fred J. Weiler Greenbelt Vegetation Habitat Management Area (VHA) and Sears Point ACEC overlap, land use planning decisions for the ACEC would take precedence.

Management Actions

- SM-027: Except for prior existing rights, discretionary Mineral Resource Management (Section 2.19) and Lands and Realty (Section 2.18) actions, including but not limited to mineral materials disposals and ROW facilities, will not be authorized inside the Sears Point ACEC 3,700-acre core area. Discretionary actions within the ACEC, but outside of the core area, will be avoided to the extent practicable. Installation of facilities to protect, interpret, or manage ACEC resource values will be allowed within the entire ACEC, including the core area.
- SM-030: Expand the Sears Point ACEC to encompass 28,500 acres (see Map 2-1-3).
- VM-073: Prohibit collection of dead, downed, and detached firewood within 3,700 acres of the Sears Point ACEC core area (see Map 2-1-3).
- RR-007: Construct recreational facilities in the Sears Point ACEC as needed, including:
 - A visitor host site to monitor sensitive resources and maintain a presence in the area.
 - Facilities necessary for public health and safety.
- RR-009: Install interpretive exhibit panels at the central mesas and at main points of access and interest within the Sears Point ACEC.
- RR-013: Limit the Sears Point ACEC 3,700-acre core area to day-use only (see Map 2-1-3).
- TM-007: Designate a Closed OHV Management Area within 1,400 acres of the Sears Point ACEC core area (see Map 2-1-3).
- TM-046: Establish a parking area and install barriers as needed at the Sears Point ACEC interpretive area to control access and prevent damage to cultural and natural resources. Determine an appropriate location for the parking area in coordination with stakeholders and Native American tribes.
- LR-003: Pursue the withdrawal of an additional 4,900 acres of Federal land within the Sears Point ACEC (see Map 2-1-3).
- LR-005: All non-Federal lands acquired within the Gila River Cultural ACEC (i.e., Sears Point ACEC core area) boundary established and withdrawn by Public Land Order 7212 (September 5, 1996) will be managed under the current existing withdrawal (see Map 2-1-3). Continue to acquire from willing sellers those non-Federal lands within the current boundary of the Gila River Cultural ACEC withdrawn by Public Land Order 7212.
- MI-009: No surface occupancy for oil and gas leases will be allowed within the Sears Point ACEC 3,700-acre core area (see Map 2-1-3).

Administrative Actions

- AA-032: The existing Gila River Cultural Area ACEC will be renamed as the Sears Point ACEC.
- AA-033: Develop a Sears Point ACEC plan in coordination with interested partners that includes additional management prescriptions for balancing increasing public visitation with protection of natural and cultural resources. Until the Sears Point ACEC management plan is approved, the ACEC will be managed according to the Management Actions listed in the Approved RMP.
- AA-034: Throughout the life of the Approved RMP, determine the public demand for overnight camping opportunities within the Sears Point ACEC outside of the core area. If structured overnight camping opportunities are needed to reduce impacts to natural and cultural resources, designate a campground within the proposed ACEC expansion area at a reasonable distance away from sensitive resources.
- AA-035: Inventory and monitor mesquite trees along the Gila River within the Sears Point ACEC to determine age, structure, and health. Develop protection measures if necessary.
- AA-036: Provide reliable, safe, and legal administrative access to the Sears Point ACEC from Interstate 8.

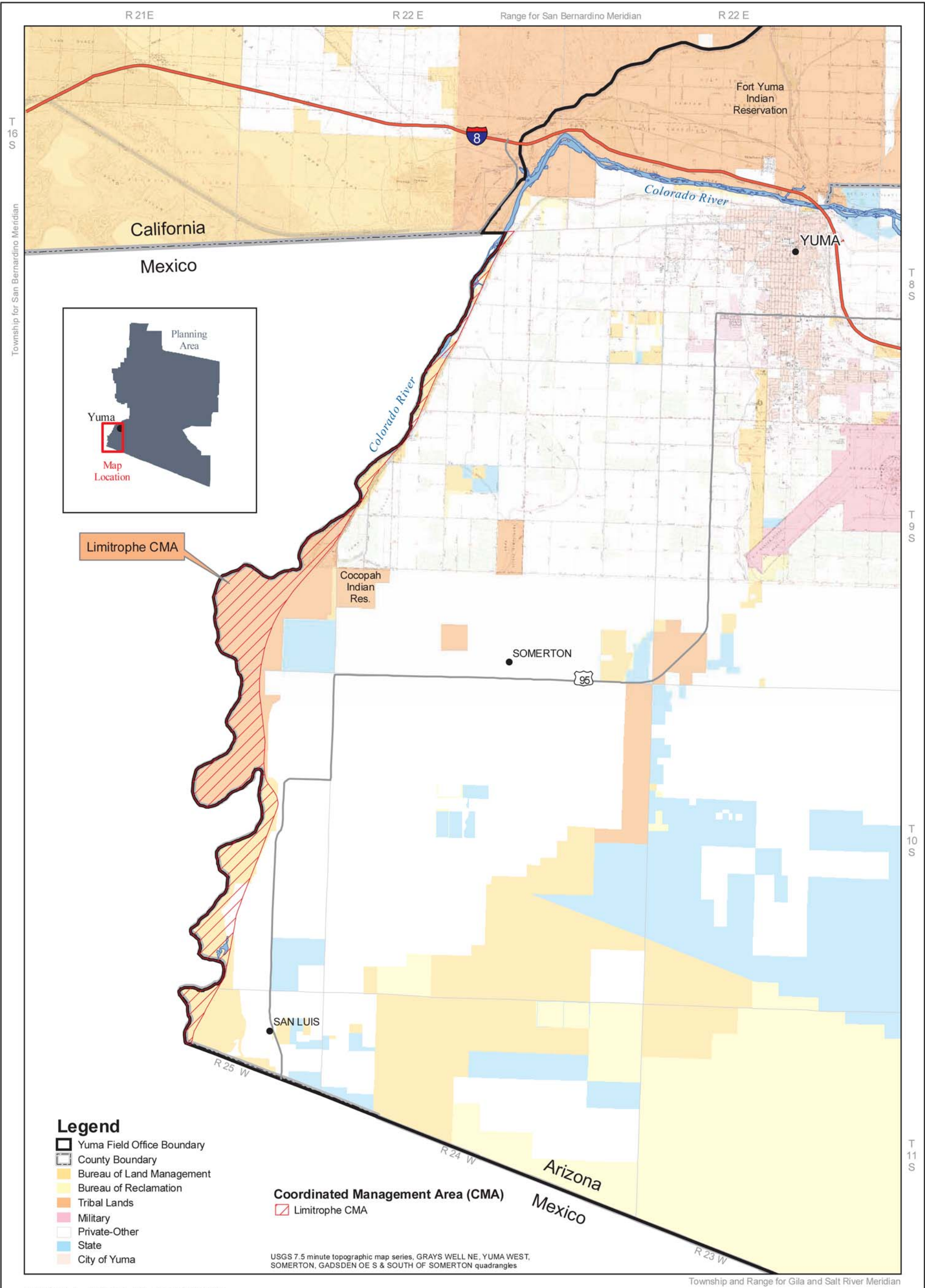
2.4 COORDINATED MANAGEMENT AREAS

There are three areas within the planning area that are managed in close coordination with other agencies (Table 2-3). These are Fortuna Pond (30 acres), the “Limitrophe” division of the lower Colorado River (4,500 acres), and the Mittry Lake Wildlife Area (3,800 acres) (Maps 2-2 through 2-4). CMAs are technically not BLM land use planning allocations under the *Land Use Planning Handbook* or FLPMA. However, these CMAs are being recognized in the Approved RMP to identify the specific management prescriptions and partnership efforts needed for the sustainable management of these lands. All three CMAs are located on Reclamation project lands, and DM 613 assigns the BLM with recreation and wildlife habitat management responsibilities on Reclamation project lands identified in the Lower Colorado River LUP.

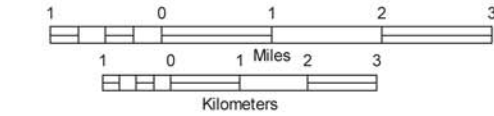
Table 2-3
Approved RMP Coordinated Management Areas

Coordinated Management Area	Approved RMP Total Acres
Fortuna Pond	30
Limitrophe	4,500
Mittry Lake Wildlife Area	3,800
Total CMA Acres	8,330

CMA = Coordinated Management Area



**YUMA FIELD OFFICE
RECORD OF DECISION
APPROVED RESOURCE MANAGEMENT PLAN**



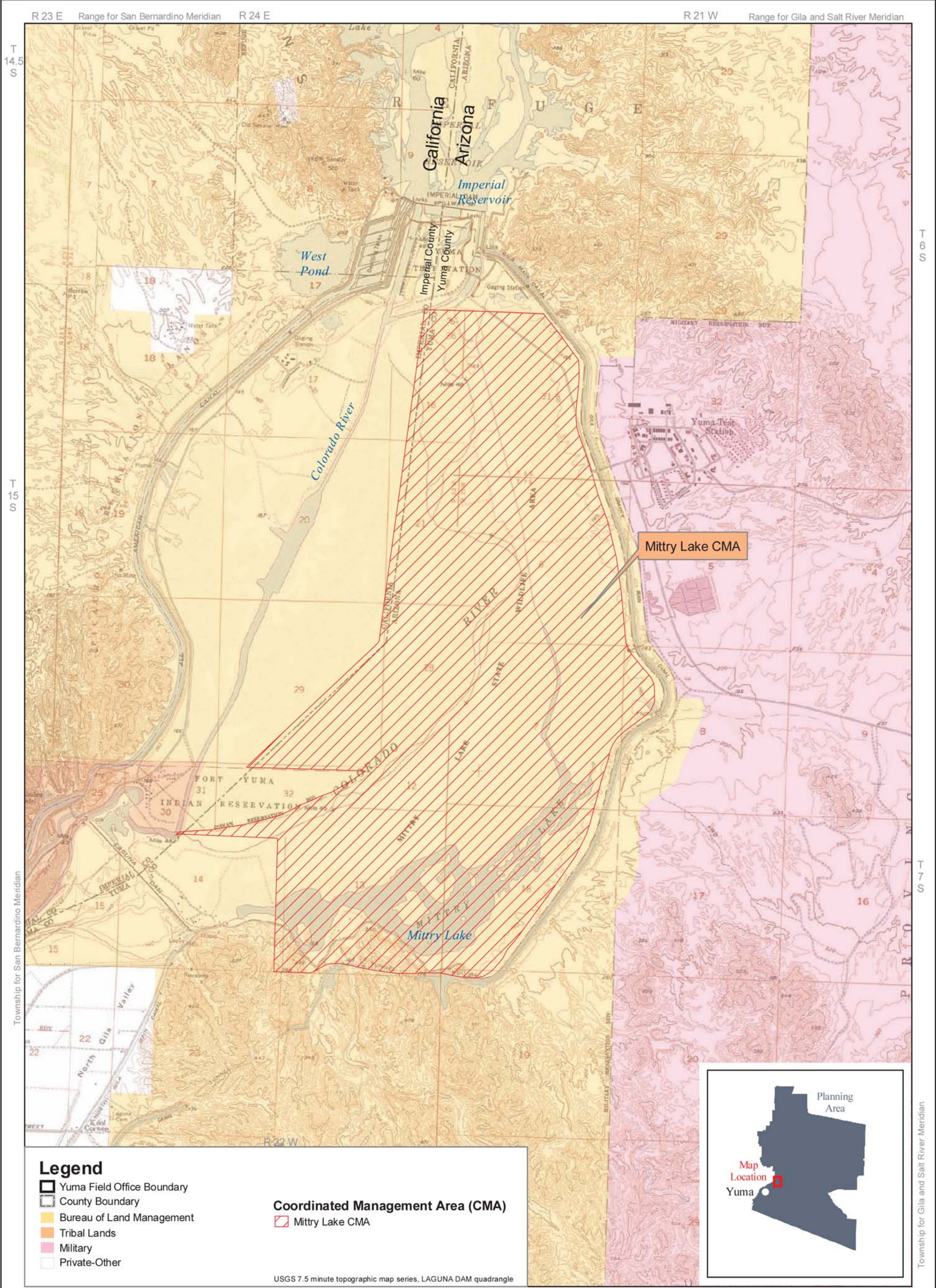
**Map 2-3: Limitrophe
Coordinated Management Area**



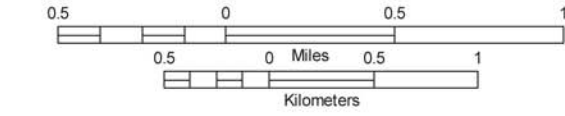
**U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Yuma Field Office
January 2010**



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



**YUMA FIELD OFFICE
RECORD OF DECISION
APPROVED RESOURCE MANAGEMENT PLAN**



U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Yuma Field Office
January 2010



**Map 2-4: Mittry Lake
Coordinated Management Area**

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

2.4.1 FORTUNA POND CMA

Fortuna Pond is a mitigation requirement to replace lost fishing opportunities on the lower Colorado River as a result of the Colorado River Salinity Control Project. The 30-acre Fortuna Pond CMA continues the existing cooperative management approach to the pond between the BLM, AGFD, and Reclamation (see Map 2-2). Reclamation and AGFD also have responsibilities for managing the pond and public use of the pond under their individual authorities.

Desired Future Conditions

- RR-054: Fortuna Pond continues to provide recreational fishing opportunities as mitigation under the Title I contract for the Colorado River Basin Salinity Control Project.

Management Actions

- RR-007: Provide adequate facilities at Fortuna Pond to accommodate visitor use.

Administrative Actions

- AA-037: Achieve consensus with Reclamation, AGFD, and resource stakeholders to cooperatively manage Fortuna Pond for recreation and fishing opportunities.
- AA-038: Finalize and implement the *Fortuna Pond Management Plan*, which will guide management of the area. Until the document is finalized and implemented by the three agencies, the *Draft Fortuna Pond Management Plan* will serve as guidance.
- AA-039: Identify the responsibilities of each agency having management authority at Fortuna Pond.
- AA-040: The BLM and AGFD will regularly monitor visitor use at Fortuna Pond in accordance with their respective missions to ensure compliance with applicable recreational laws and regulations, including length-stay-limits, fire restrictions, and fishing regulations. The YFO will continue to monitor visitor use and associated resource damage at Fortuna Pond to determine the need for recreational facilities, such as garbage cans, restrooms, and/or a volunteer host site. If monitoring determines that such facilities are needed to fulfill BLM resource protection mandates, a proposal to include Fortuna Pond as a recreation fee site may be made in the publicly-reviewed YFO Recreation and Visitor Services Business Plan and the Federal Register.

2.4.2 LIMITROPHE CMA

The Limitrophe CMA encompasses the 4,500 acres of land along the International Boundary with Mexico (see Map 2-3). There are numerous jurisdictions managing varying aspects of the resources, along with a variety of stakeholders with interests in the Limitrophe. The intent of the Limitrophe CMA is to unite the mandates, activities, and responsibilities of multiple jurisdictions and stakeholders while providing a level of protection to the riparian, cultural, and traditional resource values of the area.

Desired Future Conditions

- CM-001: Riparian habitat and marsh vegetation in the Limitrophe are protected and maintained to retain biological diversity and enhance potential habitat to support neotropical migratory birds, special status species, and other wildlife.
- CM-002: The characteristics of the Limitrophe area that have been identified by Native American tribes and groups as important for traditional use are protected and maintained.
- CM-003: A group would constitute the guiding body for the U.S. side of the Limitrophe area to share information for the future of the Limitrophe, and will not be controlled by any single agency.
- CM-004: Ensure that each resource value or issue identified by the stakeholders is addressed in the planning and management of the Limitrophe area.
- CM-005: Each agency or sovereign nation with land management jurisdiction in the Limitrophe will make decisions independently of the stakeholder group, using information and facts from group meetings and the MOU. A charter will not be needed, because the group will not have voting capability for actions where decisions are required by agencies.

Management Actions

- VM-008: Where and when practicable, develop new riparian habitat or restore damaged, degraded, and salt cedar habitats within the Limitrophe for the protection and enhancement of riparian or floodplain associated species. Install facilities to protect restoration sites as needed.
- VM-011: Conduct and/or authorize vegetation treatments in selected locations along the International Boundary to allow visibility and reduce cover for clandestine activity. Such treatments will be conducted in a way that considers impacts to Native American religious concerns.
- VM-012: Require mitigation for vegetation treatments to offset impacts to riparian habitat and recreation values along the International Boundary.
- FM-029: Resolve public health and safety issues by clearing hazardous fuels along the International Boundary under the fire management program, where appropriate.
- MI-009: No surface occupancy for oil and gas leases will be allowed within the Limitrophe CMA.
- MI-023: Allow no salable mineral materials within the Limitrophe area.
- HM-009: Place signs regarding border safety, where appropriate.

Administrative Actions

- AA-041: Develop an MOU and promote cooperation between its signers to create a partnership for the future of the Limitrophe.
- AA-042: Participate in working groups, meetings, and task force settings to collaborate with interested stakeholders on the Limitrophe.

- AA-043: Invite public as well as agencies and organizations to participate in the Limitrophe CMA management plan.
- AA-044: Prepare a Limitrophe CMA management plan in cooperation with stakeholders using facts and information from the group. Develop coordinated goals and objectives for management based on input from all stakeholders. The Limitrophe CMA management plan will:
 - Define roles, jurisdictions, and working relationships of each agency, non-government stakeholders, private landowners, and other partners.
 - Identify goals and objectives to maintain important riparian habitat values in the Limitrophe within the constraints of differing agency jurisdictions in the area.
 - Contain goals and objectives to protect and maintain the characteristics of the Limitrophe area that have been identified by Native American tribes and groups as important for traditional use.
 - Contain goals and objectives to provide for use of, and access to, sacred sites and other places of traditional cultural importance by Native American tribes, when such places are identified within the Limitrophe area through government-to-government consultation.
 - Balance International Border public health and safety issues with resource protection in the Limitrophe.
 - Incorporate decisions which apply to the Limitrophe area from other sections of this RMP to clarify BLM roles and sideboards to the group.
 - Address the following BLM issues in the Limitrophe: recreational uses of the area; dead, downed, and detached firewood collection; fire management; invasive non-native species; endangered species and conservation measures to protect them, cultural resources; traditional use; habitat integrity; access; habitat restoration; water sources; and public health and safety.

2.4.3 MITTRY LAKE WILDLIFE AREA

The 3,800-acre Mittry Lake Wildlife Area CMA (see Map 2-4) is cooperatively managed by AGFD, BLM, and Reclamation under a lease, cooperative agreement, contract agreement, and wildlife area management plan to provide for wildlife-related recreation.

Desired Future Conditions

- CM-006: The Mittry Lake Wildlife Area CMA provides wildlife habitat and compatible wildlife-dependent recreation opportunities under the provisions of the Fish and Wildlife Coordination Act and in accordance with the area's existing lease, cooperative agreement, contract agreement, and wildlife area management plan.

Administrative Actions

- AA-045: Each agency will coordinate activities within the Mittry Lake Wildlife Area on a regular basis under guidance of the contract agreement.

- AA-046: The BLM and its partners will regularly monitor visitor use at the Mittry Lake Wildlife Area under the authority of their respective missions to ensure compliance with applicable laws and regulations, including length-of-stay-limits, fire restrictions, and fishing and hunting licenses. Cooperative monitoring of public land resource conditions, including riparian vegetation, wetlands, hazardous fuels, non-native invasive species, and wildlife will also occur on an annual basis within the CMA. The YFO and AGFD will also continue to monitor visitor use and associated resource damage at the Mittry Lake Wildlife Area to determine the need for additional wildlife-based recreational facilities.

2.5 VEGETATION MANAGEMENT

Vegetation management on BLM-administered lands follows guidance from the BLM *Land Use Planning Handbook*. The guidance instructs the BLM to identify the desired mix of vegetation types, vegetation management areas, sensitive plant species, priority plant species, management for invasive non-native plants, and vegetative use authorizations.

Desired Future Conditions

The following Desired Future Conditions are consistent with the Arizona Land Health Standards listed in Section 2.2 and will be applied throughout the entire planning area.

- VM-001: Vegetation diversity within designated ACECs will be maintained in accordance with ecological site description guides (USDA NRCS 2005).
- VM-002: Restoration and vegetation maintenance actions benefit special status and priority plant and animal species and their habitats (Appendix E lists special status and priority plants and animals).
- VM-003: Upland and riparian–wetland areas exhibit a mosaic of native plant communities.
- VM-004: Riparian–wetland areas achieve or are moving towards properly functioning condition. Riparian, floodplain, and wetland areas enhance water quality, improve water storage, increase groundwater recharge, and provide quality fish and wildlife values.
- VM-005: Forage on rangelands continues to support wildlife and grazing in a manner consistent with other resource management objectives or uses.
- VM-006: Special status species and VHAs are protected from ground-disturbing activities, such as OHV use.
- VM-007: Vegetation communities will be maintained to stabilize soils and reduce erosion and air quality degradation.

Management Actions

The following Management Actions will be applied throughout the entire planning area.

- VM-008: Where and when practicable, develop new riparian habitat or restore damaged, degraded, and salt cedar habitats along the lower Colorado River and Gila River for the

protection and enhancement of riparian or floodplain associated species. Install facilities to protect restoration sites as needed.

- VM-009: Protect or restore native species in upland and riparian communities through an integrated weed management approach emphasizing prevention, containment, and early detection of invasive weeds.
- VM-010: Restore unproductive or non-functioning upland and riparian–wetland sites to desired plant communities based on ecological site and capability potential.
- VM-011: Conduct and/or authorize vegetation treatments in selected locations along the International Boundary to allow visibility and reduce cover for clandestine activity. Such treatments will be conducted in a way that considers impacts to Native American religious concerns.
- VM-012: Require mitigation for vegetation treatments to offset impacts to riparian habitat and recreation values along the International Boundary.
- VM-013: Manage for large, contiguous blocks of native riparian habitat (>30 acres) for yellow-billed cuckoo in conjunction with removal of competing exotic species (such as salt cedar).
- VM-014: Plant trees in suitable areas to provide perch sites and enhance foraging habitat for raptors.
- VM-015: Promote regeneration of native vegetation in riparian areas for yellow-billed cuckoo by minimizing impacts from land/resource uses such as livestock grazing, water diversion, inundation, wood cutting, and OHV travel.

Administrative Actions

The following Administrative Actions will be applied throughout the entire planning area.

- AA-047: Assess rehabilitation of burned areas on a case-by-case basis. Preference will be given to VHAs, riparian areas with habitat for special status species, ACECs, and WHAs.
- AA-048: Restore reaches of riparian habitat by encouraging private/public partnerships for habitat restoration and associated fencing through Federal, State, and non-government programs.
- AA-049: Monitoring for vegetation communities will focus on achieving the Desired Future Conditions listed in Section 2.2 for Land Health Standards through the Land Health Assessment and Proper Functioning Condition Assessment processes.
 - Upland Sites: Land Health Assessments will determine upland conditions and trend as a part of all grazing allotment assessments and TMPs. These will serve as a baseline measure for any further monitoring required to measure management success in that area. This will include route restoration efforts to assure achievement of desired plant communities, and revegetation prescriptions associated with utility and transportation corridor work.
 - Riparian-Wetland Sites: Proper Functioning Condition Assessments will be performed in combination with plan implementation on at least a 10-year revolving schedule, with all

riparian resources receiving an initial assessment by 2012. More detailed measures will occur in cooperation with partners and in association with restoration projects. A desired plant community will be prescribed and monitored for implementation success in all waterside recreation or concession leases with condition reports to the Field Office Manager included with all five-year implementation plan reports.

2.5.1 DESIRED PLANT COMMUNITIES

In accordance with Standard 3 of the *Standards and Guidelines*, objectives for seven different desired plant communities within the planning area have been identified in the Approved RMP.

Management Actions Common to all Desired Plant Communities

- VM-016: Require mitigation where plants and parts of plants will be destroyed from an unavoidable impact as a result of development, disturbance, or disposal. For BLM-authorized surface disturbing activities within desired plant communities, impacts to vegetation will be mitigated through:
 - Avoidance;
 - Use of minimum reasonable and practical tools and equipment (such as trimming trees instead of removal where appropriate, use of existing routes and ROWs instead of creation of new ones, crushing vegetation instead of blading it);
 - Soil stabilization and vegetative rehabilitation;
 - Replacement, which will follow an approved protocol and use of previously disturbed sites;
 - Transplanting of plant species (e.g., beavertail cactus, cholla, barrel cactus, pincushion cactus) directly on site or onto neighboring public lands where feasible using approved protocol will be encouraged; and
 - Salvage of plants and plant parts. Salvage will be authorized and encouraged on a case-by-case basis pursuant to applicable Federal and State laws and regulations governing the sale, disposal, and transportation of plants. Plants salvaged will be limited to those allowable under the Arizona Native Plant Law. Plants and parts of plants will be replanted on public lands or salvaged for public, private, commercial, educational, research, or other appropriate purposes. Special consideration will be given to educational facilities, botanic gardens, and public institutions.
- VM-017: Avoid desert wash woodlands to the greatest extent possible during BLM-authorized surface disturbing activities.
- VM-018: Require use of native plant materials for landscaping at developed recreation sites within public lands.
- VM-019: Require concessions to get BLM approval for landscaping plans. Require the use of native plants and drought adapted vegetation.
- LR-030: Require all ROW construction activities to follow stipulated rehabilitation measures in support of the planning area's desired plant communities. Stipulations may include imprinting, contouring, debris and brush replacement, and invasive plant treatment. Avoid

blading new routes to the greatest extent possible. Where access is needed to accomplish objectives, crush vegetation instead of blading and denuding the ground surface.

A. MIXED RIPARIAN HABITAT AND WETLANDS

- VM-020: Riparian habitats contain a diversity of native trees and herbaceous plants adapted to hydric soils. Lands along the Colorado and Gila rivers exhibit strong species diversity and are composed of native riparian obligate trees (such as cottonwood [*Populus* spp.] and willow [*Salix* spp.]) of various age and size classes from seedlings and saplings to large mature trees with spreading canopies.
- VM-021: Bank vegetation is composed of native species capable of withstanding flood events to reduce soil loss and bank erosion.
- VM-022: River corridor (including floodplains) and riparian-wetland associated habitat types covered in the LCR MSCP provide a variety of habitat types for resident or migratory aquatic and terrestrial species. These habitat types include riparian areas, open water, backwaters, and marshes.

B. MESQUITE BOSQUES/WOODLANDS

- VM-023: Mesquite bosques/woodland communities contain trees of various size and age classes, with an understory of native perennial grasses, forbs, and shrub species.
- VM-024: Mesquite bosque communities are identified and protected.

C. DESERT WASH WOODLANDS

- VM-025: Multi-layered desert wash woodlands (xeroriparian scrub) are dominated by perennial vegetation including trees, grasses, shrubs and forbs which provide for hydrologic connectivity and geomorphic integrity (i.e., sediment capture and storage, energy dissipation, bank stability).
- VM-026: Diverse vegetative composition and structure within desert wash woodlands include such species as foothills paloverde (*Cercidium microphyllum*), blue paloverde (*Cercidium floridum*), desert willow (*Chilopsis linearis*), ironwood (*Olneya tesota*), mesquite (*Prosopis* spp.), smoke tree (*Psoralea argyrea*), and catclaw acacia (*Acacia greggii*). Size and growth form, such as overhanging branches, mid-story and under-story vegetation are represented by naturally occurring species of moderate density.
- VM-027: Sufficient bank and floodplain vegetation (including along braided channel floodplains) provide landscape habitat connectivity and physical stability which, in turn, support ground- and stem-dwelling species.

D. PALOVERDE–MIXED CACTI ON BAJADAS AND ROCKY SLOPES

- VM-028: Paloverde–mixed cacti communities have diverse vegetative composition and structure, from small shrubs to large trees (such as ironwood, paloverde, and mesquite) interspersed with a variety of cacti, such as mammalaria (*Mammalaria* spp.), prickly pear (*Opuntia* spp.), cholla (*Opuntia* spp.), barrel cactus (*Ferocactus wislizenii*), hedgehog (*Echinocereus* spp.), and saguaro (*Cereus giganteus*). Where potential exists, saguaro forests support medium-to-high densities of saguaro, with all age classes represented.

E. CREOSOTE–BURSAGE

- VM-029: Unfragmented creosote-bursage habitats that function as landscape connectivity corridors (i.e., movement corridors and foraging areas) between adjacent plant communities are maintained.
- VM-030: Ground cover in creosote-bursage plant communities are maintained with native or naturalized species at the maximum amount appropriate for the site conditions to provide hiding cover and forage for wildlife species.

F. MOUNTAIN UPLANDS

- VM-031: Botanically diverse vegetative communities in mountain uplands include a combination of desert, chaparral, and semi-desert grassland species in amounts appropriate to site conditions. Some areas may include relict populations of oak and elephant tree (Weinstein et al. 2003).

G. DUNE COMPLEXES

- VM-032: Dunes support a diverse mix of native species composed of shrubs, grasses and annual forbs.
- VM-033: The location of intact dune complexes are identified throughout the planning area.
- VM-034: Sensitive or rare species endemic to dunes are found in all size classes (i.e., scaly sand plant [*Pholisma arenarium*] in the north of La Posa Plain).
- VM-035: Non-native invasive species (e.g., Russian thistle [*Salsola kali*] and Sahara mustard) that threaten dune complexes are reduced in the Dunes WHA.

2.5.2 VEGETATION HABITAT MANAGEMENT AREAS

VHAs contain populations of priority plant species (Appendix E) and native plant assemblages. The VHAs are areas of ecological importance that are recognized for significant factors such as density, diversity, size, public interest, remnant character, or age. The Approved RMP allocates three VHAs as presented in Map 2-5 and Table 2-4.

Table 2-4
Approved RMP Vegetation Habitat Management Areas

Vegetation Habitat Management Areas	Approved RMP Total Acres
Elephant Tree community (<i>Bursera microphylla</i>)	10,000
Blue Sand Lily community (<i>Triteleiosis palmeri</i>)	500
Fred J. Weiler Greenbelt	12,400
Total VHA Acres	22,900

VHA=Vegetation Habitat Management Area

Desired Future Conditions

- VM-036: Ensure that plant species-populations within VHAs are stable or increasing with recruitment over all age classes with no net loss of habitat or fragmentation of plant communities.
- VM-037: Ensure the Fred J. Weiler Greenbelt is managed for habitat values, specifically to benefit dove, quail, and thrasher populations.
- SM-029: On lands where the Fred J. Weiler Greenbelt VHA and Sears Point ACEC overlap, land use planning decisions for the ACEC would take precedence.

Management Actions

- VM-038: Allocate the 12,400-acre Fred J. Weiler Greenbelt as a VHA. The Fred J. Weiler Greenbelt includes portions of Gila River riparian habitat located in the planning area and has been designated as a VHA to perpetuate a previous land designation. The greenbelt was originally segregated as a Resource Conservation Area in 1970 to set aside the riparian habitat for game birds for hunting along the Gila River. The VHA will emphasize the original values of the Resource Conservation Area, such as “nesting areas for white-winged dove, mourning dove, and songbirds, public recreation, historic significance, flood and erosion control and water conservation” (*Federal Register* Vol. 32, No. 178, September 14, 1967).
- VM-039: Allocate the 10,000-acre Elephant Tree Community as a VHA. The Elephant Tree VHA will protect a proposed priority plant, *Bursera microphylla*, which is a shrub with subtropical affinities. The trunk and lower branches are thickened, the bark exfoliates in sheets, the plant exudes resin, and the leaves are aromatic. It is found in isolated populations of the Sonoran Desert on mountains. The population in the Gila Mountains is one of the most well represented stands in the U.S.
- VM-040: Allocate the 500-acre Blue Sand Lily Community as a VHA. The Blue Sand Lily VHA will protect the *Triteleiosis palmeri*, a flowering plant listed as an Arizona BLM sensitive species. This rare plant grows from bulblets and only flowers in wet years. The VHA is located on stabilized sand dunes of the Gila River Mesa and is the northernmost known population in the U.S. It is also found in Baja California and the Gran Desierto in Sonora, Mexico.

- VM-041: Increase or decrease the acreages of VHAs as necessary based upon new information through an RMP amendment.
- VM-042: Minimize BLM-authorized ground-disturbing activities in VHAs to protect focal plant species-populations. Land use authorizations for activities such as mineral extraction and livestock grazing would generally not be approved.
- VM-043: Treat non-native invasive species within the VHAs.
- FM-022: Install fire breaks and complete hazardous fuels reduction activities within the Fred J. Weiler Greenbelt VHA to protect mesquite bosques and native woodlands.
- LR-028: To the extent possible, new transportation ROWs will avoid VHAs. Appropriate mitigation will be required when avoidance is not possible.

Administrative Actions

- AA-050: Inventory and map the focal plant communities in VHAs. Monitor ground-disturbing activities by OHV use and other sources of disturbance or habitat alterations to assess the conditions and trends of plant species-populations.
- AA-051: Develop a management plan for the Fred J. Weiler Greenbelt VHA in cooperation with AGFD and USFWS.
- AA-052: Assess the potential threats to blue sand lily populations within the Blue Sand Lily VHA. These focal plant species-populations are potentially threatened by OHV and invasive, non-native species such as Sahara mustard (*Brassica tournefortii*).
- AA-053: Identify additional plant populations which meet VHA criteria.

2.5.3 BLM SENSITIVE PLANT SPECIES

BLM sensitive species are taxa that are not already included as BLM special status species under (1) federally listed, proposed, or candidate species; or (2) State of Arizona/State of California listed species (see Appendix E). BLM policy is to provide these species with the same level of protection as is provided for candidate species to ensure that actions authorized, funded, or carried out do not contribute to the need for the species to become listed. The sensitive species designation is normally used for species that occur on BLM-administered lands for which BLM has the capability to significantly affect the conservation status of the species through management.

Desired Future Conditions

- VM-044: Sensitive plant species and associated habitats are protected to prevent them from becoming listed under the ESA. Sensitive plant species and other species at risk, where the quantity and quality of habitat to support population persistence is a concern, are conserved.
- VM-045: Unique habitats (e.g., unique assemblages of rare plant species) are maintained or restored throughout the planning area in order to support plant biodiversity and to meet ecological integrity and social needs.

- VM-046: Sensitive plant species and relict populations that are vulnerable to habitat disturbance are protected. Minimize potential threat of imperiled status as a result of land and resource uses-related disturbances on BLM-administered lands.
- VM-047: Stable or increasing populations of sensitive plant species are achieved over time with adequate pollination, nurse plants, recruitment, and survivorship. Desired habitat conditions are maintained and/or degraded habitats are restored to promote pollinator success and survival.
- VM-048: Public understanding of the importance of maintaining rare and culturally important plants is enhanced through educational programs regarding native plant conservation, biodiversity, and invasive non-native plant species.

Management Actions

- VM-049: Implement protection and restoration measures, such as fencing, seeding by using native species, and native plant seed collection, for sensitive plant species.
- VM-050: Reduce or eradicate populations of non-native plants in occupied and potential rare plant habitat. Aggressively treat non-native invasive species where appropriate to protect sensitive plant species.
- VM-051: Collect seeds of native sensitive plant species to be used in rehabilitation and restoration activities. Seeds must be collected in accordance with seed zones or breeding zones for native plants.
- LR-068: Acquire lands from willing landowners for conservation banking of natural communities with sensitive plant species, especially if loss of essential habitat is anticipated.

Administrative Actions

- AA-054: Continue to survey and map locations of suitable habitat occupied by sensitive plant species. Also, identify and map areas of non-native plant invasions within rare plant habitats.
- AA-055: Monitor and evaluate the status and trends of rare and endemic plant species with emphasis on sensitive plant species. Monitor the rare plant populations according to BLM botanical standards and *Rare Plants 2000 Strategy*.
- AA-056: Collaborate with academic institutions and non-governmental organizations (i.e., Arizona and/or California Native Plant Society, Arizona or California Natural Heritage Program) for research and monitoring of sensitive plant species. Support research efforts for sensitive plants to determine species distribution, phenology, pollination ecology, habitat dynamics, and susceptibility to disturbances during key life stages.
- AA-057: During site/project-level analysis, inventory occupied and potential sensitive plant habitats and prioritize opportunities for protection and/or restoration.
- AA-058: Continue to identify potential botanical special interest areas (i.e., areas with unique habitat features, rare plant communities; or areas with high-quality cryptogammic soil crusts with lichens, bryophytes, and fungi) and recommend them for protection.

2.5.4 PRIORITY PLANT SPECIES

Priority plant species are rare, unusual, or key species that are not BLM sensitive or listed as threatened and endangered. These species are considered priority species due to ecological importance, rarity, and human interest. They are worthy of special treatment and indicate ecological health, biological diversity, and unique habitats. Identification of priority plant species will help prevent the avoidable loss of these plants due to development and implementation of other multiple use objectives.

Desired Future Conditions

- VM-052: Priority plant species-populations are stable or increasing, with adequate recruitment given the ecological conditions and dynamics associated with the Sonoran Desert. No net loss of habitat or fragmentation of plant communities.
- VM-053: Landscape-scale conservation measures of priority plant species protect or restore botanical resources of concern and ensure consistent management across jurisdictional boundaries.
- VM-054: Priority plant species and relict populations that are vulnerable to habitat disturbance are protected. The potential threat of imperiled status as a result of land- and resource-uses-related disturbances on BLM-administered lands is minimized.

Management Actions

- VM-055: Implement protection and restoration measures, such as fencing, seeding by using native species, invasive weeds treatment, and native plant seed collection, for priority plant species.
- VM-056: Reduce or eradicate populations of non-native plants in occupied and potential rare plant habitat. Aggressively treat non-native invasive species where appropriate to protect priority plant species.
- LR-068: Acquire lands from willing landowners for conservation banking of natural communities with priority plant species, especially if loss of essential habitat is anticipated.

Administrative Actions

- AA-059: Survey, map, and monitor natural plant communities with special emphasis on priority plant species.
- AA-060: Follow and implement the BLM *Rare Plants 2000 Strategy* (USDOI BLM 2000) for rare plants and natural plant communities to maintain biological diversity through the conservation of natural plant communities and rare plant species.
- AA-061: Identify status of rare and endemic plant species or communities through collaborative efforts between BLM and other governmental and non-governmental agencies (i.e., USFWS, AGFD, CDFG, Arizona and California Natural Heritage Programs, Arizona and California Native Plant Societies, The Nature Conservancy, and others).

- AA-062: Survey the presence of invasive, non-native species within the scrub oak relict populations at three sites in the Eagletail Mountains Wilderness and at Dripping Springs.
- AA-063: Use regional databases such as Southwest Environmental Information Network (<http://seinet.asu.edu/>) to further understand species status.
- AA-064: Regularly update the priority plant species list (Appendix E) to reflect new information and survey data.

2.5.5 INVASIVE NON-NATIVE PLANTS

Non-native, invasive and State and federally listed noxious weed species collectively constitute a major threat to the biodiversity on BLM-administered lands. Non-native invasive species often degrade aesthetic vegetation values, tourism opportunities, or degrade 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. Two critical components of managing these species are (1) identifying and assessing those species that threaten biodiversity and other ecological functions and values and (2) prioritizing species for management efforts, which must be based, at least in part, on the ecological impacts imparted by these invaders (see Appendix C).

Desired Future Conditions

- VM-057: The introduction or spread of non-native, invasive and State and federally listed noxious weed species is prevented.
- VM-058: Non-native invasive species management is enhanced through a collaborative approach with fire management.

Management Actions

- VM-035: Non-native invasive species (e.g., Russian thistle [*Salsola kali*] and Sahara mustard) that threaten dune complexes are reduced in the Dunes WHA.
- VM-059: Use an integrated pest management approach to ensure that the best methods available are implemented to prevent the introduction and control the spread of non-native plants, invasive plants, and noxious weeds. Treat invasive, non-native plant species using a combination of chemical, mechanical, manual, and biological methods.
- VM-060: Conduct vegetation treatments of riparian areas dominated by salt cedar (*Tamarix ramosissima/chinensis*) along the lower Colorado River and Gila River corridors where ecological enhancement is possible. Where salt cedar is removed for the purposes of replanting with native species and restoration of a site, BLM will assess the likelihood of success on a case-by-case basis prior to implementation. Factors to consider include salinity, depth to groundwater, and soil structure. Salt cedar may also be removed to create permanent fire breaks, decrease hazard fuel load, protect existing native vegetation pockets, and allow for public health and safety as well as homeland security.
- VM-061: Treat giant salvinia (*Salvinia molesta*) and other invasive, non-native species in aquatic ecosystems along the lower Colorado River.

- VM-062: Treatment for hazardous fuels reduction and non-native invasive species will be allowed within designated ACECs. These treatments will be carried out in a manner that avoids or minimizes impacts to important resources.
- VM-063: Within lands being managed to maintain wilderness characteristics, allow vegetative manipulation to control noxious, exotic, or invasive plant species, when there is no effective alternative and when the control is necessary to maintain the natural ecological balances within the area. Control may include manual, chemical, and biological treatment, provided it will not cause adverse impacts to the wilderness characteristics.
- VM-064: Reduce hazardous fuels and non-native invasive species along the Anza Trail.
- FM-020: Treat non-native invasive species that constitute significant fuel load and fire threat directly by using integrated pest management or managed through fire breaks and other tactics.

Administrative Actions

- AA-065: Conduct risk assessments and formulate BMPs to control infestations and spread of noxious or invasive weeds. The integrated pest management approach will include (1) early detection and rapid response (early treatment of newly invading species); (2) containment and treatment (control of established widespread infestations); (3) inventory, monitoring, and evaluation; and (4) public awareness, education, and outreach.
- AA-066: Promote coordinated partnership for landscape-scale weed management across jurisdictional boundaries to achieve the desired conditions in a cost-efficient manner. Establish or update cooperative agreements and participate in local councils (i.e., Lower Colorado River Giant Salvinia Task Force and Steering Committee, Sonoran Desert Invasive Species Council, and King of Arizona Cooperative Weed Management Area) to maximize coordination and implement an integrative framework for weed management.
- AA-067: Implement public outreach and interpretive programs to enhance public awareness regarding noxious or invasive weeds and associated impacts on biodiversity.
- AA-068: Collaborate with State efforts of both California and Arizona for noxious and invasive weeds (e.g., Arizona Invasive Species Council).
- AA-069: Encourage equestrian groups to use weed-free hay.
- AA-070: Require BLM contractors and employees to clean vehicles after traveling in areas with high noxious or invasive weed infestations.

2.5.6 VEGETATIVE USE AUTHORIZATION

BLM manages vegetation for habitat, multiple use, and sustained yield. This section describes firewood collection allocations, permitted uses, and non-permitted uses of vegetation resources.

Desired Future Conditions

The following Desired Future Conditions will be applied throughout the entire planning area.

- VM-065: Vegetation resources are used at a sustainable level.
- VM-066: Appropriate levels of dead, downed, and detached wood remain on the ground to provide wildlife habitat and reduce soil erosion.

Management Actions

The following Management Actions will be applied throughout the entire planning area.

- VM-067: Wood Cutting (Commercial). Issue permits for commercial wood cutting on a case-by-case basis.
- VM-068: Wood Cutting (Personal). Prohibit wood cutting of native species for household fuel wood use.
- VM-069: Plant and Seed Collection. Issue permits for commercial seed collection on BLM-administered lands on a case-by-case basis and ensure permit holders follow permit stipulations.
- VM-070: Plant Salvage. Allow plant salvage within the planning area on a case-by-case basis. Plant salvage will require prior written authorization from BLM as well as a permit from the Arizona Department of Agriculture as required by the Arizona Native Plant Law.
- VM-071: Scientific Plant Collection. Allow the scientific collection of vegetative materials, including seeds, where appropriate through an annual letter of permission by the Arizona BLM State Office.
- VM-072: Native American Traditional Use. Fees will not apply on BLM lands to Native Americans for the collection of non-commercial, personal use quantities of herbals, medicines, traditional use items, or items necessary for traditional, religious, or ceremonial purposes. Collection of federally listed threatened and endangered species will not be authorized (see Appendix C).
- VM-073: Firewood Collection. Close a total of 153,000 acres to firewood collection, including portions of the La Posa Plain, Imperial Dam LTVA, Big Marias ACEC, and Dripping Springs ACEC as listed in Table 2-5 and shown on Map 2-5. New firewood collection closures will be implemented through the establishment of supplementary rules, as outlined in 43 CFR 8365.1-6, if assessments indicate potential resource degradation.
- VM-074: On Site Firewood Collection. Allow the public to collect dead, downed, and detached wood for personal campfire use while camping on BLM-administered lands not closed to firewood collection. Prohibit the collection of standing dead plant material throughout the entire planning area, including removal by any mechanical means.
- VM-075: Other Vegetative Collection. Allow the public to collect small amounts of commonly available renewable resources such as flowers, berries, nuts, seed, cones, and leaves for non-commercial purposes without written authorization; the collection of these resources is prohibited within the Sears Point ACEC core area, Big Marias ACEC, and Dripping Springs ACEC.

- VM-076: Saguaro Skeleton Collection. Prohibit the collection of saguaro cacti skeletons for personal use or campfire burning throughout the entire planning area, as such use is not sustainable for this product.
- VM-077: Ironwood Collection. Limit the collection and possession of dead, downed, and detached ironwood at any one time to three pieces, with an approximate weight not to exceed 10 pounds; the collection of dead, down, and detached ironwood is prohibited within the Sears Point ACEC core area, Big Marias ACEC, and Dripping Springs ACEC.
- VM-078: Vegetative Product Sales. Close the Big Marias and Dripping Springs ACECs to all vegetative product sales.

Table 2-5
Approved RMP Firewood Collection Closures

Firewood Collection Closure Area	Approved RMP Total Acres
La Posa Plain Planning Area	131,500
Imperial Dam LTVA	3,200
Big Marias ACEC	2,900
Sears Point ACEC (core area)	3,700
Dripping Springs ACEC	11,700
Remaining Field Office	0
Total Acres Closed	153,000

LTVA = Long-term Visitor Area; ACEC = Area of Critical Environmental Concern

Administrative Actions

- AA-071: Work and coordinate with Native American tribes to select harvesting areas and allow noncommercial (personal use) collection of medicinal herbs, ceremonial herbs, other vegetation, and/or minerals for traditional or ceremonial use.

2.6 WILDLAND FIRE MANAGEMENT

YFO 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 Arizona and the portion of California that falls within the planning area.

The Lower Colorado River subdivision of the Sonoran Desert is the predominant vegetation community within the planning area. This vegetation community is not considered to be fire adapted or dependent. The invasion of non-native species has created areas that are now prone to high intensity fires with high rates of spread. The non-fire use management includes areas where mitigation and suppression are required to prevent direct threats to life or property. It includes areas where fire never played a large role, historically, in the development and maintenance of the ecosystem, and some areas where fire return intervals were very long. It also includes areas

(including some Wildland Urban Interface [WUI] areas) where an unplanned ignition could have adverse effects to the ecosystem unless some form of mitigation takes place. Mitigation may include mechanical, biological, chemical, or prescribed fire to maintain non-hazardous levels of fuels, reduce the hazardous effects of unplanned wildland fires, and to meet resource objectives.

Desired Future Conditions

- FM-001: Human life (both firefighters and public) and communities, property, and the natural resources on which they depend are protected. Firefighter and public safety are the highest priority in all fire management activities.
- FM-002: Public awareness of the role of fire in ecosystem restoration, wildfire risk and mitigation strategies, and wildfire safe community, preparedness, and response planning is improved.
- FM-003: Interagency and community interactions and cooperation develop effective and integrated wildland fire and fuel management strategies across administrative boundaries to meet landscape-scale resource condition objectives.
- FM-004: Hazardous fuels around communities at risk within the WUI are reduced using mechanical treatment and prescribed fire, where applicable.
- FM-005: Appropriate Management Response (AMR) for resource benefits will be full suppression.

Management Actions

- FM-006: The entire planning area is managed as non-fire use.
- FM-007: Implement the WUI fuels reduction program, with wildland fuels decreased and maintained at a manageable level, creating conditions conducive to safe, efficient, and effective firefighting.
- FM-008: Utilize prescribed and wildland fire techniques to protect the values-at-risk (life and property) and to maintain or enhance the ecosystem health.
- FM-009: Implement fire and fuels management strategies that include fire suppression, prescribed fire, and non-fire treatments (manual, chemical, mechanical, or biological treatments).
- FM-010: Identify areas where prescribed fire use will be appropriate to maintain or restore desirable plant communities.
- FM-011: Identify, prioritize, and implement an estimated annual average of 1,000 acres per year of fuel management over the life of the plan. Fuel treatments to reduce wildland fire risk will focus on the WUI areas and shrublands characterized as Fire Regime Condition Class II and III.
- FM-012: Identify and implement post-fire stabilization and rehabilitation actions in burned areas to restore a functional landscape to meet the natural resource management objectives.
- FM-013: Include wildfire hazard mitigation strategies in the Fire Management Plan for the planning area by identifying appropriate areas for prescribed fire use and mechanical,

biological, or chemical treatments to reduce hazardous fuels to minimize the adverse effects of uncharacteristic wildland fires and meet resource objectives. The plan will also identify areas for exclusion from fire (through fire suppression), chemical, mechanical, and/or biological treatments.

- FM-014: In Wilderness, when wildland fire suppression occurs, minimum impact suppression tactics identified in the Interagency Standards for Fire and Aviation Operations will be applied.
- FM-015: Conduct fire management activities within ACECs and along the Anza Trail and National Byways in a manner that will avoid or minimize adverse impacts to existing resources and values identified in the legislative designation of the trail.
- FM-016: Wildland fire suppression activities will utilize methods with lesser ground disturbance to minimize potential adverse impacts on existing species and habitats. No heavy equipment (such as bulldozers) will be used unless approved by the YFO Manager.
- FM-017: Use of fire retardants or chemicals adjacent to waterways will be in accordance with the Environmental Guidelines for Delivery of Retardant or Foam near Waterways, in accordance with the Interagency Standards for Fire and Aviation Operations (National Interagency Fire Center 2007).
- FM-018: Protect all known cultural resources from fire management activities-related disturbance through consultation with cultural resource specialists.
- FM-019: For fire suppression activities, a protocol for consultation has been developed as a part of the BO. This programmatic consultation contains 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 BO will outline coordination needs for emergency response actions that may affect a federally listed/proposed species and/or critical habitat. The following protocol will apply: YFO will 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 will work with YFO during the emergency response to apply the appropriate Conservation Measures. When Conservation Measures cannot be applied during the suppression activities, YFO will, 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, YFO will report on the actions taken and effects to the species and its habitat following the fire, but no further consultation on that incident will be required.
- FM-020: Treat non-native invasive species that constitute significant fuel load and fire threat directly by using integrated pest management or managed through fire breaks and other tactics.
- FM-021: When AMR allows, use minimum impact suppression tactics during fire suppression operations within lands being managed to maintain wilderness characteristics.
- FM-022: Install fire breaks and complete hazardous fuels reduction activities within the Fred J. Weiler Greenbelt VHA to protect mesquite bosques and native woodlands.

- FM-023: Integrate fire management into upland and riparian habitat restoration actions for non-game bird species.
- FM-024: Use prescribed fire, chemical, and mechanical treatments in Sonoran pronghorn habitat to reduce shrub and tree components. Prescribed fire can be used to supplement natural grassland renewal, especially to increase forbs and reduce shrubs.
- FM-025: Avoid hazardous fuel thinning projects that reduce the quality or quantity of southwestern willow flycatcher (SWFL) habitat and instead install fire breaks to protect habitat from wildfires.
- FM-026: Burn decadent marsh vegetation without risking the rarer and more valuable cottonwood-willow habitat, if research concludes that burning decadent marsh vegetation benefits Yuma clapper rail population.
- FM-027: Limit fuel treatments in watersheds with occupied reaches or sites of Gila topminnow, bonytail chub, and desert pupfish to no more than half of the watershed area in any two-year period.
- FM-028: Within lands being managed to maintain wilderness characteristics, allow prescribed fires in conformity with a fire management plan so long as it is consistent in improving or maintaining the area's wilderness characteristics.
- FM-029: Resolve public health and safety issues by clearing hazardous fuels along the International Boundary under the fire management program, where appropriate.
- FM-030: Reduce and or remove hazardous fuels in recreation sites to improve public safety in coordination with the BLM Fire Management program.
- VM-062: Treatment for hazardous fuels reduction and non-native invasive species will be allowed within designated ACECs. These treatments will be carried out in a manner that avoids or minimizes impacts to important resources.
- VM-064: Reduce hazardous fuels and non-native invasive species along the Anza Trail.
- TE-005: To the extent possible, implement the fire management activities-related conservation measures presented in Appendix C to avoid, minimize, or mitigate potential impacts on federally protected species and habitats. Of the adopted conservation measures, some are mandatory and others are recommended. If the mandatory conservation measures for federally protected species and habitats cannot be implemented during wildland fire management activities (i.e., suppression, rehabilitation and restoration, and hazardous fuels reduction), YFO will be required to initiate ESA Section 7 consultation with the USFWS for the specific projects.

Administrative Actions

- AA-072: Establish an approved burn plan and follow the environmental prescriptions identified in the plan for fuels treatment using prescribed fire.
- AA-073: Identify, prioritize, and plan fuels reduction projects using a uniform system for determining wildland fire risk in WUI (e.g., risk assessment and mitigation strategy).

- AA-074: Identify AMR-related goals, objectives, and constraints for each fire management unit.
- AA-075: Comply with Federal and State standards for smoke and air quality management for fuel treatment using prescribed fire.
- AA-076: Collaborate with communities at risk within the WUI to develop strategies for wildfire hazard mitigations.
- AA-077: Coordinate implementation of fuel reduction treatments with landowners, agencies, and Native American tribes.
- AA-078: Establish or update cooperative agreements to maximize coordination with BLM's cooperators.
- AA-079: Undertake education, enforcement, and administrative activities as measures to minimize human-caused wildfires. Education measures will include dissemination of information through various media on the natural role of fire within terrestrial ecosystems, interpretive sign program, and participation in fairs, parades, and other public outreach or contacts.
- AA-080: Accomplish enforcement by providing training opportunities for BLM employees interested in fire-cause determination.
- AA-081: Include expanded fire prevention media outreach and stakeholder/cooperating agencies involvement in administrative activities.
- AA-082: Monitor to determine whether fire management strategies, practices, and activities are meeting resource management objectives and concerns. Fire management plans and policies will be updated as needed to keep current with national and State fire management direction. Scheduled program reviews (post-season fire review) will be conducted to evaluate fire management effectiveness in meeting goals and to reassess program direction. In the case of wildfire rehabilitation, monitoring will be specific to resource objectives.

2.7 FISH AND WILDLIFE MANAGEMENT

The Sikes Act of 1974 authorized the USDOJ in cooperation with State agencies responsible for the administration of fish and wildlife laws to plan, develop, maintain and coordinate programs for the conservation and rehabilitation of fish and wildlife (both game and non-game) on public lands within its jurisdiction.

The LCR MSCP is a multi-stakeholder Federal and non-Federal partnership, with Reclamation as the lead Federal agency, responding to the need to balance the use of lower Colorado River water resources and the conservation of native species and their habitats in compliance with the ESA and other environmental laws. BLM supports and participates in achieving the conservation goals identified within the LCR MSCP.

The State of Arizona manages wildlife, while the BLM manages wildlife habitat. BLM will consider the goals and objectives of the AGFD's *Comprehensive Wildlife Conservation Strategy*

(AGFD 2006), *Wildlife Management Program Strategic Plan* (AGFD 2007), and subsequent *State Wildlife Action and Strategic Plans* when implementing management actions. Such plans identify wildlife species and habitats, assess threats to their survival, and identify long-term conservation actions. The Arizona BLM's *Five-Year Strategy for the Wildlife, Fisheries, Botany, and Threatened and Endangered Species Programs* (USDOI BLM 2004b) will guide management actions.

Desired Future Conditions

The following Desired Future Conditions will be applied throughout the entire planning area.

- WF-001: Priority habitats (i.e., mountain ranges, riparian areas, desert washes, sand dunes, abandoned mines and natural caves) and associated wildlife assemblages for terrestrial ecosystem management will remain in their present quality and quantity, at a minimum.
- WF-002: High-quality, connected, and sustainable fish and wildlife habitat is retained.
- WF-003: Fish and wildlife habitats capable of sustaining healthy populations will meet conservation, socio-economic (e.g., hunting, fishing, watchable wildlife), and Tribal needs.
- WF-004: Suitable habitats and habitat linkages will remain available in both quality and quantity to promote genetic integrity for priority fish and wildlife species when planning terrestrial and aquatic ecosystem restoration.
- WF-005: The planning area contains suitable habitat for relocating and releasing individual animals and release of rehabilitated wildlife. These types of wildlife releases are not intended to establish new populations but are appropriate in areas of suitable habitat. Wildlife species that could be released include mountain lion (*Puma concolor*); burrowing owl; and other raptor, reptile, and game species.
- WF-006: All livestock waters will provide safe, usable water for wildlife.
- WF-007: Natural wildlife waters, such as unmodified tinajas and Dripping Springs, will remain in their natural state. Such waters are essential for ecological integrity and promote biological diversity. Any modifications to unmodified tinajas will be minimal to allow trapped animals to escape (e.g., stairs or escape ramps), and will be analyzed through site-specific NEPA.
- WF-008: The distribution and abundance of invasive plants and animals are limited to current levels and the impacts of invasive species on native ecosystems through active management are reduced from current levels.
- WF-009: The undesirable effects to fish and wildlife populations resulting from human activities are minimized, especially during critical life stages, through mitigation of potential impacts.
- WF-010: Native species habitat distribution and occurrence (especially for priority species) is restored, biological diversity is conserved, genetic integrity and exchange is maintained, and availability of suitable habitats and habitat linkages is improved.

Management Actions

The following Management Actions will be applied throughout the entire planning area.

- WF-011: Construct, maintain, restore, redevelop, or enhance wildlife waters to provide perennial water sources for native wildlife species-populations. Water developments will include design features to ensure safety and accessibility to water by wildlife.
- WF-012: Establish ground-level wildlife water developments at livestock waters where feasible. An enclosure of three to seven acres containing the water source, storage, and related riparian habitat will be built to exclude livestock. Where terrain permits, livestock water will be provided at least 0.5 mile outside of the fenced enclosures.
- WF-013: Modify existing livestock water facilities for safe wildlife use as funding and opportunities permit. The following standards apply to the design and modification of livestock waters.
 - The above-ground height of livestock troughs and tanks will not exceed 20 inches.
 - YFO will install wildlife escape ladders in each facility and provide ramps for small bird and mammal access in cooperation with AGFD and CDFG.
 - Storage tanks will have either a metal or floating vinyl cover to reduce evaporation and prevent wildlife from drowning.
- WF-014: Initiate restoration activities in priority habitats to move toward desired habitat conditions and provide functional landscapes to sustain the fish and wildlife species-populations. Wildlife habitat improvement projects for the planning area will be implemented in coordination with AGFD, CDFG, and/or USFWS, as necessary.
- WF-015: Support reintroductions, transplants, and supplemental stockings (augmentations) of wildlife populations (as defined in BLM Manual 1745) in current or historic ranges in collaboration with AGFD, CDFG, and/or the USFWS and other agencies where such reintroductions are within areas deemed suitable through BLM policy and procedure 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. Species that could be reintroduced, transplanted or augmented include but are not limited to Sonoran pronghorn (*Antilocapra americana sonoriensis*), cactus ferruginous pygmy-owl (CFPO; *Glaucidium brasilianum cactorum*), desert mule deer (*Odocoileus hemionus*), bighorn sheep (*Ovis canadensis mexicana*), javelina (*Pecari tajacu*), desert tortoise (*Gopherus agassizii*), beaver (*Castor canadensis*), lowland leopard frog (*Rana yavapaiensis*), Gila topminnow (*Poeciliopsis occidentalis occidentalis*), desert pupfish (*Cyprinodon macularius*), Colorado pikeminnow (*Ptychocheilus lucius*), razorback sucker (*Xyrauchen texanus*), woundfin (*Plagopterus argentissimus*), bonytail chub (*Gila elegans*), flannel mouth sucker (*Catostomus latipinnis*), roundtail chub (*Gila robusta*), burrowing owl (*Athene cunicularia hypugae*), and Aplomado falcon (*Falco femoralis septentrionalis*).
- WF-016: Manage non-native species identified as pests in accordance with applicable BLM, AGFD, and CDFG management policies depending on administrative area.
- WF-017: Design and implement vegetation, fire and fuels, and watershed resource management-related projects that will promote enhancement of existing habitat conditions or

restoration of degraded habitat conditions for the selected fish and wildlife species of emphasis. Vegetation and fuels management for wildlife habitat improvement should consider the following habitat conditions or features: (1) amount, quality, and distribution of suitable habitats; (2) juxtaposition and connectivity to other habitat areas; (3) influence of roads-related degradation; and (4) ecosystem disturbance processes that develop and modify habitats.

Administrative Actions

The following Administrative Actions will be applied throughout the entire planning area.

- AA-083: Develop landscape-specific habitat management plans through collaborative partnership with appropriate agencies.
- AA-084: Enhance public awareness of fish and wildlife management through conservation education and interpretive programs.
- AA-085: Coordinate animal damage control with the Animal and Plant Health Inspection Service and AGFD and CDFG.
- AA-086: Cooperate with AGFD and CDFG to conduct wildlife surveys, research, and other management actions.

2.7.1 PRIORITY SPECIES

Potential priority species for the planning area include bats, big game mammals, non-game migratory birds, raptors, and game birds. A list of priority species that occur or may occur in the planning area is found in Appendix E.

Desired Future Conditions Common to All Priority Species

The following Desired Future Conditions apply throughout the entire planning area where habitat for priority species exists.

- WF-018: Well-distributed habitat and connectivity corridors are provided that are capable of supporting self-sustaining populations of interacting groups of priority species for biodiversity, socio-economic, and Tribal needs.
- WF-019: Suitable habitat is provided that is capable of maintaining stable or increasing trends in abundance to help keep species from becoming federally listed.
- WF-020: Human-caused disturbances to habitats that result in animal mortalities or undesirable effects to populations of priority species are prevented during critical stages where and when possible.
- WF-021: Adverse effects to big game habitat from project-related disturbances are minimized, particularly during lambing and fawning seasons. Lambing and fawning areas and periods should be determined during site/project-level planning to address big game exposure to stress during critical periods.

A. BATS

Desired Future Conditions

- WF-022: Suitability of existing bat roost sites is maintained and accessibility to key open watering sites are maintained or enhanced.

Management Actions

- WF-023: Install bat gates at abandoned mine sites that do or could support bat roosts.

Administrative Actions

- AA-087: Inventory and monitor caves, mines, and other natural and artificial roosts and habitats that support, or once supported, the most important bat colonies and populations.
- AA-088: Identify key open watering sites for bats.
- AA-089: Prioritize natural and manmade roosts for protection, especially those containing large populations of a single species or diverse collections of species.
- AA-090: Monitor the potential effects of land management and resource use, and other natural or human-caused disturbances on bat habitat.
- AA-091: Evaluate the effectiveness of conservation measures or management actions implemented, including bat gates, manmade roosts, and other habitat protection and restoration actions.
- AA-092: Educate the public on bat conservation through collaborative partnership with Bat Conservation International, a non-governmental organization, and by integrating education materials into other successful programs.

B. BIG GAME SPECIES

Management Actions

- GM-015: Prohibit domestic sheep and goat grazing within nine miles of desert bighorn sheep habitat to avoid disease transmission according to BLM guidelines, including IM 98-140 *Revised Guidelines for Management of Domestic Sheep and Goats in Native Wild Sheep Habitat*.
- TM-017: Roads traversing bighorn sheep habitat may be closed, limited, or rerouted during the lambing season in specific areas consistent with safety and maintenance requirements of authorized uses in corporation with AGFD and CDFG.

Administrative Actions

- AA-093: Coordinate with AGFD and CDFG regarding their management objectives for big game species when YFO management actions may affect those objectives (including development of water catchments).

- AA-094: In cooperation with AGFD and CDFG, identify existing and potential areas where big game mortality from vehicles may be a concern. Implement temporary, seasonal, or permanent area and transportation route closures or reroutes, if necessary, to address big game vulnerability to mortality. Any changes will consider public access needs and the prior existing rights of potentially affected parties. Coordinate any changes with the appropriate Federal, State, county, and Tribal governments, and all potentially affected parties.

C. NON-GAME MIGRATORY BIRDS

Desired Future Conditions

- WF-024: YFO actions promote programs and recommendations of comprehensive migratory bird planning efforts such as Partners-in-Flight, U.S. National Shorebird Plan, North American Waterfowl Management Plan (2004), North American Colonial Waterbird Plan, and other planning efforts, as well as guidance from other sources.
- WF-025: The conservation intent of the conventions of the Migratory Bird Treaty Act are supported by integrating bird conservation principles, measures, and practices into YFO activities and by avoiding or minimizing adverse impacts on migratory bird resources when conducting BLM actions.
- WF-026: The pollution or detrimental alteration of the environment is prevented or abated for the benefit of migratory birds, as practicable.

Management Actions

- WF-027: Restore degraded habitats (both upland and riparian) to ecological conditions consistent with non-game migratory bird habitat management objectives, emphasizing maintenance and/or enhancement of natural biological diversity.
- VM-008: Where and when practicable, develop new riparian habitat or restore damaged, degraded, and salt cedar habitats along the lower Colorado River and Gila River for the protection and enhancement of migratory birds. Install facilities to protect restoration sites as needed.
- FM-023: Integrate fire management into upland and riparian habitat restoration actions for non-game bird species.
- LR-068: Consolidate areas with high actual or potential value for non-game migratory bird habitat through land exchange or acquisition.

Administrative Actions

- AA-095: Prioritize breeding and migratory stopover bird habitat for protection or mitigation.
- AA-096: Identify major habitat modifications and other threats that may have significant negative effects on the survival of migratory bird species-populations.
- AA-097: Provide notice to the USFWS in advance of conducting an action that is intended to “take” (see glossary) migratory birds or annually report to the USFWS on the number of individuals of each species of migratory birds intentionally taken during the conduct of any

BLM action including but not limited to banding or marking, scientific collecting, taxidermy, and depredation control.

- AA-098: Identify where unintentional take reasonably attributable to BLM actions is having, or is likely to have, a measurable negative effect on migratory bird populations, focusing first on species of concern, priority habitats, and key risk factors. With respect to those actions so identified, the YFO shall develop and use principles, standards, and practices that would lessen the amount of unintentional take, developing any such conservation efforts in cooperation with the USFWS. These principles, standards, and practices shall be regularly evaluated and revised to ensure that they are effective in lessening the detrimental effect of YFO actions on migratory bird populations. The YFO also shall inventory and monitor bird habitat and populations within the BLM's capabilities and authorities to the extent feasible to facilitate decisions about the need for and effectiveness of conservation efforts.
- AA-099: Within the scope of statutorily designated authorities, control the import, export, and establishment in the wild of live exotic animals and plants that may be harmful to migratory bird resources. Collaborate with AGFD on the control of exotic animals.
- AA-100: Identify possible mitigation measures through project-specific NEPA analysis. Avoid or minimize adverse impacts on non-game bird habitats.
- AA-101: Develop a broad awareness and understanding of the importance of non-game bird species and their value to our natural heritage through public outreach and education. Develop interpretive displays for use at professional meetings, county fairs, and other outreach opportunities.
- AA-102: Promote recreational opportunities for bird watching and photography. Recognize and promote economic and recreational values of birds, as appropriate.
- AA-103: Provide training and information to appropriate employees on methods and means of avoiding or minimizing the take of migratory birds and conserving and restoring migratory bird habitat.
- AA-104: Promote migratory bird conservation in international activities and with other countries and international partners, in consultation with the Department of State, as appropriate or relevant to the BLM's authorities.
- AA-105: Develop partnerships with non-Federal entities to further bird conservation.
- AA-106: Promote research and information exchange related to the conservation of migratory bird resources, including coordinated inventorying and monitoring, and the collection and assessment of information on environmental contaminants and other physical or biological stressors having potential relevance to migratory bird conservation. Where such information is collected in the course of BLM actions or supported through Federal financial assistance, reasonable efforts shall be made to share such information with the USFWS, the Biological Resources Division of the U.S. Geological Survey, and other appropriate repositories of such data (e.g., the Cornell Laboratory of Ornithology).
- AA-107: Design migratory bird habitat and population conservation principles, measures, and practices into BLM plans and planning processes (natural resource, land management, and environmental quality planning including but not limited to forest and rangeland

planning, coastal management planning, watershed planning) as practicable, and coordinate with other agencies and non-Federal partners in planning efforts.

- AA-108: Ensure that environmental analyses of Federal actions required by NEPA or other established environmental review processes evaluate the effects of actions and BLM plans on migratory birds, with emphasis on species of concern.

D. RAPTORS

Desired Future Conditions

- WF-028: Raptor populations are maintained, restored, or enhanced through proper habitat management.

Management Actions

- VM-014: Plant trees in suitable areas to provide perch sites and enhance foraging habitat for raptors.
- LR-068: Pursue all land acquisition options, including but not limited to purchase, exchange, donation, and easement, from willing landowners to consolidate important raptor habitats that are located on State or privately-owned lands within Key Raptor Areas (i.e., Mittry Lake Wildlife Area and the Colorado River corridor) (USDOI BLM 1992).

Administrative Actions

- AA-109: Identify important parcels for land tenure adjustments within the Key Raptor Areas. Allocate funding for appraisals, cadastral surveys, and other lands and realty-related actions necessary to process the land acquisition options.
- AA-110: Ensure that all new power lines are safe for raptors. Inventory power lines to ensure that they meet established standards as described in BLM Manual 2800 and in the 2006 Suggested Practices for Avian Protection on Power Lines (Avian Power Line Interaction Committee 2006). Inventories of power lines within areas of known high raptor use should be completed first.
- AA-111: Assess the adverse and beneficial effects of fire and fuels management on raptor habitats and the opportunities for integrating fire as a restorative action for raptor habitat management.
- AA-112: Participate in cooperative research initiatives for raptors with other Federal and State agencies, universities, and non-governmental organizations.
- AA-113: Identify major habitat modifications and other threats that may have significant negative effects on the survival of raptor species-populations.

E. GAME BIRDS

Management Actions

- WF-029: Create or maintain habitat for dove and quail at suitable sites such as riparian restoration areas or retired agricultural leases.

Administrative Actions

- AA-114: Coordinate with AGFD to provide hunting opportunities for dove and quail.
- AA-115: Monitor the potential effects of land management and resource use, and other natural or human-caused disturbances on game bird habitat.
- AA-116: The future management plan for the Fred J. Weiler Greenbelt VHA incorporates Approved RMP's management prescriptions for game birds.

2.7.2 WILDLIFE HABITAT MANAGEMENT AREAS

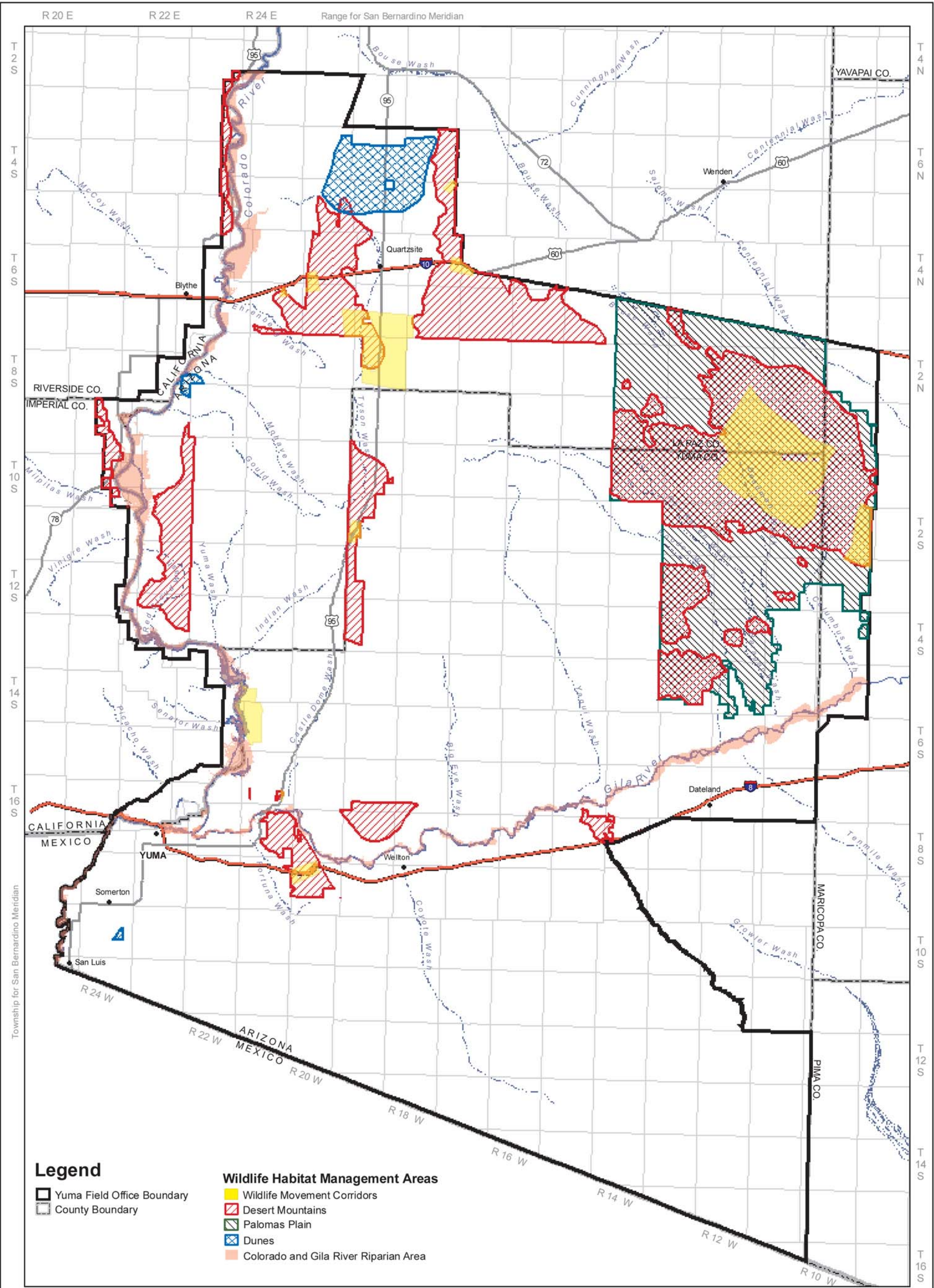
Priority Wildlife Habitats were designated as wildlife-related special interest areas under the 1987 Yuma District RMP. Five WHAs are designated in the Approved RMP. These management areas are as follows: Colorado and Gila River Riparian, Desert Mountains, Dunes, Palomas Plain, and Wildlife Movement Corridors. WHA designations are presented in Map 2-6 and Table 2-6 below.

Desired Future Conditions Common to All WHAs

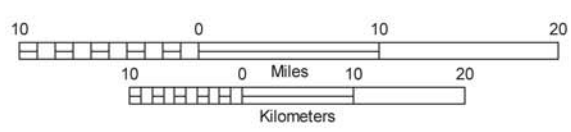
- WF-030: WHAs promote healthy terrestrial, aquatic, and riparian ecosystems for biological diversity, ecological integrity and sustainability, and social and cultural needs.
- WF-031: Fragmentation of land cover by land use is reduced within WHAs to sustain ecosystem composition, structure, functions, and processes.
- WF-032: Conservation measures for special status species, priority species, and other at-risk species are emphasized within WHAs while balancing the multiple uses of public lands.
- WF-033: WHAs provide well-distributed habitats and connective corridors for a functional landscape to maintain self-sustaining, complex interacting groups of species or wildlife assemblages.
- WF-034: Additional human-caused disturbance and land-cover changes that may cause adverse effects on native and desired non-native fish and wildlife species habitats are limited within WHAs.

Management Actions Common to All WHAs

- WF-035: When impacts within WHAs are unavoidable, allow no net loss or no net impact to occur so that the ecosystem composition, structure, functions, and processes are maintained.



**YUMA FIELD OFFICE
RECORD OF DECISION
APPROVED RESOURCE MANAGEMENT PLAN**



U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Yuma Field Office
January 2010



Map 2-6: Wildlife Habitat Management Areas

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

Table 2-6
Approved RMP Wildlife Habitat Management Areas

Wildlife Habitat Management Areas	Approved RMP Total Acres
Colorado River and Gila River Riparian	38,900
Desert Mountains	664,000
Dunes	57,500
Palomas Plain	627,700
Wildlife Movement Corridors	138,100

Note: The total WHA acres are greater than the total YFO administered lands due to overlap between WHA areas.

- WF-036: Additional uses in WHAs will be limited to compatible activities and those actions whose impacts could be mitigated to preserve or enhance wildlife values.
- WF-037: Limit developments (i.e., livestock facilities, roads, lands actions, mining and minerals) on WHAs to those that are compatible with wildlife habitat.
- LR-028: To the extent possible, new transportation ROWs will avoid WHAs. Appropriate mitigation will be required when avoidance is not possible.
- LR-038: Transmission class ROWs within WHAs will be confined to designated ROW Corridors whenever practicable.
- LR-068: Acquire non-Federal lands in WHAs from willing landowners through purchase or exchange.

A. COLORADO AND GILA RIVER RIPARIAN WHA

Desired Future Conditions

- WF-038: The Colorado and Gila River Riparian WHA provides suitable habitat for aquatic and riparian species.
- WF-039: Opportunities are provided for the restoration of native fish habitat in the lower Colorado River.
- WF-040: The desired watershed conditions in the Colorado and Gila River Riparian WHA are enhanced through maintenance of hydrologic integrity, reduction of accelerated soil erosion and sedimentation, and protection of water quality from point- and non-point-source pollutants.
- WF-041: Riparian-wetland and floodplain areas are in proper functioning condition within the Colorado and Gila River Riparian WHA.
- CM-001: Riparian habitat and marsh vegetation in the Limitrophe are protected and maintained to retain biological diversity and enhance potential habitat to support neotropical migratory birds, special status species, and other wildlife.

Management Actions

- WF-042: Allocate 38,900 acres to the Colorado and Gila River Riparian WHA. This WHA includes the riparian areas along the Colorado and Gila rivers. Although riparian areas make up less than three percent of the public lands, they are one of the most productive and important areas, providing for an even greater diversity of wildlife species. In the planning area, more than 400 species are either directly dependent on riparian areas or use them more than other habitats (USDOI BLM 1987b). Many riparian-obligate wildlife species, as well as many native fish species, are either federally listed or are considered special status species by the Federal government (USFWS and BLM) or State wildlife agencies in Arizona and California. Much of the native riparian habitats on public lands within the planning area have been severely fragmented, degraded, or otherwise substantially altered from a variety of causes, thereby affecting the wildlife populations and species that inhabit them. Large areas of riparian habitats have been invaded by the exotic (invasive) and less desirable salt cedar.
- WF-043: Implement management prescriptions for aquatic and riparian ecosystems described in the LCR MSCP to conserve or recover special status species and at-risk priority species in the Colorado and Gila River WHA.
- VM-008: Where and when practicable, develop new riparian habitat or restore damaged, degraded, and salt cedar habitats within the Colorado and Gila River WHA for the protection and enhancement of riparian or floodplain associated species. Install facilities to protect restoration sites as needed.
- VM-011: Conduct and/or authorize vegetation treatments in selected locations along the International Boundary to allow visibility and reduce cover for clandestine activity. Such treatments will be conducted in a way that considers impacts to Native American religious concerns.
- MI-009: No surface occupancy for oil and gas leases will be allowed within the Colorado and Gila River Riparian WHA.
- MI-023: No salable mineral materials permits will be issued within the Colorado and Gila River Riparian WHA.

B. DESERT MOUNTAINS WHA

Desired Future Conditions

- WF-044: The Desert Mountains WHA maintains well-distributed habitats and connective corridors to support self-sustaining populations of native wildlife species (i.e., desert bighorn sheep, desert tortoise [Sonoran and Mojave populations], CFPO, raptors, and bats).
- WF-045: The Desert Mountains WHA promotes stable or increasing population trends in the Desert Mountains-associated priority species.

Management Actions

- WF-046: Allocate 664,000 acres to the Desert Mountains WHA. This WHA includes the overlapping habitat areas of desert bighorn sheep and desert tortoise. The Desert Mountains provide important habitat for desert bighorn sheep, desert tortoise and other wildlife species

that could not survive on the arid plains of lower elevations. Mountain ranges provide some of the best remaining bighorn sheep habitat in the southwest, with stable populations in several areas.

- TM-017: Roads traversing bighorn sheep habitat may be closed, limited, or rerouted during the lambing season in specific areas consistent with safety and maintenance requirements of authorized uses in corporation with AGFD and CDFG.
- MI-009: No surface occupancy for oil and gas leases will be allowed within the Desert Mountains WHA where AGFD has identified sensitive desert bighorn sheep habitat.
- MI-025: Limit salable mineral materials permits within the Desert Mountains WHA by making appropriate use of community pits.

Administrative Actions

- AA-117: Monitor OHV usage to ensure that vehicles are staying on designated routes and within existing camping areas and pull-outs within the Desert Mountains WHA.

C. DUNES WHA

Desired Future Conditions

- WF-047: Sand dune habitats are maintained in the Dunes WHA to support native wildlife and plant species that include but are not limited to Cowle's fringe-toed lizard (*Uma notata rufopunctata*), scaly sand plant, flat-tailed horned lizard (FTHL) (*Phrynosoma mcallii*), and sand food (*Pholisma sonora*).

Management Actions

- WF-048: Allocate 57,500 acres to the Dunes WHA. This WHA includes four areas of dune habitat. Dunes are a sensitive and unusual habitat in the low deserts and host a variety of plants and wildlife, many of which occur in no other habitat. The principle of managing this WHA will be that the amount of human disruption should decrease in proportion to the significance of the sand dune features, with more intensive use directed to sand dune areas of lesser significance or sensitivity.
- VM-035: Non-native invasive species (e.g., Russian thistle [*Salsola kali*] and Sahara mustard) that threaten dune complexes are reduced in the Dunes WHA.
- TM-004: Within the Dunes WHA, dune areas which support sensitive, special status, and/or priority species will not be available for future Open OHV Management Area designations.
- LR-014: Lands authorizations within the Dunes WHA will avoid to the extent practicable, minimize, or mitigate impacts to dunes with sensitive species.

Administrative Actions

- AA-118: Identify areas of high ecological sensitivity in the Dunes WHA.

D. PALOMAS PLAIN WHA

Desired Future Conditions

- WF-049: The Palomas Plain WHA promotes landscape juxtaposition and connectivity with adjacent planning areas.
- WF-050: The Palomas Plain WHA maintains unfragmented, functional landscapes with well-distributed habitat and connective corridors to support native wildlife populations (including Sonoran pronghorn, mule deer, desert bighorn sheep, desert tortoise, and raptor species).

Management Actions

- WF-051: Allocate 627,700 acres to the Palomas Plain WHA. This WHA is the largest unfragmented habitat in southwest Arizona for a myriad of wildlife, including bighorn sheep and mule deer. It contains braided channel floodplains and mixed cacti paloverde communities on rocky slopes and *bajadas*. The large, contiguous, unfragmented habitat is significant to the hunting community. This area is a potential reintroduction area for the endangered Sonoran pronghorn.
- WF-052: Concentrate developments such as utility facilities in areas already developed or disturbed in the Palomas Plain WHA.

Administrative Actions

- AA-119: Monitor OHV usage to ensure that vehicles are staying on designated routes and within existing camping areas and pull-outs within the Palomas Plain WHA.
- AA-120: Monitor and evaluate habitat use by native wildlife populations (including mule deer, desert bighorn sheep, desert tortoise, and raptor species) in the Palomas Plain WHA.
- AA-121: In cooperation with AGFD and other agencies, determine the feasibility of reintroduction of Sonoran pronghorn to its historic range in the Palomas Plain WHA.

E. WILDLIFE MOVEMENT CORRIDORS WHA

Desired Future Conditions

- WF-053: Within the Wildlife Movement Corridors WHA, maintain functional habitats through landscape connectivity and reduced habitat fragmentation to support terrestrial wildlife species and provide big game species-related movement corridors between and within mountain ranges.

Management Actions

- WF-054: Allocate 131,800 acres to the Wildlife Movement Corridors WHA. This WHA includes areas identified by AGFD and the Arizona Wildlife Linkages Group as being used by wildlife to move between habitats. Migration corridors are traditional movement paths between adjacent mountain ranges.

- WF-055: Minimize new developments or improvements (i.e., roads, fences, canals, quarries, developed campgrounds) within the Wildlife Movement Corridors WHA which will impede or inhibit wildlife movement within a corridor to the maximum extent practicable. Where new developments or improvements cannot be avoided within a wildlife movement corridor, appropriate mitigation to provide for wildlife movement must be included.

Administrative Actions

- AA-122: Coordinate with ADOT to reduce wildlife highway fatalities in problem areas within the Wildlife Movement Corridors WHA.

2.8 SPECIAL STATUS SPECIES MANAGEMENT

Special status species are fish, wildlife, and plants that require specific conservation measures or management directions due to species-population or species-habitat concerns. In the Approved RMP, special status plants are addressed in Section 2.5 Vegetation Management. 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 adverse effects to species listed under the ESA. Special status species land use planning falls under the following broad categories: (1) Federally Listed Species: Threatened, Endangered, Proposed, or Candidate Species (and Designated or Proposed Critical Habitat); (2) State Listed (Arizona's draft list of Wildlife of Special Concern or California ESA) Species; and (3) BLM Sensitive Species. Appendix E contains a list of special status species in the planning area.

YFO carries out management for the conservation of State listed plants and animals. State laws protecting these species apply to all BLM programs and actions to the extent that they are consistent with FLPMA and other Federal laws. The protection provided by the policy for candidate species shall be used as the minimum level of protection for BLM sensitive species.

In addition to the ESA, decisions in the Approved RMP are consistent with objectives and recommended actions in approved recovery plans, conservation agreements and strategies, MOUs, and applicable BOs for threatened or endangered species.

Desired Future Conditions

The following Desired Future Conditions will be applied throughout the entire planning area.

- TE-001: Terrestrial and aquatic habitats for the survival and recovery of species listed under the ESA are maintained, enhanced, and restored, and help keep proposed or candidate species from becoming listed as endangered or threatened under the ESA. Management actions included in the Approved RMP either contribute to or do not prevent recovery or delisting of species listed under the ESA.
- TE-002: Applicable species- or habitat-specific goals and objectives addressed in established and approved recovery plans, conservation strategies and agreements, and MOUs (including the LCR MSCP) are achieved within the planning area.

- TE-003: Habitat historically or currently supporting special status species and existing habitat capable of supporting special status species in the future are maintained, enhanced, and restored. Ecological restoration actions will address long-term threats to special status species and the short-term need to protect special status species and their habitats.
- TE-004: There is no net loss or fragmentation of habitat for major life history requirements (i.e., breeding, feeding, or resting cover) for special status species.

Management Actions

The following Management Actions will be applied throughout the entire planning area.

- TE-005: Adopt and implement the conservation measures developed with the USFWS through the ESA Section 7 consultation process (Appendix C) to protect and enhance known habitat for threatened and endangered species and assist in the recovery of listed species to maintain biological diversity within the planning area.
- TE-006: Evaluate proposals authorized, funded, or carried out on public lands to ensure they do not contribute to the need to list special status species as threatened or endangered. No activities or projects that will jeopardize the continued existence of special status species will be permitted on BLM-administered lands.
- TE-007: Avoid or minimize negative behavioral impacts to special status species resulting from human caused disturbances by either prohibiting or constraining human activities during breeding or migratory seasons, on a case-by-case basis.
- TE-008: Require projects and land-use authorizations to minimize adverse impacts to special status species through mitigation.
- TE-009: Avoid or minimize the following situations for special status species and associated habitat management on BLM-administered public lands: (1) species becoming endangered in or extirpated from a State, or within a significant portion of its distribution; (2) species undergoing significant current or predicted downward trend in habitat capability that will reduce a species' existing distribution; and (3) species undergoing significant current or predicted downward trend in population or density.
- TE-010: Minimize or avoid human-caused 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 threatened, endangered, proposed, or candidate species populations.
- LR-063: BLM follows three criteria for land disposals regarding threatened and endangered species:
 - BLM will not transfer out of Federal ownership designated or proposed critical habitat for a listed or proposed threatened or endangered species.
 - BLM will not transfer out of Federal ownership lands supporting listed or proposed threatened or endangered species if such transfer will be inconsistent with recovery needs and objectives or will likely affect the recovery of the listed or proposed species.

- o BLM will not transfer out of Federal ownership lands supporting Federal candidate species if such action will contribute to the need to list the species as threatened or endangered.

Exceptions to the above could occur if the recipient of the lands will protect the species or critical habitat equally well under the ESA, such as disposal to a non-Federal governmental agency or private organization if conservation purposes for the species will still be achieved and ensured.

Administrative Actions

The following Administrative Actions will be applied throughout the entire planning area.

- AA-123: During site/project-level analysis, identify practices or facilities that will adversely affect special status species or their habitats, and prioritize opportunities to mitigate, through avoidance or minimization, the adverse effects to the species or their habitats.
- AA-124: Design and implement Management Actions to 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.
- AA-125: Cooperate with USFWS, AGFD, and CDFG for management of species listed under the ESA, and with the AGFD and CDFG for species of special concern or State-listed species.
- AA-126: Enhance scientific knowledge and public awareness on special status species through research, and interpretive and outreach programs.

2.8.1 FEDERALLY LISTED SPECIES AND DESIGNATED CRITICAL HABITAT

A. CALIFORNIA BROWN PELICAN (ENDANGERED)

The planning area does not contain any habitat or populations of the California brown pelican (*Pelecanus occidentalis californicus*). All birds that incidentally occur in the planning area are considered vagrants.

Administrative Actions

- AA-127: Provide public education, outreach, and interpretive programs for California brown pelican.
- AA-128: Enforce existing State and Federal regulations for protection of the California brown pelican.
- AA-129: Continue to assist USFWS in retrieving weakened, transient California brown pelicans for rehabilitation.

B. BALD EAGLE (SONORAN DESERT POPULATION) (THREATENED)

Desired Future Conditions

- TE-011: Riparian areas along the Gila River that are capable of providing special habitat components for nesting and wintering bald eagles are protected.

Management Actions

- TE-012: Adopt and implement the *Bald Eagle (Southwestern Population) Recovery Plan* (USDOI USFWS 1982), and any future plan revisions for this species.
- TE-013: Protect, maintain, or enhance the existing known occupied sites for bald eagles.

Administrative Actions

- AA-130: Monitor land use/cover changes within currently occupied and potential bald eagle habitats and evaluate bald eagle responses to changed site conditions and disturbance factors.
- AA-131: Locate, map, and evaluate non-nesting habitats by the transient bald eagle population.
- AA-132: Enhance public outreach designed to gain support for the protection of bald eagles.

C. GILA TOPMINNOW, BONYTAIL CHUB, AND DESERT PUPFISH (ENDANGERED)

Desired Future Conditions

- TE-014: Protection of Gila topminnow, bonytail chub, and desert pupfish populations in currently occupied habitat is the highest management priority, followed by reintroductions into suitable habitat within their historic ranges.
- TE-015: Suitable perennial waters capable of supporting self-sustaining populations of Gila topminnow, bonytail chub, and desert pupfish, are provided as appropriate. Sufficient shoreline vegetation is retained to reduce soil erosion and protect spawning habitat along shorelines of perennial waters from excess siltation above natural or background levels.
- TE-016: In cooperation with the AGFD and the USFWS, Gila topminnow, bonytail chub, and desert pupfish populations are reestablished into currently or potentially suitable habitat areas within the planning area.

Management Actions

- TE-017: Adopt and implement the *Gila Topminnow Revised Recovery Plan* (USDOI USFWS 1998a), and any future plan revisions for this species.
- TE-018: Adopt and implement the *Bonytail Chub Recovery Goals* (USDOI USFWS 2002a), and any future plan revisions for this species.

- TE-019: Adopt and implement the *Desert Pupfish Recovery Plan* (USDOI USFWS 1993), and any future plan revisions for this species.
- FM-027: Limit fuel treatments in watersheds with occupied reaches or sites of Gila topminnow, bonytail chub, and desert pupfish to no more than half of the watershed area in any two-year period.
- GM-025: Limit domestic livestock utilization of native riparian trees along stream reaches occupied by Gila topminnow, bonytail chub, and desert pupfish to 30 percent of the apical stems per growing season.
- RR-021: Limit streambank vegetation alteration due to recreation activities in riparian areas along stream reaches occupied by Gila topminnow, bonytail chub, and desert pupfish.

D. MOJAVE DESERT TORTOISE (THREATENED)

Desired Future Conditions

- TE-020: Category I Mojave desert tortoise habitat maintains stable and viable populations, retains natural shelter sites, protects existing tortoise habitat values, and increases populations where possible.
- TE-021: Category II Mojave desert tortoise habitat maintains stable and viable populations, retains natural shelter sites, and halts further declines in tortoise habitat values.
- TE-022: Category III Mojave desert tortoise habitat limits tortoise habitat and population declines to the extent possible through mitigation.
- TE-023: To the extent practicable, no net loss in the quality or quantity of Category I and II Mojave desert tortoise habitats occurs.
- TE-024: Take of Mojave desert tortoises during project activities is reduced through the removal of tortoises to undisturbed areas out of harm's way.
- TE-025: Wild horse and burro abundance is in ecological balance with existing Mojave desert tortoise and other wildlife populations.

Management Actions

The following management actions will apply to all Mojave desert tortoise habitat within the planning area.

- TE-026: Adopt and implement the *Desert Tortoise (Mojave Population) Recovery Plan* (USDOI USFWS 1994), and any future plan revisions for this species.
- TE-027: When possible, prohibit activities that will fragment or further isolate existing populations of Mojave desert tortoises (i.e., canals, highways).
- TE-028: Review land use requests in Mojave desert tortoise habitat during the March 1 through October 15 critical period on a case-by-case basis. Requests may be denied and/or mitigated to achieve Desired Future Conditions (e.g., no net loss of Category I and II habitat).

- TE-029: Compensate for residual project impacts in accordance with the Compensation for the Desert Tortoise Report (Desert Tortoise Compensation Team 1991). Compensation for loss of desert tortoise habitat is required according to BLM policy.
- TE-030: Reduce the attraction of predators, such as the common raven, to project areas within Mojave desert tortoise habitat to the maximum extent possible.
- TE-031: Reduce take of Mojave desert tortoises by injury or death due to the straying of construction and maintenance equipment beyond project areas through establishment of clearly defined work areas.
- TE-032: Modify activities to avoid injury or harm if a Mojave desert tortoise is found in a project area.
- TE-033: Confine the period of leasable mineral exploration and major construction work from November 1 to March 1 within Mojave desert tortoise habitat. Minimize surface disturbance associated with authorized activities. Perform complete preconstruction inspections of areas to be developed and mitigate for actions to protect desert tortoises and their habitat, including reclamation and bonding, if appropriate. After project completion, measures will be taken to facilitate restoration of the disturbed site.
- TE-034: Fence new paved roads and highways or major modifications of existing roads through Mojave desert tortoise habitat with tortoise barrier fencing. Culverts, to allow safe passage of tortoises, shall be constructed approximately every mile of new paved roads and railroads. Require erection of tortoise barriers around projects that will be sources of mortality (such as canals, heavily used roads, steep-walled reservoirs), and promote methods that allow safe movement across project areas.
- TE-035: Minimize blading of new access or work areas within Mojave desert tortoise habitat. Disturbance to shrub cover will be avoided if possible. If shrubs cannot be avoided during equipment operation or vehicle use, they should be crushed wherever possible rather than excavated or bladed and removed.
- TE-036: Cover or modify project features that might trap or entangle Mojave desert tortoises, such as open trenches, pits, pipes, and others, to prevent entrapment during the active season or when an on-site biologist is not available. After completion, these features will be filled in, covered, or otherwise modified so they are no longer a hazard to desert tortoises.
- TE-037: To the extent practicable, all BLM-authorized surface-disturbing projects will be located in previously disturbed areas or outside of Mojave desert tortoise habitat. When at all possible, avoid habitat, otherwise mitigate. If a desert tortoise is found in a project area, activities should be modified to avoid injuring or harming it.
- TE-038: Enclose an entire site with a tortoise-proof fence where project activities are to extend over 90 days in Mojave desert tortoise habitat. For project activities that are to occur in fewer than 90 days, a temporary fence will be erected around the area of activity.
- TE-039: Limit seismic exploration, new construction, road maintenance, vehicle use, or other BLM-authorized surface-disturbing activities to existing ROW Corridor areas within Mojave Desert tortoise habitat.

- TM-018: Within Mojave Desert tortoise habitat, limit vehicular travel and non-motorized competitive events to designated routes; and close and rehabilitate existing roads where no public or administrative need exists.
- MI-023: No salable mineral materials permits will be authorized in Category I and II Mojave desert tortoise habitat.

Administrative Actions

- AA-133: Implement worker education programs and well-defined operational procedures to avoid the “take” of Mojave desert tortoises and their habitat.

E. RAZORBACK SUCKER (ENDANGERED)

Desired Future Conditions

- TE-040: Known threats to razorback sucker are minimized, including habitat modification, competition with and predation by non-native fish species, and pesticides and pollutants.
- TE-041: Critical razorback sucker habitat is protected from further degradation of habitat conditions and water quality and habitats are restored to meet established recovery goals for razorback sucker.

Management Actions

- TE-042: Adopt and implement the *Razorback Sucker Recovery Goals* (USDOI USFWS 2002b) of the *Razorback Sucker Recovery Plan* (USDOI USFWS 1998b), and any future plan revisions for this species.
- TE-043: Develop, enhance, and maintain suitable habitats (riverine habitats including oxbows, depressions, and bottomlands) required for all life stages for self-sustaining populations of razorback sucker in all recovery units.
- RR-020: Post signs at fishing access points and at tackle shops clearly advising anglers of the potential to take razorback suckers and how to report and release captured fish. Signs should contain a clear photograph of a razorback sucker that can be used by anglers to identify the species.

Administrative Actions

- AA-134: Evaluate razorback sucker habitat on BLM-administered lands and develop a strategy to eliminate or reduce adverse effects from BLM-authorized development to the habitat along shorelines.
- AA-135: Enhance public awareness through educational programs and posting of informational bulletins of the importance of razorback sucker and potential threat to the species and habitat from recreation use and developments in the floodplain along the Colorado River.

- AA-136: Support efforts to control non-native fishes, where feasible, to minimize the threat of hybridization or negative interactions between non-native fishes and razorback sucker with proper coordination with and authorization from AGFD and CDFG.

F. SONORAN PRONGHORN (ENDANGERED)

Desired Future Conditions

- TE-044: Unfragmented habitat is provided in the planning area that is capable of contributing to the potential reintroduction of Sonoran pronghorn as a step toward recovery of the species within the historic range.
- TE-045: Plant species richness in Sonoran pronghorn habitat is maximized. Prescribed fire and livestock herd management could be utilized to improve plant species richness.
- TE-046: Sonoran pronghorn habitat is managed to minimize shrub and tree encroachment following evaluation of potential reintroduction sites in accordance with the recovery plan.

Management Actions

- TE-047: Adopt and implement the *Final Revised Sonoran Pronghorn Recovery Plan* (USDOI USFWS 1998c) and *Recovery Criteria and Estimates of Time for Recovery Actions for the Sonoran Pronghorn* (USDOI USFWS 2002c), and any future plan revisions for this species.
- FM-024: Use prescribed fire, chemical, and mechanical treatments in Sonoran pronghorn habitat to reduce shrub and tree components. Prescribed fire can be used to supplement natural grassland renewal, especially to increase forbs and reduce shrubs.
- GM-017: Design livestock fences or modify existing fences to facilitate pronghorn movement. Traditional livestock fencing can impede or prevent pronghorn movement and create habitat fragmentation. Habitat fragmentation can result in genetic isolation, herd extirpation, and periodic winter kills.

Administrative Actions

- AA-137: Support the Sonoran Pronghorn Recovery Team's efforts to transplant or reintroduce species to BLM-administered lands.
- AA-138: Investigate, evaluate, and prioritize potential future pronghorn reintroduction sites within the historic range.
- AA-139: Map native vegetation in potential pronghorn reintroduction areas.

G. SOUTHWESTERN WILLOW FLYCATCHER (ENDANGERED)

Desired Future Conditions

- TE-048: The planning area provides suitable habitat capable of maintaining stable or increasing population trends of SWFL (*Empidonax traillii extimus*) in the Lower Colorado

Recovery Unit.

- TE-049: Activities that will promote or encourage attractants of scavengers, predators, and brown-headed cowbirds are minimized to protect existing populations of SWFL (e.g., livestock grazing, bird feeders, forest thinning).
- TE-050: Recreational activities are minimized where potentially suitable SWFL habitat has been identified to allow the area to recover vegetative features needed by the species.
- TE-051: Existing SWFL habitats are protected by reducing fire risk to habitat.

Management Actions

- TE-052: Adopt and implement the *Southwestern Willow Flycatcher Final Recovery Plan* (USDOI USFWS 2002d), and any future plan revisions for this species.
- TE-053: After sufficient baseline data shows cowbird parasitism to be a significant threat to particular SWFL populations, initiate cowbird control measures in coordination with AGFD to protect these populations.
- VM-008: Where and when practicable, develop new riparian habitat or restore damaged, degraded, and salt cedar habitats along the lower Colorado River and Gila River for the survival and recovery of SWFL. Install facilities to protect restoration sites as needed.
- FM-025: Avoid hazardous fuel thinning projects that reduce the quality or quantity of SWFL habitat and instead install fire breaks to protect habitat from wildfires.
- TM-019: Use fencing or physical barriers to protect riparian SWFL habitat from unauthorized OHV use.

Administrative Actions

- AA-140: Acquire suitable SWFL habitat and protect known occupied sites through land acquisition and easements from willing landowners to compensate for loss of historical SWFL habitat.
- AA-141: Reduce potential impacts to SWFL from recreation activities by promoting public outreach and education.

H. YUMA CLAPPER RAIL (ENDANGERED)

Desired Future Conditions

- TE-054: There is sufficient habitat in the U.S. and Mexico with sufficient breeding and wintering habitat capable of supporting a population of 700-1,000 breeding Yuma clapper rail (*Rallus longirostris yumanensis*) in the U.S.
- TE-055: No net loss or fragmentation of marshlike habitat for major life history requirements (i.e., breeding, feeding or resting cover) of Yuma clapper rail occurs and natural bird behavior is maintained by minimizing indirect effects resulting from human-caused disturbances.

- TE-056: Riparian areas are maintained that form an integrated mosaic with wet sloughs and marshes designed to support the Yuma clapper rail and other marsh and aquatic wildlife.

Management Actions

- TE-057: Adopt and implement the *Yuma Clapper Rail Recovery Plan* (USDOI USFWS 1983), and any future plan revisions for this species.
- TE-058: Restrict or prohibit human caused disturbances to Yuma clapper rail habitat or individuals in occupied territories during the breeding and molting seasons (March 15–September 1).
- FM-026: Burn decadent marsh vegetation without risking the rarer and more valuable cottonwood-willow habitat, if research concludes that burning decadent marsh vegetation benefits Yuma clapper rail population.

Administrative Actions

- AA-142: Support research to study the biological requirements of Yuma clapper rail.
- AA-143: Complete survey and monitoring of Yuma clapper rail populations and breeding areas on BLM-administered lands.
- AA-144: Initiate public outreach with education and interpretive programs to promote Yuma clapper rail species–habitat recovery.

2.8.2 FEDERAL CANDIDATE SPECIES

Candidate species are those species for which USFWS has sufficient information on biological vulnerability and threats to support proposals to list them as endangered or threatened under the ESA. The yellow-billed cuckoo (*Coccyzus americanus*) is a candidate for listing under the ESA. No recovery plans or objectives have been developed for this species.

A. YELLOW-BILLED CUCKOO

Desired Future Conditions

- TE-059: Yellow-billed cuckoo habitats and the ecosystems of which they are components are conserved to maintain or improve the status of the species in the wild and reduce the need to list the species as endangered or threatened.
- TE-060: Connective riparian corridors within and between known yellow-billed cuckoo breeding areas are maintained along the lower Colorado River and Gila River.
- TE-061: Currently unprotected occupied or potential yellow-billed cuckoo habitat is protected through acquisition, easements, partnerships, and other means.
- TE-062: No net loss or fragmentation of breeding and migratory yellow-billed cuckoo habitats occurs, and natural bird behavior is maintained by minimizing indirect effects resulting from human-caused disturbances.

Management Actions

- TE-063: Evaluate all projects and activities occurring on public lands within the planning area to ensure they will not contribute to the need to list the yellow-billed cuckoo as threatened or endangered under the ESA.
- VM-008: Where and when practicable, develop new riparian habitat and restore damaged or degraded areas along the lower Colorado River and Gila River for the protection of yellow-billed cuckoo and other riparian or floodplain associated species. Install facilities to protect restoration sites as needed.
- VM-013: Manage for large, contiguous blocks of native riparian habitat (>30 acres) for yellow-billed cuckoo in conjunction with removal of competing exotic species (such as salt cedar).
- VM-015: Promote regeneration of native vegetation in riparian areas for yellow-billed cuckoo by minimizing impacts from land/resource uses such as livestock grazing, water diversion, inundation, wood cutting, and OHV travel.

Administrative Actions

- AA-145: Collaborate with Federal and State agencies, and private organizations conducting research, survey, and monitoring of yellow-billed cuckoo to develop region-wide conservation strategies.
- AA-146: Restore reaches of riparian habitat by encouraging private/public partnerships for fencing and habitat restoration through Federal, State, and non-government programs.
- AA-147: Survey and monitor riparian vegetation areas that are currently regenerating to determine occupancy by yellow-billed cuckoo.

2.8.3 STATE-LISTED SPECIES

The species listed in this section are those with specific management guidelines applicable to the planning area. YFO carries out management for the conservation of animals listed by California and Arizona. State laws protecting these species apply to all BLM programs and actions to the extent that they are consistent with FLPMA and other Federal laws. These Approved RMP decisions aim to assist California and Arizona in achieving their management objectives for State-listed species.

A. BALD EAGLE

Management Actions

- TE-064: Adopt and implement the *National Bald Eagle Management Guidelines* (USDOI USFWS 2007) and the *Conservation Assessment and Strategy for the Bald Eagle in Arizona, Manager's Guide* (Driscoll et al. 2006), and any future plan revisions for this species.

B. BURROWING OWL

Desired Future Conditions

- TE-065: The planning area provides suitable habitats of sufficient quality and quantity with adequate patch sizes that could support burrowing owls.
- TE-066: Burrowing animals, which are essential to creating nest sites for burrowing owls, are conserved.
- TE-067: The planning area maintains large, contiguous areas of treeless, native grasslands for burrowing owls.

Management Actions

- TE-068: Adopt and implement conservation strategies outlined by the AGFD and CDFG for burrowing owls.
- TE-069: Place artificial nest boxes for burrowing owls no closer apart than 360 feet. Artificial burrows should not be placed 165 to 330 feet from the original burrow.
- TE-070: Reintroduce burrowing owls in areas that have approximately 55 percent (40–70 percent) bare ground and average shrub cover of <15 percent.
- TE-071: Restrict lethal burrowing mammal control when burrowing owls are not nesting or not choosing nest sites.
- TE-072: Prohibit the use of traps, poisoned meat, or poisoned grain for rodent control. Rather, burrows unoccupied by owls should be fumigated.
- TE-073: Pesticide should not be sprayed within 1,300–2,000 feet of burrowing owl nest sites during the breeding season.

Administrative Actions

- AA-148: Educate private landowners and the general public about the status of burrowing owls, including how domestic cats have a negative impact on burrowing owl abundance.

C. CACTUS FERRUGINOUS PYGMY-OWL

Desired Future Conditions

- TE-074: All currently known CFPOs (since 1993) and the integrity of their territories, including adequate dispersal habitat are protected. An interconnected system of habitat patches, extending from the northern portion of their historical range south to areas in Mexico, are identified and maintained. Threats or limiting factors to the persistence of CFPOs are reduced or eliminated.
- TE-075: The planning area provides well-distributed habitat capable of contributing to the survival and recovery of self-sustaining populations of CFPO. Habitat management for CFPO will consider the following features: (1) amount, quality, and distribution of habitat

patches; (2) juxtaposition and connectivity to dispersal habitat; and (3) influence of disturbance-related habitat degradation.

- TE-076: Manage key elements of CFPO habitat that include the following features:
 - Elevations below 4,000 feet within the biotic communities of Sonoran riparian deciduous woodlands; Sonoran riparian scrubland; mesquite bosques; xeroriparian communities; tree-lined drainages in semidesert, Sonoran savanna, and mesquite grasslands; and the Arizona Upland and lower Colorado River subdivisions of Sonoran desertscrub.
 - Nesting cavities located in trees including but not limited to cottonwood, willow, velvet ash (*Fraxinus velutina*), mesquite, paloverde, ironwood, and hackberry (*Celtis* spp.) with a trunk diameter of six inches or greater measured five feet from the ground, or large columnar cactus such as saguaro or organ pipe cacti (*Stenocereus thurberi*) greater than eight feet.
 - Multilayered vegetation (presence of canopy, midstory, and ground cover) provided by trees and cacti in association with shrubs such as acacia, prickly pear, desert hackberry (*C. pallida*), graythorn (*Ziziphus obtusifolia*) and ground cover such as triangle-leaf bursage (*Ambrosia deltoidea*), burroweed (*Isocoma tenuisecta*), grasses, or annual plants.
 - Vegetation providing mid-story and canopy-level cover (this is provided primarily by trees greater than seven feet in height) in a configuration and density compatible with CFPO flight and dispersal behaviors. Within 49.21-foot-radius plots centered on nests and perch sites, AGFD has documented the mean number of trees and average height of trees per plot in Sonoran desertscrub and semidesert grassland areas. The mean number of trees per plot in Sonoran desertscrub was 12.5 with a mean height of 12.96 feet. The mean number of trees in semidesert grassland was 28.5 with a mean height of 26.57 feet. Habitat elements configured and human activity levels minimized so that unimpeded use, based on CFPO behavioral patterns (typical flight distances, activity level tolerance, etc.) can occur during dispersal and within home ranges (the total area used on an annual basis).

Management Actions

- TE-077: During prescribed fires, protect mesquite and other trees and shrubs along riparian and xeroriparian areas and all saguaros to provide potentially suitable habitat for CFPOs.
- TE-078: Consider restrictions on special use permits and special closure stipulations for public access, where appropriate to protect CFPOs. Activities such as intensive or frequent discharge of firearms (e.g., target practicing) should be restricted within 0.25 mile of active CFPO territories during critical periods of the breeding season (February 1–July 31).
- TE-079: Restrict or redirect activities which concentrate cattle or create other disturbances near active CFPO territories (site occupancy determined on an annual basis through surveys and monitoring) during the breeding season, if such activities show evidence as being detrimental to CFPOs.
- RR-005: Within 0.25 mile of active CFPO territories, restrict recreational activities permitted through SRPs which concentrate large numbers of people or vehicles (e.g., hike-a-thon, motor cross rally, four-wheel-drive or OHV rally, cross-country races, mountain bike races) during critical periods of the breeding season.

Administrative Actions

- AA-149: Support research to study the life history and habitat requirements of CFPO.
- AA-150: Complete survey and monitoring of CFPOs to understand population demographics, dispersal movement and habitats, and genetic diversity and isolation.
- AA-151: Use existing vegetation and soils maps, coupled with verification on the ground, to identify habitat areas potentially suitable for the CFPO. Once potential suitability has been identified, these areas should be systematically surveyed (using a multi-year survey approach) to determine occupancy by CFPOs.
- AA-152: Initiate a process for augmenting existing imperiled CFPO population segments and establishing CFPOs in areas that appear suitable, but are presently unoccupied, or into areas that have been modified by enhancing some habitat characteristics for CFPOs.
- AA-153: Provide public education and outreach to increase public awareness on the importance of survival and recovery of CFPOs.

D. FLAT-TAILED HORNED LIZARD

Desired Future Conditions

- TE-080: Self-sustaining populations of FTHL are maintained in perpetuity. Loss or degradation of FTHL habitat is minimized, and effective habitat corridors between naturally adjacent populations are maintained or established.

Management Actions

- TE-081: Adopt and implement the revised FTHL Rangewide Management Strategy (FTHL Interagency Coordinating Committee 2003), and any future plan revisions.
- TE-082: Limit the loss of habitat and effects on FTHL populations through the application of effective mitigation and compensation.
- LR-068: Using compensation or other funds, acquire currently unprotected or potential FTHL habitat within management areas in accordance with established priorities and/or criteria. Participate in land exchanges where opportunities arise to acquire key habitat within management areas.

Administrative Actions

- AA-154: Promote the purposes of the FTHL conservation strategy through law enforcement and public education.
- AA-155: Encourage and support research that would promote the conservation of FTHLs or desert ecosystems.
- AA-156: Conduct inventory and monitoring of FTHL populations and habitats.
- AA-157: Seek funding to acquire key land parcels to protect FTHL and suitable habitat in the management areas.

E. SONORAN DESERT TORTOISE

Desired Future Conditions

- TE-083: Category I and II Sonoran desert tortoise habitat retain all natural shelter sites (boulders, caliche caves, or similar features used by tortoises for sheltering), and maintain the land in an unfragmented state.
- TE-084: Sonoran desert tortoise habitat consists of at least five percent native perennial grasses, at least 10 percent native perennial forbs or subshrubs, at least 30 percent native shrubs, and at least 30 percent native trees and cacti, by dry weight, as limited by the capability of the ecological site.
- TE-085: No net loss in quantity or quality of Category I and II Sonoran desert tortoise habitat will occur (Table 2-7).

Table 2-7
Goals and Criteria for Categories I, II, and III of Sonoran Desert Tortoise Habitat Areas

Item	Category I Habitat Areas	Category II Habitat Areas	Category III Habitat Areas
Category Goals	Maintain stable, viable populations and protect existing tortoise habitat values; increase populations, where possible.	Maintain stable, viable populations and halt further declines in tortoise habitat values.	Limit tortoise habitat and population declines to the extent possible by mitigating impacts.
Criterion 1	Habitat area essential to maintenance of large, viable populations.	Habitat area may be essential to maintenance of viable populations.	Habitat area not essential to maintenance of viable populations.
Criterion 2	Conflicts resolvable.	Most conflicts resolvable.	Most conflicts not resolvable.
Criterion 3	Medium to high density or low density contiguous with medium or high density.	Medium to high density or low density contiguous with medium or high density.	Low to medium density not contiguous with medium or high density.
Criterion 4	Increasing, stable, or decreasing populations.	Stable or decreasing populations.	Stable or decreasing populations.

Management Actions

- TE-086: Adopt and implement the Management Plan for the Sonoran Population of the Desert Tortoise in Arizona (Arizona Interagency Desert Tortoise Team 1996), and any future plan revisions.
- TE-087: Adopt and implement to the extent practicable actions from the pending State of Arizona conservation agreement for the Sonoran desert tortoise.
- TE-088: Limit the loss of suitable habitat and effects on Sonoran desert tortoise populations through the application of effective mitigation and compensation.
- TE-089: Compensate for residual project impacts in accordance with the Compensation for the Desert Tortoise Report (Desert Tortoise Compensation Team 1991). Compensation for loss of Sonoran desert tortoise habitat is required according to BLM policy.

- TE-090: If adverse impacts to Sonoran desert tortoise habitat cannot be mitigated on site, compensation in the form of land or moneys deposited to a fund for the purpose of acquiring desert tortoise habitat will be pursued.
- GM-018: Locate new livestock waters at least two miles from Category I and II Sonoran desert tortoise habitat.
- GM-019: Exclude range improvement projects within Category I and II Sonoran desert tortoise habitat, including water developments, which will create conflicts with Sonoran desert tortoise populations.
- GM-020: Manage rangelands within Category I and II Sonoran desert tortoise habitat to increase distribution and density of native perennial grasses for Sonoran desert tortoise. Stock cattle only under the following criteria: 280 pounds/acre (dry weight) of succulent ephemeral forage present, consumption of forage never to result in reduction of the biomass of spring annuals to levels below 54 pounds/acre, and cattle densities not to exceed those traditionally specified to protect winter forage species for domestic grazers.
- GM-021: Within Category I and II Sonoran desert tortoise habitat, defer grazing (or rest pastures) from spring green-up, which is concurrent with desert tortoise emergence, through October, to include peak Sonoran desert tortoise activity (August–October) and emergence of young. Allow winter-spring ephemeral grazing only, if sufficient soil moisture is present, to produce and maintain a standing crop of forage plants adequate to support the number of livestock to be turned out as well as provide for other resource values (e.g., ground cover, wildlife forage, seed source) for the entire grazing period. After a fire exclude livestock grazing at least for one growing season.
- GM-022: Prohibit feeding of roughage, such as hay, hay cubes, or grain, to livestock within Category I and II Sonoran desert tortoise habitat.
- LR-063: Retain Sonoran desert tortoise habitat in public ownership, unless land disposal through an exchange provides greater benefits to desert tortoises.
- MI-018: Assess all mining plans of operations for potential impacts to Sonoran desert tortoise habitat on a case-by-case basis. Adverse impacts to desert tortoise will be mitigated to the extent allowable in BLM 3809 regulations.
- MI-023: No salable mineral materials permits will be authorized in Category I and II Sonoran desert tortoise habitat.

Administrative Actions

- AA-158: Update Sonoran desert tortoise categorization maps (Category I, II, and III habitat areas) based on new inventory information that meets the criteria in Table 2-7.
- AA-159: Monitor and evaluate vegetation use by large ungulates and trends in site conditions in designated Sonoran desert tortoise habitats.
- AA-160: Enhance public awareness of Sonoran desert tortoise habitat management and species conservation through educational and interpretive programs.
- AA-161: Support research and interagency collaboration that will promote the conservation of Sonoran desert tortoise or desert ecosystems.

2.9 LIVESTOCK GRAZING MANAGEMENT

The YFO manages livestock grazing in both the YFO planning area and the LHFO Planning area. This Approved RMP identifies lands that are available and unavailable for grazing in the two planning areas. BLM-administered lands available for livestock grazing are presented in Table 2-8 and Map 2-7.

The Arizona Guidelines for Grazing Administration are a series of management practices used to ensure that grazing activities meet the Land Health Standards. The Arizona Standards for Rangeland Health and Guidelines for Grazing Administration apply to all allotments within the planning area.

Table 2-8
Approved RMP Livestock Grazing Availability

Available/Unavailable for Livestock Grazing	Approved RMP BLM Acres
Available YFO	428,300
Available LHFO	215,200*
Unavailable YFO	889,700

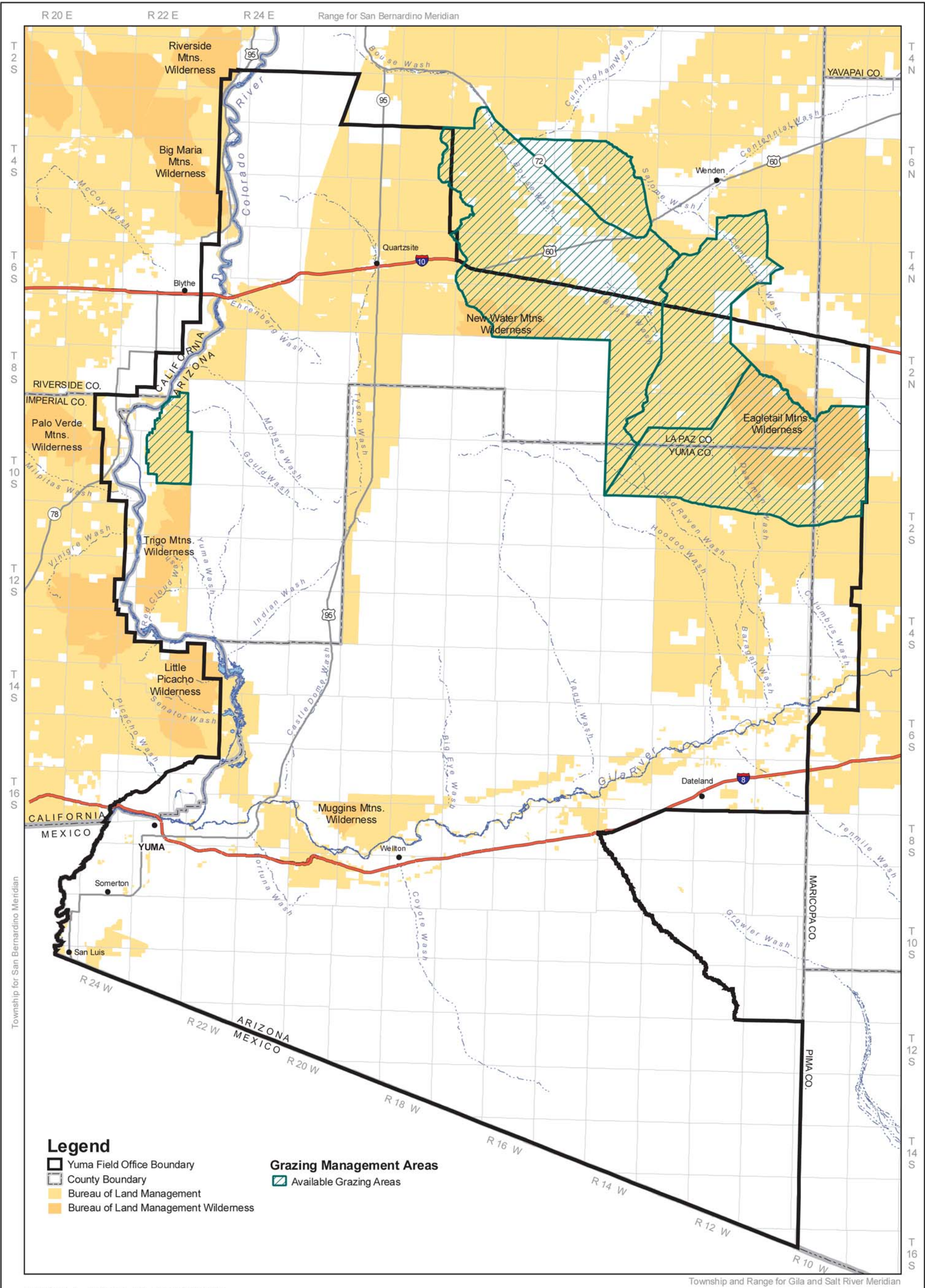
BLM = Bureau of Land Management; YFO = Yuma Field Office; LHFO = Lake Havasu Field Office

*215,200 acres available in LHFO, managed by YFO.

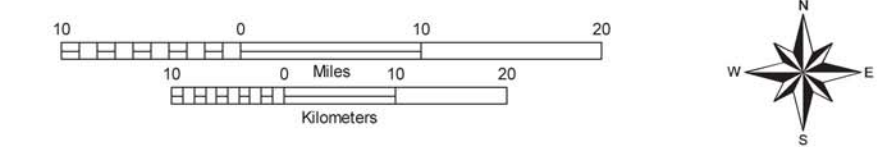
Desired Future Conditions

- GM-001: Arizona Guidelines for Grazing Administration to meet Land Health Standard 1
 - 1-1. Management activities will maintain or promote ground cover that will provide for infiltration, permeability, soil moisture storage, and soil stability appropriate for the ecological sites. The ground cover should maintain soil organisms and plants and animals to support the hydrologic and nutrient cycles, and energy flow. Ground cover and signs of erosion are surrogate measures for hydrologic and nutrient cycles and energy flow.
 - 1-2. When grazing practices alone are not likely to restore areas of low infiltration or permeability, land management treatments may be designed and implemented to attain improvement.
- GM-002: Arizona Guidelines for Grazing Administration to meet Land Health Standard 2
 - 2-1. Management practices maintain or promote sufficient vegetation to maintain, improve or restore riparian-wetland functions of energy dissipation, sediment capture, groundwater recharge and stream bank stability, thus promoting stream channel morphology (e.g., gradient, width/depth ratio, channel roughness and sinuosity) and functions appropriate to climate and landform.
 - 2-2. New facilities are located away from riparian-wetland areas if they conflict with achieving or maintaining riparian-wetland function. Existing facilities are used in a way that does not conflict with riparian-wetland functions or are relocated or modified when incompatible with riparian-wetland functions.

- 2-3. The development of springs and seeps or other projects affecting water and associated resources shall be designed to protect ecological functions and processes.
- GM-003: Arizona Guidelines for Grazing Administration to meet Land Health Standard 3
 - 3-1. The use and perpetuation of native species will be emphasized. However, when restoring or rehabilitating disturbed or degraded rangelands, non-intrusive, non-native plant species are appropriate for use where native species (a) are not available, (b) are not economically feasible, (c) cannot achieve ecological objectives as well as non-native species, and/or (d) cannot compete with already established non-native species.
 - 3-2. Conservation of Federal threatened or endangered, proposed, candidate, and other special status species is promoted by the maintenance or restoration of their habitats.
 - 3-3. Management practices maintain, restore, or enhance water quality in conformance with State or Federal standards.
 - 3-4. Intensity, season and frequency of use, and distribution of grazing use should provide for growth and reproduction of those plant species needed to reach desired plant community objectives.
 - 3-5. Grazing on designated ephemeral (annual and perennial) rangeland may be authorized if the following conditions are met:
 - Ephemeral vegetation is present in draws, washes, and under shrubs and has grown to useable levels at the time grazing begins;
 - Sufficient surface and subsurface soil moisture exists for continued plant growth;
 - Serviceable waters are capable of providing for proper grazing distribution;
 - Sufficient annual vegetation will remain on site to satisfy other resource concerns (i.e., watershed, wildlife, wild horse and burro); and
 - Monitoring is conducted during grazing to determine if objectives are being met.
 - 3-6. Management practices will target those populations of noxious weeds that can be controlled or eliminated by approved methods.
 - 3-7. Management practices to achieve desired plant communities will consider protection and conservation of known cultural resources, including historical sites, and prehistoric sites and plants of significance to Native American peoples.
- GM-004: Forage is provided on a sustained yield basis for livestock consistent with meeting Land Health Standards and multiple use objectives.
- GM-005: Livestock use and associated management practices are conducted in a manner consistent with other multiple-use needs and objectives to ensure that the health of rangeland resources is preserved or improved so that they are productive for all rangeland values. Where needed, improve public rangeland ecosystems to meet objectives.
- GM-006: Healthy, sustainable rangeland ecosystems are maintained or improved to meet *Standards and Guidelines* (USDOI BLM 1997) and produce a wide range of public values such as wildlife habitat, livestock forage, recreation opportunities, clean water, and functional watersheds.



**YUMA FIELD OFFICE
RECORD OF DECISION
APPROVED RESOURCE MANAGEMENT PLAN**



Map 2-7: Livestock Grazing Management



U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Yuma Field Office
January 2010



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

Management Actions

- GM-007: Make 428,300 acres available for livestock grazing in the YFO planning area.
- GM-008: Make 215,200 acres available for livestock grazing in the LHFO planning area.
- GM-009: Make 889,700 acres unavailable for livestock grazing by removing 12 inactive livestock grazing allotments encompassing 577,300 acres from availability and continuing to make 312,400 acres unavailable for livestock grazing.
- GM-010: Guidelines for grazing administration, as approved in the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration, apply to all livestock grazing activities.
- GM-011: Authorize and maintain range improvement projects in accordance with grazing regulations and policies.
- GM-012: Allotments may be classified as ephemeral through Rangeland Health Assessments in accordance with the Special Ephemeral Rule published December 7, 1968 (Appendix F) when the following criteria are met:
 1. Rangelands are within the hot desert biome;
 2. Average annual precipitation is less than eight inches;
 3. Rangelands produce less than 25 pounds per acre of desirable forage grasses;
 4. The vegetative community is composed of less than five-percent desirable forage species;
 5. The rangelands are generally below 3,500 feet in elevation;
 6. Annual production is highly unpredictable and forage availability is of a short duration;
 7. Usable forage production depends on abundant moisture and other favorable climatic conditions; and
 8. Rangelands lack potential to improve existing ecological status and produce a dependable supply of forage through intensive rangeland management practices.
- GM-013: Continue to use the allotment management categorization process to define the level of management needed to properly administer livestock grazing according to management needs, resource conflicts, potential for improvement, and BLM funding/staffing constraints. The allotment categories are:
 - o Custodial (C), custodial management to protect resource conditions and values,
 - o Maintain (M), management to maintain current satisfactory resource conditions and active management to ensure that the conditions of resource values do not decline, and
 - o Improve (I), active management to improve unsatisfactory resource conditions.
- GM-014: Change the category of grazing allotments as objectives are accomplished and/or conditions change.
- GM-015: Prohibit domestic sheep and goat grazing within nine miles of desert bighorn sheep habitat to avoid disease transmission according to BLM guidelines, including IM 98-140 Revised Guidelines for Management of Domestic Sheep and Goats in Native Wild Sheep Habitat.
- GM-016: Grazing for commercial purposes will not be allowed within designated ACECs.
- GM-017: Design livestock fences or modify existing fences to facilitate pronghorn movement. Traditional livestock fencing can impede or prevent pronghorn movement and

create habitat fragmentation. Habitat fragmentation can result in genetic isolation, herd extirpation, and periodic winter kills.

- GM-018: Locate new livestock waters at least two miles from Category I and II Sonoran desert tortoise habitat.
- GM-019: Exclude range improvement projects within Category I and II Sonoran desert tortoise habitat, including water developments, which will create conflicts with Sonoran desert tortoise populations.
- GM-020: Manage rangelands within Category I and II Sonoran desert tortoise habitat to increase distribution and density of native perennial grasses for Sonoran desert tortoise. Stock cattle only under the following criteria: 280 pounds/acre (dry weight) of succulent ephemeral forage present, consumption of forage never to result in reduction of the biomass of spring annuals to levels below 54 pounds/acre, and cattle densities not to exceed those traditionally specified to protect winter forage species for domestic grazers.
- GM-021: Within Category I and II Sonoran desert tortoise habitat, defer grazing (or rest pastures) from spring green-up, which is concurrent with desert tortoise emergence, through October, to include peak Sonoran desert tortoise activity (August–October) and emergence of young. Allow winter-spring ephemeral grazing only, if sufficient soil moisture is present, to produce and maintain a standing crop of forage plants adequate to support the number of livestock to be turned out as well as provide for other resource values (e.g., ground cover, wildlife forage, seed source) for the entire grazing period. After a fire exclude livestock grazing at least for one growing season.
- GM-022: Prohibit feeding of roughage, such as hay, hay cubes, or grain, to livestock within Category I and II Sonoran desert tortoise habitat.
- GM-023: Allow existing livestock grazing operations and support facilities to continue within lands being managed to maintain wilderness characteristics.
- GM-024: No grazing leases will be authorized within the 100-year floodplain of the Colorado or Gila rivers.
- GM-025: Limit domestic livestock utilization of native riparian trees along stream reaches occupied by Gila topminnow, bonytail chub, and desert pupfish to 30 percent of the apical stems per growing season.
- VM-042: Minimize BLM-authorized ground-disturbing activities in VHAs to protect focal plant species-populations. Land use authorizations for activities such as mineral extraction and livestock grazing would generally not be approved.
- TM-021: During the construction of rangeland developments, vehicles will use designated routes wherever possible for access to sites. Where no routes exist, vehicles will be authorized on a case-by-case basis to travel cross-country to avoid the need for road building. Where new roads must be built, roadbeds will be no wider than needed for reliable access. As a general practice, new roads will not be bladed for use in fence construction. Vehicles will travel cross-country or fences will be built without motorized access.

Administrative Actions

- AA-162: A majority of the perennial/ephemeral allotments have monitoring studies established at key areas. Monitoring data collected includes climatic information, actual use, utilization, and trend in condition. These studies will continue to be collected periodically, as necessary to ensure that current grazing management continues to meet or is making progress towards existing goals and objectives.
- AA-163: In accordance with established schedules, individual allotments will be evaluated for compliance with the *Standards and Guidelines*. The criteria for the Special Ephemeral Rule will be addressed during these evaluations.
- AA-164: All grazing allotments within the Approved RMP area will be assessed in accordance with the Arizona Standards for Rangeland Health prior to October 1, 2009. If the assessment finds that an allotment does not meet or is not making significant progress to meet the Land Health Standards, management actions to correct the deficiency will be implemented in accordance with the grazing regulations at 43 CFR 4100. During assessments, each allotment will be analyzed in relation to the criteria for classifying allotments as ephemeral, as enumerated in the Approved RMP.

2.10 WILD HORSE AND BURRO MANAGEMENT

BLM is the managing agency responsible for protecting wild horses and burros and their habitat on BLM-administered public lands. The management of wild horses and burros on public lands is accomplished at the minimum level necessary to assure the herd's free-roaming character, health, and self-sustaining ability. BLM YFO manages one Herd Area (HA) and one HMA that share identical boundaries. In Arizona, the Cibola-Trigo HMA supports both wild horses and burros. In southwestern California, only the wild burro roams between the Colorado River and the Chocolate/Mules and Picacho HMAs. The Approved RMP HA and HMA boundary is shown in Table 2-9 and Map 2-8.

Table 2-9
Approved RMP Wild Horse and Burro Herd and Herd Management Areas

Herd and Herd Management Areas	Approved RMP BLM Acres
Herd Area (historic)	263,700
Cibola-Trigo HMA	179,000

BLM=Bureau of Land Management; HMA = Herd Management Area

Desired Future Conditions

- HB-001: A viable and sustainable population of wild, free roaming horses and burros in the Cibola-Trigo HMA is maintained, while maintaining a thriving natural ecological balance with other resources and consistent with other management agencies objectives.
- HB-002: Wild horses and burros will be managed in areas adjacent to the NWRs on the Colorado River in accordance with mutual agreements established for resource protection to

meet the National Refuge management objectives. This includes agreed upon use levels for key forage species currently identified.

- TE-025: Wild horse and burro abundance is in ecological balance with existing Mojave desert tortoise and other wildlife populations.

Management Actions

- HB-003: The Appropriate Management Level (AML₂) for the Cibola-Trigo HMA will be 165 burros and 150 horses. Monitoring data, including climate, population, and vegetative data, will be collected and used to support removals and/or the revision of AML₂ for either wild horses, burros, or both.
- HB-004: Reduce the Cibola-Trigo HMA to 179,000 acres. The HMA boundary has been adjusted to only include those portions of the HA west of Highway 95 and south of I-10.
- HB-005: NWRs are not included within the boundaries of the Cibola-Trigo HMA. Imperial and Cibola NWRs currently allow burro use if impacts to xeroriparian vegetation are kept to a minimum by maintaining the AML₂.
- HB-006: YFO will mitigate loss of access to water along the Colorado River due to changing land use by either providing fenced access routes or developing new sources of water.
- HB-007: Identify objectives for herd composition, animal characteristics, and habitat development. The AML₂ may be adjusted based on monitoring data and subsequent evaluations.
- HB-008: Wild horses and burros utilizing the HA east of Highway 95 will be removed due to animal safety and health issues. Wild horses may be relocated into the HMA to the extent that they would not exceed the AML₂; all others will be offered for adoption through the Wild Horse and Burro Adoption Program.

Administrative Actions

- AA-165: Conduct population status and rangeland condition assessments periodically for population trend monitoring and habitat condition evaluation. Collect relevant and essential background information using established protocol.
- AA-166: Review current herd management directions and rangeland conditions of the Cibola-Trigo HMA. Identify relevant changes in management directions to ensure multiple-use and ecological sustainability in the Cibola-Trigo HMA supporting the wild horses and burros.
- AA-167: Conduct herd monitoring annually in accordance with established protocol. Monitoring data will be used for periodic review of the AML₂ and guide animal removal decisions.

2.11 RECREATION MANAGEMENT

BLM's multiple-use mission is to serve the diverse outdoor recreation demands of visitors while helping maintain the sustainable conditions needed to conserve their lands and their recreation choices.

YFO currently manages seven developed recreation sites that charge amenity recreation fees under the authority of the Federal Lands Recreation Enhancement Act (FLREA). Federal regulations in place under the authority of FLPMA enable the BLM to collect SRP fees for organized groups, commercial uses, competitive events, and use of specially designated public lands, such as the planning area's two LTVAs.

Approved RMP decisions concerning OHV and other trail-based recreation activities are in Section 2.12 Travel Management. Approved RMP decisions involving concession leases are in Section 2.18 Lands and Realty Management.

2.11.1 PLANNING AREA-WIDE MANAGEMENT

Desired Future Conditions

- RR-001: Public understanding and appreciation of the planning area's natural and cultural history and sensitive resources are enhanced through educational outreach and heritage tourism opportunities.
- RR-002: Where appropriate, recreational facilities are constructed or modified so they are accessible to people with disabilities in accordance with the Architectural Barriers Act of 1968 and Section 504 of the Rehabilitation Act of 1973, as amended, and in conformance with relevant building standards, accessible outdoor program guidance, and program regulations.
- RR-003: Ample recreation opportunities are provided on BLM-administered lands within the 100-year floodplains of the lower Colorado and Gila rivers.
- CL-004: Historic trails, including the Anza Trail, Butterfield Overland Mail Route, Gila Trail, and Mormon Battalion Trail, are managed to realize their educational, recreational, and scientific values.

Management Actions

- RR-004: Collect amenity recreation fees at the Squaw Lake, Senator's Wash, North Shore, South Shore, Betty's Kitchen, Oxbow Recreation and Wildlife Area, and Ehrenberg Sandbowl recreation sites under the authority of FLREA and in accordance with the current YFO Recreation and Visitor Services Business Plan.
- RR-005: Authorize SRPs for competitive events, commercial activities, organized groups, and individual use of specially designated areas on a case-by-case basis or as determined appropriate in implementation-level management plans.

- Issue SRPs within ACECs, Public Use cultural resource sites, and special status species habitat if it is determined that adverse impacts can be avoided. Include stipulations in SRPs to protect sensitive resources.
 - Limit equestrian use authorized by SRPs to pre-selected trails.
 - Collect SRP fees for use of the La Posa and Imperial Dam LTVAs.
- RR-006: Continue implementing decisions from the La Posa Interdisciplinary Management Plan, the Ehrenberg–Cibola Recreation Area Management Plan, and the Oxbow Recreation and Wildlife Area Management Plan.
- RR-007: Construct recreational facilities throughout the planning area to protect public land resources, provide for public health and safety, and accommodate visitor use.
- RR-008: Where warranted by increased recreation demands and user and resource conflicts, expand the recreation fee program to additional BLM-administered lands. The development of new and expanded recreation fee sites will be contingent upon the completion of publicly reviewed recreation activity plans. Activity-level management plans must document the long-term compatibility of such proposals with the BLM’s multiple-use mission.
- RR-009: Install and maintain interpretive, informational, and educational materials and facilities at main points of access and interest throughout the planning area. Interpretive locations include, but are not limited to, recreation sites, parking areas, hiking trails, Public Use cultural resource sites, and Wilderness boundaries. Focus areas include the Blythe Intaglios Complex, non-Wilderness portions of the Big Marias ACEC, Sears Point ACEC core area, Dripping Springs ACEC core area, Betty’s Kitchen NRT, Anza Trail (see Map 2-1-1).
- RR-010: Limit the length of stay for overnight camping on BLM-administered lands to 14 days within any 28-day period. After 14 days, visitors must move to another campsite at least 25 miles away. This length of stay limit does not apply within recreation concession leases, public agency leases, LTVAs, and the Mittry Lake Wildlife Area.
- RR-011: Allow continuous overnight camping from September 15 to April 15 within the La Posa and Imperial Dam LTVAs.
- RR-012: Limit the length of stay for overnight camping at the Mittry Lake Wildlife Area to 10 days per calendar year.
- RR-013: Limit 106,000 acres of the La Posa Plain; 2,900 acres of the Big Marias ACEC (see Map 2-1-2); 640 acres of the Dripping Springs ACEC (see Map 2-1-1); and 3,700 acres of the Sears Point ACEC (see Map 2-1-3) to day-use only.
- RR-014: Expand the administrative boundary of the Oxbow Recreation and Wildlife Area as needed to benefit the recreational and/or riparian values of the lower Colorado River.
- RR-015: Identify a sufficient number of staging areas and base camps throughout the planning area for authorized SRP activities through collaboration with local agencies and organizations.
- RR-016: Install and maintain vehicle and pedestrian traffic counters on BLM-administered lands with high public use to improve the accuracy of visitor use monitoring data.

- RR-017: Protect at-risk cultural resources and special status plant and animal species from recreational damage as needed throughout the planning area. Protection measures could include, but are not limited, to fencing, signs, and trail realignments, restorations, and use limitations.
- RR-018: Implement appropriate developments necessary for protection and interpretation at Public Use cultural resource sites, including but not limited to installing registration boxes and interpretive signs; establishing non-motorized trails, including hardened walking trails within ¼ to ½ mile distance from sites; closing and converting to hiking trails or rehabilitating existing vehicle routes in close proximity to the site; and producing fact sheets or brochures.
- RR-019: Delineate base camps and install the appropriate facilities adjacent to Wilderness boundaries to accommodate equestrian use and hunting groups.
- RR-020: Post signs at fishing access points and at tackle shops clearly advising anglers of the potential to take razorback suckers and how to report and release captured fish. Signs should contain a clear photograph of a razorback sucker that can be used by anglers to identify the species.
- RR-021: Limit streambank vegetation alteration due to recreation activities in riparian areas along stream reaches occupied by Gila topminnow, bonytail chub, and desert pupfish.
- RR-022: Allow fishing, hunting, and trapping activities within lands being managed to maintain wilderness characteristics. AGFD retains jurisdiction and responsibilities with respect to fish and wildlife management and establishes regulations and enforcement for these uses.
- RR-023: Allocate 167,500 acres of public land as ERMAs.
- VM-018: Require use of native plant materials for landscaping at developed recreation sites within public lands.
- FM-030: Reduce and or remove hazardous fuels in recreation sites to improve public safety in coordination with the BLM Fire Management program.
- WS-021: Allow only those permanent new facilities that can be flood proofed within the 100-year floodplain. Existing permanent structures will be allowed to remain in the 100-year floodplain until they are inundated, their useful life is gone, or the present leases expire.

Administrative Actions

- AA-168: Update publicly reviewed Recreation and Visitor Services' Business Plans as needed to propose changes in the recreation fee program.
- AA-169: Develop and enhance partnerships and the YFO volunteer program to improve recreational opportunities and promote community stewardship of the public lands.
- AA-170: Enhance and expand the YFO's interpretive and outreach programs for the purposes of public education and resource protection.
- AA-171: Within the lower Colorado River floodplain, coordinate with Reclamation to (1) ensure that recreation projects do not affect water delivery and storage or the integrity of the

floodway and (2) ensure that impacts to recreation are considered during river management activities.

- AA-172: Determine the need for facilities within the designated Ehrenberg Sandbowl Open OHV Management Area to address public safety and resource protection concerns.
- AA-173: Work with interested cooperators to develop a proposal for the U.S. Board on Geographic Names to change the names of Squaw Lake and the Squaw Lake Campground.
- AA-174: Promote recreational opportunities for bird watching and photography. Recognize and promote economic and recreational values of birds, as appropriate.
- AA-175: Map and document cultural properties before interpretive development for Public Use, to the extent necessary to preserve archaeological data, plan for interpretive facilities, provide a baseline condition assessment for monitoring changes resulting from visitor use, and complete interpretive plans.
- AA-176: The YFO will continue to monitor and document the number of recreation permits sold and issued within the planning area and report these results into the BLM's Recreation Management Information System (RMIS) for local, statewide, and national analysis. Detailed counts of visitor use for several non-fee public lands with 14-day limits that are closely monitored by BLM staff and volunteers will also continue to be input into RMIS. Organized groups, commercial uses, and competitive events authorized through the BLM SRP program will continue to be monitored for compliance and effectiveness on an as-needed basis. Annual data collected on recreational activities (e.g., visitation, SRPs, and conditions of facilities) will be reported into RMIS and the Facilities Maintenance Information System. The collection of this recreation-oriented data will be tracked and reported on a five-year basis through the plan evaluation schedule.
- AA-177: A major component in more accurately monitoring visitor use within the YFO includes improving visitor counting capabilities on non-developed public lands. A detailed monitoring plan for recreational visitor use within the planning area will be developed that includes the use of motorized vehicle and pedestrian traffic counters, visitor registers, and/or other methods used to estimate visitor use levels. Detailed monitoring plans for potential recreational impacts to public land resources will be addressed during each available implementation-level planning opportunity tiered to this Approved RMP. These planning opportunities could include, but are not limited to, recreation management plans for SRMAs or RMZs, TMPs, ACEC Management Plans, or Cultural Resource Management Plans. Resource monitoring obligations and protocols generated through development of the above plans will be progressively included into the YFO's monitoring schedules. Monitoring activities will be accomplished through a combination of BLM and interagency staff, partnerships, volunteers, and contracted labor as monitoring plans are developed and funding becomes available.

2.11.2 RECREATION MANAGEMENT ALLOCATIONS

The BLM Land Use Planning Handbook outlines specific recreation management allocations to be made in RMPs, including SRMAs, ERMAs, RMZs, and Prescribed Recreation Settings. The Approved RMP allocates five SRMAs containing a total of 22 RMZs within the YFO planning area. Approved RMP Recreation Management allocations are presented in Table 2-10 and Map 2-9.

Table 2-10
Approved RMP Recreation Management Allocations

Recreation Management Area	Approved RMP BLM Acres	Recreation Management Zone
Colorado River Corridor Destination SRMA	149,000	Blythe Intaglios Heritage RMZ
		Ehrenberg–Cibola RMZ
		Trigo Mountains Wilderness RMZ
Gila River Valley Undeveloped SRMA	42,600	Agua Caliente Access RMZ
		Anza Trail RMZ
		Sears Point Heritage RMZ
Greater Yuma Community SRMA	122,700	Anza Trail RMZ
		Gila Mountains RMZ
		Imperial Dam RMZ
		Laguna Mountains RMZ
		Limitrophe RMZ
		Mittry Lake Wildlife Area RMZ
		Southern Desert Communities RMZ
		Urban Recreation Lands RMZ
La Posa Destination SRMA	310,300	Dripping Springs Heritage RMZ
		Highway 95 RMZ
		Intensive Camping RMZ
		Intensive Day-use RMZ
		Plomosa Road Access RMZ
		New Water Mountains Wilderness RMZ
Yuma East Undeveloped SRMA	526,900	Dispersed Use RMZ
ERMA	166,500	Eagletail Mountains Wilderness RMZ
Total BLM Acres	1,318,000	

BLM = Bureau of Land Management; ERMA = Extensive Recreation Management Area; RMZ = Recreation Management Zone; SRMA = Special Recreation Management Area

Desired Future Conditions for All SRMAs

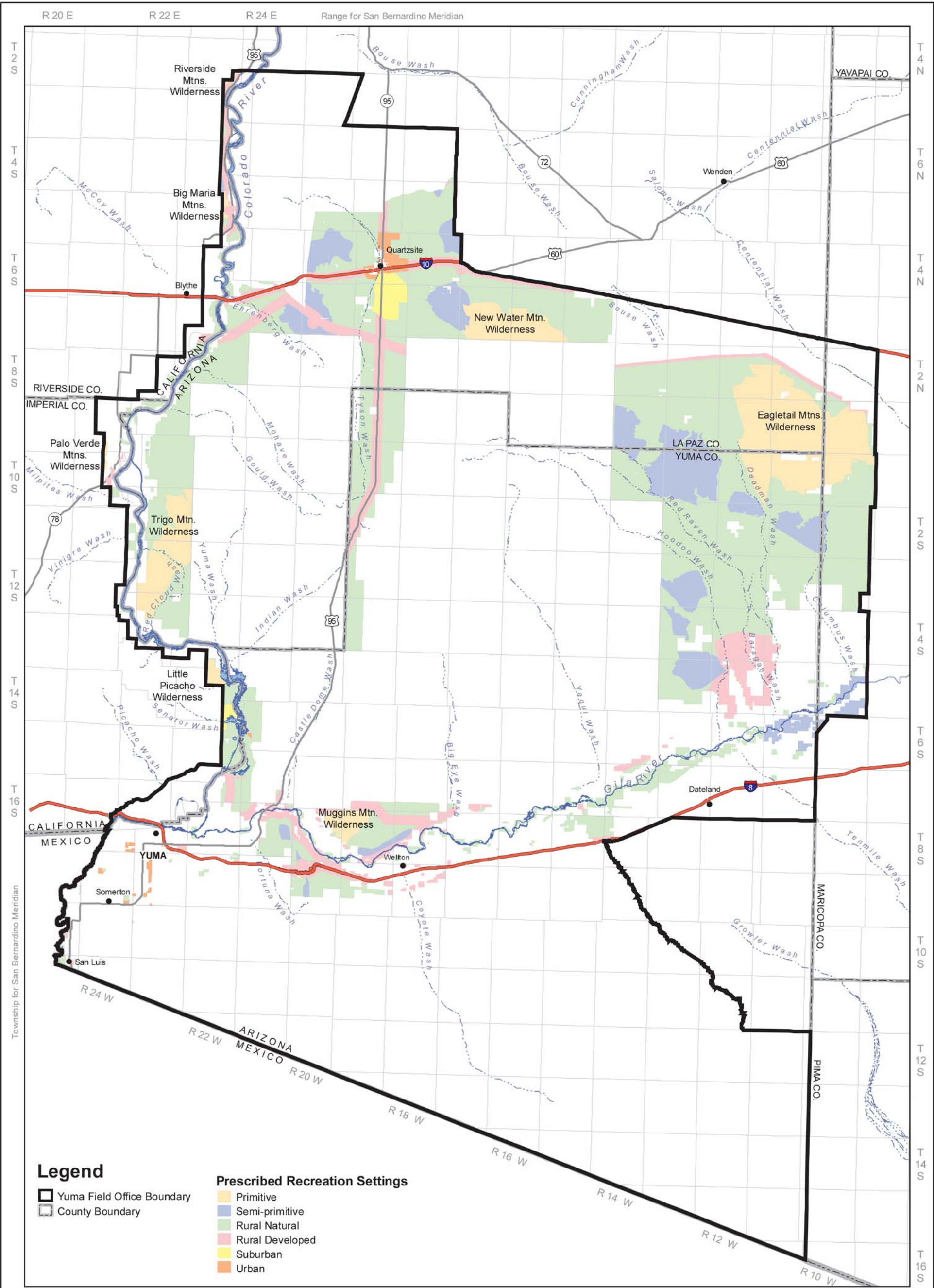
Desired Future Conditions for all SRMAs and RMZs are described as six different Prescribed Recreation Settings, ranging from Primitive to Urban. Each Prescribed Recreation Setting describes a unique set of recreational experiences and opportunities the YFO would aim to provide within SRMAs and RMZs. Table 2-11 and Map 2-10 convey the acreages of the six different types of Prescribed Recreation Settings for which the YFO will manage.

Table 2-11
Approved RMP Desired Future Conditions for Recreation Management

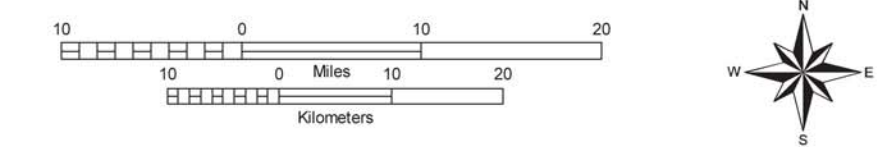
Prescribed Recreation Settings	Approved RMP BLM Acres
Primitive	166,500
Semi-primitive	146,600
Rural Natural	696,600
Rural Developed	124,400
Suburban	12,800
Urban	7,800

BLM=Bureau of Land Management

- RR-024: 166,500 acres of public land within the planning area provide Primitive recreation settings and opportunities. The primitive recreation setting provides extensive opportunities to see, hear, or smell the natural resources because development, human activity, and natural resource modifications are rare; opportunity to experience natural ecosystems with very little and no apparent human imprint is paramount; natural views, sounds, and smells dominate; a sense of solitude, tranquility, challenge, adventure, risk, orienteering, and self-reliance is important; a sense of freedom, tranquility, humility, relaxation, nature appreciation, wonderment, and stewardship is central and dominant; overnight visitors tent camp with no modern facilities; adventure travelers are often attracted to the undisturbed wild settings.
- RR-025: 146,600 acres of public land within the planning area provide Semi-primitive recreation settings and opportunities. The semi-primitive recreation setting provides widespread and very prevalent opportunities to see, hear, or smell the natural resources because development, human activity, and natural resource modifications are seldom encountered; opportunity to experience a natural ecosystem with little human imprint is important; a sense of challenge, adventure, risk, and self-reliance is important; solitude and lack of contact with other visitors, managers, and facilities is important; the recreation experiences tend to be more resource-based; a sense of independence, freedom, tranquility, relaxation, nature appreciation and wonderment, testing skills, and stewardship is typical; area provides opportunities for the more adventure-based enthusiasts. Overnight visits are typically car and tent camping far from modern conveniences and facilities. Knowledge of desert survival skills is critical to visitor safety. Topography, an absence of existing roads, or resource protection measures may limit motorized access.
- RR-026: 696,600 acres of public land within the planning area provide Rural Natural recreation settings and opportunities. The rural natural recreation setting provides prevalent opportunities to see, hear, or smell the natural resources because development, human activity, and natural resource modifications are occasional and infrequent; socialization with others is expected and tolerated; opportunity to relieve stress and to get away from built environment is important; a high sense of safety, security, comfort and convenience is not important nor expected; a sense of independence and freedom with a moderate level of management presence is important; moments of solitude, tranquility, and nature appreciation are important; experiences tend to be more resource-dependent, although may be diverse, ranging from relaxation and contemplation to socialization, to physical exertion and challenge; area is typically attractive to extended weekend visitors using recreation vehicles, tents, or rustic cabins.



**YUMA FIELD OFFICE
RECORD OF DECISION
APPROVED RESOURCE MANAGEMENT PLAN**



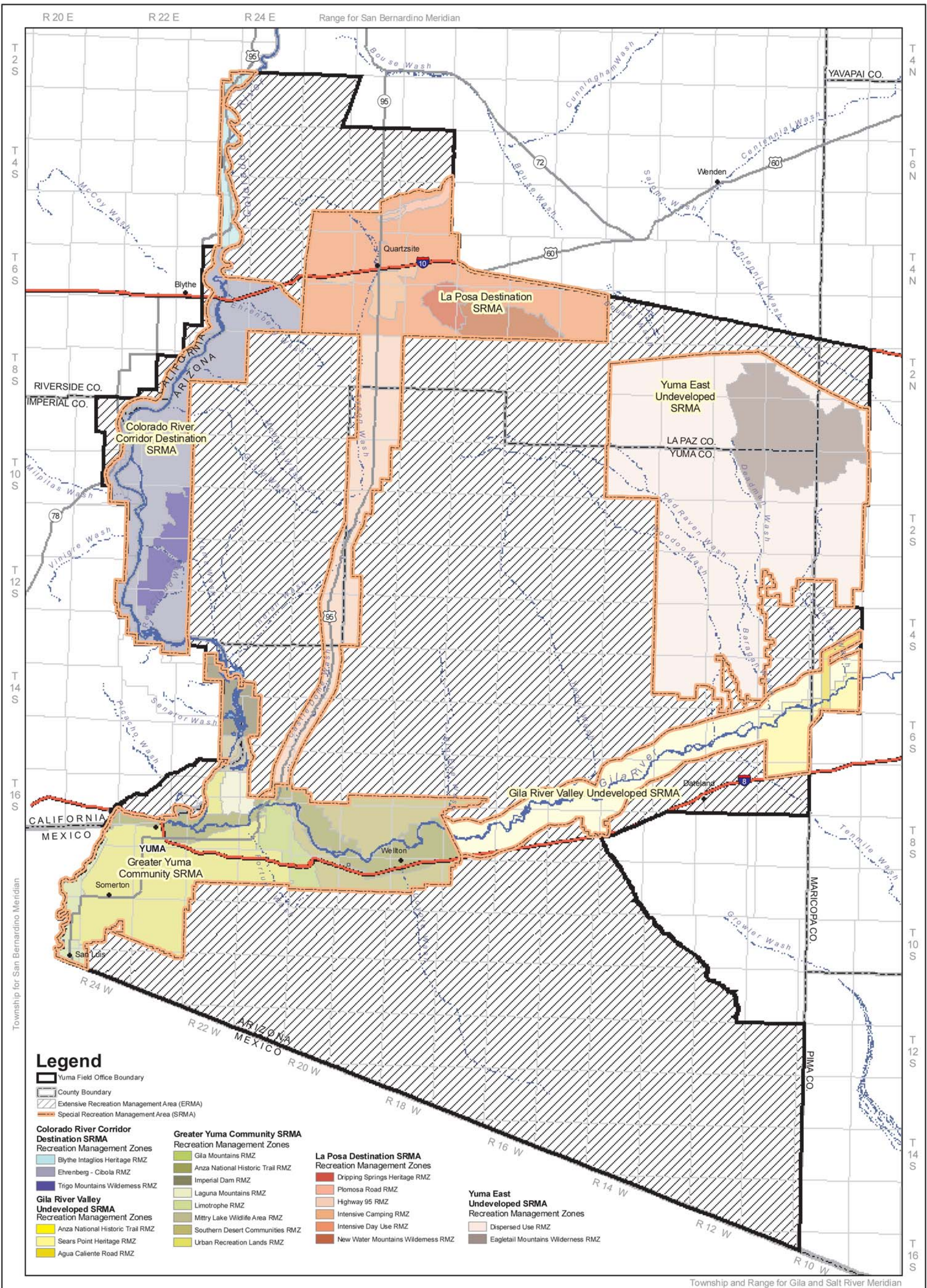
Map 2-9: Prescribed Recreation Settings



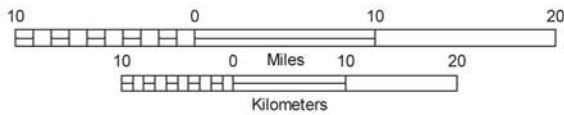
U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Yuma Field Office
January 2010



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



**YUMA FIELD OFFICE
RECORD OF DECISION
APPROVED RESOURCE MANAGEMENT PLAN**



U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Yuma Field Office
January 2010



Map 2-10: Recreation Management Allocations

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

- RR-027: 124,400 acres of public land within the planning area provide Rural Developed recreation settings and opportunities. The rural developed recreation setting provides occasional or periodic opportunities to see, hear, or smell the natural resources because of the common and frequent level of development, human activity, or natural resource modification; opportunity to experience brief periods of solitude and change from everyday sights and sounds is important; socialization within and outside one's group is typical and the presence of other visitors is expected; opportunity to relieve stress and to alter everyday routines is important; a moderate level of comfort and convenience is important; a sense of safety and security is important; the array of recreation activities may be diverse, ranging from relaxation and contemplation to physical exertion and challenge; area is typically attractive for day-use and weekend visits from regional metropolitan areas and smaller nearby communities.
- RR-028: 12,800 acres of public land within the planning area provide Suburban recreation settings and opportunities. The suburban recreation setting provides limited or little opportunity to see, hear, or smell the natural resources because of the widespread and very prevalent level of development, human activity, or natural resource modification; watching and meeting other visitors is expected and desired; opportunity to briefly relieve stress and to alter everyday routine is important; families are common; a high sense of safety, security, comfort, and convenience is central and dominant; the mix of recreation activities may be diverse, ranging from relaxation and contemplation to physical exertion, thrills, excitement, and challenge; learning about the natural and cultural history of the area is important to some; area is popular with local residents or long-term winter visitors.
- RR-029: 7,800 acres of public land within the planning area provide urban recreation settings and opportunities. The urban recreation setting provides very limited opportunities to see, hear, and smell the natural resources because of the extensive level of development, human activity, and natural resource modification. Watching and meeting other visitors is expected and desired; large group activities are popular; opportunity to briefly relieve stress and to alter everyday routines is important; socializing with family and friends is important; large groups and families are common; a high sense of safety, security, comfort, and convenience is central and dominant; the mix of recreation activities may be diverse, ranging from those of relaxation and contemplation to those of physical exertion, thrills, excitement and challenge. The setting is often attractive to short-term visitors, tours, and school groups; it may serve as a staging area for visitors traveling on to areas with non-urban recreation settings.

A. COLORADO RIVER DESTINATION SRMA AND RMZS

Desired Future Conditions

- RR-030: The primary recreation management strategy for the Colorado River Corridor SRMA will be to target the demonstrated regional destination tourism market. Public use of the SRMA varies by season. Family and groups from metropolitan centers in Arizona and California visit the SRMA primarily for water-based activities during the summer. During the winter, the SRMA is a destination for OHV riding, hunting, camping, horseback riding, cultural resource viewing, and fishing throughout the region.

- RR-031: The Benefits-Based Recreation Management Objective of the Blythe Intaglios Heritage RMZ is to provide recreational opportunities that are compatible with the ACEC and Wilderness resource values. The Blythe Intaglios Complex is promoted as a heritage tourism destination to enhance public understanding and appreciation of relevant and important resource values. Interpretation design and protection measures at the Blythe Intaglios Complex are improved in coordination with interested partners. The continued integrity of identified relevant and important resource values provides the public with opportunities to learn about the area's natural and cultural history through effective interpretation. Rugged and natural landscapes within the Big Maria Mountains Wilderness and Riverside Mountains Wilderness remain untrammelled and undeveloped for future generations to experience as they do today.
- RR-032: The Benefits-Based Recreation Management Objective of the Ehrenberg–Cibola RMZ is to maintain the wide range of water-based and OHV-based recreational opportunities for the public's enjoyment. The facilities at the Ehrenberg Sandbowl and Oxbow Recreation and Wildlife Area are maintained and upgraded as needed to meet recreational demands and public health and safety requirements.
- RR-033: The Benefits-Based Recreation Management Objective of the Trigo Mountains Wilderness RMZ is to ensure that recreational activities remain compatible with the natural, cultural, and Wilderness resource values within the RMZ. Rugged and natural landscapes within the RMZ remain untrammelled and undeveloped for future generations to experience as they do today.

Management Actions

- RR-034: Allocate the 149,000-acre Colorado River Corridor Destination SRMA.
- RR-035: Allocate the Blythe Intaglios Heritage RMZ within the Colorado River Corridor Destination SRMA. This RMZ encompasses the Big Marias ACEC, Big Marias SCRMA, and portions of two Wildernesses. The Blythe Intaglios Complex within the Big Marias ACEC provides cultural resource viewing opportunities that have the potential to educate visitors about the rich prehistoric cultures that thrived along the lower Colorado River. The Big Maria Mountains and Riverside Mountains Wilderness provide primitive non-motorized recreation opportunities. Additional Approved RMP decisions for these public lands can be found in Sections 2.3.4 ACEC, 2.14.1 SCRMA, and 2.3.1-A Designated Wilderness.
- RR-036: Allocate the Ehrenberg–Cibola RMZ within the Colorado River Corridor Destination SRMA. This RMZ provides a wide range of water-based recreation opportunities on the lower Colorado River and trail-based recreation opportunities within the adjacent desert landscapes. A majority of the RMZ is undeveloped, providing some of the last remaining opportunities for isolated and unconfined recreation along the lower Colorado River.
- RR-037: Allocate the Trigo Mountains Wilderness RMZ within the Colorado River Corridor Destination SRMA. This RMZ encompasses the Trigo Mountains Wilderness. The RMZ's numerous desert woodland washes provide some of the best horseback riding opportunities within the YFO. Historic mining operations south of the Trigo Mountains provide outstanding heritage tourism and rock hounding opportunities. Challenging outdoor adventures to hike, camp, and hunt also exist throughout the RMZ's rugged terrain.

Additional Approved RMP decisions for these public lands can be found in Section 2.3.1-A Designated Wilderness.

Administrative Actions

- AA-178: Promote the following environmental education programs and topics to ensure that recreational activities remain sustainable within the Colorado River Corridor Destination SRMA: Tread Lightly!, Leave No Trace, wildland fire prevention and mitigation, Stop Aquatic Hitchhikers!, invasive species prevention, archaeological ethics, natural and cultural history of the lower Colorado River, desert survival skills, and OHV safety.
- AA-179: Coordinate and form partnerships with the following agencies and groups for comprehensive and collaborative management of the Colorado River Corridor Destination SRMA: AGFD, Arizona State Lands Department, BLM El Centro Field Office, BLM Palm Springs/South Coast Field Office, CDFG, Arizona and California SHPOs, Cibola NWR, City of Blythe, Imperial County, Imperial NWR, La Paz County, Reclamation, Riverside County, Native American tribes and groups, Sonoran Desert Invasive Species Council, Southern Low Desert Resource Conservation and Development Council, Town of Cibola, Town of Ehrenberg, Town of Palo Verde, United Desert Gateway, U.S. Army Corps of Engineers, USFWS, and YPG.
- AA-180: Focus recreation management within the Blythe Intaglios Heritage RMZ to provide sustainable opportunities for cultural resource viewing, natural landscape viewing, hiking, and hunting.
- AA-181: Focus recreation management within the Ehrenberg–Cibola RMZ to provide sustainable opportunities for camping, fishing, boating, swimming, OHV riding, hunting, horseback riding, and wildlife viewing.
- AA-182: Focus recreation management within the Trigo Mountains Wilderness RMZ to provide sustainable opportunities for horseback riding, hiking, camping, hunting, wildlife viewing, and rock hounding.

B. GILA RIVER VALLEY UNDEVELOPED SRMA AND RMZS

Desired Future Conditions

- RR-038: The primary recreation management strategy for the Gila River Valley SRMA will be to target the demonstrated undeveloped tourism market. Visitors come to this SRMA to enjoy dispersed hiking, hunting, fishing, and cultural resource viewing opportunities.
- RR-039: The Benefits-Based Recreation Management Objective of the Agua Caliente Access RMZ is to engage interested partners to provide effective resource interpretation, promote sustainable OHV ethics, and identify vehicle safety requirements focused on protecting the area's resource values.
- RR-040: The Benefits-Based Recreation Management Objective of the Anza Trail RMZ is to establish and maintain a recreational trail through collaborative partnerships that provides local residents with opportunities to learn about the natural and cultural history of the area and connect local communities to the public lands.

- RR-041: The Benefits-Based Recreation Management Objective of the Sears Point Heritage RMZ is to ensure that heritage-based recreation activities remain compatible with the ACEC's resource values. Opportunities to learn about the area's natural and cultural history through effective interpretation ensure the continued integrity of identified relevant and important resource values.

Management Actions

- RR-042: Allocate the 42,600-acre Gila River Valley Undeveloped SRMA.
- RR-043: Allocate the Agua Caliente Access RMZ within the Gila River Valley Undeveloped SRMA. This RMZ encompasses the proposed Agua Caliente National Back Country Byway corridor. The Agua Caliente Access RMZ has been allocated to link with potential RMP decisions from the adjacent BLM Lower Sonoran Field Office. The Agua Caliente Access RMZ provides exemplary vehicle-based landscape viewing opportunities. Additional Approved RMP decisions for these public lands are located in Section 2.3.3 National Byways.
- RR-044: Allocate the Anza Trail RMZ within the Gila River Valley Undeveloped SRMA. This RMZ represents portions of the Congressionally-designated Anza Trail corridor within the Gila River Valley Undeveloped SRMA. The trail corridor for this RMZ is also the location of the historic Gila Trail, Mormon Battalion Trail, and Butterfield Overland Stage Route, and also served as a prehistoric trade route between indigenous peoples of the Yuma and Phoenix areas. BLM supports the development of the Anza Trail for public recreational use; however, the YFO does not administer contiguous tracts of public land within this RMZ. Additional Approved RMP decisions for these public lands are located in Section 2.3.1-B NHTs.
- RR-045: Allocate the Sears Point Heritage RMZ within the Gila River Valley Undeveloped SRMA. This RMZ encompasses the Sears Point ACEC. The prolific petroglyphs within the Sears Point ACEC were created by an unusually diverse group of different indigenous cultures and provide cultural resource viewing opportunities. The unique geologic and riparian landscapes within the ACEC also provide exemplary landscape and wildlife viewing opportunities. Additional Approved RMP decisions for these public lands are located in Section 2.3.4 ACECs.

Administrative Actions

- AA-183: Promote the following environmental education programs and topics to ensure that recreational activities remain sustainable within the Gila River Valley Undeveloped SRMA: Tread Lightly!, Leave No Trace, archaeological ethics, invasive species prevention, wildland fire prevention and mitigation, Stop Aquatic Hitchhikers!, desert survival skills, natural and cultural history of the area, and OHV safety.
- AA-184: Coordinate and form partnerships with the following agencies and groups for comprehensive and collaborative management of the Gila River Valley Undeveloped SRMA: Anza Trail Coalition of Arizona, AGFD, Arizona State Parks, Arizona SHPO, BLM Lower Sonoran Field Office, Native American tribes and groups, NPS, Reclamation, Sonoran Desert Invasive Species Council, Town of Dateland, Town of Wellton, United Desert

Gateway, WMIDD, Yuma County, Yuma Historical Society, Yuma Trails, Inc., and private landowners.

- AA-185: Focus recreation management within the Agua Caliente Access RMZ to provide sustainable opportunities for OHV-based landscape viewing, auto-based landscape viewing, photography, and wildlife viewing.
- AA-186: Focus recreation management within the Anza Trail RMZ to provide sustainable opportunities for hiking, horseback riding, picnicking, mountain biking, camping, wildlife viewing, fishing, and learning about the area's natural and cultural history.
- AA-187: Focus recreation management within the Sears Point Heritage RMZ to provide sustainable opportunities for cultural resource viewing, hiking, wildlife and wildflower viewing.

C. GREATER YUMA COMMUNITY SRMA AND RMZS

Desired Future Conditions

- RR-046: The primary recreation management strategy for the Greater Yuma SRMA will be to target the demonstrated community tourism market. Residents of local communities are the primary visitors of the SRMA, who come to hike, camp, boat, fish, hunt, mountain bike, and ride horses and OHVs.
- RR-047: The Benefits-Based Recreation Management Objective for the Anza Trail RMZ is to provide local residents with convenient opportunities to exercise, learn about Yuma's natural and cultural history through effective interpretation, and connect local communities to the public lands. The installation and maintenance of the recreational Anza Trail is accomplished through collaborative partnerships.
- RR-048: The Benefits-Based Recreation Management Objective for the Gila Mountains RMZ is to ensure that legal public access, wildlife habitat, and cultural resources of the RMZ are not compromised from encroaching urban development and increasing recreational demands. A wide range of personal and community benefits occur from sustainable open space management practices.
- RR-049: The Benefits-Based Recreation Management Objective for the Imperial Dam RMZ is to maintain and enhance the facilities at the Imperial Dam LTVA, South Shore, North Shore, Senator Wash Boat Launch, and Squaw Lake recreation sites as needed to meet recreational demands and comply with public health and safety requirements. These recreation sites, collectively known as the Imperial Dam Recreation Area, provide sustained economic benefits to surrounding communities from large numbers of regional, national, and international visitors.
- RR-050: The Benefits-Based Recreation Management Objective for the Laguna Mountains RMZ is to reduce user group conflicts and impacts to wildlife and cultural resources while ensuring that a wide variety of trail-based activities remain available. A wide range of personal and community benefits occur from sustainable open space management practices.
- RR-051: The Benefits-Based Recreation Management Objective for the Limitrophe RMZ is to ensure that traditional use opportunities remain available to local Native Americans so

they are able to maintain their cultural identities. Efforts to improve the Limitrophe's safety, vegetation management, wildlife habitat, and recreational opportunities sustain collaboration and cooperation between all interested stakeholders.

- RR-052: The Benefits-Based Recreation Management Objective for the Mittry Lake Wildlife Area RMZ is to effectively collaborate with the co-managers of the Mittry Lake Wildlife Area to maintain and enhance wildlife-based recreation opportunities determined compatible with the purpose of the wildlife area. The wildlife area continues to provide local communities with convenient access to water and wildlife-based recreation opportunities and younger generations are provided with opportunities to develop boating, hunting, fishing, and outdoor skills.
- RR-053: The Benefits-Based Recreation Management Objective for the Southern Desert Communities RMZ is to ensure that recreational activities remain compatible with the natural, cultural, and Wilderness resource values within the RMZ. Rugged and natural landscapes within the planning area remain untrammelled and undeveloped for future generations to experience as we do today, and OHV riding opportunities connect local communities to the public lands.
- RR-054: Allocate the Urban Recreation Lands RMZ within the Greater Yuma Community SRMA. This RMZ represents isolated parcels of public lands within the urban Yuma environment not encompassed by other RMZs of the SRMA. While many of these parcels are small and isolated, they provide tremendous benefits to the community through the preservation of urban open spaces for daily activities such as dog walking, hiking, and wildflower viewing.
 - Fortuna Pond continues to provide recreational fishing opportunities as mitigation under the Title I contract for the Colorado River Basin Salinity Control Project.

Management Actions

- RR-055: Allocate the 122,700-acre Greater Yuma Community SRMA.
- RR-056: Allocate the Anza Trail RMZ within the Greater Yuma Community SRMA. This RMZ represents the Congressionally-designated Anza Trail corridor within the Greater Yuma Community SRMA. The trail corridor for this RMZ is also the location of the historic Gila Trail, Mormon Battalion Trail, and Butterfield Overland Stage Route, and also served as a prehistoric trade route between indigenous peoples of the Yuma and Phoenix areas. BLM supports the development of the Anza Trail for public recreational use; however, the YFO manages a very limited amount of land within this RMZ. Additional Approved RMP decisions for these public lands are located in Section 2.3.1-B NHTs.
- RR-057: Allocate the Gila Mountains RMZ within the Greater Yuma Community SRMA. The jagged peaks, rolling foothills, and stunning washes of the Gila Mountains provide the greater Yuma area with convenient hiking, OHV riding, and horseback riding opportunities.
- RR-058: Allocate the Imperial Dam RMZ within the Greater Yuma Community SRMA. The boating, floating, fishing, and swimming opportunities on the lower Colorado River and its associated backwaters cool down local and regional visitors throughout the long southwestern summers. The BLM-administered lands adjacent to both of the rivers' shorelines provide weekend residents, campers, and day-use visitors with exemplary OHV-

riding opportunities. The Imperial Dam LTVA provides extended camping opportunities for winter visitors from September to April. Outstanding primitive recreation opportunities, such as hiking and wildlife viewing, are available in the Little Picacho Wilderness.

- RR-059: Allocate the Laguna Mountains RMZ within the Greater Yuma Community SRMA. The rolling hills of the Laguna Mountains provide the greater Yuma area with convenient mountain biking opportunities. Numerous hiking, OHV, and equestrian trail opportunities are also available within the RMZ.
- RR-060: Allocate the Limitrophe RMZ within the Greater Yuma Community SRMA. This RMZ encompasses the Limitrophe CMA. The riparian resources of this RMZ provide local Native Americans with some of the last remaining cultural and traditional use opportunities along the lower Colorado River in the greater Yuma area. There is also the potential to cultivate the fishing, dove hunting, and wildlife viewing opportunities within the RMZ once the criminal activities associated with the International Boundary are addressed. Additional Approved RMP decisions for these public lands are located in Section 2.4 CMAs.
- RR-061: Allocate the Mittry Lake Wildlife Area RMZ within the Greater Yuma Community SRMA. This RMZ encompasses the Mittry Lake Wildlife Area CMA. Sport fishing, hunting, and wildlife viewing opportunities within this RMZ significantly contribute to Yuma's eco-tourism industry. The RMZ also provides exemplary camping opportunities along Mittry Lake and environmental education opportunities at Betty's Kitchen Watchable Wildlife Area and NRT. Additional Approved RMP decisions for these public lands are located in Section 2.4 CMAs.
- RR-062: Allocate the Southern Desert Communities RMZ within the Greater Yuma Community SRMA. Portions of this RMZ encompass the Muggins Mountains Wilderness and all public lands in the rapidly developing Dome Valley. Hunting, OHV riding, and hiking opportunities all exist within this RMZ. The Muggins Mountains Wilderness provides challenging, primitive recreation opportunities such as hiking. The RMZ also provides OHV riding opportunities to residents and winter visitors of the nearby local communities. Additional Approved RMP decisions for these public lands are located in Section 2.3.1-A Designated Wilderness.
- RR-063: Allocate the Urban Recreation Lands RMZ within the Greater Yuma Community SRMA. This RMZ represents isolated parcels of public lands within the urban Yuma environment not encompassed by other RMZs of the SRMA. While many of these parcels are small and isolated, they provide tremendous benefits to the community through the preservation of urban open spaces for daily activities such as dog walking, hiking, and wildflower viewing.

Administrative Actions

- AA-188: Promote the following environmental education programs and topics to ensure that recreational activities remain sustainable within the Greater Yuma Community SRMA: Tread Lightly!, Leave No Trace, archaeological ethics, Stop Aquatic Hitchhikers!, invasive species prevention, wildfire prevention and mitigation, natural history and cultural history of Yuma, International Boundary safety, desert survival skills, health benefits of regular exercise, and OHV safety.

- AA-189: Coordinate and form partnerships with the following agencies and groups for comprehensive and collaborative management of the Greater Yuma Community SRMA: Anza Trail Coalition of Arizona, AGFD, Arizona State Parks, Arizona State Lands Department, Arizona and California SHPOs, BMGR, BLM El Centro Field Office, CDFG, City of Yuma, Fisher's Landing, Hidden Shores recreation concession lease, Imperial County, Imperial NWR, Native American tribes and groups, LCR MSCP, MCAS-Yuma, Martinez Lake, Mexico, NPS, Reclamation, Sonoran Desert Invasive Species Council, United Desert Gateway, U.S. Border Patrol, U.S. International Boundary and Waters Commission (USIBWC), WMIDD, Yuma County, Yuma Historical Society, YPG, Yuma Trails, Inc., private landowners, and local public health agencies.
- AA-190: Focus recreation management within the Anza Trail RMZ to provide sustainable opportunities for hiking, jogging, horseback riding, OHV riding, picnicking, swimming, mountain bike riding, camping, wildlife viewing, fishing, and learning about the area's natural and cultural history.
- AA-191: Focus recreation management within the Gila Mountains RMZ to provide sustainable opportunities for hiking, OHV riding, horseback riding, picnicking, wildlife viewing, rock hounding, and geocaching.
- AA-192: Focus recreation management within the Imperial Dam RMZ to provide sustainable opportunities for long-term camping, short-term camping, boating, swimming, river floating, fishing, OHV riding, geocaching, hiking, and wildlife viewing.
- AA-193: Focus recreation management within the Laguna Mountains RMZ to provide sustainable opportunities for mountain bike riding, hiking, OHV riding, and wildlife and landscape viewing.
- AA-194: Focus recreation management within the Limitrophe RMZ to provide sustainable opportunities for Native American cultural and traditional uses, wildlife viewing, hunting, and fishing.
- AA-195: Focus recreation management within the Mittry Lake Wildlife Area RMZ to provide sustainable opportunities for fishing, hunting, camping, boating, picnicking, hiking, environmental education, and wildlife viewing.
- AA-196: Focus recreation management within the Southern Desert Communities RMZ to provide sustainable opportunities for OHV riding, hunting, hiking, picnicking, wildlife and wildflower viewing.
- AA-197: Focus recreation management within the Urban Recreation Lands RMZ to provide sustainable opportunities for dog walking, fishing, wildflower viewing, wildlife viewing, and hiking.

D. LA POSA DESTINATION SRMA AND RMZS

Desired Future Conditions

- RR-064: The primary recreation management strategy for the La Posa SRMA will be to target the demonstrated destination tourism market. The SRMA is a national and international camping destination, with thousands of retirees migrating to the area every

winter in recreational vehicles (RVs). While camping, these visitors also participate in a variety of other activities on the public lands, such as hiking, OHV riding, geocaching, and cultural resource viewing.

- RR-065: The Benefits-Based Recreation Management Objective for the Dripping Springs Heritage RMZ is to ensure that heritage-based recreation does not negatively impact the natural and cultural resource values of the RMZ. The continued integrity of identified relevant and important resource values provides the public with opportunities to learn about the area's natural and cultural history through effective interpretation.
- RR-066: The Benefits-Based Recreation Management Objective for the Highway 95 RMZ is to effectively educate the public about the resource values and different agency missions along Highway 95 through collaborative partnerships. The journey from Yuma to Quartzsite continues to provide scenic vistas and natural resource-based viewing opportunities.
- RR-067: The Benefits-Based Recreation Management Objective for the Intensive Camping RMZ is to maintain and enhance the facilities within the La Posa LTVA and the Dome Rock, Plomosa Road, Hi Jolly, Scaddan Wash, and Road Runner 14-day camping areas as needed to meet recreational demands and public health and safety requirements. Sustainable long- and short-term camping facilities continue to provide the Town of Quartzsite with positive economic benefits.
- RR-068: The Benefits-Based Recreation Management Objective for the Intensive Day Use RMZ is to reduce the recreational impacts to the RMZ's natural, cultural, and historical resources through effective protection, interpretation, adaptive management, and environmental education. Public lands within the RMZ continue to provide the Town of Quartzsite with positive economic benefits, and resource protection measures address on-going recreational impacts.
- RR-069: The Benefits-Based Recreation Management Objective for the New Water Mountains Wilderness RMZ is to ensure that recreational activities remain compatible with the Wilderness resource values of the RMZ. Rugged and natural landscapes within the RMZ remain untrammelled and undeveloped for future generations to experience as we do today.
- RR-070: The Benefits-Based Recreation Management Objective for the Plomosa Road Access RMZ is to support and coordinate with the BLM LHFO to effectively manage the Plomosa Road Access RMZ. In collaboration interested partners, the Plomosa Road Access RMZ provides effective resource interpretation, promotes sustainable OHV ethics, and identifies vehicle safety requirements in order to protect the area's resource values.

Management Actions

- RR-071: Allocate the 310,300-acre La Posa Destination SRMA.
- RR-072: Allocate the Dripping Springs Heritage RMZ within the La Posa Destination SRMA. This RMZ encompasses the Dripping Springs ACEC. Cultural resource viewing opportunities are available within this RMZ, along with exemplary opportunities to view native vegetation and wildlife. Outstanding visual resources provide an exquisite backdrop for all of these activities. Additional Approved RMP decisions for these public lands are located in Section 2.3.4 ACECs.

- RR-073: Allocate the Highway 95 RMZ within the La Posa Destination SRMA. This RMZ encompasses the proposed Highway 95 National Scenic Byway corridor. Between Yuma and Quartzsite, Arizona, the ADOT-managed Highway 95 provides passing motorists with exceptionally scenic landscape viewing opportunities on BLM, Kofa NWR, and YPG-administered lands. Passing motorists will see the Castle Dome, Chocolate, Dome Rock, Gila, Laguna, and New Water mountain ranges; characteristic Sonoran Desert flora; and chances to see characteristic fauna, wild horse and burro populations, and wildflower blooms. Additional historic sites and points of interest can be interpreted to educate visitors about U.S. military training activities in the area, from the pre-World War II era to the present day. The public lands east of Highway 95 also provide OHV riding opportunities and access to the Kofa NWR. Additional Approved RMP decisions for these public lands are located in Section 2.3.3 National Byways.
- RR-074: Allocate the Intensive Camping RMZ within the La Posa Destination SRMA. This RMZ represents the 15,500 acres of public land surrounding the Town of Quartzsite that were designated as the La Posa LTVA and five free 14-day camping areas. This RMZ primarily provides winter visitors with long- and short-term RV camping opportunities, which are major contributors to the Town of Quartzsite's tourism industry.
- RR-075: Allocate the Intensive Day-Use RMZ within the La Posa Destination SRMA. This RMZ is composed of public land surrounding the Town of Quartzsite, Arizona that has been closed to overnight camping. Both winter visitors and local residents participate in a variety of recreational activities throughout the undeveloped terrain of the RMZ.
- RR-076: Allocate the New Water Mountains Wilderness RMZ within the La Posa Destination SRMA. This RMZ encompasses the New Water Mountains Wilderness. Challenging outdoor adventures to hike, camp, and hunt exist throughout the RMZ's rugged mountain terrain. Additional Approved RMP decisions for these public lands are located in Section 2.3.1-A Designated Wilderness.
- RR-077: Allocate the Plomosa Road Access RMZ within the La Posa Destination SRMA. This RMZ encompasses the proposed Plomosa Road National Back Country Byway corridor. The Plomosa Road Access RMZ has been allocated to link with LUP decisions made by the BLM LHFO. Plomosa Road connects Quartzsite and Bouse, Arizona, and provides exemplary landscape viewing opportunities with two-wheel drive vehicles. Additional Approved RMP decisions for these public lands are located in Section 2.3.3 National Byways.

Administrative Actions

- AA-198: Promote the following environmental education programs and topics to ensure that recreational activities remain sustainable within the La Posa Destination SRMA: Tread Lightly!, Leave No Trace, archaeological ethics, invasive species prevention, wildland fire prevention and mitigation, natural and cultural history of the area, and OHV safety.
- AA-199: Coordinate and form partnerships with the following agencies and groups for comprehensive and collaborative management of the La Posa Destination SRMA: ADOT, AGFD, Arizona State Parks, Arizona SHPO, City of Yuma, Kofa NWR, La Paz County, Maricopa County, Native American tribes and groups, Sonoran Desert Invasive Species

Council, Town of Bouse, Town of Quartzsite, United Desert Gateway, Yuma County, and YPG.

- AA-200: Focus recreation management within the Dripping Springs Heritage RMZ to provide sustainable opportunities for cultural resource viewing, wildlife and wildflower viewing, hiking, and hunting.
- AA-201: Focus recreation management within the Highway 95 RMZ to provide sustainable opportunities for auto-based landscape touring, wildlife and wildflower viewing.
- AA-202: Focus recreation management within the Intensive Camping RMZ to provide sustainable opportunities for long-term and short-term camping.
- AA-203: Focus recreation management within the Intensive Day Use RMZ to provide sustainable opportunities for OHV riding, landscape viewing, photography, cultural resource viewing, historical site viewing, wildlife and wildflower viewing, hiking, rock hounding, geocaching, and model airplane flying.
- AA-204: Focus recreation management within the New Water Mountains Wilderness RMZ to provide sustainable opportunities for hiking, camping, hunting, and rock hounding.
- AA-205: Focus recreation management within the Plomosa Road Access RMZ to provide sustainable opportunities for OHV-based landscape viewing, auto-based landscape viewing, photography, and wildlife viewing.

E. YUMA EAST UNDEVELOPED SRMA AND RMZS

Desired Future Conditions

- RR-078: The primary recreation management strategy for the identified Yuma East SRMA will be to target the demonstrated undeveloped tourism market. The area is a regional hunting destination, and this activity can only continue through the preservation of the SRMA's exemplary wildlife habitat.
- RR-079: The Benefits-Based Recreation Management Objective for the Dispersed Use RMZ is to ensure that the RMZ continues to provide undeveloped and wildlife-based recreation opportunities through motorized and non-motorized means. The RMZ's wildlife habitat and wildlife populations continue to provide local communities with access to natural resource-based recreation opportunities and younger generations are provided with opportunities to develop hunting, camping, and outdoor skills.
- RR-080: The Benefits-Based Recreation Management Objective for the Eagletail Mountains Wilderness RMZ is to ensure that recreational activities remain compatible with the Wilderness resource values of the RMZ. Rugged and natural landscapes within the planning area remain untrammelled and undeveloped for future generations to experience as we do today.

Management Actions

- RR-081: Allocate the 526,900-acre Yuma East Undeveloped SRMA.

- RR-082: Allocate the Dispersed Use RMZ within the Yuma East Undeveloped SRMA. Outstanding hunting and dispersed camping opportunities exist throughout the RMZ which is part of AGFD Game Management Unit 41. The RMZ also provides exemplary OHV riding, hiking, and wildlife and wildflower viewing opportunities.
- RR-083: Allocate the Eagletail Mountains Wilderness RMZ within the Yuma East Undeveloped SRMA. This RMZ encompasses the Eagletail Mountains Wilderness. Challenging outdoor adventures to hike, camp, and hunt exist throughout the mountain range's rugged and undeveloped terrain. Additional Approved RMP decisions for these public lands are located in Section 2.3.1-A Designated Wilderness.

Administrative Actions

- AA-206: Promote the following environmental education programs and topics to ensure that recreational activities remain sustainable within the Yuma East Undeveloped SRMA: Tread Lightly!, Leave No Trace, archaeological ethics, invasive species prevention, wildland fire prevention and mitigation, natural and cultural history of the area, and OHV safety.
- AA-207: Coordinate and form partnerships with the following agencies and groups for comprehensive and collaborative management of the Yuma East Undeveloped SRMA: AGFD, Arizona State Parks, Arizona SHPO, Arizona Wilderness Coalition, BLM Lower Sonoran Field Office, Kofa NWR, Maricopa County, Native American tribes and groups, Sierra Club, Sonoran Desert Invasive Species Council, United Desert Gateway, Yuma County, YPG, and Yuma Valley Rod and Gun Club.
- AA-208: Focus recreation management within the Dispersed Use RMZ to provide sustainable opportunities for hunting, camping, OHV riding, hiking, wildlife and wildflower viewing.
- AA-209: Focus recreation management within the Eagletail Mountains Wilderness RMZ to provide sustainable opportunities for hiking, hunting, landscape viewing, wildlife viewing, horseback riding, wildflower viewing, and photography.

2.12 TRAVEL MANAGEMENT

The Approved RMP designates OHV Management Areas, establishes a preliminary YFO Transportation System, provides guidance for finalizing the YFO Transportation System, and delineates TMAs to provide more locale-specific planning guidance. For RMP provisions related to NHTs, NRTs, and National Byways refer to Section 2.3 Special Designations.

2.12.1 OHV MANAGEMENT AREAS

All BLM-administered lands must be designated as an Open, Closed, or Limited OHV Management Areas (43 CFR 8342.1). The BLM may institute additional closures or restrictions at any time to protect persons, property, and public lands and resources (43 CFR 8364). Acreages for OHV Management Area designations are listed in on Table 2-12 and Map2-11.

Table 2-12
Approved RMP OHV Management Area Designations

Designation	Approved RMP BLM Acres
Open Areas	
Ehrenberg Sandbowl	400
Total Acres Open	400
Closed Areas	
Designated Wilderness	167,800
Dripping Springs	440
Fortuna Wash (Section 33)	100
La Paz Valley	1,000
Muggins Mountains	2,200
Sears Point	1,400
Total Acres Closed	172,940
Limited Areas	
Total Acres Limited	1,144,660
Total Acres	1,318,000

BLM=Bureau of Land Management

A. OPEN OHV MANAGEMENT AREAS

Desired Future Conditions

- TM-001: Open OHV Management Areas in the YFO provide public lands where all types of vehicle use are permitted at all times and visitors are not restricted to existing and designated roads and trails.

Management Actions

- TM-002: Maintain the 400-acre Ehrenberg Sandbowl Open OHV Management Area.
- TM-003: Open OHV Management Areas will be adequately signed to provide the public with clear boundaries of open areas. Fencing or other structures may be used to further delineate the boundaries of open areas.
- TM-004: Within the Dunes WHA, dune areas which support sensitive, special status, and/or priority species will not be available for future Open OHV Management Area designations.
- RR-007: Establish a volunteer host site at the Ehrenberg Sandbowl Open OHV Management Area. Install and maintain additional OHV trailhead facilities if needed to accommodate increased visitor use.

Administrative Actions

- AA-210: Re-evaluate and modify Open OHV Management Area designations as needed through an RMP amendment.

B. CLOSED OHV MANAGEMENT AREAS

Desired Future Conditions

- TM-005: No OHV use occurs within designated Closed OHV Management Areas.
- TM-006: The YFO designates additional Closed OHV Management Areas when they are necessary to protect persons, property, and public lands and resources where OHV use has been determined to be causing irreparable harm to the existing resources.

Management Actions

- TM-007: Designate a total of 172,940 acres of Closed OHV Management Areas (Map 2.12), including:
 - 167,800 acres of designated Wilderness. Congressionally designated Wildernesses Areas are statutorily closed to motorized and mechanized use, except for purposes specifically provided for by law.
 - 440 acres at the Dripping Springs ACEC core area
 - 1,000 acres in La Paz Valley
 - 100 acres at Fortuna Wash (Section 33)
 - 2,200 acres in the Muggins Mountains SCRMA
 - 1,400 acres at the Sears Point ACEC core area
- TM-008: Delineate the boundaries of Closed OHV Management Areas on the ground and install wildlife-compatible vehicle barriers on an as-needed basis.

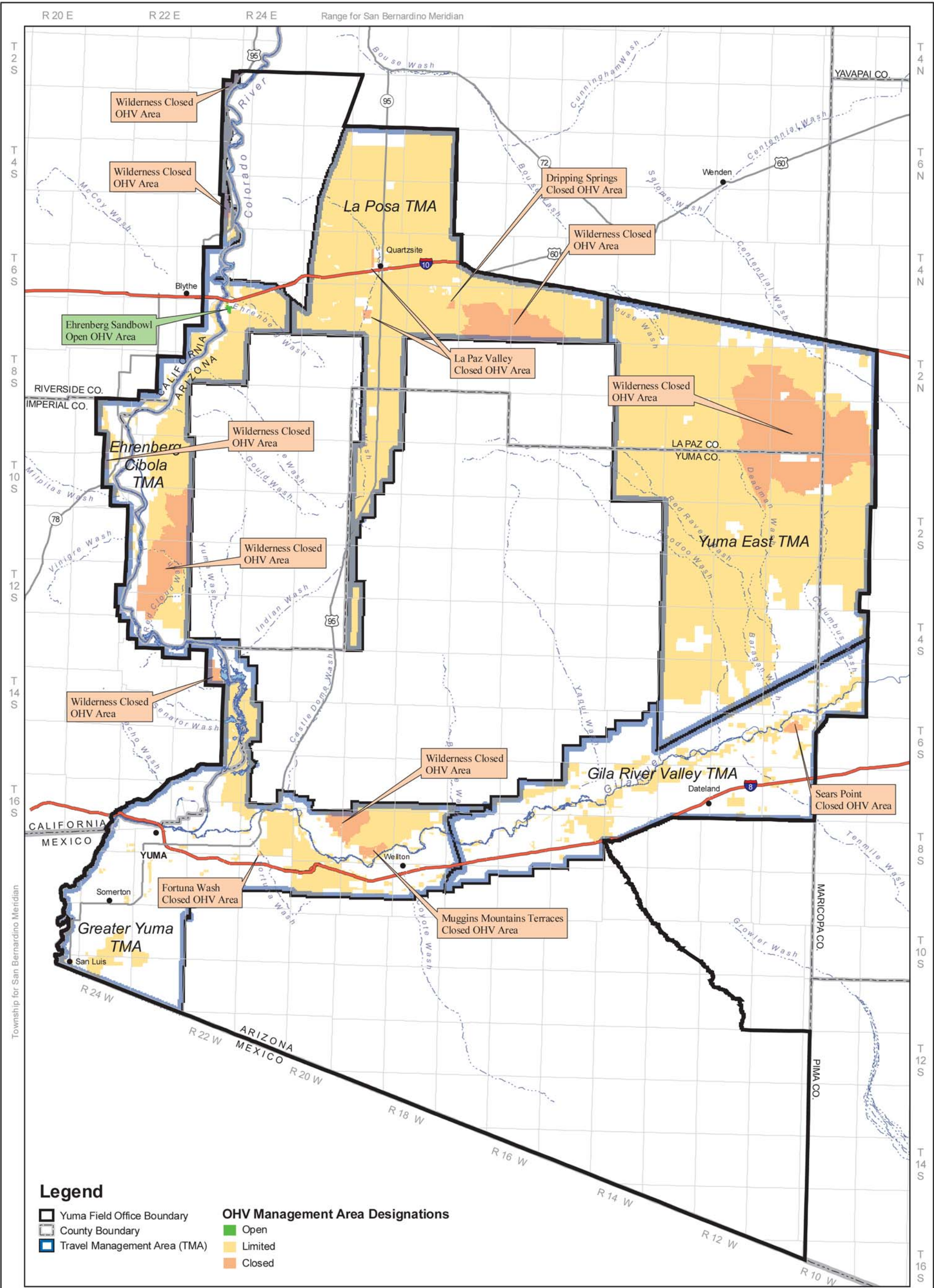
Administrative Actions

- AA-211: Review requests for vehicular access to sacred areas not normally open to vehicles and consider authorizing such use on a case-by-case basis if Native American tribes identify such areas in the future.
- AA-212: Re-evaluate and modify Closed OHV Management Area designations as needed through an RMP amendment.

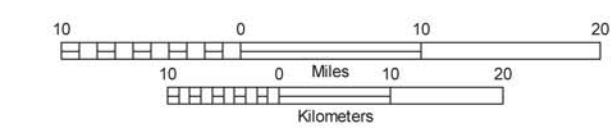
C. LIMITED OHV MANAGEMENT AREAS

Desired Future Conditions

- TM-009: The unauthorized proliferation of motorized and non-motorized recreation trails is reduced or halted.
- TM-010: OHV access within designated ACECs will be managed in a manner which does not damage important cultural resources and wildlife habitat.



**YUMA FIELD OFFICE
RECORD OF DECISION
APPROVED RESOURCE MANAGEMENT PLAN**

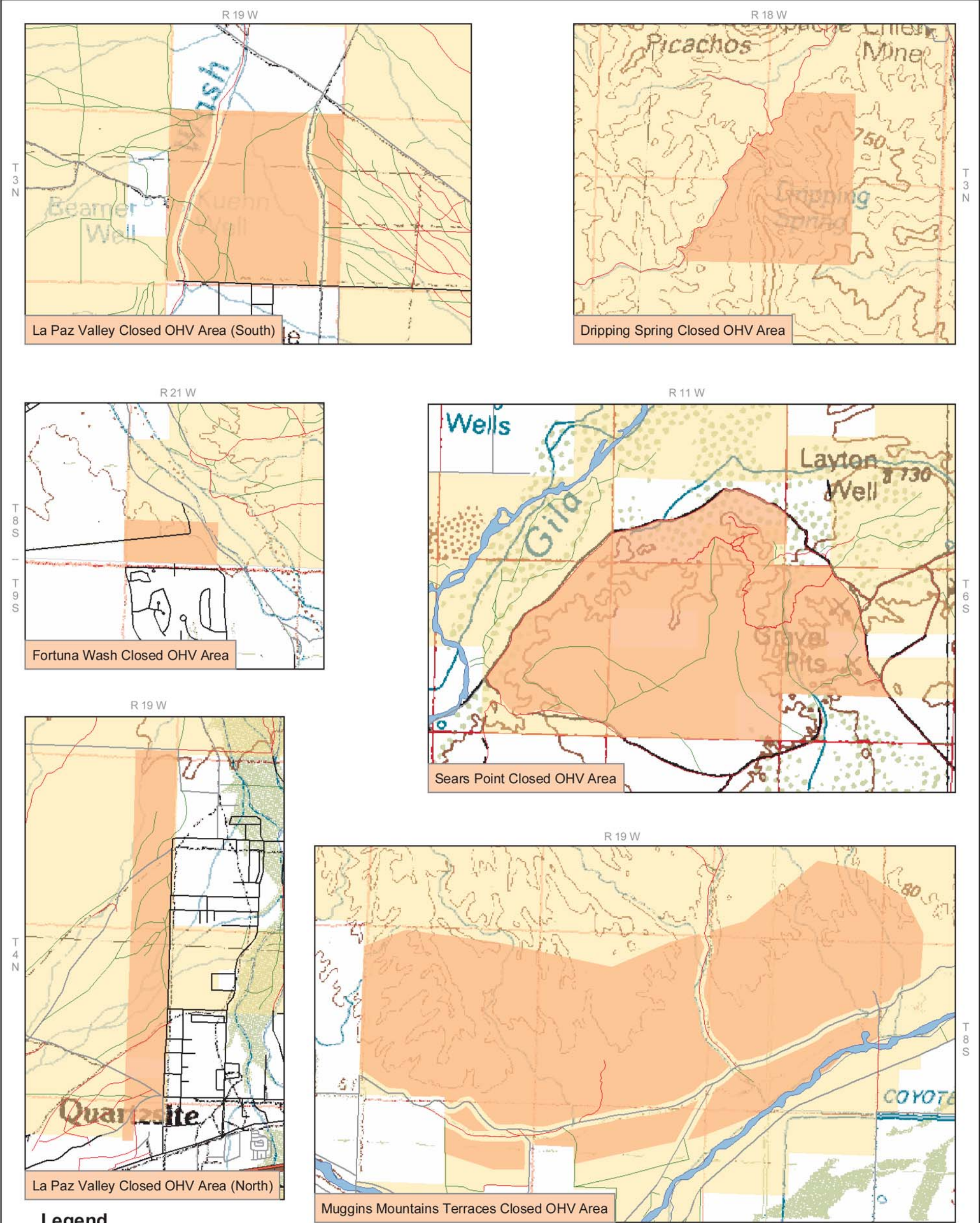


U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Yuma Field Office
January 2010



Map 2-11: Travel Management

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



Township and Range for Gila and Salt River Meridian

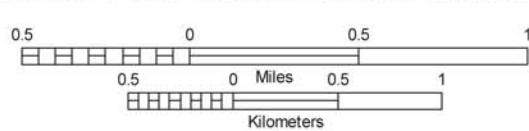
Legend

- Yuma Field Office Boundary
- County Boundary
- Stream
- Interstate
- Paved Routes
- + Railroad
- Unpaved Routes
- Primitive Routes
- Digitized Routes

OHV Designations

- Limited (BLM Land)
- Closed

YUMA FIELD OFFICE RECORD OF DECISION APPROVED RESOURCE MANAGEMENT PLAN



Map 2-12: Closed OHV Management Areas



U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Yuma Field Office
January 2010



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

Management Actions

- TM-011: Designate 1,144,660 acres of Limited OHV Management Areas.
- TM-012: Limit motorized use within Limited OHV Management Areas to existing inventoried routes appearing on the YFO route inventory maps (Maps TMA-1 to TMA-5). Motorized travel will not be allowed on roads, trails, and drivable washes that are not included on the YFO route inventory maps. After the YFO Transportation System is finalized, limit motorized use within Limited OHV Management Areas to designated routes only.
- TM-013: Allow motorized vehicles to pull off up to 100 feet from a designated route on either side of the centerline. This use will not be allowed along the Anza Trail or within ACECs and SCRMA. Within these stated areas, motorized use shall remain within the route with reasonable use of the shoulder and immediate roadside for vehicle passage, parking/overnight camping, and emergency stopping. Where pulling off a vehicle 100 feet from a route's centerline is allowed, impacts to natural and cultural resources shall be monitored on a continuing basis. If monitoring results show effects that exceed limits of acceptable change, motorized vehicles will not be allowed to pull off 100 feet from any designated route on either side of the centerline within the impacted area (IM No. AZ-2005-007).
- TM-014: Allow the use of non-motorized wheeled game carriers to retrieve game kills on all BLM-administered lands, except within Congressionally-designated Wilderness.
- TM-015: Unauthorized cross-country travel which results in the creation of new routes or the widening or extension of existing routes will not be permitted within Limited OHV Management Areas. Cross-country motorized travel will not be permitted for the retrieval of downed game within Limited OHV Management Areas. Cross-country vehicle travel may be permitted within Limited OHV Management Areas when a specific authorized task requires such use, and only where cross-country travel will not cause undue resource damage.
- TM-016: Cross-country travel for administrative purposes will be permitted only with prior approval by the authorized officer and following appropriate NEPA analysis. Any administrative action will be conducted in a manner that creates the least disturbance and reclaimed as soon as possible after the administrative need has ended.
- TM-017: Roads traversing bighorn sheep habitat may be closed, limited, or rerouted during the lambing season in specific areas consistent with safety and maintenance requirements of authorized uses in corporation with AGFD and CDFG.
- TM-018: Within Mojave Desert tortoise habitat, limit vehicular travel and non-motorized competitive events to designated routes; and close and rehabilitate existing roads where no public or administrative need exists.
- TM-019: Use fencing or physical barriers to protect riparian SWFL habitat from unauthorized OHV use.
- TM-020: Limit equestrian use to existing inventoried routes within designated ACECs until the route designation process is complete. If determined necessary, designate equestrian trails and install equestrian trailhead facilities to reduce user and resource conflicts. Limit equestrian use to these trails once they have been designated.

- TM-021: During the construction of rangeland developments, vehicles will use designated routes wherever possible for access to sites. Where no routes exist, vehicles will be authorized on a case-by-case basis to travel cross-country to avoid the need for road building. Where new roads must be built, roadbeds will be no wider than needed for reliable access. As a general practice, new roads will not be bladed for use in fence construction. Vehicles will travel cross-country or fences will be built without motorized access.
- TM-022: Within lands being managed to maintain wilderness characteristics, the use of motor vehicles and mechanical transport, and the construction of temporary roads, structures, and installations will be allowed for emergency purposes. Any emergency actions will be conducted in a manner that creates the least disturbance and will be reclaimed as soon as possible after the situation has ended.
- SM-022: Prohibit new routes within designated ACECs except as needed to manage and interpret resources or as required by law, such as access to valid mining claims or private property.
- RR-005: Limit equestrian use authorized by SRPs to pre-selected trails on a case-by-case basis.

Administrative Actions

- AA-213: Establish Supplementary Rules to enforce the Approved RMP's travel limitations according to the guidelines set forth in 43 CFR 8365.1-6.
- AA-214: Re-evaluate and modify Limited OHV Management Area designations as needed through an RMP amendment.

2.12.2 YFO TRANSPORTATION SYSTEM

The YFO Transportation System refers to the sum of the YFO's recognized inventory of roads, primitive roads, and trails formally recognized, approved, and designated for motorized and non-motorized travel. The YFO Transportation System will be established through subsequent implementation-level TMPs tiered to this RMP. The primary steps in BLM travel management planning include: (1) route inventory process, (2) route evaluation process, (3) route designation process, and (4) implementation of route designations. The first three steps in developing the YFO Transportation System must be completed within five years of the signing of the ROD.

Desired Future Conditions

- TM-023: The YFO Transportation System continues to provide essential motorized access to non-Federal lands, access across BLM-administered lands, access to private in-holdings surrounded by BLM-administered lands, and recognizes prior existing access rights.
- TM-024: The YFO Transportation System continues to provide adequate motorized access for the maintenance of wildlife water catchments and for dispersed recreation activities such as hunting.

- TM-025: The YFO Transportation System provides for a wide variety of trail-based recreational opportunities (i.e., hiking, mountain biking, OHV riding, horseback riding) in a manner that reduces existing user conflicts.
- TM-026: The YFO Transportation System minimizes impacts to identified sensitive resource values from routes that provide non-essential access.
- TM-027: The YFO Transportation System is signed and mapped for public use in a manner consistent with other Federal land management agencies.

A. ROUTE INVENTORY PROCESS

Maps TMA-1 through TMA-5 identify approximately 4,600 miles of routes and other transportation-related linear features located on BLM-administered lands within the planning area. Of these 4,600 miles, 3,200 miles have been inventoried on the ground and verified as routes by the BLM. The TMA maps also include 1,400 miles of transportation-related linear features that have not yet been verified on the ground by the BLM. These linear features include those identified by the public as routes during the DRMP/DEIS public review and comment period and those identified by the BLM from 2005 aerial photographs.

Desired Future Conditions

- TM-028: During the development of the YFO Transportation System, interested stakeholders are provided additional opportunities to update the route inventory by identifying existing roads, trails, and drivable desert washes that do not appear on Maps TMA-1 to TMA-5 and indicate those that should be considered for designation.

Management Actions

- TM-029: Identify the 4,600 miles of routes shown on Maps TMA-1 to TMA-5 as the planning area's preliminary Transportation System.

B. ROUTE EVALUATION PROCESS

Desired Future Conditions

- TM-030: Prior to beginning each individual TMP, interested stakeholders are provided with opportunities to submit written scoping comments, including recommendations as to how specific routes should be designated. Specific route designation recommendations should be accompanied with a rationale as to why the BLM should adopt the designation. Route designations that will be considered include, but are not limited to:
 - Open to Motorized Use,
 - Limited to Particular Types of Vehicles, such as all-terrain vehicles, motorcycles, rock crawlers, etc.,
 - Limited to Authorized Users Only, such as mining claimants, grazing permittees, ROW holders, etc.,
 - Limited to Non-Motorized Uses, such as hiking, mountain biking, and horseback riding,

- o Limited seasonally, or
- o Closed.
- TM-031: Prior to approving each individual TMP, interested stakeholders are provided with opportunities to submit written comments, including recommendations as to how specific routes should be designated. Specific route designation recommendations should be accompanied with a rationale as to why the BLM should adopt the designation. Route designations that will be considered include, but are not limited to:
 - o Open to Motorized Use,
 - o Limited to Particular Types of Vehicles, such as all-terrain vehicles, motorcycles, rock crawlers, etc.,
 - o Limited to Authorized Users Only, such as mining claimants, grazing permittees, ROW holders, etc.,
 - o Limited to Non-Motorized Uses, such as hiking, mountain biking, and horseback riding,
 - o Limited seasonally, or
 - o Closed.

Administrative Actions

- AA-215: The YFO route inventory will be brought forward into subsequent implementation-level TMPs for each of the five delineated TMAs. Each inventoried route within each TMA will be systematically evaluated, and the positive and negative impacts of each route to the various resource values of the public lands will be documented. Previously designated routes may be reevaluated, if it can be shown that the previous designation is causing resource damage or user conflicts. Routes within the planning area will be evaluated using the Route Evaluation Tree© process, which is described in detail in Appendix G.
- AA-216: Evaluate and document each inventoried route's impacts to the following resources and uses of the public lands:
 - o Sensitive resources, such as historic and cultural sites; special status wildlife and plant species; suitability for special status species reintroduction; wildlife movement corridors; wildlife habitat fragmentation; hydrology; geology; sensitive soils; and air quality (e.g. PM₁₀ non-attainment areas).
 - o Public access needs, such as ROWs; easements; private property; highways, State and county roads providing access to the public lands; and route densities.
 - o Commercial activities, such as mining; mineral/material operations; ranching; public utilities; railroads; apiaries; and economic impacts.
 - o Administrative sites, such as wildlife monitoring sites; habitat restoration sites; weather stations; hazardous fuels treatment areas; wildlife water catchments; local community access; invasive vegetation treatment sites; wildland fire management; and other administrative access needs identified by cooperating agencies.
 - o Recreation activities, such as trailheads and staging areas; designated recreation sites; designated interpretive sites dispersed recreational activities, such as hunting and camping; prescribed recreation settings; scenic overlooks, points of known photographic interest; areas providing educational or scientific research opportunities; hunting;

- rockhounding destinations; historic type of use on individual routes (e.g. motorized, hiking, equestrian, mountain biking); and other destinations or points of interest.
- o Human interaction issues, such as user conflicts; documented trespasses; illegal dumping; and route proliferation.
- o Hazards, such as unexploded ordinances (UXO); abandoned mines; International Boundary issues; and other identified safety concerns.
- AA-217: Consider additional route evaluation criteria in the future travel management planning processes in the event that conditions change and/or interested stakeholders request other factors to be considered.

C. ROUTE DESIGNATION PROCESS

The results of the route evaluation process provide the baseline data to be considered for the route designation process, where each inventoried route is designated as open, closed, or limited to public use.

Management Actions

- TM-032: Designate all inventoried routes within the YFO as open, closed, or limited to public use. Routes may be limited seasonally or to specific types of uses to prevent and reduce impacts to resource values and user conflicts. While lands within the Ehrenberg Sandbowl Open OHV Management Area will be exempt from the route evaluation/designation process, specific routes crossing these lands may be designated. No routes will be designated as open to motorized use within Closed OHV Management Areas. Routes within Closed OHV Management Areas may be designated to non-motorized modes of travel, such as hiking or horseback riding.
- TM-033: BLM may close or limit routes on the public lands at any time as public health and safety and resource protection needs arise (43 CFR 8342).

Administrative Actions

- AA-218: Provide interested stakeholders with opportunities to provide input and written comments throughout the designation process.
- AA-219: Consider a range of alternative route designations in future TMPs, including alternatives that consider closing a majority of non-essential routes that were created without authorization and a majority of non-essential drivable desert washes.
- AA-220: Identify individual route management needs, including, but not limited to, use specifications, signs, and vegetation management.
- AA-221: Identify individual route maintenance needs to improve public health and safety and reduce the need to create redundant routes that avoid existing hazards.
- AA-222: Identify individual route monitoring needs to detect and evaluate travel-related impacts to adjacent resources so that management changes can occur accordingly.

- AA-223: Identify easements and ROWs (to be issued by BLM or others) needed to maintain or provide legal and safe access to the public lands.
- AA-224: Coordinate with Reclamation to designate levee roads which provide essential access to local communities as open to public use.
- AA-225: Within ACECs and SCRMAAs, identify resource-compatible roadside pulloffs for overnight camping purposes.

D. IMPLEMENTATION OF ROUTE DESIGNATIONS

Following the approval of each individual TMP, individual route designation decisions are implemented and maintained on the ground.

Management Actions

- TM-034: Install and maintain the appropriate recreational trailhead facilities throughout the planning area once the YFO Transportation System has been established.
- TM-035: Sign designated routes throughout the planning area consistent with Federal land management agency standards.
- TM-036: YFO's strategy for restoring closed or unauthorized routes will be accomplished as rapidly as funding permits. Sensitive resources in immediate danger, or those that have been damaged by unauthorized use, will be a high priority for restoration. Typically, the restoration will be limited to that portion of the route of unauthorized use 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 route 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 signs, including information to OHV users, on the need and value of resource protection,
 - Converting motorized two-track routes into non-motorized single track routes, and
 - Leaving the first 100 feet from the centerline of an open route unrestored to provide pullout areas or camping opportunities intended to discourage or prevent new ground disturbance elsewhere.
- TM-037: Require all activities permitted by the YFO to stay on designated routes (IM No. AZ-2005-007).

Administrative Actions

- AA-226: Establish a volunteer workforce to provide essential on the ground implementation of the signing, monitoring, and maintenance of the YFO Transportation System.

- AA-227: Expand and pursue partnerships and sources of funding for travel management, public education, and law enforcement.
- AA-228: In the event that Title V ROWs are issued or in the event of a legal decision on RS 2477 assertions, manage routes under the terms of these authorities.

2.12.3 TRAVEL MANAGEMENT AREAS

The Approved RMP establishes five TMAs within the planning area: the Ehrenberg–Cibola, Gila River Valley, Greater Yuma, La Posa, and Yuma East TMAs (Maps TMA-1 to TMA-5). These TMAs account for all acres of BLM-administered land within the planning area.

A. EHRENBURG–CIBOLA TMA

Desired Future Conditions

- TM-038: The future route designation process ensures that there is a wide variety of equestrian trail opportunities within the Ehrenberg–Cibola TMA.

Management Actions

- TM-020: Within the Big Marias ACEC and Big Maria Terraces SCRMA, limit equestrian use to existing inventoried routes until the route designation process is complete. If determined necessary, designate equestrian trails and install equestrian trailhead facilities to reduce user and resource conflicts. Limit equestrian use to these trails once they have been designated.
- TM-039: Identify the 152,300-acre Ehrenberg–Cibola TMA and its 650-mile route inventory as the planning area that will be addressed in the implementation-level Ehrenberg–Cibola TMP (Map TMA-1).
- TM-040: Designate hiking trails at the Blythe Intaglios Complex within the Big Marias ACEC to control access and prevent damage to cultural and natural resources. Allow construction, maintenance, and improvement of hiking trails and associated facilities within the ACEC as necessary. Once the trails are established, require visitors to stay on designated hiking trails within the Blythe Intaglios Complex.
- TM-041: Limit parking within the Blythe Intaglios Complex to designated areas.
- TM-042: Maintain the 122-acre North Bank Milpitas Wash OHV Restriction until the completion of the Ehrenberg–Cibola TMP. Designate these lands as a Limited or Closed OHV Management Area in the TMP.
- TM-043: Allow construction, maintenance, and improvement of existing or new hiking trails, barriers, and signs in the Big Marias ACEC as necessary.

Administrative Actions

- AA-229: Coordinate with the BLM Palm Springs-South Coast and El Centro Field Offices, CRIT, Reclamation, Cibola and Imperial NWRs, YPG, and other interested Tribes and

agencies to ensure the future route designation process for the Ehrenberg–Cibola TMA takes into account the other agencies’ missions.

- AA-230: Develop partnerships and a volunteer workforce to enhance and expand equestrian trail opportunities in the Ehrenberg–Cibola TMA.
- AA-231: Nominate designated hiking and equestrian trails located in Arizona within the Ehrenberg–Cibola TMA to the Arizona State Parks Trail System.

B. GILA RIVER VALLEY TMA

Desired Future Conditions

- SM-005: A multiple-use Anza NHT provides contiguous recreational trail connectivity between the Greater Yuma TMA and the BLM Lower Sonoran Field Office.
- SM-010: Public land visitors are provided with recreational connectivity from the Anza Trail to other recreational trails and other points of interest within the Gila River Valley TMA, including the Sears Point ACEC.

Management Actions

- TM-020: Limit equestrian use to existing inventoried routes within the Sears Point ACEC until the route designation process is complete. If determined necessary, designate equestrian trails and install equestrian trailhead facilities to reduce user and resource conflicts. Limit equestrian use to these trails once they have been designated.
- TM-040: Designate hiking trails at the Sears Point ACEC interpretive area to control access and prevent damage to cultural and natural resources. Allow construction, maintenance, and improvement of hiking trails and associated facilities within the ACEC as necessary. Once the trails are established, require visitors to stay on designated hiking trails within the Sears Point ACEC interpretive area.
- TM-044: Identify the 60,500-acre Gila River Valley TMA and its 180-mile route inventory as the planning area that will be addressed in the implementation-level Gila River Valley TMP (Map TMA-4).
- TM-045: Designate portions of the Anza Trail through BLM-administered lands for motorized and non-motorized recreation as appropriate.
- TM-046: Establish a parking area and install barriers as needed at the Sears Point ACEC interpretive area to control access and prevent damage to cultural and natural resources. Determine an appropriate location for the parking area in coordination with stakeholders and Native American tribes.

Administrative Actions

- AA-232: Coordinate with the BMGR, BLM Lower Sonoran Field Office, YPG, and other interested Tribes and agencies to ensure the future route designation process for the Gila River Valley TMA takes into account the other agencies’ missions.

- AA-233: Work with interested cooperators to establish legal and safe public access to Anza NHT trailheads and the Sears Point ACEC from Interstate 8.

C. GREATER YUMA TMA

Desired Future Conditions

- TM-047: The future route designation process in the Greater Yuma TMA focuses on creating an interconnected system of motorized and non-motorized recreational trails for the use of local community residents.
- TM-048: The future route designation process in the Greater Yuma TMA provides route-specific use limitations to reduce user conflicts where multiple forms of travel are occurring.
- SM-005: A multiple-use Anza NHT provides contiguous recreational trail connectivity between the Gila River Valley TMA and the BLM El Centro Field Office.
- SM-010: Public land visitors are provided with recreational connectivity from the Anza Trail to other recreational trails and other points of interest within the Greater Yuma TMA, including the Gila and Laguna mountains.

Management Actions

- TM-045: Designate portions of the Anza Trail through BLM-administered lands for motorized and non-motorized recreation as appropriate.
- TM-049: Identify the 133,600-acre Greater Yuma TMA and its 650-mile route inventory as the planning area that will be addressed in the implementation-level Greater Yuma TMP (Map TMA-5).
- TM-050: Identify an interconnected system of mountain biking and hiking trails within the Laguna Mountains. Establish recreational trail connectivity from the Laguna Mountains to the Mitty Lake Wildlife Area and the Anza NHT.
- TM-051: Identify an interconnected system of equestrian and hiking trails in the Gila Mountains. Establish recreational trail connectivity from the Gila Mountains to the Anza NHT.
- TM-052: Establish designated motorized trail connectivity through the East Imperial Hills between Martinez Lake Road and the Hidden Shores RV Village BLM recreation concession lease.
- TM-053: Work with cooperators to identify a water-based route suitable for canoeing, kayaking, and river floats along the lower Colorado River from Martinez Lake to downtown Yuma. Install and maintain launching and portage sites along the route as appropriate.

Administrative Actions

- AA-234: Coordinate with the BLM El Centro Field Office, BMGR, WMIDD, Reclamation, Imperial NWR, YPG, Cocopah and Fort Yuma–Quechan reservations, and other interested

Tribes and agencies to ensure the future route designation process in the Greater Yuma TMA takes into account the other agencies' missions.

- AA-235: Nominate designated hiking, biking, and equestrian trails in the Greater Yuma TMA to the Arizona State Trails System.
- AA-236: Work with interested cooperators to establish legal and safe public access to and across designated recreational routes in the Greater Yuma TMA.

D. LA POSA TMA

Desired Future Conditions

- TM-054: The future route designation process ensures that motorized recreational trails within the La Posa TMA provide opportunities for challenging experiences for OHV riders.

Management Actions

- TM-020: Limit equestrian use to existing inventoried routes within the Dripping Springs ACEC until the route designation process is complete. If determined necessary, designate equestrian trails and install equestrian trailhead facilities to reduce user and resource conflicts. Limit equestrian use to these trails once they have been designated.
- TM-040: Designate hiking trails in the vicinity of the spring at the Dripping Springs ACEC to control access and prevent damage to cultural and natural resources. Allow construction, maintenance, and improvement of hiking trails and associated facilities within the ACEC as necessary. Once the trails are established, require visitors to stay on designated hiking trails within the vicinity of the spring at the Dripping Springs ACEC.
- TM-055: Identify the 384,600-acre La Posa TMA and its 1,710-mile route inventory as the planning area that will be addressed in the implementation-level La Posa TMP (Map TMA-2).
- TM-056: Establish a parking area at both the north and south sides of the Dripping Springs ACEC. Install post-and-cable or other barriers as needed to manage access.
- TM-057: Close the Dripping Springs ACEC 640-acre core area around the spring to public use during extreme or severe drought conditions to protect desert bighorn sheep populations, as recommended by AGFD.

Administrative Actions

- AA-237: Coordinate with the BLM LHFO, CRIT, Kofa NWR, YPG, and other interested Tribes and agencies to ensure the future route designation process in the La Posa TMA takes into account the other agencies' missions.
- AA-238: Nominate designated hiking and equestrian trails in the La Posa TMA to the Arizona State Trails System.
- AA-239: The future route designation process determines the sustainability of existing rock crawling trails within the La Posa TMA.

E. YUMA EAST TMA

Desired Future Conditions

- TM-058: Travel management strives to retain the undeveloped nature of the Yuma East TMA by limiting the number of paved roads authorized across BLM lands.

Management Actions

- TM-059: Identify the 587,000-acre Yuma East TMA and its 1,410-mile route inventory as the planning area that will be addressed in the implementation-level Yuma East TMP (Map TMA-3)
- TM-060: Do not authorize the paving of any roads within the Yuma East TMA which would negatively impact the area's visual resources and wildlife habitat.
- TM-061: Within the Eagletail Mountains Wilderness, prohibit recreational equestrian use within one quarter mile of Indian Springs to prevent impacts to wildlife habitat and cultural resource values. At equestrian trailheads, promote low-impact hitching methods that the public can use prior to entering the Indian Springs area.

Administrative Actions

- AA-240: Coordinate with the BLM Lower Sonoran and Hassayampa field offices, Kofa NWR, YPG, and other interested Tribes and agencies to ensure the future route designation process in the Yuma East TMA takes into account the other agencies' missions.

2.13 VISUAL RESOURCE MANAGEMENT

The BLM's VRM System provides a way to identify, evaluate, and determine the appropriate levels of protection to the public lands' scenic values. The overall goal of VRM analysis is to minimize visual impacts through development of landscape-appropriate mitigation measures.

All BLM lands within the planning area have been designated into VRM Classes I through IV, with VRM Class I lands providing the most protection to scenic values and VRM Class IV lands providing the least protection. VRM designations for the planning area are described in Table 2-13 and shown on Map 2-13.

Table 2-13
Approved RMP VRM Designations

VRM Class	Approved RMP BLM Acres
I	167,800
II	618,600
III	512,400
IV	19,200
Total Acres	1,318,000

VRM=Visual Resource Management; BLM=Bureau of Land Management

Desired Future Conditions

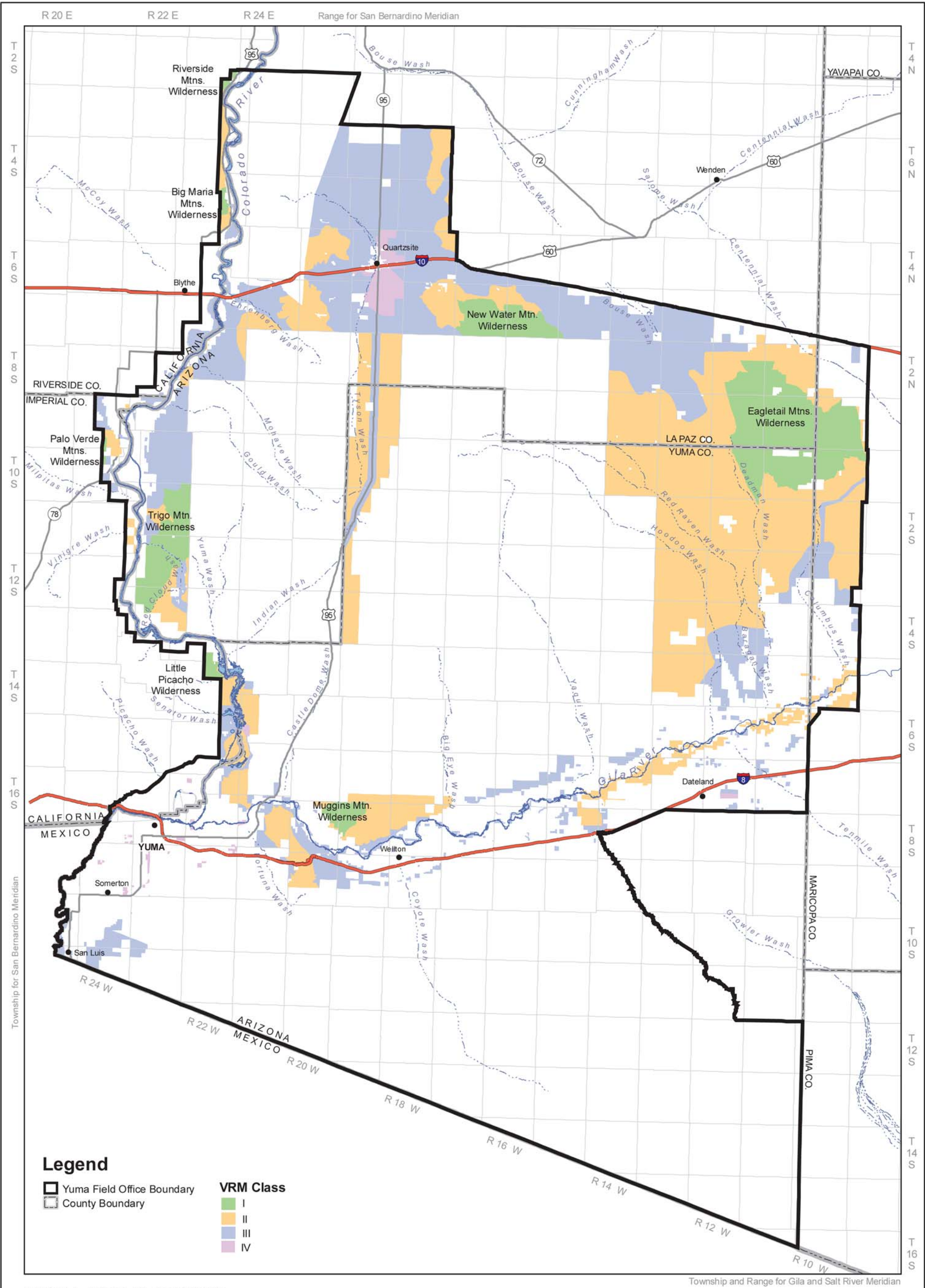
- VR-001: VRM Class I Lands: To preserve the existing character of the landscape. The level of change to the characteristic landscape should be very low and must not attract attention;
- VR-002: VRM Class II Lands: To retain the existing character of the landscape. The level of change to the characteristic landscape should be low;
- VR-003: VRM Class III Lands: To partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate; and
- VR-004: VRM Class IV Lands: To provide for management activities that require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high.
- VR-005: The long-term scenic quality of BLM-administered lands within the viewsheds of National Byways is maintained through the application of the BLM VRM system.
- VR-006: The viewsheds and landscape character of ACECs is maintained to the extent practicable through the BLM's VRM system.
- VR-007: Viewsheds of important cultural resources whose settings contribute significantly to their scientific, public, traditional, or conservation values are maintained.

Management Actions

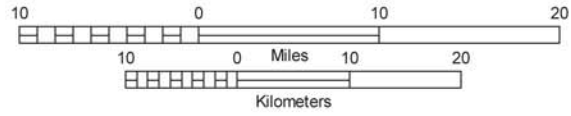
- VR-008: Designate 167,800 acres of VRM Class I. All Wildernesses are designated as VRM Class I.
- VR-009: Designate 618,600 acres of VRM Class II.
- VR-010: Designate 512,400 acres of VRM Class III. All ROW Corridors and communications sites are designated as VRM Class III.
- VR-011: Designate 19,200 acres of VRM Class IV.
- VR-012: Within lands being managed to maintain wilderness characteristics, decrease the visual effect of existing facilities on naturalness or scenic resources during reconstruction, replacement, or major maintenance.
- VR-013: Design and maintain facilities to preserve the visual integrity of cultural resources, settings, and cultural landscapes consistent with VRM objectives established in the Approved RMP.
- VR-014: All ROWs meet VRM objectives and mitigation measures stipulated in the authorization.
- VR-015: Solar or wind generating facilities will not be allowed in VRM Classes I and II.

Administrative Actions

- AA-241: Incorporate design considerations to minimize potential impacts to public lands' visual values into all BLM-authorized surface disturbing activities, regardless of size. Emphasis will be on BLM providing input during the initial planning and design phase to minimize costly redesign and mitigation at a later time.



**YUMA FIELD OFFICE
RECORD OF DECISION
APPROVED RESOURCE MANAGEMENT PLAN**



U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Yuma Field Office
January 2010



Map 2-13: Visual Resource Management

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

- AA-242: Analyze all surface-disturbing projects that require BLM authorization according to the Visual Resource Contrast Rating guidelines and procedures as required by BLM Manual 8431-1. Assess the degree of visual contrast to the landscape's form, line, color, and texture from implementing these projects.
- AA-243: Evaluate proposed surface-disturbing projects from key observation points for the following factors: distance (between project and key observation points), angle of observation, length of time the proposed project will be in view, relative size or scale, season of use, light conditions, recovery time, spatial relationships, atmospheric conditions, and motion.
- AA-244: Use visual resource design techniques and BMPs (summarized in the BMP section later in this chapter) to mitigate the potential for short- and long-term visual impacts from other uses and activities.
- AA-245: Encourage visual resource simulations to be incorporated into the Contrast Rating Analysis for major BLM-authorized ground-disturbing activities, as recommended by BLM Manual 8431-1. Simulations will accurately convey to the public the anticipated impacts to visual scenery of the project area from the identified key observation points. Simulations would also serve as a point of reference to ensure that the project proponents reclaim and restore disturbed public lands as agreed to in the authorizing document.
- AA-246: Since the overall VRM goal is to minimize impacts to the scenic values of the public lands, mitigation measures are typically developed during project-specific NEPA analysis. During and after project implementation, these measures will be monitored by the BLM for their effectiveness at reducing impacts to scenic values.

2.14 WILDERNESS CHARACTERISTICS MANAGEMENT

Section 201 of FLPMA provides the BLM with the authority to inventory features of the land, including those associated with the concept of wilderness, or wilderness characteristics. Lands with wilderness characteristics will not be managed as Wilderness under the Wilderness Act of 1964 or WSAs. The lands that will be managed to maintain wilderness characteristics are listed by BLM acres in Table 2-14 and shown on Map 2-14.

Table 2-14
Approved RMP Identification of Lands that will be
Managed to Maintain Wilderness Characteristics

Approved RMP Identification	Approved RMP BLM Acres
Wilderness Characteristics	48,400

BLM=Bureau of Land Management

Desired Future Conditions

- WC-001: For those areas where BLM has identified to maintain wilderness characteristics, these characteristics will be managed to be ecologically sustainable and resilient to human-

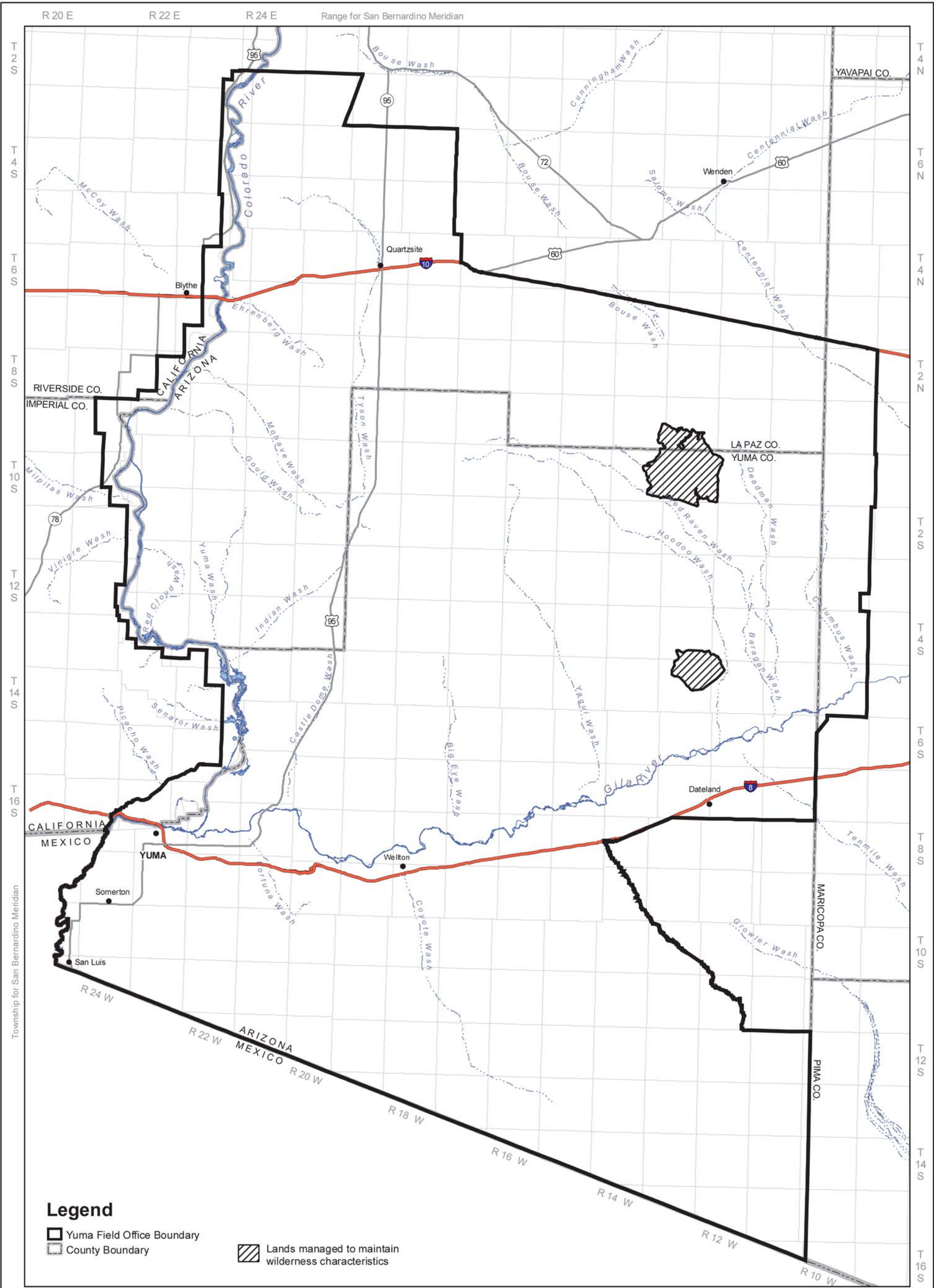
caused disturbances. The following components of wilderness characteristics will be maintained:

- Naturalness. Lands and resources exhibit a high degree of naturalness when affected primarily by the forces of nature and where the imprint of human activity is substantially unnoticeable. Naturalness attributes may include the presence or absence of roads and trails, fences, and other improvements; the nature and extent of landscape modifications; the presence of native vegetation communities; and the connectivity of habitats. Wildlife populations and habitat are recognized as important aspects of naturalness and will be actively managed;
- Solitude. Visitors may have outstanding opportunities for solitude when the sights, sounds, and evidence of other people are rare or infrequent, where visitors can be isolated, alone, or secluded from others; and
- Primitive and Unconfined Recreation. Visitors may have outstanding opportunities for primitive and unconfined types of recreation where the use of the area is through non-motorized, non-mechanical means of conveyance off designated routes or as specifically excepted, and where no or minimal developed recreation facilities are encountered.

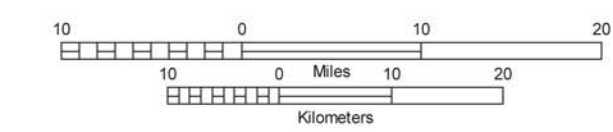
Management Actions

In those lands identified to maintain wilderness characteristics, these management actions are meant to reduce impacts to some or all of the wilderness characteristics.

- WC-002: Allow BLM-authorized surface disturbing activities or the permanent placement of structures and facilities, including but not limited to range improvements, water catchments, roads, trails, and fencing, or as required by law, only when the level of change to the characteristic landscape will be low, subject to the below project criteria.
 - In general, projects with a small footprint that will benefit from maintenance of wilderness characteristics and are compatible with other resource objectives could be approved. The criteria that will be considered for proposed projects within lands managed to maintain wilderness characteristics are listed below.
 - Need for project to protect, manage, and/or conserve natural and cultural resources.
 - Opportunity to manage and control public use or provide for public safety.
 - Opportunity to restore or enhance natural, cultural, or visual resources and meet resource objectives.
 - Long-term effect on naturalness and resources.
 - Ability to restore to its previous natural state after the project is completed.
 - Size and scale of the project.
 - Compatibility with the specified VRM Class and Prescribed Recreation Settings.
 - Loss of opportunity for solitude and primitive recreation.
 - Potential for use to be accommodated outside of the area.



**YUMA FIELD OFFICE
RECORD OF DECISION
APPROVED RESOURCE MANAGEMENT PLAN**



U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Yuma Field Office
January 2010



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

- o When approved, projects will be completed using the least impacting methods that can be reasonably used to accomplish the project, considering resource effects as well as labor effort and cost, including design for the facility to blend into the landscape; consideration of site selection and use of a low profile; design facilities that will require minimal maintenance; and use of BMPs to minimize surface and vegetation disturbance during construction. When completed, a restoration plan will be implemented to actively restore disturbed areas.
- WC-003: Allow maintenance of existing facilities.
- WC-004: Remove facilities that are no longer used, as funding and labor becomes available.
- WC-005: Evaluate and rehabilitate existing, unused, disturbed areas to a natural condition consistent with natural resource restoration objectives.
- WC-006: Reclaim sites and areas affected by human activities when such places are no longer needed for authorized land uses.
- WC-007: Allow minimum impact activities to occur such as filming, commercial recreation, guided hunts and other associated activities, when such activities conform to Approved RMP decisions, such as Prescribed Recreation Settings and VRM classes.
- WC-008: Allow the administrative use of motorized equipment on routes for natural and cultural resource management including but not limited to water supplementation, collar retrieval, and capture/release of wildlife, maintenance, repair, and reconstruction or construction of wildlife waters. Any actions will be conducted in a manner that creates the least disturbance to land to be reclaimed as soon as possible after the administrative need has ended.
- VM-063: Within lands being managed to maintain wilderness characteristics, allow vegetative manipulation to control noxious, exotic, or invasive plant species, when there is no effective alternative and when the control is necessary to maintain the natural ecological balances within the area. Control may include manual, chemical, and biological treatment, provided it will not cause adverse impacts to the wilderness characteristics.
- FM-021: When AMR allows, use minimum impact suppression tactics during fire suppression operations within lands being managed to maintain wilderness characteristics.
- FM-028: Within lands being managed to maintain wilderness characteristics, allow prescribed fires in conformity with a fire management plan so long as it is consistent in improving or maintaining the area's wilderness characteristics.
- GM-023: Allow existing livestock grazing operations and support facilities to continue within lands being managed to maintain wilderness characteristics.
- RR-022: Allow fishing, hunting, and trapping activities within lands being managed to maintain wilderness characteristics. AGFD retains jurisdiction and responsibilities with respect to fish and wildlife management and establishes regulations and enforcement for these uses.
- TM-014: Within lands being managed to maintain wilderness characteristics, allow the use of non-motorized, mechanical transport such as wheeled game carriers.

- TM-016: Within lands being managed to maintain wilderness characteristics, cross-country travel for administrative purposes will be permitted only with prior approval by the authorized officer and following appropriate NEPA analysis. Any administrative action will be conducted in a manner that creates the least disturbance and reclaimed as soon as possible after the administrative need has ended.
- TM-022: Within lands being managed to maintain wilderness characteristics, the use of motor vehicles and mechanical transport, and the construction of temporary roads, structures, and installations will be allowed for emergency purposes. Any emergency actions will be conducted in a manner that creates the least disturbance and will be reclaimed as soon as possible after the situation has ended.
- TM-036: Within lands being managed to maintain wilderness characteristics, restore closed routes to natural conditions or convert closed routes for non-motorized uses such as bicycle, equestrian, or hiking trails as appropriate.
- VR-012: Within lands being managed to maintain wilderness characteristics, decrease the visual effect of existing facilities on naturalness or scenic resources during reconstruction, replacement, or major maintenance.
- LR-032: At time of renewal of any existing ROWs within lands being managed to maintain wilderness characteristics, YFO will discuss with the grant holder the possibility of relocating the ROW outside of identified lands with high value wilderness characteristics.
- LR-063: Retain lands managed to maintain wilderness characteristics in public ownership.
- MI-004: Authorize and issue new mineral leases within lands being managed to maintain wilderness characteristics on a case-by-case basis, unless precluded from leasing by withdrawal or other laws and regulations.
- MI-010: Within lands being managed to maintain wilderness characteristics, regulate mineral leases to prevent unnecessary or undue degradation.
- MI-021: Authorization of sale and free use permits (mineral materials) will be allowed within lands being managed to maintain wilderness characteristics.

Administrative Actions

- AA-247: Lands managed to maintain wilderness characteristics will be annually monitored to determine if resource conditions are meeting identified Desired Future Conditions and the effectiveness of Management Actions. Monitoring will be completed in conjunction with other BLM resource programs, including, but not limited to, Recreation, Travel Management, Wildlife, Vegetation, Soil Resources, and Land Health Standards. Monitoring will be conducted in rotation (one area per year or as needed.) Results and conclusions of this work will be presented in the five-year plan evaluation.

2.15 CULTURAL RESOURCE MANAGEMENT

Cultural resource management in the BLM includes allocating cultural properties to appropriate cultural resource use categories and allocating areas with important cultural resources as SCRMAAs.

The Desired Future Conditions, Management Actions, and Administrative Actions below apply to all cultural resources in the planning area.

Desired Future Conditions

- CL-001: Identify, preserve, and protect significant cultural resources and ensure that they are available for appropriate uses by present and future generations.
- CL-002: Seek to reduce imminent threats and resolve potential conflicts from natural or human-caused deterioration or from other resource uses.
- CL-003: YFO provides research opportunities on cultural resources that will contribute to our understanding of the ways humans have used and influenced the landscape.
- CL-004: Historic trails, including the Anza Trail, Butterfield Overland Mail Route, Gila Trail, and Mormon Battalion Trail, are managed to realize their educational, recreational, and scientific values.
- CL-005: Within Wilderness, YFO accommodates traditional or sacred uses identified by Native American tribes who traditionally used the area.
- CM-002: The characteristics of the Limitrophe area that have been identified by Native American tribes and groups as important for traditional use are protected and maintained.
- RR-001: Public understanding and appreciation of the planning area's natural and cultural history and sensitive resources are enhanced through educational outreach and heritage tourism opportunities.
- VR-007: Viewsheds of important cultural resources whose settings contribute significantly to their scientific, public, traditional, or conservation values are maintained.

Management Actions

- CL-006: Implement protection measures to stop, limit, or repair damage to cultural resource sites. A variety of protection measures described in BLM Manual 8140 may be used to protect the integrity of sites at risk such as signs, fencing or barriers, trash removal, target shooting closures, erosion control, backfilling, repairing, shoring up, or stabilizing structures, restricting uses and access, and closures.
- CL-007: Inventory, document, monitor, and protect cultural resources of importance and relevant features within designated ACECs prior to developing interpretation programs, in order to preserve the future integrity of the resource values prior to public use.
- FM-018: Protect all known cultural resources from fire management activities-related disturbance through consultation with cultural resource specialists.

- VR-013: Design and maintain facilities to preserve the visual integrity of cultural resources, settings, and cultural landscapes consistent with VRM objectives established in the Approved RMP.
- LR-068: Where feasible, acquire properties adjacent to public lands through donation, exchange, purchase, or other means that contain significant cultural resources including, but not limited to, those properties eligible for inclusion on the NRHP.

Administrative Actions

- AA-248: Complete Class II (sample) and Class III (intensive) field inventories to identify and record cultural resource sites, in accordance with Section 110 of the NHPA. Inventory will focus on the following areas:
 - o SCRMA's and other areas with predicted cultural resource sensitivity, and
 - o Areas where cultural resource sensitivity is unknown because of a lack of previous field inventory.
- AA-249: Follow guidance developed by the BLM – SHPO Cultural Resource Data Sharing Partnership (CRDSP). Ensure that YFO's cultural resources information is entered into the AZSITE database and the California Historical Resources Information System, as appropriate.
- AA-250: Ensure that all proposed undertakings and authorizations are reviewed and conducted in compliance with applicable Federal laws including Section 106 of the NHPA.
- AA-251: Verify that project designs and proposed activities seek to avoid disturbing or removing Native American human remains and associated items.
- AA-252: Continue to coordinate and consult with Native American tribes to identify places of traditional importance in accordance with BLM Manual 8120.
- AA-253: Accommodate requests by Native American tribes for use of, and access to, sacred sites and other places of traditional cultural importance that are identified through government-to-government consultation.
- AA-254: Establish collaborative research partnerships with academic institutions, professional and non-profit organizations, and vocational organizations.
- AA-255: Restrict public information about the locations of cultural resource sites that are not allocated to Public Use, as required by law and regulation.
- AA-256: Maintain an annual monitoring program that focuses on the condition of NRHP-listed and NRHP-eligible cultural resource sites that are allocated to the Public Use, Traditional Use, and/or Conservation for Future Use categories. ACECs and SCRMA's will be monitored on an annual basis to identify any potential adverse impacts. Develop partnerships with organizations like the Arizona Site Steward Program to achieve monitoring goals.

2.15.1 SPECIAL CULTURAL RESOURCE MANAGEMENT AREAS

The Approved RMP allocates 10 SCRMA's in the planning area, which are illustrated in Table 2-15 and Map 2-15 and listed. Appendix H provides additional information on the new SCRMA allocation.

Table 2-15
Approved RMP SCRMA's

Special Cultural Resource Management Areas	Approved RMP (BLM acres)
Scientific Use	
Cibola Valley	4,700
Laguna Mountains	2,700
Ligurta Area	4,800
Traditional Use and Conservation for Future Use	
Muggins Mountains Terraces	4,300
Walters Camp	1,600
Conservation for Future Use	
Big Maria Terraces	4,700
Mittry Lake	1,000
North Gila Mountains	1,100
Palo Verde Point Area	1,300
Senator Wash North	2,300
Total SCRMA Acres	28,500

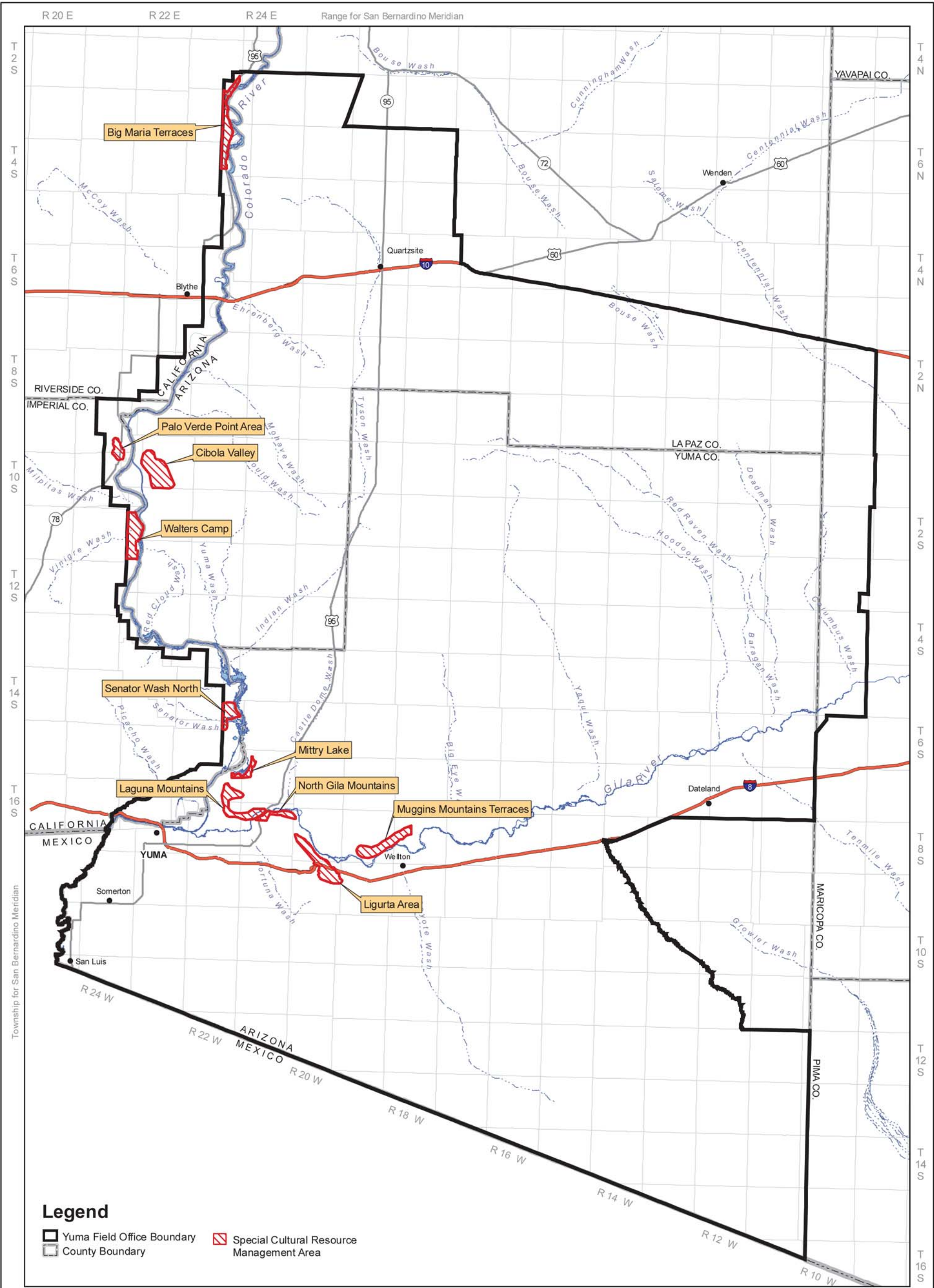
BLM = Bureau of Land Management; SCRMA = Special Cultural Resource Management Area

Management Actions

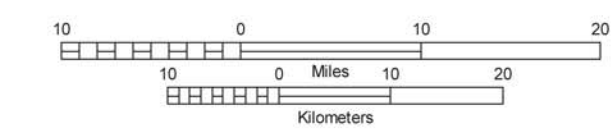
- CL-008: Additional SCRMA's may be allocated through an RMP amendment as they are identified. SCRMA's may increase or decrease in acreage based upon new information.
- CL-009: Allocate 4,700 BLM-administered acres as the Big Maria Terraces SCRMA and manage the cultural resources within the SCRMA primarily for Conservation for Future Use. This portion of the YFO has a rare density of intaglios and other desert pavement features that extends across the terraces above the Colorado River floodplain. Together with the intaglio features present inside the Big Marias ACEC, this landscape is currently recognized as the single greatest concentration of intaglio and geoglyph sites in North America. This area needs proactive management to prevent additional impacts to the desert pavement landscape from recreational use, particularly damage from unauthorized OHV tracks.
- CL-010: Allocate 4,700 BLM-administered acres as the Cibola Valley SCRMA and manage the cultural resources within the SCRMA primarily for Scientific Use. The Cibola Valley SCRMA is located on the east side of the Colorado River, in the vicinity of the Town of Cibola, Arizona. The SCRMA contains a high concentration of indigenous cultural features, including cleared areas in the desert pavement, rock alignments, circular mounds, trail networks, lithic scatters, plus some intaglio and petroglyph sites. The cultural resource sites

in this SCRMA require proactive management due to increased development and recreational use in this area.

- CL-011: Allocate 2,700 BLM-administered acres as the Laguna Mountains SCRMA and manage the cultural resources within the SCRMA primarily for Scientific Use. The Laguna Mountains SCRMA is located within the west and south foothills of the Laguna Mountains, near the confluence of the Colorado and Gila rivers. The landscape of this area primarily contains traces of habitation such as extensive low density lithic scatters, cleared areas in the desert pavement, rock features, ceramic scatters, and a trail network. There are also some known petroglyph sites of importance in the region. The cultural resource sites in this SCRMA require proactive management due to increased development and recreational use in this area.
- CL-012: Allocate 4,800 BLM-administered acres as the Ligurta Area SCRMA and manage the cultural resources within the SCRMA primarily for Scientific Use. The Ligurta Area SCRMA is located between the Gila River to the east and the Gila Mountains to the west, in the vicinity of Ligurta, Arizona. Known indigenous cultural resources in this area include rock features, dance patterns, many cleared areas in the desert pavement and a trail network. The cultural resource sites in this SCRMA require proactive management due to the increasing amount of development and recreational use in this area.
- CL-013: Allocate 1,000 BLM-administered acres as the Mittry Lake SCRMA and manage the cultural resources within the SCRMA primarily for Conservation for Future Use. The Mittry Lake SCRMA is located along the south and east sides of Mittry Lake, within the existing Mittry Lake CMA. This SCRMA includes important indigenous artifact scatters, with a diversity of lithic materials and ceramic types and a potential for subsurface deposition that is not common for the YFO area, plus some known petroglyphs. The cultural resource sites in this SCRMA require proactive management due to their close proximity to intensive recreational use in the vicinity of Mittry Lake.
- CL-014: Allocate 4,300 BLM-administered acres as the Muggins Mountains Terraces SCRMA and manage the cultural resources within the SCRMA primarily for Traditional Use and Conservation for Future Use. The Muggins Mountains Terraces SCRMA is located along the south side of the Muggins Mountains, in the foothills above the Gila River floodplain in the vicinity of Wellton, Arizona. This area contains petroglyphs, cleared areas in the desert pavement, trail networks, lithic scatters, rock alignments, and other rock features located along the desert pavement terraces. This area needs proactive management to prevent additional impacts to the desert pavement landscape from increased recreational use, particularly damage caused by unauthorized OHV tracks.
- CL-015: Allocate 1,100 BLM-administered acres as the North Gila Mountains SCRMA and manage the cultural resources within the SCRMA primarily for Conservation for Future Use. The North Gila Mountains SCRMA is located along the northern edge of the Gila Mountains, in the foothills above the south side of the Gila River. This area is known for its high density of desert pavement features, including intaglios, pebble mounds, cleared areas, rock rings, rock alignments, and an extensive trail network. The cultural resource sites in this SCRMA require proactive management due to increased development and recreational use in this area.
- CL-016: Allocate 1,300 BLM-administered acres as the Palo Verde Point Area SCRMA and manage the cultural resources within the SCRMA primarily for Conservation for Future Use.



**YUMA FIELD OFFICE
RECORD OF DECISION
APPROVED RESOURCE MANAGEMENT PLAN**



U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Yuma Field Office
January 2010



Map 2-15: Special Cultural Resource Management Areas

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

The Palo Verde Point Area SCRMA is located on the east side of the Palo Verde Mountains, in the vicinity of Palo Verde, California. This SCRMA is situated on the west side of the Colorado River above the floodplain and is unique for its relatively pristine condition, with the desert pavement virtually undisturbed compared with other portions of the planning area. Consequently, the cultural resources in this SCRMA are in superior condition with less human-caused damage. Traces of indigenous use in this area include important intaglio sites, an extensive petroglyph site, plus trail networks, rock alignments, cleared areas in the desert pavement, and widespread lithic scatters. The cultural landscape in this area requires proactive management to retain the undisturbed character of the resources.

- CL-017: Allocate 2,300 BLM-administered acres as the Senator Wash North SCRMA and manage the cultural resources within the SCRMA primarily for Conservation for Future Use. The Senator Wash North SCRMA is located in California adjacent to the Senator Wash Reservoir, bounded by the Colorado River to the east and the El Centro Field Office to the west. Indigenous cultural resource sites known in this area consist of rock alignments and other rock features, trails, and an intaglio site. The cultural resource sites in this SCRMA area require proactive management due to their close proximity to intensive recreational use in the vicinity of the Senator Wash Reservoir.
- CL-018: Allocate 1,600 BLM-administered acres as the Walters Camp SCRMA and manage the cultural resources within the SCRMA primarily for Traditional Use and Conservation for Future Use. The Walters Camp SCRMA is located on the west side of the Colorado River, between the Imperial and Cibola NWRs in California. There is extensive evidence of year-round use by indigenous peoples, with important intaglio sites, desert pavement features such as cleared areas and rock alignments, and artifact scatters situated across the landscape. In addition, the sacred Xam Kwitcam migratory trail (a path that begins at AviKwame, the mythical site of Yuman creation north of Needles, California and ends at Yuma, Arizona) is believed to cross through this area (von Werlhof 2004). Proactive management is needed to protect the cultural resources in this SCRMA from increased recreational use and OHV traffic.
- TM-007: Designate a Closed OHV Management Area within 2,200 acres of the Muggins Mountains SCRMA.
- TM-013: Within all SCRMA, prohibit motorized vehicles from pulling off 100 feet on either side of the centerline from designated routes. Motorized use shall remain within the route with reasonable use of the shoulder and immediate roadside for vehicle passage, parking/overnight camping, and emergency stopping.
- TM-020: Within the Big Maria Terraces SCRMA, limit equestrian use to existing inventoried routes until the route designation process is complete. Designate equestrian trails and install equestrian trailhead facilities to reduce user and resource conflicts. Limit equestrian use to these trails once they have been designated.
- TM-042: Maintain the 122-acre North Bank Milpitas Wash OHV Restriction within the Walters Camp SCRMA until the completion of the Ehrenberg–Cibola TMP. Designate these lands as a Limited or Closed OHV Management Area in the TMP.
- LR-004: In the event that Reclamation relinquishes their second form withdrawal within SCRMA, YFO will propose to withdraw additional Federal lands from mineral entry.

- LR-028: To the extent possible, new transportation ROWs will avoid SCRMA. Appropriate mitigation will be required when avoidance is not possible.
- LR-038: New utility facilities within ROW Corridors will avoid impacts to natural and cultural resources within SCRMA to the greatest extent possible. If impacts cannot be avoided, mitigation will be required.
- LR-052: Surface occupancy of renewable energy facilities will not be allowed in SCRMA.

2.15.2 ALLOCATION TO USE CATEGORIES

BLM evaluates cultural resources according to their current and potential uses. Cultural properties and classes of cultural properties that are known and projected to occur in the planning area 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. Suitable uses for cultural properties are determined based on the properties' characteristics, condition, setting, location, accessibility, perceived values and potential uses. Category allocations are used to determine appropriate mitigation and treatment options for cultural properties that are presently known and for those discovered in the future. A site may be allocated to more than one use category, and category allocations are reevaluated and revised, as appropriate, when circumstances change or new data become available.

While the primary focus of a SCRMA is for a particular use, individual sites within the SCRMA may be managed for any of the six cultural resource use categories, as appropriate. The principal use categories for a SCRMA may be reevaluated and revised when circumstances change or new data becomes available.

A. SCIENTIFIC USE

Desired Future Condition

- CL-019: The YFO allocates cultural resource sites and SCRMA to Scientific Use based on the following criteria: significance and uniqueness of sites; potential to contribute toward scientific understanding; capability of current available scientific methods to achieve research goals; appropriate research proposal that will further scientific understanding or resource management; and existing threats to sites, including vandalism, erosion processes, or other types of disturbance.
- CL-020: Cultural properties in the Scientific Use category are protected until land use conflicts or research in the public interest makes it necessary or advisable to subject them to scientific study.

Management Actions

- CL-021: Consider and authorize studies at sites allocated to Scientific Use using currently available research methods, including methods that will result in the properties' alteration or destruction, on a case-by-case basis.

- CL-022: Permit scientific and historical studies by qualified researchers at selected sites allocated to Scientific Use.

Administrative Actions

- AA-257: Use historic contexts and research designs to provide guidance for scientific studies at sites allocated to Scientific Use.
- AA-258: Assign highest priority for study to Scientific Use sites that are threatened with damage from human activities or natural processes, areas of scientific interest, sites eligible for the NRHP, and areas where research may inform management actions.
- AA-259: Establish collaborative research partnerships for sites allocated to Scientific Use with academic institutions, professional and nonprofit organizations, and vocational organizations.
- AA-260: Provide opportunities for and encourage Tribal participation in research at sites allocated to Scientific Use.

B. PUBLIC USE

Desired Future Condition

- CL-023: YFO allocates cultural resource sites and SCRMA's to Public Use based on the following criteria: presence of aboveground features, such as structures or rock art, landscape characteristics, or other features that are of interest to the public and are amenable to interpretive development; the condition of the site and the feasibility of treating or stabilizing areas to withstand visitation; accessibility to travel routes; visitor safety; compatibility of other land uses and site values, such as traditional use by Native Americans; feasibility of regular inspections by BLM staff and volunteers; and partnership opportunities for interpretive and educational projects.
- CL-024: Cultural properties managed for Public Use will be protected and developed as interpretive exhibits in place, or for related educational and recreational uses by members of the general public.

Management Actions

- CL-007: Inventory, document, monitor, and protect cultural properties before interpretive development for Public Use, to the extent necessary to preserve archaeological data, plan for interpretive facilities, provide a baseline condition assessment for monitoring changes resulting from visitor use, and complete interpretive plans.
- CL-025: Continue to allocate the Blythe Intaglios Complex in the Big Marias ACEC, the Fisherman Intaglio, the Sears Point ACEC interpretive area, and historic trails such as the Anza Trail, the Butterfield Overland Mail Route, the Gila Trail, and the Mormon Battalion Trail to Public Use.
- CL-026: Allocate the Dripping Springs site and the Tyson Wash Petroglyphs to Public Use.

- CL-027: Except for prior existing rights, discretionary Mineral Resource Management (Section 2.19) and Lands and Realty (Section 2.18) actions, including but not limited to mineral materials disposals and ROW facilities, will generally not be authorized at Public Use cultural resource sites. Installation of facilities to protect, interpret, or manage resource values will be allowed.
- CL-028: Implement actions designed to stabilize, repair, and maintain cultural properties in good condition at Public Use sites.
- RR-005: Authorize commercial tour operators to Public Use cultural resource sites on a case-by-case basis. Include stipulations in SRPs to ensure that commercial tour operations will not damage cultural resources.
- RR-018: Implement appropriate developments necessary for protection and interpretation at Public Use cultural resource sites, including but not limited to installing registration boxes and interpretive signs; establishing non-motorized trails, including hardened walking trails within ¼ to ½ mile distance from sites; closing and converting to hiking trails or rehabilitating existing vehicle routes in close proximity to the site; and producing fact sheets or brochures.
- MI-009: No surface occupancy for oil and gas leases will be allowed within Public Use cultural resource sites.

Administrative Actions

- AA-261: Provide opportunities for Tribal participation in interpretation at Public Use sites.
- AA-262: Promote heritage tourism at selected Public Use sites, and cooperate with Native American tribes, other agencies, and organizations on heritage tourism projects that benefit local economies.
- AA-263: Require commercial tour operators at Public Use sites to provide appropriate educational information on archaeological site etiquette and resource conservation to their customers if cultural properties are included on the tour. Require tour operators to report any vandalism or damage to sites.

C. TRADITIONAL USE

Desired Future Condition

- CL-029: Cultural resource sites and SCRMAAs managed for Traditional Use are limited to those identified by Native American tribes and other social or cultural groups as important for maintaining their cultural identity, heritage, or well-being.
- CL-030: Cultural properties allocated to Traditional Use will be managed for long-term preservation to accommodate the needs of Native American tribes and other groups for which these places are important.
- CL-031: Physical damage or intrusions at Traditional Use sites that might impede their use by religious practitioners are prevented.

- CL-032: The YFO develops specific management for sites managed for traditional uses in consultation with the Native American tribes to which they are culturally important.

Management Actions

- CL-027: Except for prior existing rights, discretionary Mineral Resource Management (Section 2.19) and Lands and Realty (Section 2.18) actions, including but not limited to mineral materials disposals and ROW facilities, will generally not be authorized at Traditional Use cultural resource sites. Installation of facilities to protect, interpret, or manage resource values will be allowed.
- CL-033: Stabilize, fence, or otherwise manage significant Traditional Use sites or features to protect the values ascribed to these sites by Native American tribes.
- CL-034: Minimize direct and indirect impacts to cultural values at Traditional Use sites pursuant to applicable cultural resource laws and regulations if land use actions cannot be redesigned to avoid culturally sensitive locations.
- MI-009: No surface occupancy for oil and gas leases will be allowed within Traditional Use cultural resource sites.

Administrative Actions

- AA-264: Review requests for vehicular access to sacred areas not normally open to vehicles and consider authorizing such use on a case-by-case basis if Native American tribes identify such areas in the future.
- AA-265: Work and coordinate with Native American tribes to select harvesting areas and allow noncommercial (personal use) collection of medicinal herbs, ceremonial herbs, other vegetation, and/or minerals for traditional or ceremonial use.
- AA-266: Identify sacred sites in consultation with Native American tribes.
- AA-267: Keep the locations of sacred sites and other places of traditional or religious importance to Native American tribes confidential to the extent allowed by law.

D. CONSERVATION FOR FUTURE USE

Desired Future Condition

- CL-035: Cultural resource sites and SCRMA's allocated to the Conservation for Future Use category are of singular historic importance, architectural interest, or cultural importance. Their unusual significance makes them unsuitable for scientific or historical study that will result in their physical alteration.
- CL-036: Cultural properties allocated to Conservation for Future Use will be managed to maintain their present condition or setting until conditions are met in the future that will make them available for other uses.

Management Actions

- CL-027: Except for prior existing rights, discretionary Mineral Resource Management (Section 2.19) and Lands and Realty (Section 2.18) actions, including but not limited to mineral materials disposals and ROW facilities, will generally not be authorized at Conservation for Future Use cultural resource sites. Installation of facilities to protect, interpret, or manage resource values will be allowed.
- CL-037: Segregate Conservation for Future Use cultural properties from all other land or resource uses, including cultural resource uses that will threaten their present condition or setting.
- CL-038: Implement actions designed to preserve Conservation for Future Use cultural properties and maintain them in good condition.
- CL-039: Minimize direct and indirect impacts to cultural values at Conservation for Future Use sites pursuant to applicable cultural resource laws and regulations if land use actions cannot be redesigned to avoid culturally sensitive locations.
- MI-009: No surface occupancy for oil and gas leases will be allowed within Conservation for Future Use cultural resource sites.

Administrative Actions

- AA-268: Conserve cultural resource sites allocated to Conservation for Future Use for the future until specified provisions were met such as the discovery of new information about the site, the development of new scientific techniques capable of fully realizing the research potential of the site, or damage to the site's integrity from vandalism or natural processes.

E. EXPERIMENTAL USE

Desired Future Condition

- CL-040: Cultural resource sites and SCRMA's allocated to the Experimental Use category are those suited for controlled experimental studies that will result in better management of other cultural properties.
- CL-041: Cultural properties allocated to Experimental Use will be available for studies that will aid in the management of other cultural properties, including studies that will result in the properties' alteration or destruction.

Administrative Actions

- AA-269: Consider studies at Experimental Use sites such as testing and measuring the rate of natural or human-caused deterioration, testing the effectiveness of certain protection measures, and testing the effects of fire.
- AA-270: Implement studies at Experimental Use sites that will develop new research or interpretation methods or will generate similar kinds of practical management information, weighing the benefits of specific information to be gained versus the loss of cultural attributes or data that may occur during the experiment or study.

- AA-271: Do not apply experimental study to cultural properties with strong research potential, traditional cultural importance, or good public use potential if it will significantly diminish those values.

F. DISCHARGED FROM MANAGEMENT

Desired Future Condition

- CL-042: Cultural properties Discharged from Management are limited to those having no remaining information potential, no traditional values, and no identifiable use. Cultural properties will be allocated to this category only on a case-by-case basis after inspection and recordation in the field, and only after complying with Section 106 of the NHPA.
- CL-043: Cultural resource sites identified through government-to-government consultation as having traditional use values are not allocated to the Discharged from Management use category.
- CL-044: Other land uses take precedence when managing cultural resource sites allocated to Discharged from Management, including land uses that will further diminish the properties' integrity.

Administrative Actions

- AA-272: Record cultural properties in the Discharged from Management category in the field and retain them in the inventory.

2.16 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.

Desired Future Conditions

- PL-001: YFO protects and conserves significant paleontological resources as they are discovered on public lands.
- PL-002: YFO manages paleontological resources in ways that prioritize research needs, facilitate educational and recreational needs, and protect important sites.
- PL-003: Specific objectives and management actions are developed for fossil localities, when paleontological resources are discovered in the planning area.

Management Actions

- PL-004: Evaluate paleontological resources as they are discovered, considering their scientific, educational, and recreational values. Identify appropriate objectives, management actions, allowable uses, and allocations for fossil localities as they are found.
- PL-005: Restrict the collection of all vertebrate fossils, and noteworthy invertebrate and plant fossils, to legitimate scientific or educational uses in accordance with permitting procedures.
- PL-006: Allow recreational collection of common invertebrate and plant fossils (43 CFR 8365).
- PL-007: Areas with Low Paleontological Sensitivity. Assessment or mitigation for proposed land use authorizations in areas with low paleontological sensitivity will not be required except in very rare circumstances.
- PL-008: Areas with Moderate Paleontological Sensitivity. BLM-authorized surface-disturbing activities in areas with moderate paleontological sensitivity may require assessment to determine further courses of action. A field survey by a qualified paleontologist may be required. Management prescriptions for resource preservation and conservation through controlled access or special management designation will be considered.
- PL-009: Areas with High Paleontological Sensitivity. An assessment by a qualified paleontologist prior to authorizing land uses that could impact vertebrate fossils and/or uncommon invertebrate fossils will be required in areas with high paleontological sensitivity. A records search, inventory, monitoring, and/or mitigation will be required as appropriate before and/or during these actions.

Administrative Actions

- AA-273: Develop a paleontology sensitivity map according to the procedures outlined in BLM Manual 8270 and BLM Handbook H-8270-1. All land use actions with a potential to impact vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils will be screened against this map. Classifications will be based on future inventory of geological units and will be accomplished through adaptive management and plan maintenance.
- AA-274: Establish agreements and partnerships with interested organizations, such as museums, scientific organizations, agencies, or universities to support inventory, evaluation, recordation, mitigation, protection, and management of paleontological resources.
- AA-275: Priority areas for paleontological inventory will be areas that are most likely to include significant paleontological resources, that are relatively accessible to the public, and/or that are vulnerable to damage or loss from land use activities.
- AA-276: A long-term monitoring program will consist of the annual visitation to any significant paleontological localities found within the planning area to identify adverse impacts, if any. The same approach would apply to significant localities identified in the future.

2.17 AIR, WATER, AND SOIL MANAGEMENT

2.17.1 AIR RESOURCE MANAGEMENT

FLPMA and the CAA of 1970 and Amendments of 1977 and 1990 prohibit 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.

Desired Future Conditions

- WS-001: Air quality, as established by the National Ambient Air Quality Standards and Arizona and California air quality standards, is maintained or improved.
- WS-002: Desired outcomes and area-wide criteria or restrictions are identified in cooperation with the appropriate air quality regulatory agencies that apply to emission-generating activities, including the CAA's requirements for compliance with:
 - 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.), and
 - Conformity Analyses and Determinations (Section 176(c)).
- WS-003: Standards involving particulate matter up to 10 micrometers in size (PM₁₀) are met in the Yuma Non-attainment area.
- WS-004: Air quality within required standards is met through cooperative management of emissions with industry, the States of Arizona and California, and Federal agencies. YFO will strive to minimize, within the scope of its authority, any emissions that may cause violations of air quality standards, add to acid rain, or degrade visibility.

Management Actions

- WS-005: Comply with the State of Arizona laws and regulations for all proposed actions that will contribute to particulate matter emissions in the air as a result of actions taken in this RMP. The planning area includes the Yuma PM₁₀ Non-attainment Area. Likewise, comply with the State of California laws and regulations regarding particulate emissions.
- WS-006: Continue to take actions to control fugitive dust from Open OHV Management Areas, dry washes, river beds, and construction sites to prevent non-point source air pollution.

Administrative Actions

- AA-277: Work closely with counties or States on the development or amendment of State implementation plans.

- AA-278: Actively support ADEQ and the California Air Resources Board Imperial County Air Pollution Control District regulatory oversight of air resources in the planning area.
- AA-279: Consult, coordinate, and comply with applicable Tribal, Federal, State, and local air quality regulations, as required by the CAA, EO 12088, and Tribal, Federal, or State implementation plans.
- AA-280: Monitoring of air quality and other conditions conducted by ADEQ will be used to determine whether BLM actions that may contribute to air quality concerns (mainly prescribed fire) may proceed or be deferred until conditions improve. The number of BLM actions contributing to any violation of national air quality standards will be tracked annually and reported in the Annual Program Summary and Planning Update.

2.17.2 WATER RESOURCE MANAGEMENT

Water resources in the planning area include both surface water and groundwater. The groundwater resource is managed by the Arizona Department of Water Resources (ADWR). BLM works in cooperation with ADWR to develop groundwater resources to provide water to BLM grazing lease holders, mineral operators, and to some recreational sites.

The planning area occurs within the Lower Colorado River Basin, which is further divided into smaller watersheds. Water management applies to these watersheds, as well as the floodplains and riparian areas of the Colorado and Gila Rivers.

Desired Future Conditions

The following Desired Future Conditions will be applied throughout the entire planning area:

- WS-007: The physical presence and legal availability of surface water and groundwater is maintained on public lands.
- WS-008: Surface water and groundwater on public lands meet or exceed Federal, Arizona, and California water quality standards for specific uses.
- WS-009: Water quality complies with State water quality standards and achieves, or is making significant progress toward achieving, established YFO management objectives such as meeting wildlife and recreational needs.

A. SURFACE WATER

Desired Future Conditions

- WS-010: Surface waters are identified and protected from the standpoint of human health concerns, aquatic ecosystem health, or other public uses
- WS-011: Stream bank and channel conditions are preserved and enhanced.
- WS-012: Area wide use restrictions or other protective measures are identified to meet Federal, Tribal, State, and local water quality requirements.

Management Actions

- WS-013: Maintain existing proper functioning conditions of watersheds by applying BMPs.
- WS-014: Prevent or reduce water quality degradation through the application of specific mitigation measures.
- WS-015: Acquire legally perfected rights to use water from the lower Colorado River in support of YFO programs, including the water needs of the BLM recreation sites, commercial and concession facilities, and wildlife and habitat.
- WS-016: Continue to maintain or improve water quality in accordance with State and Federal standards. Consult with the appropriate State agencies (ADEQ and others) on proposed projects that may significantly affect water quality. Establish and implement Management Actions on public land within municipal watersheds to protect water quality and quantity.

Administrative Actions

- AA-281: Provide water use reports periodically to Reclamation per agreement.
- AA-282: Analyze surface and ground water quality and quantity on a case-by-case basis.

B. FLOODPLAIN MANAGEMENT

BLM is mandated by EO 11988-Floodplain Management to avoid development or occupancy on the 100-year floodplain wherever possible. Accepted flood proofing measures and other flood protection measures must be applied to all new construction or rehabilitation of structures and facilities in the floodplain.

Desired Future Conditions

- WS-017: Floodplains and riparian areas administered by BLM along the Colorado and Gila rivers will continue to be managed with priority consideration given to maintenance as wildlife habitat.
- WS-018: Desired plant communities and suitable wildlife habitat are restored and maintained for the benefit of migratory birds, waterfowl, reptiles, big-game mammals, and other desired species within riparian areas and floodplains.
- WS-019: Hydrologic function between watersheds and main channels of the Colorado and Gila rivers is maintained through proper floodplain management.
- RR-003: Ample recreation opportunities are provided on BLM-administered lands within the 100-year floodplains of the lower Colorado and Gila rivers.

Management Actions

- WS-020: Manage BLM-administered lands within or adjacent to the Colorado River Floodplain for natural resource-based recreational uses compatible with the Desired Future Conditions of wildlife habitat and vegetation communities.

- WS-021: Allow only those permanent new facilities that can be flood proofed within the 100-year floodplain. Existing permanent structures will be allowed to remain in the 100-year floodplain until they are inundated, their useful life is gone, or the present leases expire.
- GM-024: No grazing leases will be authorized within the 100-year floodplain of the Colorado or Gila rivers.
- LR-019: No new agricultural leases will be authorized within the 100-year floodplain of the Colorado and Gila rivers.
- LR-063: BLM-administered lands within or adjacent to the Colorado River 100-year floodplain will remain in Federal management and not be made available for disposal.

Administrative Actions

- AA-283: Coordinate with Reclamation pursuant to DM 613 on management of BLM-administered lands within the Colorado River Floodplain.
- AA-284: Coordinate floodplain management with the USIBWC's projects, objectives, and mission.

2.17.3 SOIL RESOURCE MANAGEMENT

Soils in the planning area are associated with a variety of climates, vegetative cover, topography, and geology. Five soil suborders (specific soil types) are found in the planning area (The Nature Conservancy 2004). Almost 90 percent of the planning area consists of aridisols, a soil order (general soil type) of the USDA NRCS Soil Classification System. The planning area also contains sensitive resources including biological soil crusts, desert pavement, and stabilized sand dunes.

Desired Future Conditions

- WS-022: Soil resource conditions are maintained or improved throughout the planning area.
- WS-023: Soils are managed to maintain biological productivity and to minimize erosion.
- LH-001: Land Health Standard #1, as related to soils, and multiple use objectives per *Standards and Guidelines* (USDOI BLM 1997) are met.

Management Actions

- WS-024: After completion of BLM-authorized surface disturbing activities, disturbed surfaces will be restored to a natural condition as far as possible.
- WS-025: Restrict vehicular and construction activities when soils are susceptible to a heightened risk of erosion or compaction. Restore areas of excessive surface damage from past activities.
- WS-026: Incorporate erosion and salinity control measures into projects where appropriate.

Administrative Actions

- AA-285: Conduct a range-wide soil survey using USDA NRCS standards to provide information on soil types, erosion risks, and soil vulnerability to disturbances.
- AA-286: Coordinate with USDA NRCS.
- AA-287: Map all sensitive soil resources to facilitate protection of biological soil crusts, desert pavement, and stabilized sand dunes.
- AA-288: Monitor effects to sensitive soils resulting from OHV use.
- AA-289: Minimize and/or avoid damage to sensitive soils from land use actions and multiple-use will be to the extent practicable.

2.18 LANDS AND REALTY MANAGEMENT

The Lands and Realty program consists of two distinct parts: land use authorizations and land tenure. FLPMA enables BLM to accomplish a variety of lands actions, including but not limited to sales, withdrawals, acquisitions, exchanges, leases, permits, easements, and ROWs. A summary of lands and realty actions is presented in Table 2-16 and Map 2-16.

Table 2-16
Approved RMP Lands and Realty Decisions

Decisions	Approved RMP BLM Area
Lands Available for Disposal (acres)	
Total Acres	11,900
Acquisitions	
Lands would be acquired on a case-by-case basis.	
Withdrawal (acres)	
Wilderness (AZ/CA) (existing, by law)	167,800
Big Marias ACEC	2,900*
Dripping Springs ACEC	640
Sears Point ACEC	8,500
Total Acres	179,840
ROW Corridors (miles)	
El Paso Natural Gas	72
Interstate 8	86
Interstate 10	79
Palo Verde–Devers	84
Palo Verde Mountains Reroute	11
Parker Blaisdell	86
San Diego Gas & Electric Interconnection	89
Highway 95 California	26
Total Corridors	8
Total ROW Corridor Miles	465**

Table 2-16
Approved RMP Lands and Realty Decisions (cont.)

Decisions	Approved RMP BLM Area
Communications Sites	
Big Maria	
Black Rock Hill	
Cunningham	
Guadalupe	
Laguna Mountain (High Power)	
Mohawk	
Palo Verde Gap	
Salome	
Stone Cabin	
Telegraph	
Total Sites	10

BLM=Bureau of Land Management; AZ=Arizona; CA=California; ACEC=Area of Critical Concern; ROW=right-of-way

*BLM would propose to withdraw 2,900 acres in the Big Marias ACEC should Reclamation revoke their existing withdrawal for the area.

**There are several overlapping ROW Corridors; there are a total of 531 miles of ROW Corridors when including the overlapping corridors.

2.18.1 LAND USE AUTHORIZATIONS

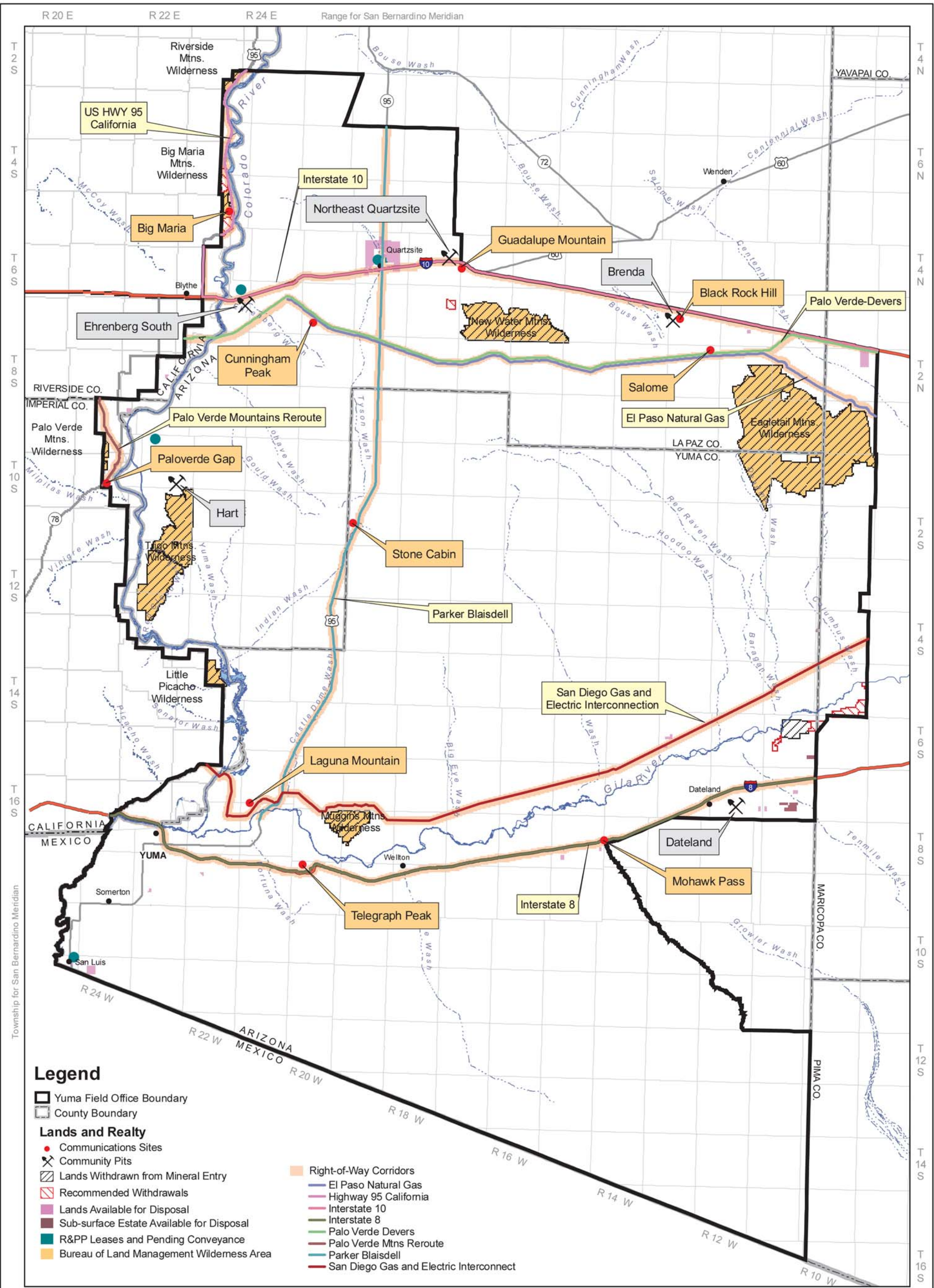
A. WITHDRAWAL

Within the planning area, 167,800 acres of public land have been permanently withdrawn from mineral entry according to the Wilderness Act of 1964, as amended. The Approved RMP continues a withdrawal in the Sears Point ACEC, recommends an expansion of the Sears Point ACEC withdrawal, and recommends additional withdrawals in the Big Marias and Dripping Springs ACECs. BLM-administered lands that are currently withdrawn or that are proposed for withdrawal are shown on Map 2-16.

There are existing withdrawn lands within the YFO for the following Federal agencies: Reclamation, USFWS, Department of the Navy, Department of the Army, Department of the Air Force, and U.S. Border Patrol. YFO has limited administrative responsibility on approximately 282,000 acres of land along the lower Colorado River that are currently withdrawn from public domain or have been acquired for project purposes by Reclamation. BLM's management of Reclamation withdrawn and acquired lands is the subject of an interagency agreement (*Reclamation/BLM Interagency Agreement of 23 March 1983*, or subsequent revisions) and department-wide guidelines (DM 613 and the Lower Colorado River LUP).

Desired Future Conditions

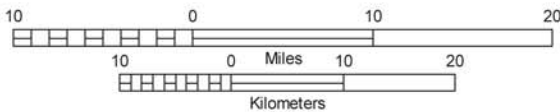
- LR-001: The amount of land withdrawn is minimized and, where applicable, existing withdrawals are revoked if the land is no longer needed for the original purpose of the withdrawal.



Legend

- Yuma Field Office Boundary
- County Boundary
- Lands and Realty**
 - Communications Sites
 - Community Pits
 - Lands Withdrawn from Mineral Entry
 - Recommended Withdrawals
 - Lands Available for Disposal
 - Sub-surface Estate Available for Disposal
 - R&PP Leases and Pending Conveyance
 - Bureau of Land Management Wilderness Area
- Right-of-Way Corridors
 - El Paso Natural Gas
 - Highway 95 California
 - Interstate 10
 - Interstate 8
 - Palo Verde Devers
 - Palo Verde Mtns Reroute
 - Parker Blaisdell
 - San Diego Gas and Electric Interconnect

**YUMA FIELD OFFICE
RECORD OF DECISION
APPROVED RESOURCE MANAGEMENT PLAN**



U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Yuma Field Office
January 2010



Map 2-16: Lands and Realty/Minerals

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

Management Actions

- LR-002: Continue managing existing withdrawals within the planning area, including 167,800 acres of Congressionally-designated Wilderness, 2,900 acres at the Big Marias ACEC, and 3,600 acres at the Sears Point ACEC.
- LR-003: Pursue the withdrawal of 640 acres of Federal land within the Dripping Springs ACEC (see Map 2-1-2) and an additional 4,900 acres of Federal land within the Sears Point ACEC (see Map 2-1-3).
- LR-004: In the event that Reclamation relinquishes their second form withdrawal within SCRMAAs and/or the Big Marias ACEC, YFO will propose to withdraw additional Federal lands from mineral entry.
- LR-005: All non-Federal lands acquired within the Gila River Cultural ACEC (i.e., Sears Point ACEC core area) boundary established and withdrawn by Public Land Order 7212 (September 5, 1996) will be managed under the current existing withdrawal. Continue to acquire from willing sellers those non-Federal lands within the current boundary of the Gila River Cultural ACEC withdrawn by Public Land Order 7212.
- LR-006: If lands withdrawn by Reclamation, USFWS, Department of the Navy, Department of the Army, Department of the Air Force, and/or U.S. Border Patrol are returned to the public domain, YFO will manage them in accordance with the Approved RMP decisions for surrounding or adjacent BLM-administered lands.

Administrative Actions

- AA-290: Continue to review existing withdrawals, including other agency withdrawals, periodically to ensure that the reasons for the withdrawal are still valid, and that only the acreage needed is retained in withdrawn status.
- AA-291: Use the appropriate tools for protection of designated ACECs, which could include withdrawal.
- AA-292: On Federal lands where appropriate, follow the floodplain management practices consistent with EO 11988, Floodplain Management.

B. LEASES/PERMITS/EASEMENTS

Public land is subject to application for community expansion needs under a wide variety of public land laws. YFO authorizes agricultural, industrial, and commercial uses on Federal lands pursuant to applicable laws and regulations.

Desired Future Conditions

- LR-007: The public demand for leases, permits, and easements is met.
- LR-008: Community expansion needs are met.
- LR-009: Existing residential leasing is phased out.

Management Actions

- LR-010: Use Recreation and Public Purposes (R&PP) Act leases to meet the needs for community expansion.
- LR-011: Any authorization determined to be in noncompliance with the terms and conditions will be subject to termination.
- LR-012: Phase out existing cabin site and residential permits, and remove improvements associated with such permits.
- LR-013: Prohibit assignment or transfer of cabin site and residential permits.
- LR-014: Lands authorizations within the Dunes WHA will avoid to the extent practicable, minimize, or mitigate impacts to dunes with sensitive species.
- SM-021: New land use authorizations within designated ACECs will be discouraged and only authorized when it is necessary for resource protection and/or when no reasonable alternative exists.
- SM-027: Except for prior existing rights, discretionary Mineral Resource Management (Section 2.19) and Lands and Realty (Section 2.18) actions, including but not limited to mineral materials disposals, ROW facilities, and surface occupancy for oil and gas leases, will not be authorized inside the Sears Point ACEC 3,700-acre core area and the Dripping Springs ACEC 640-acre core area. Discretionary actions within the ACEC, but outside of the core area, will be avoided to the extent practicable. Installation of facilities to protect, interpret, or manage ACEC resource values will be allowed within the entire ACEC, including the core area.
- VM-042: Minimize BLM-authorized ground-disturbing activities in VHAs to protect focal plant species-populations. Land use authorizations for activities such as mineral extraction and livestock grazing would generally not be approved.
- CL-027: Except for prior existing rights, discretionary Mineral Resource Management (Section 2.19) and Lands and Realty (Section 2.18) actions, including but not limited to mineral materials disposals, ROW facilities, and surface occupancy for oil and gas leases, will generally not be authorized at Public Use, Traditional Use, or Conservation for Future Use cultural resource sites. Installation of facilities to protect, interpret, or manage resource values will be allowed.
- PL-007: Areas with Low Paleontological Sensitivity. Assessment or mitigation for proposed land use authorizations in areas with low paleontological sensitivity will not be required except in very rare circumstances.
- PL-008: Areas with Moderate Paleontological Sensitivity: BLM-authorized surface-disturbing activities in areas with moderate paleontological sensitivity may require assessment to determine further courses of action. A field survey by a qualified paleontologist may be required. Management prescriptions for resource preservation and conservation through controlled access or special management designation will be considered.
- PL-009: Areas with High Paleontological Sensitivity: An assessment by a qualified paleontologist prior to authorizing land uses that could impact vertebrate fossils and/or

uncommon invertebrate fossils will be required in areas with high paleontological sensitivity. A records search, inventory, monitoring, and/or mitigation will be required as appropriate before and/or during these actions.

Administrative Actions

- AA-293: Monitor existing and future authorizations for compliance with the terms and conditions of the authorization.

1. Agricultural Leases

As of June 2007, YFO authorizes 1,528 acres of agriculture leases. This includes 1,300 acres in Arizona and 228 acres in California.

Desired Future Conditions

- LR-015: Lands currently authorized for agricultural purposes that are not renewed are converted to uses that benefit other BLM programs, such as development for recreational use or restoration of wildlife habitat.

Management Actions

- LR-016: Continue to authorize agricultural leases on a case-by-case basis.
- LR-017: The transfer or reassignment of agricultural leases will be subject to prior review and approval by BLM.
- LR-018: YFO will develop agricultural lease stipulations restricting crop types for purposes of law enforcement and public safety.
- LR-019: No new agricultural leases will be authorized within the 100-year floodplain of the Colorado and Gila rivers.

Administrative Actions

- AA-294: The transfer or reassignment of agricultural leases will be subject to review and approval by YFO.
- AA-295: The issuance of agricultural leases will be contingent on the lessee providing proof of a legal source of water and legal water rights under State water law.

2. Concession Leases

The planning area's two recreation concession leases are managed according to the 1993 BLM *Yuma District's Concession Review Program* (USDOI BLM 1993). Concession leases are authorized for recreation areas for concessionaire, State park, and county park operations to ensure that recreation opportunities are provided for the public. Private enterprises provide services and facilities that are responsive to public needs and are in appropriate intensively developed recreation areas.

Desired Future Condition

- LR-020: Public lands are available to develop concessions for recreation opportunities to meet the growth of public recreation use on a case-by-case basis.

Management Actions

- LR-021: Issue new recreation concession leases on a case-by-case basis in conformance with FLPMA. Land use alternatives that should be considered during NEPA analysis include accommodating the current lessee's request, allowing other potential bidders an opportunity to enter the recreation concession lease program, converting the lease to a traditional BLM-managed recreation site, and restoring the land to wildlife habitat.
- LR-022: Concessions will be managed in accordance with its authorized concession lease including quarterly inspections for compliance with the terms and conditions of the leases.
- LR-023: Restrict occupancy within concessions to no more than 150 days in a calendar year.
- LR-024: Concession leases found in non-compliance with the terms and conditions of the authorization will be subject to termination.
- LR-025: Phase out individual authorizations within concession leases.
- LR-026: Do not authorize concession leases that allow exclusive use.
- VM-019: Require concessions to get BLM approval for landscaping plans. Require the use of native plants and drought adapted vegetation.

Administrative Actions

- AA-296: Monitor and administer recreation concession leases according to the 1993 Yuma District Concession Review Program to ensure compliance with the terms and conditions of the authorization. Concession leases will be monitored for compliance and effectiveness through the existing Concession Review Policy on a quarterly basis, or as needed. The results of the quarterly compliance will be compiled annually and submitted to the Field Manager.
- AA-297: Any new developments within concession leases will be monitored for compliance utilizing site-specific stipulations developed during the NEPA process. Additionally, the impact of recreation concession facilities on recreational, cultural, and natural resources will be monitored as needed. Baseline collection of data will be identified during the NEPA process proposing additional concession facilities; and the frequency of monitoring will be determined after the collection of baseline data.

C. RIGHTS-OF-WAY

The types of uses that will be authorized by ROWs issued pursuant to FLPMA will include, but are not limited to, access roads, power lines, telephone lines, fiber-optic systems, communications facilities, and water and sewer pipelines. The types of uses that will be authorized by ROWs or temporary use permits pursuant to the Mineral Leasing Act are pipelines for the transportation of oil, natural gas, synthetic liquid or gaseous fuels, or any refined product produced there from.

Desired Future Condition

- LR-027: Public demand for ROWs is met on a case-by-case basis.

Management Actions

- LR-014: Lands authorizations within the Dunes WHA will avoid to the extent practicable, minimize, or mitigate impacts to dunes with sensitive species.
- LR-028: Public lands will generally be available for transportation ROWs subject to NEPA evaluation, except where specifically prohibited by law or regulation. To the extent possible, new ROWs will avoid areas such as WHAs, VHAs, SCRMAAs, ACECs, and the Anza Trail. Appropriate mitigation will be required when avoidance is not possible.
- LR-029: Any authorization determined to be in noncompliance with the terms and conditions will be subject to termination.
- LR-030: Require all ROW construction activities to follow stipulated rehabilitation measures in support of the planning area's desired plant communities. Stipulations may include imprinting, contouring, debris and brush replacement, and invasive plant treatment. Avoid blading new routes to the greatest extent possible. Where access is needed to accomplish objectives, crush vegetation instead of blading and denuding the ground surface.
- LR-031: To the extent possible, locate new ROWs within or parallel to existing ROWs or ROW Corridors to minimize resource impacts. Locate new major ROWs and utility facilities in designated ROW Corridors, unless an evaluation of the project demonstrates location outside of a designated corridor is the only practicable alternative.
- LR-032: At time of renewal of any existing ROWs within lands being managed to maintain wilderness characteristics, YFO will discuss with the grant holder the possibility of relocating the ROW outside of identified lands with high value wilderness characteristics.
- SM-021: New land use authorizations within designated ACECs will be discouraged and only authorized when it is necessary for resource protection and/or when no reasonable alternative exists.
- SM-022: Prohibit new routes within designated ACECs except as needed to manage and interpret resources or as required by law, such as access to valid mining claims or private property.
- SM-027: Except for prior existing rights, discretionary Mineral Resource Management (Section 2.19) and Lands and Realty (Section 2.18) actions, including but not limited to mineral materials disposals and ROW facilities, will not be authorized inside the Sears Point ACEC 3,700-acre core area and the Dripping Springs ACEC 640-acre core area. Discretionary actions within the ACEC, but outside of the core area, will be avoided to the extent practicable. Installation of facilities to protect, interpret, or manage ACEC resource values will be allowed within the entire ACEC, including the core area.
- VM-042: Minimize BLM-authorized ground-disturbing activities in VHAs to protect focal plant species-populations. Land use authorizations for activities such as mineral extraction and livestock grazing would generally not be approved.

- VR-014: All ROWs meet VRM objectives and mitigation measures stipulated in the authorization.
- CL-027: Except for prior existing rights, discretionary Mineral Resource Management (Section 2.19) and Lands and Realty (Section 2.18) actions, including but not limited to mineral materials disposals and ROW facilities, will generally not be authorized at Public Use, Traditional Use, or Conservation for Future Use cultural resource sites. Installation of facilities to protect, interpret, or manage resource values will be allowed.
- PL-007: Areas with Low Paleontological Sensitivity. Assessment or mitigation for proposed land use authorizations in areas with low paleontological sensitivity will not be required except in very rare circumstances.
- PL-008: Areas with Moderate Paleontological Sensitivity: BLM-authorized surface-disturbing activities in areas with moderate paleontological sensitivity may require assessment to determine further courses of action. A field survey by a qualified paleontologist may be required. Management prescriptions for resource preservation and conservation through controlled access or special management designation will be considered.
- PL-009: Areas with High Paleontological Sensitivity: An assessment by a qualified paleontologist prior to authorizing land uses that could impact vertebrate fossils and/or uncommon invertebrate fossils will be required in areas with high paleontological sensitivity. A records search, inventory, monitoring, and/or mitigation will be required as appropriate before and/or during these actions.

Administrative Actions

- AA-298: Process applications for ROWs in accordance with all applicable laws, regulations, and policies. Applications must be in conformance with the approved LUP.
- AA-299: Monitor ROWs for compliance with existing laws and regulations in conformance with their authorization.
- AA-300: Monitor existing and future authorizations for compliance with the terms and conditions of the authorization.
- AA-301: Ensure that all new power lines are safe for raptors. Inventory power lines to ensure that they meet established standards as described in BLM Manual 2800 and in the Suggested Practices for Avian Protection on Power Lines (Avian Power Line Interaction Committee 2006). Inventories of power lines within areas of known high raptor use should be completed first.

1. Right-of-Way Corridors

Approved RMP ROW Corridors are presented in Table 2-16 and Map 2-16.

Desired Future Conditions

- LR-033: Major ROWs are consolidated within approved corridors to minimize resource impacts.

- LR-034: Designated corridors are the preferred location for major ROWs.
- LR-035: Established corridors are aligned with adjacent BLM field office corridors in California and Arizona.

Management Actions

- LR-031: To the extent possible, locate new ROWs within or parallel to existing ROWs or ROW Corridors to minimize resource impacts. Locate new major ROWs and utility facilities in designated ROW Corridors, unless an evaluation of the project demonstrates location outside of a designated corridor is the only practicable alternative.
- LR-036: Designate the El Paso Natural Gas, Interstate 8, Interstate 10, Palo Verde-Devers, Palo Verde Mountains Reroute, Parker Blaisdell, San Diego Gas and Electric Interconnection, and Highway 95 California ROW Corridors, totaling eight corridors over 465 miles.
- LR-037: All designated major ROW Corridors will be one mile in width.
- LR-038: New utility facilities within ROW Corridors will avoid impacts to natural and cultural resources within ACECs, SCRMAAs, and WHAs to the greatest extent possible. If impacts cannot be avoided, mitigation will be required.

Administrative Actions

- AA-302: ROW Corridor designations will be consistent with the Western-wide Energy Corridor Programmatic EIS.

2. Communications Sites

BLM communications sites accommodate the wireless systems referred to in the Telecommunications Act of 1996 as well as many other uses, including, but not limited to, AM/FM broadcast facilities, commercial mobile radios, private mobile radios, and microwaves on designated communications sites. The Approved RMP designates nine low-power communications sites and one high-power communications site. A summary of communications sites is presented in Table 2-16 and Map 2-16.

Desired Future Conditions

- LR-039: Consolidate single facility sites into more efficient communications facilities through site management plans.
- LR-040: Meet public demand for high-power facilities by establishing a high-power communications site.

Management Actions

- LR-041: Designate the Big Maria, Black Rock Hill, Cunningham, Guadalupe Mountain, Mohawk, Palo Verde Gap, Salome, Stone Cabin, and Telegraph Pass low-power communications sites.
- LR-042: Designate the Laguna Mountains high-power communications site.

- LR-043: Terminate the Kofa and Airway Beacon communications sites.
- LR-044: Establish a communications site along the California State Highway 78 route which will be the Palo Verde Gap Low Power Communications Site.
- LR-045: Applications for new communication use facilities outside designated communications sites will be considered on a case-by-case basis. Co-location and subleasing will be emphasized.
- LR-046: Restrict any additional communications facilities in the Big Marias ACEC to the currently authorized Big Maria Communications Site boundaries.
- LR-047: New designated communications sites will have site management plans completed prior to authorizing new facilities and/or uses at the site.
- LR-048: Non-designated communications sites may require communications site plans prior to authorization as determined by the BLM authorized officer.

3. Renewable Energy

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. The potential for renewable energy in the planning area is based on environmental, physical, and economic criteria, in conjunction with policy directives.

Desired Future Conditions

- LR-049: Public lands within the planning area provide for the production and distribution of renewable energy.
- LR-050: The use of public lands for production of renewable energy is encouraged.
- LR-051: The growth, production, or conversion of biomass materials to energy products is authorized on a case-by-case basis, pursuant to applicable laws, regulations, and policies and in accordance with the approved LUP.

Management Actions

- LR-052: Surface occupancy of renewable energy facilities will not be allowed in special designation areas or SCRMAAs.
- LR-053: Wind generating facilities will not be allowed under military training routes.
- VR-015: Solar or wind generating facilities will not be allowed in VRM Classes I and II.

Administrative Actions

- AA-303: Process applications for commercial renewable energy facilities as ROWs or lease authorizations on a case-by-case basis.
- AA-304: Monitor all renewable energy facility authorizations for compliance with the terms and conditions of their authorization.

D. TRESPASS

Trespass means using, occupying, or developing public lands or their resources without a required authorization or in a way that is beyond the scope and terms and conditions of the authorization. Trespass is a prohibited act which includes acts or omissions causing unnecessary or undue degradation to the public lands or their resources. Samples of trespass include but are not limited to illegal dump sites, unauthorized construction of facilities, structures, roads, and residential and agricultural use.

Desired Future Conditions

- LR-054: The unauthorized use of public lands is eliminated.

Management Actions

- LR-055: Resolve existing unauthorized uses of public land through methods including, but not limited to, termination, approval by the appropriate type of authorization, or litigation.

Administrative Actions

- AA-305: Monitor public lands for the occurrence of trespass.
- AA-306: Evaluate all trespass for damage to natural and cultural resources particularly pursuant to the Archaeological Resources Protection Act of 1979 and the ESA, and mitigate appropriately.
- AA-307: Educate the public as to appropriate authorized uses of public land.

2.18.2 LAND TENURE

A. CLASSIFICATION

Classification is the authority of the Secretary of the Interior to determine the physical suitability of public land for disposition (i.e., retention or disposal). The following actions require classification: R&PP leases and patents, agricultural entries (i.e., applications under the Desert Land Act, as amended, and the Carey Act), and State grants for educational, institutional, and park purposes. The following decisions will be applied throughout the planning area.

Desired Future Conditions

- LR-056: Public lands are properly classified.

Management Actions

- LR-057: Reclassify public lands appropriately for all proposed dispositions.

Administrative Actions

- AA-308: When lands are proposed for disposition, ensure that the lands are classified appropriately.

B. DISPOSAL

Public lands have potential for disposal when they are isolated and/or difficult to manage. Disposal actions usually take place in response to a request from the public, or from an application that could result in a title transfer wherein the lands leave the public domain. All public lands will be retained, unless specifically identified for disposal.

Desired Future Conditions

- LR-058: When disposing of public lands, the BLM considers the public interest by giving full consideration to better Federal land management and the needs of State and local people. These include the need of lands for the economy, community expansion, recreation areas, food, fiber, minerals, and fish and wildlife.
- LR-059: When disposing by sale, the preferred method will be competitive or modified-competitive.
- LR-060: Eliminate split-estate by disposing of either the surface or subsurface rights, if disposal of the rights will be in the public interest.
- LR-061: Ensure no net loss of Federal ownership along the lower Colorado River.

Management Actions

- LR-062: Identify 11,900 acres of public land within the planning area as being available for disposal (Appendix I).
- LR-063: The YFO will retain the following types of Federal land in public ownership:
 - Lands within ACECs.
 - Sonoran desert tortoise habitat, unless land disposal through an exchange provides greater benefits to desert tortoises.
 - Lands managed to maintain wilderness characteristics.
 - Lands within or adjacent to the Colorado River 100-year floodplain.
 - Lands designated or proposed critical habitat for a listed or proposed threatened or endangered species.
 - Lands supporting listed or proposed threatened or endangered species if such transfer will be inconsistent with recovery needs and objectives or will likely affect the recovery of the listed or proposed species.
 - Lands supporting Federal candidate species if such action will contribute to the need to list the species as threatened or endangered.
- LR-064: Disposal of lands not identified for disposal in the Approved RMP will require an RMP amendment and will have to meet the disposal criteria of applicable laws and regulations.

Administrative Actions

- AA-309: Disposal requests from the public will be considered on a case-by-case basis.
- AA-310: Lands identified for disposal must meet the criteria for public land sale or exchange under existing laws, regulations, and policies at time of disposal.

C. ACQUISITION

FLPMA authorizes the Secretary of the Interior (delegated to BLM) to acquire non-Federal lands or interests in lands pursuant to FLPMA Section 205(a).

Desired Future Conditions

- LR-065: YFO acquires lands that facilitate access to public lands and resources, maintain or enhance public uses and values, facilitate implementation of this RMP, provide for a more manageable land ownership pattern, include significant natural or cultural resource values, or eliminate split-estate by acquiring either the surface or subsurface rights, if acquisition of rights will be in the public interest.
- LR-066: Split-estate consolidation, pursuant to Sections 205 and 206 of FLPMA, is achieved.
- LR-067: Any lands acquired by the BLM will include both the surface and mineral estate when possible.

Management Actions

- LR-068: Seek to acquire non-Federal lands and interests in lands from willing landowners through purchase, exchange, donation, easement, or other means. Acquisitions will include surface and subsurface rights, and water rights whenever possible. BLM would seek to acquire non-Federal lands that:
 - Are within or adjacent to special designations and allocations, including ACECs and WHAs.
 - Are adjacent to public lands that contain significant cultural resources including, but not limited to, those properties eligible for inclusion on the NRHP.
 - Facilitate conservation banking of natural communities with sensitive and/or priority plant species, especially if loss of essential habitat is anticipated.
 - Consolidate areas with high actual or potential value for non-game migratory bird habitat.
 - Consolidate important raptor habitats that are located on State or privately-owned lands within Key Raptor Areas (i.e. Mittry Lake Wildlife Area and the Colorado River corridor) (USDOI BLM 1992).
 - Is currently unprotected or potential FTHL habitat within management areas in accordance with established priorities and/or criteria.
- LR-069: Manage all acquired lands in accordance with the Approved RMP decisions for surrounding or adjacent BLM-administered lands.

Administrative Actions

- AA-311: Seek appropriate sources of funding to acquire desired lands from willing owners.

2.19 MINERAL RESOURCE MANAGEMENT

BLM supports mineral exploration and development on public lands in keeping with BLM's multiple-use mandate. Unless otherwise restricted, all Federal mineral estates administered by YFO within the planning area will be available for orderly and efficient development of mineral resources. Leases and sales of mineral materials are discretionary actions.

2.19.1 LEASABLE MINERALS

Leasable minerals include fluid minerals such as oil, gas, coalbed methane, carbon dioxide (CO₂), and geothermal resources; and solid minerals such as coal, sodium, and potash. Although not a leasable mineral, helium is included in this category, because it is typically associated with CO₂ exploration and development (43 CFR 3100 and 43 CFR 3200).

Desired Future Conditions

- MI-001: Public lands are available for mineral leasing in accordance with existing leasing laws unless precluded from leasing by withdrawal or other laws and regulations.
- MI-002: Operations authorized by the leasing law do not cause unnecessary or undue degradation of public land resources.
- MI-003: Site-specific decisions regarding lease issuance and the attachment of appropriate stipulations are based on existing laws, regulations, and policies, and in conformance with the Approved RMP.

Management Actions

- MI-004: Authorize and issue new mineral leases throughout the planning area on a case-by-case basis, unless precluded from leasing by withdrawal or other laws and regulations.
- MI-005: In highly sensitive areas, where special stipulations are not sufficient to protect surface resource values, stipulations for no surface occupancy for leasable mineral development may be attached to the lease.
- MI-006: Should activity cease on a mining claim, wells will become government property and the determination of whether or not the wells are capped will be made by BLM.
- MI-007: For split estate minerals (where the U.S. owns the minerals), 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.
- MI-008: Protection of resource values within designated ACECs will take precedence over leasable/locatable materials. If an area is not withdrawn from mineral entry, special

mitigation will be required to avoid impacts to resources. All locatable mineral actions will require an approved Mining Plan of Operations in accordance with BLM Manual 3809 regulations. Leasable mineral exploration and development will be evaluated on a case-by-case basis.

- MI-009: No surface occupancy for oil and gas leases will be allowed within (1) the Colorado and Gila River Riparian WHA, (2) the Desert Mountains WHA where AGFD has identified sensitive desert bighorn sheep habitat, (3) within the Big Marias ACEC to protect cultural resources, (4) the Limitrophe CMA, (5) the Sears Point ACEC 3,700-acre core area, (6) the Dripping Springs ACEC 640-acre core area, or (7) at Public Use, Traditional Use, or Conservation for Future Use cultural resource sites.
- MI-010: Within lands being managed to maintain wilderness characteristics, regulate mineral leases to prevent unnecessary or undue degradation.
- SM-021: New land use authorizations within designated ACECs will be discouraged and only authorized when it is necessary for resource protection and/or when no reasonable alternative exists.
- SM-022: Prohibit new routes within designated ACECs except as needed to manage and interpret resources or as required by law, such as access to valid mining claims or private property.

Administrative Actions

- AA-312: Continue to administer exploration and development in the planning area in accordance with surface and mineral management regulations.
- AA-313: When BLM manages the subsurface estate only, BLM will consult with the surface owner prior to issuing a contract or permit.

2.19.2 LOCATABLE MINERALS

Locatable minerals include metallic minerals such as gold, silver, copper, lead, zinc, and uranium; and non-metallic minerals such as allunite, asbestos, barite, gypsum, and mica; and uncommon varieties of stone (43 CFR 3800).

Desired Future Conditions

- MI-011: Public lands are available for exploration, location, and development of mining claims in accordance with existing mining laws unless withdrawn or segregated from entry.
- MI-012: Operations authorized by the mining laws do not cause unnecessary or undue degradation of public lands.

Management Actions

- MI-008: Protection of resource values within designated ACECs will take precedence over leasable/locatable materials. If an area is not withdrawn from mineral entry, special mitigation will be required to avoid impacts to resources. All locatable mineral actions will

require an approved Mining Plan of Operations in accordance with BLM Manual 3809 regulations. Leasable mineral exploration and development will be evaluated on a case-by-case basis.

- MI-013: As part of the land ownership adjustment program, consolidate surface and subsurface (minerals) estates under one ownership when possible, thereby improving manageability of the Federal lands involved.
- MI-014: Require notices when mechanized equipment is used for exploration or processing and cumulative disturbance is five acres or less.
- MI-015: Require a mining plan of operations in accordance with 43 CFR 3800 for operations including, but not limited to:
 - Where disturbance is greater than five acres or where bulk sampling will remove 1,000 tons or more of ore;
 - In the California Desert Conservation Area designated by the California Desert Conservation Area plan as “controlled or limited” use areas;
 - In designated ACECs or currently withdrawn or reserved lands where the mining claim predates the withdrawal or reservation;
 - In Closed OHV Management Areas; and
 - In lands or waters known to contain federally listed threatened or endangered species or in proposed or designated critical habitat.
- MI-016: In withdrawn areas, a validity examination will be required at prior existing claims before submittal of a mining plan of operations to verify the valid discovery of a valuable mineral deposit.
- MI-017: Require reclamation of all disturbances created by casual use mining.
- MI-018: Assess all mining plans of operations for potential impacts to Sonoran desert tortoise habitat on a case-by-case basis. Adverse impacts to desert tortoise will be mitigated to the extent allowable in BLM 3809 regulations.
- SM-022: Prohibit new routes within designated ACECs except as needed to manage and interpret resources or as required by law, such as access to valid mining claims or private property.

Administrative Actions

- AA-314: Continue to administer exploration and development in the planning area in accordance with current surface and mineral management regulations.
- AA-315: Monitor public lands for the occurrence of unauthorized use.
- AA-316: Inventory and monitor mines which provide habitat for bats.

2.19.3 SALABLE MINERALS

Salable minerals include construction materials such as sand, gravel, cinders, decorative rock, and building stone (43 CFR 3600). It is BLM’s policy to make mineral materials available to the

public and local governmental agencies whenever possible and wherever it is environmentally acceptable. Disposal of mineral materials is a discretionary action and will be authorized in accordance with appropriate laws, regulations, and policies, in conformance with the Approved RMP.

In response to increased demand for mineral materials in the planning area, YFO has proposed five sites as community pits. Mineral material disposals will continue to be authorized in other locations in the planning area if appropriate. A summary of community pits is presented in Table 2-17 below and shown on Map 2-16.

Table 2-17
Approved RMP Community Pit Names and Sizes

Community Pit Name	Approved RMP BLM Acres/Max Volume
Ehrenberg South	100 acres (~1,000,000 cubic yards)
NE Quartzsite	100 acres (~1,000,000 cubic yards)
Dateland	200 acres (~1,000,000 cubic yards)
Brenda	100 acres (~1,000,000 cubic yards)
Hart	200 acres (~1,000,000 cubic yards)
Total Acres/Volume	700 acres (~5,000,000 cubic yards)

Desired Future Conditions

- MI-019: The disposal of saleable minerals does not cause unnecessary or undue degradation of public lands.
- MI-020: Public lands remain available for disposal of mineral materials at the discretion of the authorized officer.

Management Actions

- MI-021: Authorize mineral materials operations on a case-by-case basis to facilitate infrastructure development.
- MI-022: Conduct a site specific environmental analysis for the implementation of each community pit.
- MI-023: Authorize no salable mineral materials permits within: (1) Category I and II desert tortoise habitat, (2) the Colorado and Gila River Riparian WHA, (3) the Limitrophe CMA, or (4) ACECs.
- MI-024: Allocate five community pits totaling a maximum of 700 acres (~5,000,000 yard) in Ehrenberg South, NE Quartzsite, Dateland, Brenda, and Hart (see Table 2-17). If site-specific environmental analysis reveals the community pit will have an adverse or significant impact on resources, the footprint of the proposal may be modified or reduced to avoid or minimize impacts. If impacts to resources cannot be sufficiently avoided or mitigated during site-specific analysis, the proposed community pit will not be implemented.
- MI-025: Limit salable mineral materials permits within the Desert Mountains WHA by making appropriate use of community pits.

- SM-021: New land use authorizations within designated ACECs will be discouraged and only authorized when it is necessary for resource protection and/or when no reasonable alternative exists.
- SM-022: Prohibit new routes within designated ACECs except as needed to manage and interpret resources or as required by law, such as access to valid mining claims or private property.
- SM-027: Except for prior existing rights, discretionary Mineral Resource Management (Section 2.19) and Lands and Realty (Section 2.18) actions, including but not limited to mineral materials disposals and ROW facilities, will not be authorized inside the Sears Point ACEC 3,700-acre core area and the Dripping Springs ACEC 640-acre core area. Discretionary actions within the ACEC, but outside of the core area, will be avoided to the extent practicable. Installation of facilities to protect, interpret, or manage ACEC resource values will be allowed within the entire ACEC, including the core area.
- VM-042: Minimize BLM-authorized ground-disturbing activities in VHAs to protect focal plant species-populations. Land use authorizations for activities such as mineral extraction and livestock grazing would generally not be approved.
- CL-027: Except for prior existing rights, discretionary Mineral Resource Management (Section 2.19) and Lands and Realty (Section 2.18) actions, including but not limited to mineral materials disposals and ROW facilities, will generally not be authorized at Public Use, Traditional Use, or Conservation for Future Use cultural resource sites. Installation of facilities to protect, interpret, or manage resource values will be allowed.
- PL-007: Areas with Low Paleontological Sensitivity. Assessment or mitigation for proposed land use authorizations in areas with low paleontological sensitivity will not be required except in very rare circumstances.
- PL-008: Areas with Moderate Paleontological Sensitivity: BLM-authorized surface-disturbing activities in areas with moderate paleontological sensitivity may require assessment to determine further courses of action. A field survey by a qualified paleontologist may be required. Management prescriptions for resource preservation and conservation through controlled access or special management designation will be considered.
- PL-009: Areas with High Paleontological Sensitivity: An assessment by a qualified paleontologist prior to authorizing land uses that could impact vertebrate fossils and/or uncommon invertebrate fossils will be required in areas with high paleontological sensitivity. A records search, inventory, monitoring, and/or mitigation will be required as appropriate before and/or during these actions.

Administrative Actions

- AA-317: Coordinate with Reclamation to locate and preserve adequate mineral materials to accommodate project needs.
- AA-318: Identify suitable locations for additional community pits where appropriate, based on future public need/demand.

- AA-319: Monitor minerals activities consistent with BLM policies, including periodic field inspections that ensure compliance with applicable laws, regulations, and site-specific authorizations. Findings for each inspection are documented and placed in the case file. The number of sites inspected and the number of sites in compliance will be reported in the Annual Planning Update Report and Summary.

2.20 PUBLIC HEALTH AND SAFETY MANAGEMENT

YFO will identify areas or hazards which have potential impact to public health and safety. Abandoned mines, UXO, International Boundary issues, and hazardous materials are public health and safety concerns in the planning area.

2.20.1 ABANDONED MINES

A primary public safety concern with regard to abandoned mines is the danger of a person being injured or killed by falling into or collapse of an open shaft, adit, or pit.

Desired Future Conditions

- HM-001: The risk to members of the public associated with abandoned mines is reduced or eliminated.
- HM-002: Abandoned mine sites are inventoried and prioritized for reclamation, closure, or use as wildlife habitat.

Management Action

- HM-003: Reduce the public risk by implementing fencing, signs, and ultimately closure of abandoned mine openings.
- HM-004: For abandoned mines posing a public safety hazard, design protective fences or closures to accommodate existing or future use by wildlife (i.e., bats, small mammals, and owls).
- HM-005: For abandoned mines that are part of an NRHP-listed or eligible historic site, the BLM will resolve the public safety hazard in compliance with NHPA and other applicable laws.

Administrative Actions

- AA-320: Cooperate with the appropriate Arizona and California State agencies to identify the location of abandoned mines and prospects.
- AA-321: Reclamation and mitigation work done on abandoned mine sites will be monitored to ensure compliance with laws and regulations and with the terms of the work order or contract. Abandoned mine sites requiring clean-up will be monitored to protect and safeguard human health, prevent/restore environmental damage and to limit the BLM's liability. This monitoring includes such things as conducting periodic water and soil sampling, monitoring

for revegetation of reclaimed areas, dust control, erosion and other signs of potential danger to human health and harm to the environment.

2.20.2 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. Given the amount of aircraft used on the various military facilities in the planning area, it is possible that a military aircraft could crash and be a source of UXO.

Desired Future Conditions

- HM-006: The public's risk of exposure to UXOs is reduced.

Management Actions

- HM-007: Take appropriate measures to protect the public from known UXO locations on BLM-administered lands, such as signing, fencing, removal, and remediation.

Administrative Actions

- AA-322: In cooperation with the U.S. Army Corps of Engineers, identify the locations on BLM-administered lands that are potential areas of UXO concern. Investigate, inventory and record the presence of UXOs on BLM-administered lands.
- AA-323: Educate and advise the public of potential UXO risks present on public lands.

2.20.3 INTERNATIONAL BOUNDARY ISSUES

YFO manages public land along the International Boundary. The area experiences criminal incidents such as undocumented immigrant traffic, drug trafficking, robbery, and random acts of violence including sporadic gunfire.

Desired Future Conditions

- HM-008: Borderlands are safe for public and agency use.

Management Actions

- HM-009: Place signs regarding border safety, where appropriate.
- VM-011: Conduct and/or authorize vegetation treatments in selected locations along the International Boundary to allow visibility and reduce cover for clandestine activity. Such treatments will be conducted in a way that considers impacts to Native American religious concerns.
- VM-012: Require mitigation for vegetation treatments to offset impacts to riparian habitat and recreation values along the International Boundary.

- FM-029: Resolve public health and safety issues by clearing hazardous fuels along the International Boundary under the fire management program, where appropriate.

Administrative Actions

- AA-324: Coordinate with Mexico, Federal, State, and local agencies, and interested Native American tribes to address public health and safety issues on the International Boundary.

2.20.4 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 may 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, leaking fuel tanks, illegal drug manufacturing sites, abandoned buildings, formerly used defense sites, and military aircraft crashes.

Desired Future Conditions

- HM-010: The potential impacts to human health and the environment from hazardous materials within the planning area are minimized.

Management Actions

- HM-011: Remediate areas contaminated with hazardous materials in accordance with applicable laws and regulations.

Administrative Actions

- AA-325: Perform public notification of potential health risks by means of notices, signs, and other forms of communication.
- AA-326: Identify the presence of and characterize the types of hazardous materials present on BLM-administered lands.
- AA-327: Coordinate with Federal and State agencies to remove and/or remediate hazardous materials as they are identified.
- AA-328: Remediation within NRHP-listed or eligible cultural sites will be conducted in accordance with the NHPA.
- AA-329: Implement soil testing and groundwater monitoring to define the lateral and vertical extent of impact from sites with hazardous materials contamination.
- AA-330: Monitor the extent of impacts of sites containing hazardous materials, such as mining and milling wastes, to air, soil, and surface and groundwater.
- AA-331: Coordinate to conduct “cleanup days” on illegal dumping sites, as time and staff availability permits.

GLOSSARY OF TERMS

A

Allotment Management Plan (AMP): A livestock grazing management plan dealing with a specific unit of rangeland and based on multiple use resource management objectives. The AMP considers livestock grazing in relation to other uses of rangelands and to renewable resources (e.g., watershed, vegetation and wildlife). An AMP establishes the seasons of use, number of livestock to be permitted on rangelands, and the range improvements needed.

Appropriate Management Level (AML2): That “optimum number” of wild horses, which results in a thriving ecological balance and avoids a deterioration of the range.

Archaeological Feature: A non-portable object, not recoverable from its matrix (usually in an archeological site) without destroying its integrity. Examples are rock paintings, hearths, post holes, floors, and walls.

Area of Critical Environmental Concern (ACEC): A designated area on public lands where special management attention is required: (1) to protect and prevent irreparable damage to fish and wildlife; (2) to protect important historic, cultural, or scenic values, or other natural systems or processes; or (3) to protect life and safety from natural hazards.

AZSITE Database: A computer database containing archaeological site and project information managed by the Arizona SHPO and maintained by the Arizona State Museum. The AZSITE database is part of the BLM–SHPO Cultural Resource Data Sharing Partnership (CRDSP).

B

Back Country Byway: A component of the national scenic byway system which focuses primarily on corridors along back-country roads which have high scenic, historic, archeological, or other public interest values. The road may vary from a single-track bike trail to a low-speed, paved road that traverses back-country areas. (BLM Handbook H-8357-1, B 2)

Bajada: A broad continuous slope extending along and from the base of a mountain range and formed by coalescing alluvial fans.

Basic Elements: The four design elements (form, line, color, and texture), which determine how the character of a landscape is perceived.

Biodiversity (plant and animal): Shorthand for biological diversity; the variety and variability of life, at the genetic, species, and ecosystem level.

Breeding Zones: An area within which a single population of plants can be planted without fear of misadaptation.

Buffer Zone: An area designed to separate conflicting forces or uses.

C

California Historical Resources Information System (CHRIS): The CHRIS includes the statewide Historical Resources Inventory database maintained by California Office of Historic Preservation / CA SHPO and the records maintained and managed, under contract, by twelve independent regional Information Centers. The CHRIS is part of the BLM–SHPO CRDSP partnership.

Candidate Species: Species not protected under the ESA but being considered by the USFWS for inclusion on the list of Federally threatened and endangered species.

Casual Use (Mining): Mining that only negligibly disturbs federal lands and resources and does not include the use of mechanized earth moving equipment, explosives, or motorized equipment (greater than 25 horsepower). Casual use generally includes panning, non-motorized sluicing, and collecting mineral specimens using hand tools.

Characteristic: A distinguishing trait, feature, or quality.

Characteristic Landscape: The established landscape within an area being viewed. This does not necessarily mean a naturalistic character. It could refer to an agricultural setting, an urban landscape, a primarily natural environment, or a combination of these types.

Contrast: Opposition or unlikeness of different forms, lines, colors, or textures in a landscape.

Contrast Rating: A method of analyzing the potential visual impacts of proposed management activities.

Critical Habitat (Designated): Specific parts of an area that are occupied by a federally listed or endangered plant or animal at the time it is listed and that contain physical or biological features essential to the conservation of the species or that may require special management or protection. Critical habitat may also include specific areas outside an area occupied by a federally listed species, if the Secretary of the Interior determines that these areas are essential for conserving the species.

Cultural Resource: A location of human activity, occupation, or use identifiable through field inventory, historical documentation, or oral evidence. Cultural resources include archaeological and historical sites, structures, buildings, objects, artifacts, works of art, architecture, and natural

features that were important in past human events. They may consist of physical remains or areas where significant human events occurred, even though evidence of the events no longer remains. And they may include definite locations of traditional, cultural, or religious importance to specified social or cultural groups.

Cultural Resource Data Sharing Partnership (CRDSP): A partnership started in 1998 between BLM and the SHPOs in 13 western states (Alaska, Oregon, California, Nevada, Arizona, New Mexico, Colorado, Utah, Idaho, Wyoming, Montana, North Dakota, South Dakota) and Washington D.C. to ensure cultural resource professionals have consistent, easy to use, reliable spatial information systems on their desktops with access to cultural spatial data servers (e.g., the AZSITE database in Arizona) that assist them in doing their jobs as managers, researchers, and cultural resource professionals.

Cultural Resource Inventory (Survey): A descriptive listing and documentation, including photographs and maps of cultural resources. Included in an inventory are the processes of locating, identifying, and recording sites, structures, buildings, objects, and districts through library and archival research, information from persons knowledgeable about cultural resources, and on-the-ground surveys of varying intensity.

Class I: A professionally prepared study that compiles, analyzes, and synthesizes all available data on an area's cultural resources. Information sources for this study include published and unpublished documents, BLM inventory records, institutional site files, and state and NRHP files. Class I inventories may have prehistoric, historic, and ethnological and sociological elements. These inventories are periodically updated to include new data from other studies and Class II and III inventories.

Class II: A professionally conducted, statistically based sample survey designed to describe the probable density, diversity, and distribution of cultural properties in a large area. This survey is achieved by projecting the results of an intensive survey carried out over limited parts of the target area. Within individual sample units, survey aims, methods, and intensities are the same as those applied in Class III inventories. To improve statistical reliability, Class II inventories may be conducted in several phases with different sample designs.

Class III: A professionally conducted intensive survey of an entire target area aimed at locating and recording all visible cultural properties. In a Class III survey, trained observers commonly conduct systematic inspections by walking a series of close-interval parallel transects until they have thoroughly examined an area.

Cultural Resource Values: The irreplaceable qualities that are embodied in cultural resources, such as scientific information about prehistory and history, cultural significance to Native Americans and other groups, and the potential to enhance public education and enjoyment of the Nation's rich cultural heritage.

Cultural Site: A physical location of past human activities or events, more commonly referred to as an archaeological site or a historic property. Such sites vary greatly in size and range from the location of a single cultural resource object to a cluster of cultural resource structures with associated objects and features.

D

Desert Pavement: A ground surface consisting of coarse, densely packed cobbles and gravels that are covered with layers of ferro-manganese deposits and microscopic organisms. Through the years, the stones develop a glossy patina that appears black from a distance. Desert pavement is the result of thousands of years of erosional forces.

Desert Pavement Features: Prehistoric cultural resource features created into the desert pavement, such as intaglios, cleared areas, trails, and rock alignments.

E

Ecological Function (sustained): The role or specific contribution of constituent living and non-living elements of ecosystems to system behavior. Sustained ecological function implies the maintained capacity of the land and environmental capacity of the ecosystem.

Ecological Integrity: The quality of a natural unmanaged or managed ecosystem in which the natural ecological processes are sustained with genetic, species, and ecosystem diversity assured for the future.

Ecosystem: Organisms, together with their abiotic environment, forming an interacting system and inhabiting an identifiable space.

Endangered Species: An animal or plant species that is in danger of extinction throughout all or a significant portion of its range (as defined in the ESA, as amended in 1982).

Enhancement: A management action designed to improve visual quality.

Entry: When the register of a local land office “enters” land applications in the record books and on the survey plat of the local office (taken from Opportunity and Challenge, The Story of BLM).

Excavation: The scientific examination of an archaeological site through layer-by-layer removal and study of the contents within prescribed surface units, e.g. square meters.

Exotic Species: A species of plants or animals that is not native to the area where it is found. Any species that is not indigenous, native, or naturalized.

Extensive Recreation Management Areas (ERMA): An area that emphasizes the traditional dispersed recreation use of public lands. ERMA's have an undeveloped character that allows visitors to escape crowds, rely on their own skills and equipment for recreation pursuits, and freedom from stricter regulations. All lands that are not within a designated SRMA revert to the ERMA category. BLM actions in ERMA's are limited to custodial actions and therefore do not require an implementation-level plan.

F

Form: The mass or shape of an object or objects which appear unified, such as a vegetative opening in a forest, a cliff formation, or a water tank.

G

Geomorphic Integrity: Maintaining the unimpaired condition of the physical properties of the rock, soil, and water in and around land forms.

Geothermal Resources: Products of geothermal steam or hot water and hot brines, including those resulting from water, gas, or other fluids artificially introduced into geothermal formations; heat or other associated energy found in geothermal formations; and associated byproducts (43 CFR 3200.1).

H

Habitat Fragmentation: Process by which habitats are increasingly subdivided into smaller units resulting in their increased insularity and losses of total habitat area.

Harmony: A combination of parts into a pleasing or orderly whole: congruity; a state of agreement of proportionate arrangement of form, line, color, and texture.

Herd Area (HA): The geographic area identified as having been used by wild horse or burro herds as their habitat in 1971.

Herd Management Area (HMA): Public land under the jurisdiction of the BLM that has been designated for special management emphasizing the maintenance of an established wild horse and/or wild burro herd.

Historical Site: A location that was used or occupied after the arrival of Europeans in North America (ca. A.D. 1492). Such sites may consist of physical remains at archaeological sites or areas where significant human events occurred, even though evidence of the events no longer remains. They may have been used by people of either European or Native American descent.

Hohokam: A group of North American Indians who lived between perhaps 300 BC and AD 1400 in central and southern Arizona, largely along the Gila and Salt Rivers.

Hydrologic Connectivity: The condition by which disparate regions on the hillslope are linked via subsurface water flow.

I

Imperiled Status: Extremely rare (five or fewer occurrences or very few remaining individuals or acres).

Indian Tribe: Any American Indian group in the United States that the Secretary of the Interior recognizes as possessing tribal status (listed periodically in the Federal Register).

Indigenous: Being of native origin (such as indigenous peoples or indigenous cultural features).

Intaglio: A design made in the desert pavement by moving away the large rocks and scraping back the small cobbles and gravels to expose the lighter soil underneath. Intaglio features were also created by tamping, which would result in a depressed image in the desert pavement. Also referred to as earth figures or geoglyphs.

Integrated Pest Management: A pest management strategy that focuses on long-term prevention or suppression of pest problems through a combination of techniques such as encouraging biological control, use of resistant varieties, and adoption of alternate cultural practices such as modification of irrigation, or pruning to make the habitat less conducive to pest development. Pesticides are used only when careful monitoring indicates they are needed according to pre-established guidelines, treatment thresholds, or to prevent pests from significantly interfering with the purposes for which plants are being grown.

Invasive Non-native Plant: A plant species that was introduced to the ecosystem under consideration after European contact as a direct or indirect result of human activity and that produces large numbers of offspring at considerable distances from parent plants.

J

K

L

Landscape Character: The arrangement of a particular landscape as formed by the variety and intensity of the landscape features and the four basic elements of form, line, color, and texture. These factors give the area a distinctive quality which distinguishes it from its immediate surroundings.

Landscape Connectivity Corridors: The extent to which the landscape facilitates wildlife movement.

Leasable Minerals: Minerals whose extraction from federally managed land requires a lease and the payment of royalties. Leasable minerals include coal, oil and gas, oil shale and tar sands, potash, phosphate, sodium, and geothermal steam.

Limits of Acceptable Change: A framework for establishing acceptable and appropriate resource and social conditions in recreation settings. A system of management planning.

Line: The path, real or imagined, that the eye follows when perceiving abrupt differences in form, color, or texture. Within landscapes, lines may be found as ridges, skylines, structures, changes in vegetative types, or individual trees and branches.

Locatable Minerals: Minerals subject to exploration, development, and disposal by staking mining claims as authorized by the Mining Law of 1872, as amended. This includes deposits of gold, silver, and other uncommon minerals not subject to lease or sale.

Location: A tract of land whose bounds have been officially designated (as for settlement or for a mining claim).

M

Mineral Material Disposal: The sale of sand, gravel, decorative rock, or other materials defined in 43 CFR 3600.

Mining Claim: A mining claim is a selected parcel of Federal Land, valuable for a specific mineral deposit or deposits, for which a right of possession has been asserted under the General Mining Law. This right is restricted to the development and extraction of a mineral deposit. The rights granted by a mining claim protect against a challenge by the United States and other claimants only after the discovery of a valuable mineral deposit. The two types of mining claims are lode and placer. In addition, mill sites and tunnel sites may be located to provide support facilities for lode and placer mining.

Mining Plan of Operations: A plan for mineral exploration and development that a mining operator must submit to BLM for approval for all mining, milling, and bulk sampling of more than 1,000 tons or more and for exploration disturbing more than 5 acres or on special status lands, including wilderness, areas of critical environmental concern, national monuments, national conservation areas, and lands containing proposed or listed threatened or endangered species or their critical habitat. A plan of operations must document in detail all actions that the operator plans to take from exploration through reclamation.

Mitigation: Mitigation includes: (a) Avoiding the impacts altogether by not taking an action or parts of an action, (b) Minimizing impacts by limiting the degree or magnitude of the action and its implementation, (c) Rectifying the impact by repairing, rehabilitating, or restoring the affected environment, (d) Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action, (e) Compensating for the impact by replacing or providing substitute resources or environments (40 CFR 1508.20).

Mitigation Measures: Methods or procedures designed to reduce or lessen the adverse impacts caused by management activities.

N

National Historic Trail: One of the three categories of national trails defined in the National Trails System Act of 1968 that can only be established by act of Congress and are administered by federal agencies, although part or all of their land base may be owned and managed by others. National historic trails are generally more than 100 miles long and follow as closely as possible and practicable the original trails or routes of travel of national historic significance. Their purpose is identifying and protecting the historic route and its remnants and artifacts for public use and enjoyment.

National Monument: an area designated to protect objects of scientific and historic interest by public proclamation of the President under the Antiquities Act of 1906, or by Congress for historic landmarks, historic and prehistoric structures, or other objects of historic or scientific interest on public lands. Designation also provides for the management of these features and values.

National Recreation Trail: One of the three categories of national trails defined in the National Trails System Act of 1968 that can only be established by act of Congress and are administered by federal agencies, although part or all of their land base may be owned and managed by others. National Recreation Trails are existing regional and local trails recognized by either the Secretary of Agriculture or the Secretary of the Interior upon application.

National Register of Historic Places (NRHP): The official list, established by the NHPA, of the Nation's cultural resources worthy of preservation. The NRHP lists archeological, historic, and architectural properties (i.e. districts, sites, buildings, structures, and objects) nominated for their local, state, or national significance by state and federal agencies and approved by the NRHP Staff. The NPS maintains the NRHP.

Native Species: A species of plant or animal that naturally occurs in an area and that was not introduced by humans (indigenous).

Naturalness: Lands and resources exhibit a high degree of naturalness when affected primarily by the forces of nature and where the imprint of human activity is substantially unnoticeable. BLM has authority to inventory, assess, and/or monitor the attributes of the lands and resources on public lands, which, taken together, are an indication of an area's naturalness. These attributes may include the presence or absence of roads and trails, fences and other improvements; the nature and extent of landscape modifications; the presence of native vegetation communities; and the connectivity of habitats.

No Surface Occupancy: A fluid mineral leasing stipulation that prohibits occupancy or disturbance on all or part of the lease surface to protect special values of uses. Lessees may

explore for or exploit the fluid minerals under leases restricted by this stipulation by using directional drilling from sites outside the no surface occupancy area.

Notice: The notification a mining operator must submit to BLM of the intention to begin an operation that will disturb 5 acres or less a year within a mining claim or project area. The intent of a Notice is to permit operations with limited geographic disturbance to begin after a quick review for potential resource conflicts and to eliminate the need for federal action. A Notice requires no special forms, but an operator must submit specific information. BLM must complete its review of the Notice within 15 calendar days of its receipt unless more information is needed to determine if the operation would cause unnecessary or undue degradation.

Noxious Weed: According to the Federal Noxious Weed Act (PL 93-629), a weed that causes disease or has other adverse effects on man or his environment and therefore is detrimental to the agricultural and commerce of the United States and to the public health.

O

Off-Highway Vehicle (OHV): Any vehicle capable of or designed for travel on or immediately over land, water, or other natural terrain, deriving motive power from any source other than muscle. OHVs exclude: (1) any non-amphibious registered motorboat; (2), any fire, emergency, or law enforcement vehicle while being used for official or emergency purposes; (3) any vehicle whose use is expressly authorized by a permit, lease, license, agreement, or contract issued by an authorized officer or otherwise approved; (4) vehicles in official use; and (5) any combat or combat support vehicle when used in times of national defense emergencies.

P

Paleontological Resources (Fossils): The physical remains of plants and animals preserved in soils and sedimentary rock formations. Paleontological resources are important for understanding past environments, environmental change, and the evolution of life.

Paleontology: A science dealing with the life forms of past geological periods as known from fossil remains.

Paleozoic Era: An era of geologic time (600 million to 280 million years ago) between the Late Precambrian and the Mesozoic eras and comprising the Cambrian, Ordovician, Silurian, Devonian, Mississippian, Pennsylvanian, and Permian periods.

Petroglyph: Pictures, symbols, or other art work pecked, carved, or incised on natural rock surfaces.

Phenology: The study of periodic biological phenomena, such as flowering or seeding, especially as related to climate.

Physiographic Province: An extensive portion of the landscape normally encompassing many hundreds of square miles, which portrays similar qualities of soil, rock, slope, and vegetation of the same geomorphic origin (Fenneman 1946; Sahrhaftig 1975).

Plant Community: Assemblage of plant populations in a defined area or physical habitat; an aggregation of plants similar in species composition and structure, occupying similar habitats over the landscape.

Pollination Ecology: Branch of ecology concerned with the distribution of pollen by wind or animals and its efficacy in fertilization and seed set.

Prehistoric: Refers to the period wherein American Indian cultural activities took place before written records and not yet influenced by contact with nonnative culture(s).

Prescribed Recreation Settings: An inventory and planning process that provides a framework for defining the different types of outdoor recreation opportunities the BLM will seek to provide on the public lands. Prescribed Recreation Settings are arranged along a spectrum of six classes: primitive, semi-primitive, rural natural, rural developed, suburban, and urban. The settings are measured by a wide variety of environmental, social, administrative, and economic factors; and specific geographic areas on the ground identify where the BLM will seek to provide these types of outdoor recreation opportunities.

Primitive and Unconfined Recreation: Visitors may have outstanding opportunities for primitive and unconfined types of recreation where the use of the area is through non-motorized, non-mechanical means, and where no or minimal developed recreation facilities are encountered.

Primitive Road: A linear route used by four-wheel drive or high-clearance vehicles. Primitive roads do not normally meet any BLM road design standards.

Priority Plant: Plants that are rare, unusual, or key species that are not listed as BLM Sensitive or federally listed as threatened or endangered.

Q

R

Rare Plant: Plant that is not presently threatened with extinction but exists in such small numbers throughout its range that it may become endangered if its present environment worsens.

Rehabilitation: A management alternative and/or practice which restores landscapes to a desired scenic quality.

Relict Population: A population limited to a small part of the original species range.

Right-of-way (ROW): A permit or easement that authorizes the use of lands for certain specified purposes, commonly for pipelines, roads, telephone lines or powerlines.

Riparian: Pertaining to or situated on or along the bank of streams, lakes, and reservoirs.

Riparian Area: A form of wetland transition between permanently saturated wetlands and upland areas. Riparian areas exhibit vegetation or physical characteristics that reflect the influence of permanent surface or subsurface water. Typical riparian areas include lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels. Excluded are ephemeral streams or washes that lack vegetation and depend on free water in the soil.

Road: As used herein (a linear route), a transportation facility used primarily by vehicles having four or more wheels, documented as such by the owner, and maintained for regular and continuous use.

Route: Collectively refers to roads, primitive roads, trails, and any other transportation-related linear features. Any motorized, non-motorized, or mechanized transportation corridor. Corridor may either be terrestrial or a waterway. “Roads” and/or “trails” are considered routes.

RS 2477: Revised Statute 2477 was enacted as part of the Mining Law of 1866, during a time when the federal government’s focus was on encouraging settlement and development of the West. Congress passed R.S. 2477 to ensure miners’ routes to their claims and cattlemen’s trails for their herds by granting rights-of-way over any federal land not otherwise set aside. Although Congress repealed the statute in 1976 with FLPMA, it did not terminate rights-of-way in existence at that time. As part of the new law in 1976, Congress recognized all valid existing claims to these rights-of-way as of that date.

S

Salable Minerals: Common variety minerals on the public lands, such as sand and gravel, which are used mainly for construction and are disposed by sales or special permits to local governments. See also Mineral Materials.

Scale: The proportionate size relationship between an object and the surroundings in which the object is placed.

Scenery: The aggregate of features that give character to a landscape.

Scenic Quality: The relative worth of a landscape from a visual perception point of view.

Scenic Values: (refer to scenic quality and scenic quality ratings).

Seed Zones: An area within which seed can be collected from any natural stand and planted in any new site without fear of misadaptation.

Sensitive Species (plant and animal): All species that are under status review, have small or declining populations, live in unique habitats, or need special management. Sensitive species include threatened, endangered, and proposed species that are classified by the USFWS.

Sensitivity Levels: Measures (e.g., high, medium, and low) of public concern for the maintenance of scenic quality.

Simulation: A realistic visual portrayal which demonstrates the perceivable changes in landscape features caused by a proposed management activity. This is done through the use of photography, artwork, computer graphics, and other such techniques.

Solitude: Visitors may have outstanding opportunities for solitude when the sights, sounds, and evidence of other people are rare or infrequent and where visitors can be isolated, alone, or secluded from others.

Special Cultural Resource Management Area (SCRMA): An area containing cultural resources that are of special importance for public use, scientific use, traditional use or other uses as defined in BLM Manual 8110.4.

Special Recreation Management Area (SRMA): Designation intensifies management of areas where outdoor recreation is a high priority. It helps direct recreation program priorities toward areas with high resource values, elevated public concern, or significant amounts of recreational activity. Areas with a SRMA designation can be expected to see investments in recreation facilities and visitor services aimed at reducing resource damage and mitigating user conflicts. Implementation-level plans are completed for each SRMA to fully describe management actions and objectives.

Special Status Species: Plant and animal species listed as endangered, threatened, candidate, or sensitive by Federal or State governments.

Split-estate: Land whose surface rights and mineral rights are owned by different entities.

State Historic Preservation Officer (SHPO): The official within and authorized by each state at the request of the Secretary of the Interior to act as liaison for the NHPA.

Subsurface: Of or pertaining to rock or mineral deposits which generally are found below the ground surface.

Suburban Recreation Setting: The suburban recreation setting provides limited or little opportunity to see, hear, or smell the natural resources because of the widespread and very prevalent level of development, human activity, or natural resource modification. Watching and meeting other visitors are expected and desired; opportunity to briefly relieve stress and to alter everyday routine is important; families are common; a high sense of safety, security, comfort, and convenience is central and dominant. The mix of recreation activities may be diverse, ranging from relaxation and contemplation to physical exertion, thrills, excitement, and challenge; learning about the natural and cultural history of the area is important to some; area is popular with local residents or long-term winter visitors.

Surface-Disturbing Activities: This term generally refers to any BLM-authorized action that disturbs vegetation and surface soil, increasing erosion potential above normal site conditions. This definition typically excludes allowable casual use of the public lands, as outlined in the CFRs. Examples of surface disturbing activities are mining; construction and/or maintenance of roads, pipelines, and powerlines; installation of facilities; and implementation of vegetation treatments.

Surface Occupancy: See No Surface Occupancy.

T

Take: Under the ESA, take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

Texture: The visual manifestations of the interplay of light and shadow created by the variations in the surface of an object or landscape.

Traditional Use: This cultural resource use category is to be applied to any cultural resource that is perceived by a specified social and/or cultural group as having attributes that contribute to maintaining the heritage or existence of that group. This use category signifies that the cultural resource is to be managed in a way that takes those attributes into account, as applicable.

Trail: A linear route managed for human powered, stock, or OHV forms of recreation or for historic or heritage values. Trails are not generally managed for use by four wheel drive or high clearance vehicles.

Transportation Linear Feature: The broadest category of physical disturbance (planned and unplanned) on BLM land. Transportation-related linear features include engineered roads and trails, as well as user-defined, nonengineered roads and trails created as a result of the public use of BLM land. Linear features may include roads and trails identified for closure or removal, as well as those that make up the BLM's defined transportation system.

Transportation System: The sum of the BLM's recognized inventory of linear features (roads, primitive roads, and trails) formally recognized, designated, and approved as part of the BLM's transportation system.

Travel Management (comprehensive): The proactive interdisciplinary planning, on-the-ground management, and administration of travel networks (both motorized and non-motorized) to ensure public access, natural resources and regulatory needs are considered. It consists of inventory, planning, designation, implementation, education, enforcement, monitoring, easement acquisition, mapping and signing, and other measures necessary to provide access to public lands for a wide variety of uses (including uses for recreational, traditional, casual, agricultural, commercial, educational, and other purposes).

U

V

Vandalism (Cultural Resource): Malicious damage or the unauthorized collecting, excavating, or defacing of cultural resources. Section 6 of the Archaeological Resources Protection Act states that "no person may excavate, remove, damage, or otherwise alter or deface any archaeological resource located on public lands or Indian lands, unless such activity is pursuant to a permit issued under section 4 of this act."

Variables: Factors influencing visual perception including distance, angle of observation, time, size or scale, season of the year, light, and atmospheric conditions.

Variety: The state or quality of being varied and having the absence of monotony or sameness.

Vegetative Composition: The types of vegetation that are present in an area.

Viewshed: The landscape that can be directly seen under favorable atmospheric conditions, from a viewpoint or along a transportation corridor. Protection, rehabilitation, or enhancement is desirable and possible.

Visual Contrast: See Contrast.

Visual Quality: See Scenic Quality.

Visual Resource Management (VRM): The inventory and planning actions taken to identify visual values and to establish objectives for managing those values; and the management actions taken to achieve the visual management objectives.

Visual Resource Management Classes: Categories assigned to public lands based on scenic quality, sensitivity level, and distance zones. There are four classes. Each class has an objective which prescribes the amount of change allowed in the characteristic landscape.

Visual Resources: The visible physical features on a landscape (e.g., land, water, vegetation, animals, structures, and other features).

Visual Values: See Scenic Quality.

W

Wetland: An area that is inundated or saturated by surface or ground water often and long enough to support a prevalence of vegetation typically adapted for life in saturated soil. Wetlands include marshes, shallows, lakeshores, cienegas, and riparian areas.

Wilderness: A wilderness, in contrast with those areas where man and his own works dominate the landscape, is hereby recognized as an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain. An area of wilderness is further defined to mean in this chapter an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions and which (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 unconfined type of recreation; (3) has at least five thousand 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.

Wilderness Characteristics: Features of the land associated with the concept of wilderness that may be considered in land use planning when BLM determines that those characteristics are reasonably present, of sufficient value (condition, uniqueness, relevance, importance) and need (trend, risk), and are practical to manage. Lands are considered to maintain wilderness characteristics when opportunities to experience naturalness, solitude, or primitive and unconfined types of recreation are reasonably present.

Wildlife: A broad term that includes birds, reptiles, amphibians, and non-domesticated mammals.

Withdrawals, first form: Lands withdrawn by Reclamation which are exempt from both general land laws and mining laws. First form withdrawals are lands which may be needed in the construction and maintenance of irrigation projects.

Withdrawals, second form: Lands withdrawn by Reclamation which are exempt from general land laws, but not exempt from mining laws. Second form withdrawals may allow for specific land laws, i.e., homestead entry. Second form withdrawals include lands which are believed to be susceptible to irrigation from a reclamation project.

X

Xeroriparian: An area in a drainage that supports plant species more characteristic of uplands than wetlands, but that is more densely vegetated than areas removed from the drainage. Any flows in these channels are characteristically ephemeral but water may also be subsurface and the drainage may not flow.

Y

Z

REFERENCES CITED

Arizona Game and Fish Department (AGFD)

- 2006 *Arizona's Comprehensive Wildlife Conservation Strategy: 2005-2015*. Phoenix, Arizona.
- 2007 *Wildlife 2012: The Arizona Game and Fish Department's Strategic Plan for the Years 2007-2012*. Phoenix, Arizona.

Arizona Interagency Desert Tortoise Team

- 1996 *Management Plan for the Sonoran desert population of the desert tortoise in Arizona*. R.C. Murray and V. Dickinson, eds. Arizona Game and Fish Department and USFWS, Phoenix.

Avian Power Line Interaction Committee

- 2006 *Suggested Practices for Raptor Protection on Power Lines: the State of the Art in 2006*. Edison Electric Institute and the Raptor Research Foundation. Washington, D.C.

Desert Tortoise Compensation Team

- 1991 *Compensation for the Desert Tortoise*. Approved by the Desert Tortoise Management Oversight Group.

Driscoll, J.T., D.V. Jacobson, G.L. Beatty, J.S. Canaca, J.G. Koloszar

- 2006 Conservation assessment and strategy for the bald eagle in Arizona, Manager's Guide. Nongame and Endangered Wildlife Program Technical report 173a. Arizona Game and Fish Department, Phoenix, Arizona.

Flat-tailed Horned Lizard Interagency Coordinating Committee

- 2003 *Flat-tailed Horned Lizard Rangewide Management Strategy*, 2003 revision. 80 pp. plus appendices.

Imperial County

- 1993 *Imperial County General Plan*.

La Paz County

- 2005 *Revised Draft La Paz County Comprehensive Plan*.

Maricopa County

- 2005 *Maricopa County – Managing for Results Strategic Plan*.

National Interagency Fire Center

- 2007 *Interagency Standards for Fire and Aviation Operations*.

References Cited

The Nature Conservancy

- 2004 *Preliminary Assessment of Biodiversity Values and Management Framework Adaptation for the Expanded Kofa Complex and Yuma Resource Management Area in Southern Arizona*. Originally released August 2003, Revised February 2004. Prepared by Stephanie Weinstein, Anne Gondor, and John A. Hall.

North American Waterfowl Management Plan, Plan Committee

- 2004 *North American Waterfowl Management Plan 2004. Strategic Guidance: Strengthening the Biological Foundation*. Canadian Wildlife Service, U.S. Fish and Wildlife Service, Secretaria de Medio Ambiente y Recursos Naturales.

Riverside County

- 2003 *Riverside County General Plan*.

U.S. Army Yuma Proving Ground

- 2005 *Integrated Natural Resources Management Plan*.

U.S. Department of Agriculture, Natural Resources Conservation Service (USDA NRCS)

- 2005 *Arizona Ecological Site Descriptions*. Available online at: <http://efotg.nrcs.usda.gov/>.

U.S. Department of the Air Force

- 2006 *Final Environmental Impact Statement for the Barry M. Goldwater Range Integrated Natural Resource Plan*.

U.S. Department of the Interior (USDOI)

- 1964 *The Lower Colorado River Land Use Plan. A Report of the Lower Colorado River Land Use Advisory Committee*. U.S. Government Printing Office, Washington, D.C. 20402.

U.S. Department of the Interior, Bureau of Land Management (USDOI BLM)

- 1983 *Lower Gila North Management Framework Plan*.
- 1987a *Yuma District Resource Management Plan and Environmental Impact Statement*.
- 1987b *Lower Gila South Final Wilderness EIS*.
- 1988 *Lower Gila South Resource Management Plan*.
- 1991 *Environmental Impact Statement for Vegetation Treatments, Watersheds and Wildlife Habitats on Public Lands Administered by the BLM in the Western United States, including Alaska*.
- 1992 *BLM Raptor Habitat Management on Public Lands, A strategy for the future*. Richard R. Olendorff and Michael N. Kochert, Boise, Idaho.
- 1993 *Yuma District's Concession Review Program*.

- 1997 *Arizona Standards for Rangeland Health and Guidelines for Grazing Administration.*
 - 2000 *Rare Plants 2000 Strategy.*
 - 2002 *Northern and Eastern Colorado Desert Coordinated Management Plan and Final Environmental Impact Statement.* July. BLM California Desert District.
 - 2004a Final Scoping Report. Yuma Field Office. Yuma, Arizona.
 - 2004b *Five-Year Strategy for the Wildlife, Fisheries, Botany, and Threatened and Endangered Species Programs.* BLM Arizona State Office, Phoenix, Arizona.
 - 2005 *A Desk Guide to Cooperating Agency Relationships.*
 - 2007 *Yuma Field Office Draft Resource Management Plan and Draft Environmental Impact Statement.*
 - 2008 *Yuma Field Office Proposed Resource Management Plan and Final Environmental Impact Statement.*
- U.S. Department of the Interior, Bureau of Reclamation, U.S. Fish and Wildlife Service, and the Metropolitan Water District of Southern California
- 2004 *Lower Colorado River Multi-Species Conservation Program.* Final Programmatic Environmental Impact Statement/Environmental Impact Report, Volume I.
- U.S. Department of the Interior, National Park Service (NPS)
- 1996 *Comprehensive Management and Use Plan.* Final Environmental Impact Statement. Juan Bautista de Anza National Historic Trail.
- U.S. Department of the Interior, U.S. Fish and Wildlife Service (USFWS)
- 1982 *Bald Eagle (Southwestern Population) Recovery Plan.*
 - 1983 *Yuma Clapper Rail Recovery Plan.*
 - 1993 *Desert Pupfish Recovery Plan.* Phoenix, Arizona.
 - 1994 *Desert Tortoise (Mojave Population) Recovery Plan.*
 - 1998a *Gila Topminnow (Poeciliopsis occidentalis occidentalis), Revised Recovery Plan.* U.S. Fish and Wildlife Service, Albuquerque, New Mexico.
 - 1998b *Razorback Sucker Recovery Plan.* U.S. Fish and Wildlife Service, Region 6, Denver, Colorado.
 - 1998c *Final Revised Sonoran Pronghorn Recovery Plan.*

References Cited

- 2002a *Bonytail Chub (Gila elegans) Recovery Goals: Amendment and Supplement to the Bonytail Chub Recovery Plan*. U.S. Fish and Wildlife Service, Mountain-Prairie Region (6), Denver, Colorado.
- 2002b *Razorback Sucker (Xyrauchen texanus) Recovery Goals: Amendment and Supplement to the Razorback Sucker Recovery Plan*. U.S. Fish and Wildlife Service, Mountain-Prairie Region (6), Denver, Colorado.
- 2002c *Recovery Criteria and Estimates of Time for Recovery Actions for the Sonoran Pronghorn*.
- 2002d *Southwestern Willow Flycatcher Final Recovery Plan*.
- 2007 National Bald Eagle Management Guidelines.
- 2009 *Biological Opinion for the Yuma Field Office Resource Management Plan*. Arizona Ecological Services Field Office, Phoenix, AZ.
- von Werlhof, J.
2004 Archaeological Report on the Walters Camp Project Area.
- Weinstein, S., A. Gondor, and J. Hall
2003 Preliminary Assessment of Biodiversity Values and Management Framework Adaptation for the Expanded Kofa Complex and Yuma Resource Management Area in Southwestern Arizona. The Nature Conservancy, Tucson, AZ.
- Yuma, City of
2002 *City of Yuma 2002 General Plan*.
- Yuma, County of
2006 *Yuma County Plan 2010 Comprehensive Plan*.

ACRONYMS

ACEC	Area of Critical Environmental Concern
ADEQ	Arizona Department of Environmental Quality
ADOT	Arizona Department of Transportation
ADWR	Arizona Department of Water Resources
AGFD	Arizona Game and Fish Department
AML ₁	abandoned mine lands
AML ₂	Appropriate Management Level
AMR	Appropriate Management Response
ARPA	Archeological Resources Protection Act
ARS	Arizona Revised Statutes
AZ	Arizona
BLM	Bureau of Land Management
BMGR	Barry M. Goldwater Range
BMP	Best Management Practice
BO	Biological Opinion
CA	California
CAA	Clean Air Act
CDFG	California Department of Fish and Game
CEQ	Council on Environmental Quality
CFPO	cactus ferruginous pygmy-owl
CFR	Code of Federal Regulations
CHRIS	California Historical Resources Information System
CMA	Coordinated Management Area
CO ₂	carbon dioxide
CRDSP	Cultural Resource Data Sharing Partnership
CRIT	Colorado River Indian Tribes
CWA	Clean Water Act
DEIS	Draft Environmental Impact Statement
DM	Departmental Manual
DRMP	Draft Resource Management Plan
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
ERMA	Extensive Recreation Management Areas
ESA	Endangered Species Act
FCR	Field Contact Representative
FEIS	Final Environmental Impact Statement
FHWA	Federal Highway Administration
FLPMA	Federal Land Policy and Management Act of 1976
FLREA	Federal Lands Recreation Enhancement Act
FTHL	flat-tailed horned lizard
HA	Herd Area

HMA	Herd Management Area
IM	Instruction Memorandum
LCR MSCP	Lower Colorado River Multiple Species Conservation Program
LHFO	Lake Havasu Field Office
LTVA	Long-Term Visitor Area
LUP	Land Use Plan
MCAS–Yuma	Marine Corps Air Station–Yuma
MOU	Memorandum of Understanding
mph	miles per hour
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NHT	National Historic Trail
NLCS	National Landscape Conservation System
NOA	Notice of Availability
NOI	Notice of Intent
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NRT	National Recreation Trail
NWR	National Wildlife Refuge
OHV	off-highway vehicle
PL	Public Law
PM ₁₀	particulate matter less than 10 microns in diameter
PRMP	Proposed Resource Management Plan
R&PP	Recreation and Public Purposes
Reclamation	See: USDOIR Reclamation
RMIS	Recreation Management Information System
RMP	Resource Management Plan
RMZ	Recreation Management Zone
ROD	Record of Decision
ROW	Right-of-Way
RV	recreational vehicle
SCRMA	Special Cultural Resource Management Area
SHPO	State Historic Preservation Officer
SRMA	Special Recreation Management Areas
SRP	Special Recreation Permit
SWFL	southwestern willow flycatcher
TMA	Travel Management Area
TMP	Travel Management Plan
U.S.	United States
USC	United States Code
USDA	United States Department of Agriculture
USDOIR	United States Department of the Interior
USDOIR BLM	United States Department of the Interior, Bureau of Land Management
USDOIR Reclamation	United States Department of the Interior, Bureau of Reclamation
USFWS	United States Fish and Wildlife Service

USIBWC	United States International Boundary and Waters Commission
UXO	Unexploded Ordnance
VHA	Vegetation Habitat Management Area
VRM	Visual Resource Management
WHA	Wildlife Habitat Management Area
WMIDD	Wellton-Mohawk Irrigation and Drainage District
WUI	Wildland Urban Interface
YFO	Yuma Field Office
YPG	United States Army Yuma Proving Ground

INDEX

(The numbers after entries refer to section, table, and map numbers.)

A

abandoned mine—see Public Health and Safety

access—see Travel Management

air quality—see Air Resource Management

Air Resource Management, 2.17.1

Ak-Chin Indian Community, 1.7.2

allotment—see Livestock Grazing Management

Anza Trail—see Juan Bautista de Anza National Historic Trail (NHT)

Area of Critical Environmental Concern (ACEC), 2.3.4

Arizona Department of Transportation (ADOT), 2.7.2E, 2.11.2D

Arizona Game and Fish Department (AGFD), 2.3.3; 2.3.4B; 2.4.1; 2.4.3; 2.5.2; 2.5.4; 2.7; 2.7.1B,C, and E; 2.7.2 B, D, and E; 2.8; 2.8.1C, E, and G; 2.8.3B and C; 2.11.1; 2.11.2; 2.12.1C; 2.12.3D; 2.14; 2.19.1

Arizona State Lands Department, 2.11.2A and C

B

bald eagle—see Special Status Species Management

best management practices (BMPs), Appendix B

Betty's Kitchen National Recreation Trail—see National Recreation Trail (NRT)

bighorn sheep—see Fish and Wildlife Management

bonytail chub—see Special Status Species Management

Bureau of Reclamation (Reclamation), 2.3.4.A, 2.4, 2.4.1, 2.4.3, 2.7, 2.11.1, 2.11.2A-C, 2.12.C, 2.12.3A and C, 2.15.1, 2.17.2, 2.18.1A, 2.19.3, 2.20.1, Table 2-16

burro—see Wild Horse and Burro Management

burrowing owl—see Fish and Wildlife Management

Byway (Back Country, Scenic)—see Travel Management

C

cactus ferruginous pygmy-owl—see Special Status Species Management

California brown pelican—see Special Status Species Management

Chemehuevi Indian Tribe, 1.7.2

Cibola-Trigo Herd Management Area—see Wild Horse and Burro Management

Closed OHV Management Area, 2.3.4B and C, 2.12.1B and C, 2.12.3A, 2.15.1, 2.19.2

Cocopah Indian Tribe, 1.7.1D, 1.7.2

Colorado River, 2.3.4A, 2.4, 2.4.1, 2.5, 2.5.5, 2.7, 2.7.1C and D, 2.7.2A, 2.8.1E and G, 2.8.2A, 2.10, 2.11.1, 2.11.2A and C, 2.15.1, 2.17.2, 2.18.1, 2.18.2B and C, Table 2-6

Colorado River Indian Tribes (CRIT), 1.3, 1.7.2

conservation measures, 2.4.2, 2.5.4, 2.6, 2.7.1A, 2.7.2, 2.8

cooperating agency, 1.7, 1.7.1

Coordinated Management Area (CMA), 2.4, Table 2-3

critical habitat, designated—see Special Status Species Management

Cultural Resource Management, 2.15

D

day use area—see Recreation Management

Department of Homeland Security, 1.7.1A

Departmental Manual 613, 1.3.1, 2.4, 2.17.2B, 2.18.1A

desert pupfish—see Special Status Species Management

desert tortoise habitat—see Special Status Species Management

designated roads and trails—see Travel Management

designated wilderness area—see Wilderness Areas

desired plant community—see Vegetation Management

disposal—see Lands and Realty Management

Dripping Springs ACEC, 2.3.4, 2.3.4B, 2.5.6, 2.11.1, 2.11.2D, 2.12.3D, 2.18.1A, 2.19.1, 2.19.3, Tables 2-5 and 2-16

E

endangered species—see Special Status Species Management

environmental justice, 1.5.2V

exotic species—see Vegetation Management

F

Federal Land Policy and Management Act (FLPMA), 1.2.1; 1.2.2; 1.5.1; 1.5.2M, R, and S; 1.6.3; 1.8; 1.10.3; 2.1; 2.2.3; 2.3.4; 2.4; 2.8; 2.8.3; 2.11; 2.14; 2.17.1; 2.18; 2.18.1B and C; 2.18.2C

fees—see Recreation Fees

fire management—see Wildland Fire Management

firewood—see Vegetation Management

Fish and Wildlife Management, 1.6.1B, 2.7, 2.11.1, 2.14

flat-tailed horned lizard—see Special Status Species Management

Fort Mojave Indian Tribe, 1.7.2

Fort Yuma Quechan Tribe, 1.7.1D, 1.7.2

G

Geology, 1.6.1C, 2.12.2B, 2.17.3

Gila River, 2.3.1B, 2.3.4C, 2.5, 2.5.1A, 2.5.2, 2.5.5, 2.7.1C, 2.7.2, 2.7.2A, 2.8.1B and G, 2.8.2A, 2.9, 2.11.1, 2.11.2B, 2.12.3, 2.12.3B and C, 2.15.1, 2.17.2, 2.17.2B, 2.18.1A and B, 2.19.1, 2.19.3, Tables 2-6 and 2-10

Gila River Indian Community, 1.7.2

Gila topminnow—see Fish and Wildlife Management

grazing—see Livestock Grazing Management

H

hazardous materials—see Public Health and Safety

Herd Management Area (HMA), 2.10, Table 2-9, Map 2-6

Hualapai Tribe, 1.7.2

I

Imperial County, 1.0, 1.3, 1.8, 2.11.2A and C, 2.17.1

International Boundary, 2.4.2, 2.5, 2.7, 2A.11.2C, 2.12.2B, 2.20, 2.20.3

J

Juan Bautista de Anza National Historic Trail (Anza Trail), 2.3.1B, 2.3.4C, 2.5.5, 2.6, 2.11.1, 2.11.2B and C, 2.12.1C, 2.12.3B and C, 2.15, 2.15.2B, 2.18.1C, Tables 2-1 and 2-10

K

L

La Paz County, 1.0, 1.3, 1.5.1, 1.8, 2.11.2A and D

land health standards, 2.2, 2.5, 2.8.3E, 2.9, 2.14

land tenure—see Lands and Realty Management

land use authorizations—see Lands and Realty Management

Lands and Realty Management, 2.17

leasable minerals—see Mineral Resource Management

Limited OHV Management Area, 2.12.1, 2.12.1C

Limitrophe, 2.4, 2.4.2, 2.7.2A, 2.11.2C, 2.15, 2.19.1, 2.19.3, Tables 2-3 and 2-10

Livestock Grazing Management, 2.2, 2.9

locatable minerals—see Mineral Resources Management

Lower Colorado River Multi-species Conservation Plan, 1.5.2A, 1.5.2F, 2.5.1A, 2.7, 2.7.2A, 2.8, 2.11.2C

M

Maricopa County, 1.0., 1.3, 1.8, 2.11.2D and E

Marine Corps Air Station–Yuma (MCAS-Yuma), 1.3, 1.7.1A, 2.11.2C

mineral entry—see Mineral Resources Management

mineral materials—see Mineral Resources Management

Mineral Resource Management, 2.3.4B and C, 2.15.2C and D, 2.18.1B and C, 2.19

Mojave desert tortoise—see Special Status Species Management

Monitoring—see Implementation and Monitoring

Muggins Mountains Wilderness Area, 2.3.1A, 2.11.2C, Tables 2-1 and 2-12

N

National Environmental Policy Act (NEPA), 1.0, 1.4.1, 1.5.1, 1.5.2Q, 1.6.3, 1.9.6, 1.9.7, 1.10.1, 1.10.2, 1.10.3, 2.1, 2.7, 2.7.1C, 2.12.1C, 2.13, 2.14, 2.18.1B and C

National Historic Preservation Act of 1966, as amended (NHPA), 1.5.2H, 2.3.3, 2.15, 2.15.2F, 2.20.1, 2.20.4

National Historic Trail (NHT), 2.3, 2.3.1, 2.3.1B, 2.11.2B and C, 2.12, 2.12.3B and C

National Recreation Trail (NRT), 2.3, 2.3.2, 2.11.1, 2.11.2C, 2.12

Native American tribes, 1.5, 1.5.1, 1.7.1, 1.7.2, 1.8

native species, 2.2.3, 2.4.2, 2.5, 2.5.1A and G, 2.5.2, 2.5.3, 2.5.4, 2.5.5, 2.6, 2.7, 2.9

Natural Resources Conservation Service (NRCS), 1.7.1A, 2.17.3

noxious weed—see Vegetation Management

O

off-highway vehicle (OHV), 1.2.2, 1.5.2O, 1.6.1A-E, 1.9.1, 2.2.3, 2.4, 2.6, 2.7, 2.10, 2.11

oil and gas—see Mineral Resources Management

Open OHV Management Area, 2.7.2C, 2.11.1, 2.12.1A, 2.12.2C, 2.17.1

P

Paleontological Resource Management, 2.16

Permits, 1.5.2L and M, 2.3.3, 2.5.6, 2.7, 2.7.2A and B, 2.8.1D, 2.8.1D, 2.8.3C and E, 2.11.1, 2.12.2D, 2.14, 2.18, 2.18.1B and C, 2.19.3, 2.20.4

planning criteria, 1.4.1A and B, 1.5, 1.5.1, 1.5.2, 1.6, 1.7

plant community—see Vegetation Management

predator control—see Fish and Wildlife Management

prescribed fire (burning)—see Wildland Fire Management

priority species—see Vegetation Management

primitive recreation—see Recreation Management

Public Health and Safety Management, 2.20

Pueblo of Zuni, 1.7.2

Q

Quartzsite, Town of, 1.3, 1.3.2, 1.6, 1.6.1F, 1.7, 1.7.1C, 2.11.2D

R

range improvements—see Livestock Grazing Management

razorback sucker—see Special Status Species Management

Record of Decision (ROD), 1.2.1, 1.4.1H and I, 1.4.2, 1.5.2O, 1.6.2, 1.9.1, 1.9.3, 1.10.2, 1.10.4, 2.1, 2.12.2

Recreation and Public Purposes (R&PP) Act, 2.18.1B, 2.18.2A

recreation fees—see Recreation Management

Recreation Management, 2.11

Recreation Management Area, 2.11.2, Table 2-10

Recreation Management Zone (RMZ), 2.11.2, Table 2-10

recreation setting—see Recreation Management

Right-of-Way (ROW) Corridors, 2.7.2, 2.13, 2.15.1, 2.18.1C, Table 2-16

Riverside County, 1.0, 1.3, 1.5.1, 1.8, 2.11.2A

road—see Travel Management

route—see Travel Management

route designation—see Travel Management

route evaluation—see Travel Management

route inventory—see Travel Management

S

salable minerals—see Mineral Resources Management

Salt River Pima-Maricopa Indian Community, 1.7.2

scoping, 1.4.1A and B, 1.4.2, 1.6, 1.6.1, 1.6.2, 1.7

sensitive species—see Fish and Wildlife Management

Soil Resource Management, 2.17.3

Sonoran desert tortoise—see Special Status Species Management

Sonoran pronghorn—see Special Status Species Management

southwestern willow flycatcher—see Special Status Species Management

Special Cultural Resource Management Area (SCRMA), 2.15.1, Table 2-15

Special Designations Management, 2.3

Special Recreation Management Area (SRMA), 2.11.1, 2.11.2, Table 2-10

Special Recreation Permit (SRP), 2.3.1A, 2.3.4, 2.8.3C, 2.11, 2.11.1, 2.12.1C, 2.15.2B

Special Status Species Management, 2.8

surface occupancy, 2.3.1B, 2.3.2, 2.3.3, 2.3.4, 2.4.2, 2.7.2A and B, 2.15.1, 2.15.2B-D, 2.18.1B and C, 2.19.1

T

Tohono O’odham Tribal Nation, 1.7.2

trail—see Travel Management

Travel Management, 2.12

Travel Management Area (TMA), 2.3.1B, 2.12, 2.12.1C, 2.12.2B, 2.12.3A-D

U

U.S. Army Yuma Proving Ground (YPG), 1.3, 1.7.1A, 1.8, 2.11.2A and C-E, 2.12.3A-D, Table 2-2

U.S. Department of Transportation (USDOT), 2.3.3

U.S. Fish and Wildlife Service (USFWS), 1.5.1, 1.7.1, 2.3.1A, 2.5.2, 2.5.4, 2.6, 2.7, 2.7.1C, 2.7.2A, 2.8, 2.8.1A-H, 2.8.2, 2.8.3A, 2.11.2A, 2.18A

U.S. Highway 95—see byway

V

Vegetation Habitat Management Area (VHA), 2.3.4C, 2.5, 2.5.2, 2.6, 2.7.1E, 2.9, 2.18.1B and C, 2.19.3, Table 2-4

Vegetation Management, 2.5, 2.8, 2.11.2C, 2.12.2C

vegetation treatments, 2.4.2, 2.5, 2.5.5, 2.7.2A, 2.12.2B, 2.20.3

Visual Resource Management (VRM), 2.13

W

watchable wildlife, 2.3.2, 2.7, 2.11.2C

water quality—see Water Resource Management

Water Resource Management, 2.17.2

Wellton–Mohawk Irrigation and Drainage District (WMIDD), 1.7.1C

Wild Horse and Burro Management, 2.10

Wilderness Characteristics Management, 2.14, Map 2-14

Wildland Fire Management, 2.6, 2.12.2B

Wildlife Habitat Management Area (WHA), 2.3.3, 2.5, 2.5.1G, 2.5.5, 2.7.2, 2.12.1E, 2.18.1B and C, 2.18.2C, 2.19.1, 2.19.3

withdrawal— see Mineral Resources Management

X

Y

Yavapai–Apache Nation, 1.7.1D, 1.7.2

Yavapai–Prescott Indian Tribe, 1.7.2

yellow-billed cuckoo—see Special Status Species Management

Yuma, City of, 1.3, 1.7.1C, 1.8, 2.11.2C and D

Yuma clapper rail—see Special Status Species Management

Yuma County, 1.0, 1.3, 1.5.1, 1.8, 2.11.2C and D

Yuma County Department of Public Works, 1.7.1C

Z

APPENDIX A:

LAWS AND EXECUTIVE ORDERS

BLM must comply with the mandate and intent of the following laws and EOs that apply to BLM-administered lands and resources in the planning area. The YFO also manages the public lands according to applicable regulations found at Title 43 of the Code of Federal Regulations and according to applicable USDOJ and BLM Manuals, Handbooks, and Instruction Memorandum.

GENERAL

American Heritage Rivers (EO 13061, September 11, 1997)
Base Closure & Realignment Act (Title II of Public Law [PL] 100-526)
Cave Resources Protection Act (16 USC 4301 et seq.)
Consultation & Coordination with Indian Tribal Governments (EO 13175, November 6, 2000)
Environmental Quality Improvement Act (42 USC 4371 et seq.)
Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations (EO 12898, February 11, 1994)
Federal Advisory Committee Act (PL 92-463)
Federal Land Policy and Management Act (43 USC 1701 et seq.)
Federal Power Act (16 USC 791-828c)
Federalism (EO 13132, August 4, 1999)
Freedom of Information Act (PL 85-619)
Intergovernmental Review of Federal Programs (EO 12372)
Land and Water Conservation Fund (16 USC 460l - 460l-11)
National Environmental Policy Act (42 USC 4321 et seq.)
Privacy Act of 1974 (PL 93-579)
Protection & Enhancement of Environmental Quality (EO 11514, March 5, 1970)
Regulatory Impact Analysis (EO 12866, September 30, 1993)
Takings (EO 12630, March 15, 1988)

WILDERNESS

Arizona Desert Wilderness Act (PL 101-628)
California Desert Protection Act (PL 103-433)
Wilderness Act (16 USC 1131 et seq.)

NATIONAL HISTORIC TRAILS

National Trails System Act (16 USC 1241-1249)

NATIONAL BYWAYS

Transportation Equity Act for the 21st Century (PL 105-178)

WILD AND SCENIC RIVERS

Wild & Scenic Rivers Act (16 USC 1271 et seq.)

VEGETATION MANAGEMENT

Arizona Native Plant Law (Arizona Revised Statutes [ARS], 3-901 et. seq.)

Federal Noxious Weed Act (7 USC 2801 et seq.)

Invasive Species Control (EO 13112, February 3, 1999)

Noxious Plant Control Act (43 USC 1241-43)

WILDLAND FIRE MANAGEMENT

Timber Protection Act (16 USC 594)

FISH AND WILDLIFE MANAGEMENT

Animal Damage Control Act (7 USC 426-426c)

Bald Eagle Protection Act (16 USC 668-668d)

California Endangered Species Act (Fish & Game Code §§2050, et seq.)

California Native Plant Protection Act (Fish & Game Code §§1900-1913)

Conservation of Migratory Birds (EO 13186, January 10, 2001)

Endangered Species Act (16 USC 1532 et seq.)

Exotic Organisms (EO 11987, May 24, 1977)

Fish and Wildlife Conservation Act (16 USC 2901-2911 et seq.)

Fish and Wildlife Coordination Act (16 USC 661-667e et seq.)

Migratory Bird Treaty Act (16 USC 703-712 et seq.)

Neotropical Migratory Bird Conservation Act (PL 106-247)

Recreational Fisheries (EO 12962, June 7, 1995)

Sikes Act (16 USC 670)

LIVESTOCK GRAZING MANAGEMENT

Public Rangelands Improvement Act (43 USC 1901 et seq.)
Taylor Grazing Act (43 USC 215 et seq.)

WILD HORSE AND BURRO MANAGEMENT

Wild Free-Roaming Horse & Burro Act (16 USC 1331-1340)

RECREATION MANAGEMENT

Facilitation of Hunting Heritage and Wildlife Conservation (EO 13443)
Federal Lands Recreation Enhancement Act (PL 108-447)
National Parks and Recreation Act of 1978 (PL 95-625)

TRAVEL MANAGEMENT

Use of Off-Road Vehicles on the Public Lands (EO 11644, February 8, 1972; EO 11989, May 24, 1977)
Arizona Off-highway Vehicle Law (ARS 28-1171.4)

CULTURAL RESOURCE MANAGEMENT

American Indian Religious Freedom Act (42 USC 1996)
Antiquities Act (16 USC 431-433)
Archaeological Resources Protection Act (16 USC 470aa - 470ll)
Archeological and Historic Preservation Act (16 USC 469-469c)
Historic Sites, Buildings and Antiquities Act (16 USC 461-462, 464-467)
Indian Sacred Sites (EO 13007, May 24, 1996)
National Historic Preservation Act (16 USC 470 et seq.)
Native American Graves Protection & Repatriation Act (25 USC 3001-13)
Preserve America (EO 13287, March 3, 2003)
Protection & Enhancement of Cultural Environment (EO 11593, May 13, 1971)

PALEONTOLOGICAL RESOURCE MANAGEMENT

Issuance of Archaeological and Paleontological Permits (Secretarial Order 3104, September 28, 1984)

AIR RESOURCE MANAGEMENT

Clean Air Act (42 USC 7401 et seq.)

WATER RESOURCE MANAGEMENT

Arizona Revised Statutes (ARS Title 45 – Waters)
Clean Water Act (PL 95-217)
Colorado River Basin Project Act (43 USC 1501-1556)
Colorado River Basin Salinity Control Act (43 USC 1571-1599)
Colorado River Floodway Protection Act (100 Stat. 1129)
Colorado River Storage Project Act (43 USC 620)
Federal Water Pollution Control Act (33 USC 1251 et seq.)
Flood Control Act (16 USC 460d et seq.)
Floodplain Management (EO 11988, May 24, 1977)
Oil Pollution Act (33 USC 2701 et seq.)
Protection of Wetlands (EO 11990, May 24, 1977)
Safe Drinking Water Act (42 USC 300h)
Water Quality Act (PL 100-4)
Water Resources Planning Act (42 USC 1962a - 1962(a)(4)(e))
Water Rights Act (43 USC 666)

LANDS AND REALTY MANAGEMENT

Airport and Airway Improvement Act (49 USC 2215)
Desert Land Entry Act (43 USC 321 et seq.)
Energy Policy Act (42 USC 15801)
Energy Project Streamlining (EO 13212)
Exchanges of Public Land for Non-Federal Land (43 USC 1716)
Federal Highway Acts (23 USC 17 and 317)
Federal Land Exchange Facilitation Act (43 USC 1716, August 20, 1988)
Federal Land Transaction and Facilitation Act (PL 106-248, July 25, 2000)
Indian General Allotment Act (24 Stat. 388)
Recreation and Public Purposes Act (43 USC 869 et seq.)
Telecommunications Act (PL 104-104)

MINERAL RESOURCE MANAGEMENT

Federal Coal Leasing Amendments Act (30 USC 201)
Federal Onshore Oil and Gas Leasing Reform Act (30 U.S.C. 226(g))
General Mining Law (30 USC 21 et seq.)
Geothermal Steam Act (30 USC 1001 et seq.)

Materials Sales Act (30 USC 601-604)
Mineral Leasing Act (30 USC 181 et seq.)
Mineral Leasing Act for Acquired Lands (30 USC 351 et seq.)
Mineral Materials Act (30 U.S.C. 601 et seq.)
Mining & Mineral Policy Act (30 USC 21a)
Stock Raising Homestead Act (43 USC 291-299)
Surface Mining Control & Reclamation Act (30 USC 1201 et seq.)
Surface Resources Act (30 USC 611-615)

PUBLIC HEALTH AND SAFETY MANAGEMENT

Action to Expedite Energy Related Projects (EO 13212, May 18, 2001)
Comprehensive Environmental Response Compensation & Liability Act (Superfund)
(42 USC 9601 et seq.)
Energy Supply, Distribution, or Use (EO 13211, May 18, 2001)
Environmental Stewardship & Transportation Infrastructure Project Reviews (EO 13274,
September 18, 2002)
Federal Aid Highways Act (23 USC 317)
Federal Compliance with Pollution Control Standards (EO 12088, October 13, 1978)
Federal Compliance with Right to Know Laws and Pollution Prevention Requirements
(EO 12856, August 3, 1993)
Federal Environmental Pesticide Control Act (7 USC 136)
Pollution Prevention Act (42 USC 13101 et seq.)
Resource Conservation & Recovery Act (42 USC 6901 et seq.)
Solid Waste Disposal Act (42 USC 6901 et seq.)
Superfund Implementation (EO 12580, January 23, 1987)
Toxic Substances Control Act (15 USC 2601 et seq.)

APPENDIX B: BEST MANAGEMENT PRACTICES

BMPs are innovative, dynamic, and improved environmental protection practices applied to resource management activities to help ensure that those activities are conducted in an environmentally responsible manner. When incorporated into standard operating procedures, BMPs can protect resource values and public health by avoiding, minimizing, and/or mitigating impacts.

Some BMPs are as simple as careful siting of facilities so that they blend in with the natural surroundings, others involve safe application of herbicides, while others involve careful monitoring of cultural and natural resources. BMPs are based on past experience and practices and continue to improve over time, building on new techniques and creative strategies for resource management. BMPs are not one size fits all. They should be developed in response to specific requirements of an activity or project and the site-specific conditions and needs. The following sections provide general guidance on BMPs that will be appropriate for the YFO.

1.1 SPECIAL DESIGNATIONS

BLM manages designated Wilderness according to requirements of the Wilderness Act and provisions of designating legislation. Guidelines and operating procedures for all management activities in Wilderness Areas are provided in BLM *Manual* 8560—*Management of Designated Wilderness Areas*, and in Wilderness management plans, where completed for specific Wilderness Areas. Requiring the completion of a *Minimum Requirements Decision Guide* prior to completing non-emergency actions within Wilderness will further ensure that impacts to wilderness values are minimized.

In Wilderness Areas minimum impact suppression tactics will be applied and coordinated with Wilderness Area management objectives and guidelines when fire suppression actions are required (National Interagency Fire Center 2007).

1.2 VEGETATION TREATMENTS

The following chemical, mechanical, manual, biological, and fire treatment methods will be used to achieve vegetation management objectives in the planning area.

A. CHEMICAL TREATMENT

YFO will use Environmental Protection Agency-approved herbicides in accordance with the Endangered Species Pesticide Program covered in the BLM's Vegetation Treatment on BLM Lands in Thirteen Western States FEIS (USDOI BLM 1991) and further limited to those approved for use by this document's ROD. These herbicides are Atrazine; Bromacil; Bromacil + Diuron; Chlorsulfuron; Clopyralid; 2,4-D; Diacamba; Dicamba +2,4-D; Diuron; Glyphosate; Glyphosate + 2,4-D; Hexazinone; Imazapyr; Mefluidide; Metsulfuron Methyl; Picloram; Picloram + 2,4-D; Simazine; Sulfometuron Methyl; Tebuthiuron; and Triclopyr. This list may be amended to accommodate subsequent updates to the herbicide EIS. Treatments will follow Standard Operating Procedures on pages 1-19 through 1-32 and project design features on pages 1-33 through 1-37 of the *Environmental Impact Statement for Vegetation Treatments, Watersheds and Wildlife Habitats on Public Lands Administered by the BLM in the Western United States, including Alaska* (USDOI BLM 1991). Additionally, project design features, including buffer strips described on page 10 of the above mentioned ROD, as follows: Buffer zones will be used adjacent to dwellings, domestic water sources, agriculture land, streams, lakes and ponds. A minimum buffer zone of 100 feet wide will be provided for aerial application, 25 feet for vehicle application and 10 feet for hand application (USDOI BLM 1991). Any deviations must be in accordance with the label for the herbicide. Herbicides will be hand wiped on individual plants within 10 feet of water where application is critical. Additionally, in order to protect listed, proposed, and candidate species, these buffer strips will be used.

YFO will work closely with the USFWS to ensure that herbicide applications will not affect listed or proposed, threatened, and endangered species on a project-level basis. If adverse effects are anticipated during informal consultation, YFO will formally consult on these projects. If USFWS develops herbicide guidance for particular species that improves protection beyond the current BLM design features, YFO will 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.

Herbicides are applied in several ways, depending upon the treatment objective, topography of the treatment area, target species, expected costs, equipment limitations, and potential environmental impacts. Herbicide applications will be timed to have the least impact on non-target plants and animals consistent with the objectives of the vegetation management program.

The chemicals will 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, areas with sensitive cultural resources, or those inaccessible by vehicle.

Rates of herbicide application will depend on the target species, other vegetation present, soil type, depth of the ground water table, and presence of other water sources. When target species occur in riparian areas, the application rate will be reduced to reduce injury to non-target species.

The size of areas that will be treated may vary from 10 feet in diameter to 100 acres, but, most such areas will vary from 10 feet in diameter to less than five acres. The normal area of treatment by helicopter will be less than 100 acres.

During aerial applications, nozzles to reduce drift will be used for all liquid applications. Liquid herbicides will not be applied when wind speeds exceed five miles per hour (mph), and granular herbicides will not be applied when wind speeds exceed 10 mph. Herbicides will 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 (see Glossary) to protect water resources will be provided according to individual State regulations and guidelines and herbicide labels.

Vehicle-mounted sprayer (hand gun or boom) applications will be mainly used in open areas that are readily accessible by vehicle. The boom will be used only where feasible to treat concentrated weed infestations. The hand gun will be used for spot treatment of weeds and only up to the high water line near water bodies. Neither hand guns nor booms will be used in riparian areas where weeds are closely intermingled with shrubs and trees. Under both hand gun and boom methods, sprays will be applied in a manner that gives the best possible coverage with the least amount of drift, and only when wind velocity is below eight mph, except in riparian areas where treatment will be applied only at wind velocities below five mph. Boom sprayers will 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 eight mph. Near water, wind velocities cannot exceed five mph. Contact systemic herbicides (see Glossary), such as glyphosate, wiped on individual plants, will be used up to the existing high water line. Granular formulations will 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 TREATMENT

Mechanical methods of vegetation treatment employ several different types of equipment to suppress, inhibit, or control herbaceous and woody vegetation. The goal of mechanical treatments is to kill or reduce the cover of undesirable vegetation and thus encourage the growth of desirable plants. YFO 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 will be conducted in accordance with BLM established procedures. Re-seeding after a mechanical treatment has been applied and is important to help ensure that desirable plants will 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 improve 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.

Disk plowing in its various forms can be used for removing shallow-rooted herbaceous and woody plants. Disk plows should only be used where all of the vegetation is intended to be killed. There are several different kinds of root plows that are specific for certain types of vegetation. In addition to killing vegetation, disk plowing is effective in loosening the soil surface to prepare it for seeding and to improve the rate of water infiltration. The disadvantage of disk plowing is that it may be expensive and usually kills all species. Also, plowing is usually not practicable on steep slopes (greater than a 35 to 45 percent slope) or rocky soil. Plant species that sprout from roots may survive.

Chaining and cabling is accomplished by dragging heavy anchor chains or steel cables hooked behind tractors in a U-shape, half circle or J-shaped manner. Chaining and cabling is effective on rocky soils and steep slopes. Chaining and cabling is best used to control non-sprouting woody vegetation such as small trees and shrubs. However, desirable shrubs may be damaged in the process. Herbaceous vegetation is normally not injured by this control method. This control

method is cost effective, as large areas can be readily treated. The chains or cables also scarify the soil surface in anticipation of seeding desirable species. The disadvantage is that weedy herbaceous vegetation can survive this treatment.

There are various tractor attachments that are used for mowing, beating, crushing, chopping, or shredding vegetation depending on the nature of the plant stand and goals of the project. The advantage in using this type of equipment is that selective plants may be targeted to achieve specific goals. For example, mowing is effective in reducing plant height to a desirable condition and it usually does not kill vegetation. Mowing is more effective on herbaceous than woody vegetation. On the other hand, a rolling cutter can kill woody non-sprouting vegetation by breaking stems at ground level but leave herbaceous vegetation. Mowing, beating, crushing, chopping, or shredding usually does not disturb the soil. Rocky soil and steep slopes may limit this use of equipment.

Debris management after a mechanical control treatment application is critical in fuel reduction projects. Vegetation material that is left onsite will dry and become more hazardous than before the treatment. Herbaceous material is usually not a problem, because it will decompose relatively fast depending on soil moisture, ambient humidity, and temperature. Woody vegetation should be piled and burned under acceptable fire management practices.

Efforts repeated every 21 days during the growing season can deplete the underground food supply of some perennials. This method will be required for at least a three-year period to attain satisfactory control and will be considered only in areas where slope is less than 10 percent and where a small percentage of the vegetation consists of shrubs. This method will also weaken non-target species in treated areas.

C. MANUAL TREATMENT

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 will cut plants above ground level; pull, grub, or dig out plant root systems to prevent subsequent sprouting and regrowth; 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. BIOLOGICAL TREATMENT

Biological methods of vegetation treatment could employ grazing by cattle, sheep or goats, but will not include the use of invertebrates or microorganisms. YFO will only use cattle, sheep, or goats when grazing, which will not adversely affect federally listed, proposed, or candidate species. The use of grazing as a biological control agent will be conducted in accordance with BLM procedures in the *Use of Biological Control Agents of Pests on Public Lands* (USDOI BLM 1990a). Grazing cattle, sheep, or goats will control few plant species.

Biological control methods using cattle, sheep, or goats will avoid erosion hazard areas, areas of compactable soils, riparian areas susceptible to bank damage, and steep erodible slopes. Domestic sheep and goats will not be used within nine miles of bighorn sheep habitat, per AGFD.

Biological control methods using cattle, sheep, or goats will be applied to treat areas for short periods. When considering the use of grazing animals as an effective biological control measure, several factors will be taken into consideration including:

- Target plant species present
- Size of the infestation of target plant species
- Other plant species present
- Stage of growth of both target and other plant species
- Palatability of all plant species present
- Selectivity of all plant species present by the grazing animal species that is being considered for use as a biological agent
- Availability of the grazing animal within the treatment site area
- Type of management program that is logical and realistic for the specific treatment site

These factors will be some of the options taken when developing the individual treatment for a specific site.

Although discussed as biological agents, cattle, sheep, and goats are not truly biological agents, but are domestic animals used to control only the top growth of certain noxious weeds. The following are some advantages of using domestic animals, mainly sheep or goats, for noxious weed control: (1) they use weeds as a food source, (2) following a brief adjustment period, they sometimes consume as much as 50 percent of their daily diet of this species, (3) average daily gains of offspring grazing certain weed-infested pastures can sometimes be significantly higher than average daily gains of offspring grazing grass pastures, and (4) sheep or goats can be used in combination with herbicides.

Some of the disadvantages of using domestic animals are that (1) they also use non-target plants as food sources, (2) the use of domestic animals, like sheep or goats, requires a herder or temporary fencing, (3) the animals may be killed by predators such as coyotes, (4) heavy grazing of some weed species, such as leafy spurge, tends to loosen the stool of the grazing animals,

- (5) most weed species are less palatable than desirable vegetation and will cause overgrazing,
- (6) they may accelerate movement of nonnative plants through seed ingestion and excretion, and
- (7) domestic livestock may transmit parasites and/or pathogens to resident native wildlife species.

E. PRESCRIBED BURNING

Prescribed burning is the planned application of fire to wild land fuels in their natural or modified state, under specific conditions of fuels, weather, and other variables to allow the fire to remain in a predetermined area and to achieve site-specific fire and resource management objectives.

Management objectives of prescribed burning include the control of certain species; enhancement of growth, reproduction, or vigor of certain species, management of fuel loads, and maintenance of vegetation community types that best meet multiple-use management objectives. Treatments will be implemented in accordance with BLM procedures in Fire Planning, Prescribed Fire Management, and Fire Training and Qualifications.

Prior to conducting a prescribed burn, a written plan must be prepared that takes into consideration existing conditions (amount of fuel, fuel moisture, temperatures, terrain, weather forecasts, etc.) and identifies people responsible for overseeing the fire. Potential effects to sensitive cultural resources, including sites that are especially susceptible to damages from fire, such as rock art or historic sites with wooden components, must also be considered. Planning and implementation for a specific prescribed fire project entails the following four phases:

Phase 1. The Information/Assessment Phase includes identifying the area to be treated, inventorying and assessing site specific conditions (live and dead vegetation densities, dead down woody fuels loadings, soil types, etc.), analyzing historic and present fire management, identifying resource objectives from LUPs, and analyzing and complying with NEPA.

Phase 2. The Prescribed Fire Plan Development Phase includes developing a site specific prescribed fire plan to BLM Standards. It also includes reviews of the plan and obtaining plan approval from local BLM field office administrators.

Phase 3. The Implementation Phase includes ignition of the fire according to the plan's prescribed parameters. Implementation includes prescribed fire boundary area preparation to ensure that the fire remains in prescribed boundaries. Site preparation may take place in the form of fire line construction, road improvements, wildlife and stock trails, tree limbing, and debris clearing.

Phase 4. The Monitoring and Evaluation Phase includes assessment and long-term monitoring of the fire treatment to ensure that the prescribed fire has met the objectives of the approved prescribed fire plan. BLM fire monitoring policy is described in the BLM prescribed *Fire Management Handbook*, October 2003, Chapter 2 and Appendix 7. This policy applies to prescribed fire and wildland fire use.

1.3 APPROPRIATE MANAGEMENT RESPONSE TO WILDLAND FIRES

The AMR concept represents a range of available management responses to wildland fires. The entire planning area will be managed as non-fire use. Responses range from full fire suppression to managing fires for resource benefits (fire use). Management responses applied to a fire will be identified in the fire management plans and will 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.

1.4 WILDLIFE WATERS

Wildlife water developments will be constructed according to AGFD specifications (AGFD 2007).

1.5 SPECIES REINTRODUCTIONS AND TRANSPLANTS

Reintroductions and transplants are conducted pursuant to procedures in Manual Section 1745 and Master MOUs with AGFD and CDFG, as appropriate, for animals, and applicable agencies for plants. Reintroductions and transplants for federally listed species are done in cooperation with State agencies and the USFWS.

Typically, a suitability analysis is conducted to determine if sufficient habitat of appropriate quality is available. The cooperating agencies develop a proposed action for the reintroduction or transplant and incorporate agency (State and Federal) procedures. The NEPA process and other environmental compliance is initiated after the proposed action is developed. Upon completion of environmental compliance and approval process, the State agency takes the lead in trapping/acquiring (based on individual species requirements) wild animals from the healthy source population, transports captures to the reintroduction site (based on individual species transport requirements), and conducts a release. Follow-up monitoring ensues until agencies are satisfied the project was successful or until adaptive management is required (e.g., predator control, supplemental stocking, or other measures).

1.6 SPECIAL STATUS SPECIES

A. FLAT-TAILED HORNED LIZARD

1. Prior to project initiation, an individual shall be designated as a field contact representative. The field contact representative shall have the authority to ensure compliance with protective measures for the FTHL and will be the primary agency contact dealing with these measures. The field contact representative shall have the authority and responsibility to halt activities that are in violation of these terms and conditions.
2. All project work areas shall be clearly flagged or similarly marked at the outer boundaries to define the limit of work activities. All construction and restoration workers shall restrict their activities and vehicles to areas that have been flagged to eliminate adverse impacts to the FTHL and its habitat. All workers shall be instructed that their activities are restricted to flagged and cleared areas.
3. A biological monitor shall be present in each area of active surface disturbance throughout the work day from initial clearing through habitat restoration, except where the project is completely fenced and cleared of FTHLs by a biologist. The monitor(s) shall perform the following functions:
 - a) Develop and implement a worker education program. Wallet-cards summarizing this information shall be provided to all construction and maintenance personnel. The education program shall include the following aspects at a minimum:
 - biology and status of the FTHL
 - protection measures designed to reduce potential impacts to the species
 - function of flagging designating authorized work areas
 - reporting procedures to be used if a FTHL is encountered in the field
 - importance of exercising care when commuting to and from the project area to reduce mortality of FTHLs on roads
 - b) Ensure that all project-related activities comply with these measures. The biological monitor shall have the authority and responsibility to halt activities that are in violation of these terms and conditions.
 - c) Examine areas of active surface disturbance periodically (at least hourly when surface temperatures exceed 85°F) for the presence of FTHLs. In addition, all hazardous sites (e.g., open pipeline trenches, holes, or other deep excavations) shall be inspected for the presence of FTHLs prior to backfilling.

- d) Work with the project supervisor to take steps, as necessary, to avoid disturbance to FTHLs and their habitat. If avoiding disturbance to a FTHL is not possible or if a FTHL is found trapped in an excavation, the affected lizard shall be captured by hand and relocated.
4. Sites of permanent or long-term (greater than one year) projects where continuing activities are planned and where FTHL mortality could occur, may be enclosed with FTHL barrier fencing to prevent lizards from wandering onto the project site where they may be subject to collection, death, or injury. Barrier fencing should be in accordance with the standards outlined in the *Rangewide Management Strategy*. After clearing the area of FTHLs, no on-site monitor is required.
5. Construction of new paved roads shall include a lizard barrier fence on each side of the road that is exposed to occupied FTHL habitat. Exceptions may occur in accordance with the following evaluation, to be applied separately to each side of the road. This prescription may also be applied to canals or other fragmenting projects.

Side is made nonviable for FTHLs even if connected to the other side:

- Compensate for the entirety of the fragmented parcel.

Side is viable only if connected to the other side:

- Compensate for the entirety of the fragmented parcel, or
- Provide fencing and effective culverts or underpasses that will maintain connectivity.

Side is viable even if not connected to the other side:

- Provide fencing (no culverts).

Specifications for barrier fences are provided in the *Rangewide Management Strategy*. The FTHL Interagency Coordinating Committee will make the determination of FTHL population viability based on the size, configuration, and habitat condition of the isolated parcel, threats from adjacent lands, and existing scientific evidence of edge effects on FTHL. Culvert design will be provided by the FTHL Interagency Coordinating Committee.

B. GILA MONSTERS

If any Gila monsters or desert tortoises are observed, their location shall be recorded and the sighting along with any information concerning the sighting shall be reported to the BLM wildlife biologist at the YFO.

C. SONORAN DESERT TORTOISES

a. Project activities shall be scheduled when tortoises are inactive (typically November 1 to March 1).

Within all categories of desert tortoise habitat, a desert tortoise protection education program shall be presented to all employees, inspectors, supervisors, contractors, and subcontractors who carry out proposed activities at the project site. The education program shall include discussions of the following:

- The legal and sensitive status of the tortoise
- A brief discussion of tortoise life, history, and ecology
- Mitigation measures designed to reduce adverse effects to tortoises
- Protocols to follow if a tortoise is encountered, including appropriate contact points

The project proponent shall designate a field contact representative (FCR) who shall be responsible for overseeing compliance with these mitigation measures and for coordination on compliance with the BLM. The FCR and authorized/qualified biologist(s) shall have the authority and the responsibility to halt all project activities that are in violation of these mitigation measures. The FCR shall be responsible for oversight of compliance with these mitigation measures, coordination with permitting agencies, land managers, and State Game and Fish Departments; and shall serve as a contact point for personnel that encounter desert tortoises. The FCR shall be on site during project activities and shall be familiar with and have a copy of these mitigation measures.

Prior to implementation of any BLM-authorized surface-disturbing activities, work sites shall be surveyed for desert tortoises by a qualified biologist approved by the BLM. Surveys shall be in accordance with standardized protocol approved by the BLM. For surface-disturbing activities occurring during the desert tortoise season (March 1 through November 1), surveys shall be conducted within 24 hours of initiation of surface-disturbing activities. The 100-percent surveys of new areas of disturbance shall be conducted a maximum of three times, or two consecutive times if no desert tortoises are found. During surveys, occupied desert tortoise burrows in or within 40 feet of areas to be disturbed shall be excavated using hand tools by an authorized biologist. Burrows discovered in areas to be disturbed by project activities shall be collapsed or blocked to prevent entry by tortoises (any tortoises in those burrows shall be relocated first). Desert tortoises and any desert tortoise eggs found in areas to be disturbed shall be relocated and handled in accordance with the following measures.

If a tortoise is found in a project area, activities shall be modified to avoid injuring or harming it. If activities cannot be modified, tortoises shall be moved from harm's way. Upon discovery of a desert tortoise in harm's way, the authorized biologist shall translocate the animal the minimum distance possible (but not more than 2 miles) within appropriate habitat to ensure its safety from death, injury, or collection associated with the project or other activities. The authorized biologist shall be allowed some discretion to ensure that survival of each relocated desert tortoise is likely. Desert tortoises shall not be translocated to lands outside the administration of the Federal government without the written permission of the landowner.

Handling procedures for desert tortoises shall adhere to protocols outlined in the *Management Plan for the Sonoran Desert Population of the Desert Tortoise in Arizona*.

Only biologists authorized by the BLM and the appropriate State Fish and Game Department shall handle desert tortoises. The holder shall submit the name(s) of the proposed authorized biologist(s) to the BLM for review and approval at least 45 days prior to the onset of activities that could result in a take.

The authorized biologist shall maintain a record of all desert tortoises encountered during project activities. This information shall include for each desert tortoise:

- The locations and dates of observation
- General condition and health, including injuries and state of healing and whether animals voided their bladders
- Location moved from and location moved to
- Diagnostic markings; i.e., identification numbers of marked lateral scutes

No notching of scutes or replacement of fluids with a syringe is authorized.

Vehicle use shall be limited to existing or designated routes.

Areas of new construction or disturbance shall be flagged or marked on the ground prior to construction. All construction workers shall strictly limit their activities and vehicles to areas that have been marked. Construction personnel shall be trained to recognize markers and understand the equipment movement restrictions involved.

Blading of new access or work areas shall be minimized. Disturbance to shrubs shall be avoided. If shrubs cannot be avoided during equipment operation or vehicle use, they shall be crushed rather than excavated or bladed and removed.

Project features that might trap or entangle desert tortoises such as open trenches, pits, open pipes, etc., shall be covered or modified to prevent entrapment. This may only be necessary during the tortoise active season and may be unnecessary if an on-site biologist is monitoring activities.

Construction sites shall be maintained in a sanitary condition at all times. The project proponent shall be responsible for controlling and limiting litter, trash, and garbage by immediately placing refuse in predator-proof, sealable receptacles. Trash and debris shall be moved when construction is complete.

After completion of the project, trenches, pits, and other features in which tortoises could be entrapped or entangled, shall be filled in, covered, or otherwise modified so they are no longer a hazard to desert tortoises.

After project completion, measures shall be taken to facilitate restoration, where practicable. Restoration techniques shall be tailored to the characteristics of the site and the nature of project

impacts identified in the mitigation plan as developed by project biologists, AGFD, and permitting State and Federal agencies. Techniques may include removal of equipment and debris, recontouring, replacing boulders that were moved during construction, seeding, planting, transplanting of cacti and yuccas, etc. Only native plant species shall be used in restoration.

The project proponent shall submit a monitoring report to the BLM within 60 days of project completion. For long-term or ongoing projects that may result in continuing impacts to tortoises and habitat, annual monitoring reports shall be prepared. Monitoring reports shall briefly document the effectiveness of the desert tortoise mitigation measures, actual acreage of desert tortoise habitat disturbed, the number of desert tortoises excavated from burrows, the number of desert tortoises moved from construction sites, and other applicable information on individual desert tortoise encounters. The report shall make recommendations for modifying or refining the mitigation program to enhance desert tortoise protection and reduce needless hardship on the project proponents.

In accordance with *Compensation for the Desert Tortoise* (Desert Tortoise Compensation Team 1991), signed by the Desert Tortoise Management Oversight Group, authorizing agencies shall require compensation for residual impacts to desert tortoise habitat.

Oil, fuel, pesticides, and other hazardous material spills shall be cleaned up and properly disposed of as soon as they occur in accordance with applicable State and Federal regulations. All hazardous material spills must be reported promptly to the appropriate surface management agencies and hazardous materials management authorities.

Workers shall check under vehicles for desert tortoises before vehicles are moved. If tortoises are found, they shall be allowed to move out of harm's way on their own or shall be moved by an authorized biologist prior to moving the vehicle.

No unleashed pets (e.g., dogs) shall be allowed on the construction site.

On long-term or permanent projects in which continued encounters with desert tortoises are expected, such as construction of schools, factories, power plants, office buildings, and other permanent or long-term projects in moderate to high density desert tortoise habitat, the site shall be enclosed with desert tortoise barrier fencing to prevent tortoises from wandering onto the project site where they may be subject to collection, death, or injury. Barrier fencing shall consist of wire mesh with a maximum mesh size of one-inch (horizontal) by two-inch (vertical) fastened securely to posts. The wire mesh shall extend at least 18 inches above the ground and preferably 12 inches below the surface of the ground. Where burial is not possible, the lower 12 inches shall be folded outward, away from the enclosed site, and fastened to the ground so as to prevent tortoise entry. Any gates or gaps in the fence shall be constructed and operated to prevent desert tortoise entry (such as installing tortoise guards similar to cattle guards, and/or keeping gates closed). Specific measures for tortoise-proofing gates and gaps shall be addressed project by project. Fencing is a relatively expensive mitigation measure and may not be appropriate in areas of very low tortoise density.

In desert tortoise habitat, project-related vehicles shall not exceed 25 miles per hour on unpaved roads.

New paved roads and highways or major modifications of existing roads through desert tortoise habitat shall be fenced with desert tortoise barrier fencing. Culverts, to allow safe passage of tortoises, shall be constructed approximately every one mile of new paved roads and railroads (culverts can also serve the more typical purpose of conducting water under roads and railroads). The culvert diameter needed to encourage tortoise use is correlated with culvert length, but generally short culverts of large diameter are most likely to be used. Culvert design shall be coordinated with the AGFD and authorized State and Federal agencies. The floor of the culvert shall be covered with dirt and maintenance shall be performed as necessary to maintain an open corridor for tortoise movement.

Use of roads constructed for specific nonpublic purposes such as access routes to microwave towers shall be gated to limit access.

Temporary access routes created during project construction shall be modified as necessary to prevent further use. Closure of access routes shall be achieved by ripping, barricading, posting the route as closed, and/or seeding and planting with native plants.

b. Projects Conducted During Tortoise Activity Period (Typically March 1 to November 1)

Within all categories of desert tortoise habitat, for projects conducted during normal tortoise activity period (typically March 1 to November 1), construction and operation activities shall be monitored by a qualified biologist (approved by the BLM). The biologist shall be present during all activities in which encounters with tortoises may occur. The biologist shall watch for tortoises wandering into construction areas, check under vehicles, check at least three times per day any excavations that might trap tortoises, and conduct other activities necessary to ensure that death and injury of tortoises is minimized.

Temporary fencing, such as chicken wire, snow fencing, chain link, and other suitable materials shall be used in designated areas to reduce encounters with tortoises on short-term projects, such as construction of power lines, burial of fiber optic cables, etc., where encounters with tortoises are likely.

D. SOUTHWESTERN WILLOW FLYCATCHER

To avoid disturbing birds during migration, activities in SWFL migratory habitat shall be avoided during spring migration (May 1 to June 30) and fall migration (August 15 to October 7).

1.7 LIVESTOCK GRAZING ACTIVITIES

Desired plant community objectives will be quantified for each allotment through the rangeland monitoring and evaluation process. Ecological site descriptions available through the USDA NRCS and other data will be used as a guide for addressing site capabilities and/or potentials for change over time. These desired plant community objectives are vegetative values that YFO is managing over the long term. Once established, desired plant community objectives will be updated and monitored based on indicators for the Land Health Standards. These standards were developed through a collaborative process and identify the characteristics of and the management actions needed to promote and sustain healthy ecosystems on public lands.

Monitoring studies would be used to determine conformance with the *Land Health Standards and Guidelines for Grazing Administration*. Monitoring studies generally include actual use, utilization, trend, and climate. The three management categories will be used to set priorities. These studies will be analyzed through the evaluation process to determine management actions needed to achieve standards and meet multiple-resource management objectives.

Rest rotation, deferred rotation, seasonal or short duration use, or other grazing management systems may be implemented where the need has been identified through monitoring. Monitoring will be used to assess the effectiveness of changes brought about by new management practices.

Intensity, season and frequency, and distribution of grazing use should provide for growth and reproduction of the plant species needed to reach desired plant community objectives.

Deferment of livestock will be considered where possible in cooperation with lease and permit holders. This deferment may allow for the use of prescribed fire or other vegetative treatments, or the use of the area as a grass bank to allow for rest in other grazing allotments.

Administrative vehicular access to repair range improvements by the grazing lessee will be authorized through issuance of the grazing permit.

One-time travel to access sick or injured livestock away from designated routes could be authorized to transport the individual to a medical facility.

Any compensation for a loss of range improvements within the pastures will be made in accordance with 43 CFR 4120.3-6.

Livestock management changes may be made when sufficient assessment, inventory, or monitoring data are available.

Fence construction and maintenance will follow guidance provided in the *BLM Handbook on Fencing* No. 1741-1.

1.8 TYPICAL RANGE OF HABITAT IMPROVEMENTS

Following is a discussion of typical design features, construction practices, and implementation procedures for range or habitat improvements. The extent, location, and timing of such actions will be based on allotment-specific management objectives adopted through the evaluation process, interdisciplinary development and analysis of proposed actions, and funding.

A. FENCES

All new fences will be built to BLM manual specifications. Fences will normally be constructed to provide exterior allotment boundaries, divide allotments in pastures, protect streams, and control livestock. Most fences will be three-wire or four-strand with steel posts spaced 16.5 feet apart with intermediate wire stays. Existing fences that create wildlife movement problems will be modified. Proposed fence lines will usually not be bladed or scraped. Gates or cattle guards will be installed where fences cross existing roads.

All new or reconstructed fences in big game habitat, including desert bighorn sheep habitat, will meet specifications in BLM Handbook 1741-1 or be designed to allow for the movement of big game, including desert bighorn sheep. YFO will consult with AGFD and CDFG on the design and location of new fences.

B. PIPELINES

Wherever possible, water pipelines will be buried. The trench will be excavated by a backhoe, ditch witch, or similar equipment. Plastic pipe will be placed in the trench and the excavated material will be used to backfill. Most pipelines will have water tanks spaced as needed to achieve proper livestock distribution.

C. RESERVOIRS

Stock pond sites will be selected based on available watershed and hydrologic information. All applicable State laws and regulations will be followed.

D. WELLS

Well sites will be selected based on geologic reports that predict the depth to reliable aquifers. All applicable State laws and regulations that apply to groundwater will be observed.

E. SUPPLEMENTAL FEEDINGS

Supplemental feed must be authorized in advance. Supplemental feed means a feed that supplements the forage available from the public lands and is provided to improve livestock nutrition or rangeland management.

If used, salt should be placed at least 0.25 mile from water sources to disperse impacts.

1.9 WILD HORSE AND BURRO ACTIVITIES

A. SUPPLEMENTAL WATER

In response to restricted or prohibited access to the Colorado River, and to enhance management opportunities for wild horses and burros within the Cibola-Trigo HMA, supplemental water may be developed within the HMA. Such developments may include wells, water catchments, and earthen tanks. Locations will be determined on a case-by-case basis and dependent upon available funding. Wells will likely be redevelopment of an existing well. Water catchments will use current underground storage techniques currently employed by AGFD. Earth tanks will require moving the soil and constructing a dam with an impoundment behind it.

B. CAPTURE TECHNIQUES

There are three capture techniques utilized to gather wild horses and burros. There are two methods that are helicopter assisted, and one is bait trapping. Because the primary water source is the Colorado River, water trapping is not a viable option for capturing these animals in a majority of the HMA.

Bait traps utilize feed, generally alfalfa hay, to entice the animals to a specific location. This method is not used for capturing wild horses but is a very efficient method for wild burros. Hay is placed within a trap constructed of portable panels, with a bayonet gate. Burros enter the trap to eat, but cannot see a hole big enough to exit. This is an efficient method to capture a small number of burros, and is regularly employed in nuisance situations.

Helicopter assisted gathers use a low flying helicopter to herd the animals to either a group of riders who will rope them or into a wing trap where they are captured in a trap constructed of portable panels. During helicopter herding, the animals are moved at their own pace toward the trap or ropers. If they are being roped, they are led to stock trailers and loaded. If they are trapped, the animals are moved to a back pen adjacent to the trap so that additional animals can be gathered. When capture operations are done for the day, the animals are loaded onto stock trailers. Roping is a method best suited for large open washes and when a few animals are targeted for removal. Wing traps are an efficient means of gathering large numbers of animals and is easily moved to a new location.

During helicopter assisted gathers, various safeguards to ensure the health and safety of the wild horses or burros and personnel are employed. Animals will not be herded from more than four miles away from the trap. Mothers with young foals are allowed to drop away from the others if the foal is unable to keep up. In the summer months, once the temperature reaches 105 degrees, herding operations are ceased. YFO has not had any incident of serious injury or death to captured animals in the last 14 years.

C. TRANSPORT

Captured animals are transported in stock trailers from trap locations to either temporary holding or to holding facilities in Kingman, Arizona. All stock trailers have skid proof floors, are closed top, and safe for transport of wild horses and burros. At temporary holding, the animals are separated by sex, fed, and watered. Once capture operations are completed or if a load needs to be shipped, the animals are taken to Kingman, Arizona, where they will be vaccinated, freeze branded, and available for adoption.

1.10 RECREATION

YFO applies BMPs to ensure that recreational facilities and activities comply with all applicable natural and cultural resource management laws, regulations, and policies, and to further promote sustainable land use ethics. Two sets of supplementary rules have been established by the YFO to regulate public occupancy, use, and conduct within the LTVAs and seven other developed recreation fee sites. These supplementary rules address a variety of natural and cultural resource and public health and safety protection measures. The YFO continuously monitors and updates these Supplementary Rules as needed and according to the guidance set forth in 43 CFR 8365.1-6. The YFO develops stipulations for activities authorized through the YFO's SRP program, including organized groups, commercial uses, and competitive events. Stipulations are typically established to protect natural and cultural resource values, public health and safety, and limit the displacement of existing recreational uses.

1.11 TRAVEL MANAGEMENT

The route evaluation criteria set forth in this Approved RMP (see Section 2.11.2.B) will ensure that all of the public lands' various resource values are considered during the future travel management planning process. The implementation of future route designation decisions will comply with the BLM policies set forth in IM No. AZ-2006-043, Section 106 *Compliance for Designating Off-Highway Vehicle Routes and Areas in Land Use Plans* (August 14, 2006) and IM No. 2007-030, *Clarification of Cultural Resource Considerations for OHV Designation and Travel Management* (December 15, 2006). In addition, the YFO will continue using its authority under 43 CFR 8364.1 to enact closure or restriction orders to protect persons, property, and public lands and resources.

1.12 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* 8431 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.

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

These techniques are only a portion of the many design techniques available to help reduce the visual impacts resulting from surface-disturbing activities or projects. Additional design techniques are utilized as BMPs to avoid or minimize impacts to visual resources. Consultation with planners, landscape architects, and other design professionals will help to further reduce the visual impacts of any development.

1.13 CULTURAL RESOURCES

Management of cultural resources involves inventory to discover and record cultural resources, evaluation to determine their scientific and public importance, planning to determine their most appropriate uses, protection to safeguard the uses, and authorizing or otherwise accommodating their proper use.

A cultural resource inventory is maintained for all BLM-administered land. This inventory includes three classes: (1) Class I – synthesis of existing information, (2) Class II – sample field survey, and (3) Class III – intensive field survey. Cultural resources discovered through inventory are evaluated against the criteria of eligibility for the NRHP, and are nominated for listing.

Native American comments, concerns and perspectives are sought on all BLM actions potentially affecting cultural resources. YFO consults specifically with Native American tribes and traditional religious practitioners in accordance with the American Indian Religious Freedom Act, Section 106 of the NHPA, EO 13007, and the Native American Graves Protection and Repatriation Act.

Cultural resource protection efforts include both physical and administrative measures. Administrative measures include such actions as withdrawals, closures to public access, special designations, land acquisitions, easements, and protective covenants or stipulations to provide for protection of sensitive resources. Physical protection includes measures such as site-specific stabilization, signs, fencing, adaptive reuse, law enforcement surveillance and patrols, public awareness activities, site interpretation, and other actions.

YFO also protects cultural resources by following the NHPA Section 106 process for all undertakings with the potential to affect cultural resources. Avoidance is the preferred course of action when a proposed project may affect an archaeological or historic site. In some cases, it is not possible to avoid NRHP-eligible sites; those important primarily for the scientific information they contain are then conserved through data recovery.

1.14 PALEONTOLOGICAL RESOURCES

Management of paleontological resources emphasizes the non-renewable nature of fossils, their usefulness in deciphering ancient and modern ecosystems, the public benefits and public expectations arising from their scientific, recreational and educational values, BLM's interest in the continued advancement of the science of paleontology, and the importance of minimizing resource use conflicts within a multiple use framework.

Paleontological resources are considered in all levels of planning, such as RMPs, EISs, resource- or area-specific activity plans, and land tenure adjustments. For paleontological resources, this includes:

1. Identifying areas and geological units, i.e., formations, members, etc., containing paleontological resources
2. Evaluating the potential of areas to contain vertebrate fossils or uncommon non-vertebrate fossils
3. Assessing the impacts to paleontological resources from the planned actions

4. Developing strategies to mitigate resource use conflicts and loss of paleontological resources and related information
5. Developing management recommendations to promote the scientific, educational and recreational uses of fossils on public lands

Surface disturbing actions may adversely impact paleontological resources. Where areas containing fossils are identified during environmental (NEPA) review of land-use actions, land-use authorizations or transfer of title, existing data is used to assess potential impacts to paleontological resources. A paleontological field survey is carried out by a qualified paleontologist whenever analysis of existing data indicates that vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils are, or are likely to be, present in an area proposed for surface disturbance. Compliance with NEPA may involve mitigation where vertebrate fossils, or noteworthy occurrences of invertebrate or plant fossils, are known. Mitigation may be accomplished, for example, by (1) collection of data and fossil material, (2) obtaining representative samples of the fossils, (3) avoidance, or (4) in some cases by no action. In some cases, surface disturbance may have a beneficial impact on paleontological resources where it exposes additional outcrop areas for study, or public education/interpretation. Based on the formal analysis of existing data and the field survey, a decision whether or not to mitigate is made by the Authorized Officer.

Paleontological Resource Use Permits are issued to qualified applicants for the purpose of facilitating collection of fossils for scientific research and educational uses, or mitigating adverse impacts resulting from surface disturbing projects. Protection measures to prevent or detect unauthorized uses of paleontological resources, include patrol/surveillance, signs, special designations, and public information and education programs.

1.15 MINERAL RESOURCE ACTIVITIES

Unless otherwise restricted, all Federal mineral estates administered by YFO within the planning area are available for orderly and efficient development of mineral resources. Mineral exploration and development is generally encouraged on public land in keeping with BLM's multiple use concepts. Overall guidance on the management of mineral resources appears in the Mining and Mineral Policy Act of 1970, Sec. 102(a)(120) of FLPMA, National Materials and Minerals Policy, Research and Development Act of 1980, and BLM's Mineral Resources Policy of May 29, 1984.

Exploration and development of all mineral resources will be conducted in accordance with all applicable laws and regulations. Acquired lands will be opened to mineral entry, unless critical resource values (threatened and endangered species, riparian habitat, scenic values, cultural resources, etc.) or public health and safety require closure.

Issuing ROWs where there are active mining claims is routine and covered by legislation and regulation. The ROW purchaser or permittee is informed of the rights of the mining claimant. Mining might intermittently or temporarily obstruct the ROW.

A. LOCATABLE MINERALS

The 43 CFR 3715 and 3809 regulations provide for the management of surface disturbance associated with mineral exploration and development including mining claim use and occupancy. YFO reviews mining notices and plans in the time allotted as identified in the regulations. For notice-level operations, if time permits, a site visit will be conducted by YFO staff. A site visit will always be conducted by YFO staff during the processing of a plan of operations.

When occupancy is proposed under mining plans and notice-level operations, proper NEPA documentation will be required. YFO will work with operators to ensure that notices and plans are processed efficiently and in a timely manner. Reclamation plans and bonds are required for each notice and plan per regulation. The amount of such bonds is for the full amount required to complete 100 percent of the required reclamation as if YFO were required to hire independent contractors to do the work.

In addition to the requirements of 43 CFR 3715 and 43 CFR 3809, State and Federal law provides for numerous other permits including but not limited to: an Aquifer Protection Permit and a National Pollution Discharge Elimination System permit both issued by ADEQ, a Section 404 permit issued by the U.S. Army Corps of Engineers and a flood control permit issued by the county. Also, Arizona State law requires mining claimants to keep mining property in a safe condition. The State Mine Inspector's Office is responsible for enforcing this law. YFO will cooperate with all interested agencies to ensure that operations conducted on BLM-administered lands are in full compliance with all Federal, State, and local health, safety, and environmental laws as required by 43 CFR 3715.5.

All occupancy of mining claims must meet the requirements of 43 CFR 3715 and the specific requirements of 43 CFR 3715.2. At a minimum, all occupancies will meet the requirements and standard stipulations for occupancy contained in the *BLM Arizona Programmatic Environmental Assessment for Mining Claim Use and Occupancy*.

Surface disturbing activities at a level greater than casual use in Wilderness areas, national monuments, ACECs, and other areas identified in 43 CFR 3809.11 will require a plan of operations before mining can begin. Operations proposed for lands that are withdrawn from mineral entry will cause BLM to initiate a validity examination and will be allowed only on claims with a valid discovery and location existing before designation. Before BLM can approve mining plans of operation submitted for work in areas withdrawn from mineral entry, a BLM mineral examiner must verify that a valid claim exists. The mineral examination and mineral report must confirm that minerals have been found and the evidence is of such character that a person of ordinary prudence will be justified in the further expenditure of his labor and means with a reasonable prospect of success in developing a valuable mine.

B. LEASABLE MINERALS

Lease applications will be considered on a case-by-case basis. Leases will be issued with necessary restrictions to protect resources. Stipulations to protect important surface values will be based on interdisciplinary review of individual proposals and environmental analyses.

C. MINERAL MATERIALS

The Mineral Materials Act of 1947 and 43 CFR 3600 regulations provide for the disposal and regulation of mineral materials. It is BLM's policy to make mineral materials available to the public and local governmental agencies. Applications for mineral materials are considered on a case-by-case basis and require either a sales contract or a free use permit from the appropriate BLM office. Disposal of mineral materials is a discretionary action and will be authorized in accordance with appropriate laws, regulations, and policies, in conformance with the Approved RMP. Appropriate measures will be taken to protect the environment and minimize impacts to public health and safety.

1.16 PUBLIC HEALTH AND SAFETY

A. HAZARDOUS MATERIALS

Hazardous materials incidents in the planning area have resulted from leaking underground storage tanks, mining sites, occupancy trespasses, drug labs, wire burning sites, industrial waste, and illegal dump sites.

Although illegally dumped materials are not routinely classified as hazardous materials, the problem of discarded used tires, household trash, and commercial waste and materials has increased as the result of increased fees at county and private landfills and transfer stations. Also of concern are incidents of unexploded military ordnance and explosives from abandoned mining operations. YFO will clean up any hazardous materials that are illegally dumped on public land.

- Minimize releases of hazardous materials through compliance with current regulations.
- When hazardous materials are released into the environment, assess their impacts on each resource and determine the appropriate response, removal and remedial actions to take.

YFO will evaluate all actions (including land use authorizations and disposals, mining and milling activities, and unauthorized land uses) for hazardous materials, waste minimization, and pollution prevention.

- Identify appropriate mitigation for surface-disturbing and disruptive activities associated with all types of hazardous materials and waste management and all types of fire management.

Site-specific inventories of lands being disposed of or acquired will be completed. It is departmental policy to minimize potential liability of the USDOJ and its bureaus by acquiring property that is not contaminated, unless directed by Congress, court mandate, or as determined by the Secretary of the Interior.

Mining and milling sites will be inspected to determine appropriate management for hazardous materials. Parties responsible for contamination will be identified and held liable for cleanup and resource damage costs, as prescribed by law.

B. ABANDONED MINE LANDS

YFO will educate the public about the risks associated with AML₁ sites and unexploded ordnance through signs, bulletin boards, and/or kiosks.

As funding is available, the Management Activities listed below will continue:

- Inventory AML₁ in high-use areas to determine mines that pose the greatest risk to public health and safety and identify the sites that should be closed to protect biological and cultural resources. Through the information gathered from the inventories, YFO will attempt to close all mines within 0.25 mile of developed recreation areas, campgrounds, access roads, and trails that pose the greatest risk to visiting public and mines that have significant cultural and biological resources. The method of closure will vary and be identified during site-specific NEPA analysis.
- Assess the impacts to waters of Arizona and California from abandoned mines, tailings, or mineral deposits within one mile of surface waters and reclaim sites presenting water quality concerns.
- Inspect AML₁ sites to identify all physical hazards presenting a safety risk to the public and take appropriate action to mitigate many hazards.
- Prevent public access to AML₁ contaminated areas.
- Notify the public of the conditions at an AML₁ site in close proximity to populated areas.

Where surveys indicate the potential for important bat habitat, YFO and its partners would take appropriate actions, such as the installation of bat gates, to preserve the habitat while addressing the public hazards.

In cases where AML₁ remediation actions may affect biological, cultural, or historical resources, the impacts are mitigated by avoiding the characteristics that make cultural sites eligible to the NRHP, recording the resources, relocating the resources, or stabilizing significant resources, consistent with reducing the threat to public health and safety.

C. UNEXPLODED ORDNANCE

The following actions will be appropriate with regard to the discovery of UXO.

- If UXO is discovered on public lands in the planning area, appropriate measures will immediately be taken to restrict access to the site.
- The appropriate military response unit will be notified of the UXO. For the planning area, that unit is currently 710th EOD, San Diego, California (619) 553-8500 (FAX 619-553 8095).

United States Department of the Interior
U.S. Fish and Wildlife Service
2321 West Royal Palm Road, Suite 103
Phoenix, Arizona 85021-4951
Telephone: (602) 242-0210 FAX: (602) 242-2513

In Reply Refer To:
AESO/SE
22410-2007-F-0196

January 29, 2009

Memorandum

To: Field Manager, Yuma Field Office, Bureau of Land Management, Yuma, Arizona

From: Field Supervisor

Subject: Biological Opinion for the Yuma Field Office Resource Management Plan

Thank you for your request for formal consultation with the U.S. Fish and Wildlife Service (FWS) pursuant to section 7 of the Endangered Species Act of 1973 (16 U.S.C. 1531-1544), as amended (Act). Your request for formal consultation regarding effects of the Bureau of Land Management (BLM) Yuma Field Office Resource Management Plan (RMP) was dated November 26, 2007, and received by us on November 27, 2007. At issue are impacts that may result from the RMP on the following federally-listed species:

- razorback sucker (*Xyrauchen texanus*) and its critical habitat;
- desert tortoise – Mohave Desert population (*Gopherus agassizii*);
- Yuma clapper rail (*Rallus longirostris yumanensis*); and,
- southwestern willow flycatcher (*Empidonax traillii extimus*).

We concur with your effects determination of “may affect, not likely to adversely affect” for the Sonoran pronghorn (*Antilocapra americanus sonoriensis*). Our rationale is presented in Appendix A. The November 26, 2007, memorandum also requested concurrence regarding your determination that implementation of the proposed action may affect, but is not likely to contribute to the need to list the candidate western yellow-billed cuckoo (*Coccyzus americanus*). Other than the applicable conservation measures included in the proposed action (Appendix B), this species is not addressed in this biological opinion (BO).

This BO is based on information provided in the biological assessment (BA), RMP, telephone conversations, email messages, and other sources of information. Literature cited in this BO is not a complete bibliography of all literature available on the species of concern, the type of

actions and their effects, or on other subjects considered in this opinion. A complete administrative record of this consultation is on file at this office.

CONSULTATION HISTORY

November 27, 2007	We received your final biological assessment and request for formal consultation on the Yuma Field Office (YFO) Preliminary RMP and Environmental Impact Statement (EIS).
May 13, 2008	We requested a 60-day extension from the April 10, 2008, final consultation due date, to June 9, 2008.
August 22, 2008	We provided a draft biological opinion for your review, and requested a second extension of the consultation period to allow for your review of the draft document.
December 12, 2008	We received BLM comments on the draft biological opinion.

BIOLOGICAL OPINION

INTRODUCTION

The RMP was prepared to provide management direction for the YFO. A detailed summary of the proposed action is contained in Appendix C of that document. All decisions presented in Alternative E of Chapter 2 of the RMP constitute the proposed action and are incorporated here by reference (USBLM 2006). This BO addresses the anticipated effects of the proposed RMP at the broad-scale planning level. Subsequent site-specific section 7 consultation will be necessary for each discretionary action that may affect federally-listed species.

Description of the Planning Area

The planning area encompasses over 1.3 million acres in La Paz, Maricopa, and Yuma counties in Arizona and Imperial and Riverside counties in California (RMP Map 1-1 USBLM 2006). The planning area follows the Lower Colorado River (LCR) from the town of Poston, Arizona, on the Colorado River Indian Tribes Reservation to the United States-Mexico international border near San Luis, Arizona. The LCR within the planning area is divided into divisions (Map 1):

- Limitrophe - International border at San Luis, Arizona upstream to Morelos Dam;
- Yuma – Morelos Dam to Laguna Dam;
- Laguna - Laguna Dam upstream to Imperial Dam;
- Imperial – Imperial Dam upstream to the south-end of the Cibola National Wildlife Refuge;
- Cibola – South end of Cibola National Wildlife Refuge (NWR) to Taylors Ferry;
- Palo Verde – Taylors' Ferry to Palo Verde Diversion Dam; and
- Parker – Palo Verde Diversion Dam to Headgate Rock Dam.

Planning area elevations vary from 3,500 feet in the Eagletail Mountains to 100 feet along the LCR near the international border. The planning area lies entirely within the Lower Colorado sub-basin of the Colorado Hydrologic Region, which experiences hot summers, mild winters, low rainfall, high evaporation rates, and low humidity. Approximately 110 days per year have average temperatures over 100 degrees Fahrenheit (°F).

The planning area includes the City of Yuma and the towns of Quartzsite, San Luis, Somerton, and Wellton, Arizona, and Palo Verde and Blythe, California. Adjacent land jurisdictions that require management coordination in this RMP include Arizona Game and Fish Department (AGFD), Arizona State Lands, Luke Air Force – Barry Goldwater Range, other BLM Field Offices (Lake Havasu, Lower Sonoran, and El Centro), Bureau of Reclamation (BOR), California Department of Fish and Game (CDFG), Cibola, Imperial and Kofa National Wildlife Refuges (NWR), Cocopah Indian Reservation, Colorado River Indian Tribes, Quechan Indian Reservation, Marine Corps Air Station – Yuma, U.S. Army Yuma Proving Ground, and private lands within regional irrigation districts.

Land along the LCR was withdrawn by the BOR to accommodate water management projects. The Secretary of the Interior assigned recreation and wildlife-habitat management responsibilities on withdrawn lands to the BLM in coordination with BOR. The BLM is responsible for maximizing opportunities for recreation, wildlife, and other resources not managed by BOR. The BOR retains the responsibility for operation and maintenance of facilities and environmental mitigation and enhancement associated with water delivery on the LCR. YFO coordinated with BOR to ensure the RMP does not propose planning direction that would conflict with existing and planned BOR project activities.

Description of the Proposed Action

The proposed action is implementation by the BLM of the preferred alternative as set forth in the RMP for BLM lands of the YFO in western Arizona and eastern California. Section 202 of the Federal Land Policy and Management Act of 1976 requires the Secretary of the Interior to develop, maintain, and revise land use plans for managing BLM lands. To comply with that Act, the YFO prepared the RMP. The RMP provides for the overall management guidance for administration of the planning area and makes specific land allocation direction regarding identification of lands eligible for disposal, designation of Areas of Critical Environmental Concern (ACECs), and limitation on use of BLM lands by off-highway vehicles (OHVs). The RMP was developed to guide management of BLM lands and resources within the planning area for approximately 15 years.

The direction resulting from the approved RMP and Record of Decision determine which use or combination of uses the YFO will emphasize. Directions also state which uses are not suitable. In certain cases, the directions are specific and immediately implementable (e.g., ACEC and utility corridor designation, and identification of wildlife travel corridors. In other instances, the YFO must prepare more specific activity plans and environmental analyses before implementing decisions (e.g., Fred J. Weiler Greenbelt Management Plan, locatable mineral withdrawal recommendations, and acquisition, exchange, or disposal of specific tracts of land).

The RMP presents and analyzes issues and management concerns identified by BLM planning team members, interagency consultation, the public, and YFO managers. The RMP focuses on the following 18 resources to implement the proposed action:

1. Land Health Standards

All resource activities will meet the Arizona Standards for Rangeland Health and Guidelines for Grazing (Standards and Guidelines). These Standards and Guidelines were developed, pursuant to 43 CFR 4180, by the BLM and the Arizona BLM Resource Advisory Council and were approved by the Secretary of the Interior in 1997. Management actions will promote sufficient vegetation across the landscape to maintain watershed stability, provide forage, improve or restore riparian-wetland functions, enhance groundwater recharge, and satisfy state water quality standards.

2. Special Designations Management

The planning area contains a variety of important historical, cultural, scenic, and natural values. Areas of Critical Environmental Concern (ACEC), National Historic Trails, National Recreation Trails, National Byways, and Wilderness designations protect these values. They may also be used to identify and manage areas that are hazardous to human life and property.

a. ACEC

Three ACECs, containing 44,700 acres, were re-authorized, designated, or expanded to protect important natural and cultural resources (RMP Table 2-1). ACEC actions include:

- Re-authorization of the existing Big Maria ACEC (4,500 acres), located north of Blythe, California, from the previous RMP (USBLM 1992);
- Designation of the Dripping Springs ACEC (11,700 acres) located in the north end of the New Water Mountains, east of Quartzsite, Arizona; and
- Expansion of the existing Sears Point (Gila River Cultural Area) ACEC, located along the Gila River east of Dateland, Arizona, from 3,700 acres to 28,500 acres.

b. Designated Wilderness

YFO manages four wilderness areas in Arizona, including the Eagletail, New Water, Muggins, and Trigo mountains. YFO shares management of four wilderness areas in the BLM California Desert District in California. The Little Picacho and Palo Verde Mountains Wildernesses are co-managed with the El Centro Field Office, and the Big Maria Mountains and Riverside Mountains wildernesses are co-managed with the Palm Springs/South Coast Field Office.

c. National Byways

The National Byways program was established by the Department of Transportation and Federal Highways Authority under the Intermodal Surface Transportation Efficiency Act of 1991 and reauthorized under the Transportation Equity Act for the 21st Century in 2003. Back Country Byways (BCB) are designated by local BLM units, while National Byways are a designation conferred by Federal and State agencies. The proposed action identifies one proposed National Byway and four proposed BCBs (RMP Table 2-2):

- U.S. Highway 95 (National Scenic Byway)
- Agua Caliente BCB
- Brenda BCB
- Gold Nugget BCB
- Plomosa BCB

d. Coordinated Management Areas (CMA)

The proposed action continues management of two CMAs and proposes one new CMA. CMAs are established where more than one government jurisdiction manages different resources within an area. The two existing and one proposed CMAs in the Planning Area include:

- Fortuna Pond (30 acres), which is cooperatively managed by the BOR, BLM, and AGFD to provide recreational fishing opportunity;
- Mittry Lake (3,800 acres), which is cooperatively managed by the BOR, BLM, and AGFD to provide wildlife habitat and compatible opportunities for fish- and wildlife-oriented recreation;
- Limitrophe (4,500 acres), which is proposed to be cooperatively managed by BOR, BLM, Department of Homeland Security, Department of State, International Water and Boundary Commission, numerous Tribes, and local law enforcement agencies. This CMA would provide for the protection of riparian, wildlife, and Tribal traditional use in balance with international border safety and health issues.

3. Vegetation Management

A. Desired Plant Communities

The RMP identifies seven different plant communities within the planning area in which specific desired future conditions would be applied, including:

- Mixed Riparian Habitat and Wetland
- Mesquite Bosques/Woodlands
- Desert Wash Woodlands
- Paloverde-Mixed Cacti on Bajadas and Rocky Slopes
- Creosote-Bursage
- Mountain Uplands
- Dune Complexes

B. Vegetation Habitat Management Areas

The RMP proposes three Vegetation Habitat Management Areas (VHA) in the planning area:

- Elephant Tree Community VHA (10,000 acres), which is located in the Gila Mountains and supports one of the larger elephant tree stands in the United States.
- Blue Sand Lily Community VHA (500 acres), which is located on stabilized dunes on the Gila River Mesa and is the northernmost known population of this plant species.
- Fred J. Wieler Greenbelt (12,400 acres), which includes a number of isolated BLM-parcels of riparian vegetation along the Gila River (YFO and Lower Sonoran Field Office). Originally established as a Resource Conservation Area in 1970, it will continue to be managed to benefit wildlife, recreation, cultural resources, flood and erosion control, and water conservation.

C. Invasive or Noxious Species Management

The YFO will cooperate with other authorities to educate the public about the risks to the environment from invasive and noxious weed species. The YFO will research the means to control invasive species, monitor the resources affected, and implement control actions where needed in the action area. The YFO will encourage the use of weed-free certified hay for all wildernesses, wilderness study areas, lands allocated for wilderness characteristics, and Wildlife Habitat Areas (WHA). YFO will encourage the use of these forages for all other public lands within the Planning Area. The YFO will also require that all contractors and employees clean vehicles after traveling in areas with high noxious or invasive weed infestations.

D. Vegetation Use Authorization

YFO manages vegetation for habitat, multiple use, and sustained yield. The desired future conditions ensure that vegetation resources are used at a sustainable level and that appropriate levels of dead, downed, and detached wood are present to provide wildlife habitat and reduce soil erosion.

The following applies to the entire planning area:

- Wood cutting of native species for commercial or household wood use is not allowed.
- Commercial seed collection would require a permit on YFO-administered lands and would follow approved protocol.
- Plant salvage, during authorized ground-disturbing activities, would be allowed within the planning area on a case-by-case basis.
- Scientific collection of vegetative materials, including seeds, would be permitted where appropriate through an annual letter of permission by the Arizona BLM State Office.
- Recognized Indian tribes or Tribal members may collect non-commercial, personal use quantities of herbals, medicinals, traditional use items, or items necessary for traditional, religious, or ceremonial purposes.
- The public may collect dead and downed wood for personal campfire use while camping on YFO-administered land. The public does not need written authorization to collect small amounts of commonly available renewable resources such as flowers, berries, nuts,

seeds, cones, and leaves for non-commercial purposes. Saguaro skeletons may not be collected for personal use or burned in campfires. The collection and possession of ironwood at any one time would be limited to three pieces, with an approximate weight not to exceed 10 pounds. The collection of standing dead plant material is not allowed.

4. Wildland Fire Management

YFO 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 basis for fire management on BLM-administered lands can be found in Federal and State laws, regulations, policies, and guidance.

This project includes conservation measures for use in fire suppression, prescribed fire, and fuels management activities as described in the biological opinion on BLM Arizona Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality Management (LUP) (FWS File number 02-21-03-F-210 Appendix C). Emergency consultation would only be needed in the future if suppression actions fall outside of these prescriptions/measures. The full analysis for fire suppression, prescribed fire, and fuels management has been included in that biological opinion.

The Lower Colorado River subdivision of the Sonoran Desert is the predominant vegetation community within the planning area. This vegetation community is not considered fire-adapted or dependent. Invasive or noxious weed have created areas that are now prone to high intensity fires with high rates of spread. The entire planning area will be managed as non-fire use; all naturally-occurring fires will be suppressed.

5. Fish and Wildlife Management

The RMP restores, enhances, and maintains habitats to sustain or increase fish and wildlife populations. Specific management actions include:

- Establishing ground-level wildlife water developments at livestock waters where feasible;
- Modifying existing livestock waters for safe wildlife use as funding and opportunities permit;
- Limiting the distribution and abundance of invasive plants and animals to current levels and reducing their impact on native ecosystems through active management;
- Minimizing the undesirable effects of human activities to fish and wildlife populations, especially during critical life stages, through mitigation of potential impacts;
- Restoring native species habitat distribution and occurrence (especially for priority species), conserving biological diversity, and maintaining genetic integrity and exchange, and improving availability of suitable habitats and habitat linkages;
- Supporting reintroductions, transplants, and supplemental stockings (augmentations) of wildlife populations (as defined in BLM Manual 1745) in current or historical ranges in collaboration with AGFD, CDFG, and/or the FWS where such reintroductions are within areas deemed suitable through BLM policy;

- Managing non-native species identified as pests in accordance with applicable BLM, AGFD, and CDFG management policies depending on administrative area;
- Designing and implementing vegetation, fire and fuels, and watershed resource management related projects that would promote enhancement of existing habitat conditions or restoration of degraded habitat conditions for the selected fish and wildlife species of emphasis. Vegetation and fuels management for wildlife habitat improvement should consider the following habitat conditions or features: (1) amount, quality, and distribution of suitable habitats; (2) juxtaposition and connectivity to other habitat areas; (3) influence of roads related degradation; and (4) ecosystem disturbance processes that develop and modify habitats.
- Constructing, maintaining, restoring, or enhancing wildlife waters for native wildlife species populations. Water developments would include design features to ensure safety and accessibility to water by wildlife;
- Maintaining all existing wildlife waters to provide a perennial water source;
- Relocating and releasing individual animals and/or rehabilitated wildlife. These types of wildlife releases are not intended to establish new populations but are appropriate in areas of suitable habitat.

6. Special Status Species Management

Special status species refers to all federally-listed endangered, threatened, proposed and candidate species, and designated or proposed critical habitat; species of concern managed under conservation agreements or management plans; state-listed species; and BLM-sensitive species. The RMP incorporates applicable recovery tasks as conservation measures in the proposed action from the following recovery plans:

- Desert tortoise (Mojave Population)
- Yuma clapper rail
- Southwestern willow flycatcher
- Razorback sucker

7. Livestock Grazing Management

The YFO's objectives for rangeland management are to carry out the intent of the Taylor Grazing Act of 1934, as amended and supplemented, the Federal Land Policy and Management Act of 1976, and the Public Rangelands Improvement Act of 1978. The Desired Future Conditions (DFCs) for grazing allotments in the action area are to provide forage on a sustained yield basis for livestock consistent with meeting Lands Health Standards and multiple use objectives. Rangeland ecosystems would be maintained or improved to meet Standards for Rangeland Health and Guidelines for Grazing Administration. There are 17 grazing allotments administered by the YFO, eight of which are classified as ephemeral (RMP Table 3-17).

8. Wild Horse and Burro Management

The YFO will manage wild horses and burros in the Cibola-Trigo Herd Management Areas (HMA) and four un-named Herd Areas (HA). HMAs are lands that have been designated for special management emphasizing the maintenance of an established wild horse and/or burro

herd. A HA is a geographic area identified as having been used by wild horses and burros 1971.

The YFO will manage the Cibola-Trigo HMA to maintain the appropriate management level of 165 burros. Previous portions of this HMA that are located east of State Highway 95 will be converted to HA status. All wild horses and burros will be removed from this area for safety reasons.

9. Recreation

Recreation management goals are primarily described through a system called the Recreation Opportunity Spectrum (ROS). The YFO completed a planning area wide ROS Inventory in 2005. The ROS Inventory identifies the recreational conditions currently available on BLM-administered lands in the planning area.

There are six different types of ROS classes: primitive, semi-primitive, rural natural, rural developed, suburban, and urban (RMP Table 2-11 and Map 2-6d). The RMP proposes to modify the existing ROS conditions to accommodate the other proposed resource allocations.

The ROS would: 1) provide guidance on what types of actions and mitigation measures are appropriate on the public lands when comprehensively examined along with other BLM resource allocations, and; 2) disclose to the public the potential impacts to recreational conditions during the NEPA analysis process for future proposed actions.

The RMP identifies areas with concentrated or intensive recreational use as Special Recreation Management Areas (SRMA). The YFO will focus specific management, funding, and planning to provide recreational opportunities while protecting, sustaining, and enhancing environmental resources in these areas. Within each SRMA, Recreation Management Zones (RMZ) may be identified to provide site-specific planning and management. The YFO will prepare activity level plans for all SRMAs designated in the RMP.

The RMP identifies five SRMAs within the planning area:

- Colorado River Corridor Destination SRMA (147,300 acres), which includes facilities developed in partnership with other agencies such as the AGFD. It contains three RMZs (RMP Map 2-7e);
 - Blythe Intaglios Heritage RMZ
 - Ehrenberg-Cibola RMZ
 - Trigo Mountain Wilderness RMZ
- Greater Yuma SRMA (123,200 acres), which is divided into eight RMZs (RMP Maps 2-7e):
 - Anza National Historic Trail RMZ
 - Gila Mountains RMZ
 - Imperial Dam RMZ
 - Laguna Mountains RMZ
 - Limitrophe RMZ
 - Mittry Lake RMZ
 - Southern Desert Communities RMZ
 - Urban Recreation Lands RMZ

- Gila River Valley SRMA (43,300 acres), which contains the Sears Point Heritage RMZ (RMP Map 2-7e):
- Yuma East SRMA (528,300 acres), which contains two RMZs (RMP Map 2-7e).
 - Dispersed Use RMZ
 - Eagletail Mountain Wilderness RMZ
- La Posa SRMA (346,400 acres), which is divided into six RMZs (RMP Map 2-7e):
 - Access RMZ
 - Dripping Springs Heritage RMZ
 - Highway 95 RMZ
 - Intensive Camping RMZ
 - Intensive Day-use RMZ
 - New Water Mountain Wilderness RMZ

All areas outside of the SRMAs that do not receive focused, specific recreation program management are classified as Extensive Recreation Management Areas. Recreation management within Extensive Recreation Management Areas would be limited to custodial actions only. Custodial actions are primarily reactive in order to manage dispersed activities, visitor health and safety, and user and resource conflicts. Extensive Recreation Management Areas are generally managed directly through LUP decisions and do not require additional activity-level planning.

10. Travel Management

A. Travel Management Areas

Land ownership in the action area varies from large blocks of BLM, Military, USFWS NWR and Tribal lands to small, scattered tracts of BLM, State, and private lands. Access problems, because there are no roads or trails, or no legal right to use existing roads or trails, prevent BLM from administering some tracts of BLM lands and prevent the public from legally accessing these lands. Travel Management Areas would provide for more locale-specific transportation management guidance to protect various resource values. The RMP proposes five Travel Management Areas within the Planning Area:

- Ehrenberg Cibola Travel Management Area (152, 300 acres) (RMP Table 2-20)
- Gila River Valley Travel Management Area (60,500 acres) (RMP Table 2-21)
- Greater Yuma Travel Management Area (133,600 acres) (RMP Table 2-22)
- La Posa Travel Management Area (384,600 acres) (RMP Table 2-23)
- Yuma East Travel Management Area (587,000 acres) (RMP Table 2-24)

B. Off Highway Vehicle Management Areas

This RMP will implement the following OHV area designations:

- Open Area (2,400 acres) - All types of vehicle use are permitted at all times; subject to regulations and standards set forth in 43 CFR 8341 and 8342.
- Limited Area (1,146,700 acres) - OHV use is restricted at certain times, in certain areas.
- Closed Area (168,900 acres) - All vehicle use is prohibited, unless permitted by an authorized official. These areas include:

- o designated wilderness
- o Fortuna Wash (Section 33)
- o La Paz Valley

11. Visual Resource Management

The RMP assigns a visual resource management class for all areas in the planning area based on an inventory of visual resources and management considerations for other land uses (RMP Map 2-9e). The visual resource management land use designations are described in RMP Table 2-26. Other resource uses and management activities would be managed to conform to the applicable visual resource management objectives established in this RMP.

12. Wilderness Characteristics Management

The YFO evaluated 48,400 acres of public lands, outside of designated wilderness, which will be managed to maintain or enhance the following wilderness characteristics:

- Naturalness - Lands and resources exhibit a high degree of naturalness when effected by the forces of nature and where the imprint of human activity is substantially unnoticeable.
- Solitude - Visitors may have outstanding opportunities for solitude when the sights, sounds, and evidence of other people are rare and infrequent.
- Primitive and Unconfined Recreation - Visitors may have outstanding opportunities for primitive and unconfined types of recreation where the use of the area is through non-motorized, non-mechanical means, and where no or minimal developed recreation facilities are encountered.

13. Cultural Resources

The desired future condition of all cultural resources on YFO-administered land within the planning area is to preserve and protect significant cultural resources for future generations. Cultural resources include sites, buildings, objects, features, and artifacts.

14. Paleontological Resources

Paleontological resources will be managed for their scientific, educational, and recreational values, and adverse impacts to these resources will be mitigated.

15. Air, Water and Soil Management

A. Air

The Federal Land Policy and Management Act (FLPMA) and the Clean Air Act (CAA) of 1970 and Amendments of 1977 and 1990 prohibit all Federal land management agencies 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, a program has been developed that provides benefits to air quality and other resources by decreasing air pollutant concentrations, increasing visibility, and decreasing atmospheric deposition.

B. Water

Water resources in the planning area include both surface water and groundwater. Guidance for water resources management is given by BLM Manual 7240 (DOI BLM 1997 update) and in the Land Health Standards and Guidelines (CFR 43-4180). The YFO works cooperatively with BOR to manage develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

C. Soils

The planning area also contains sensitive resources including biological soil crusts, desert pavement, and stabilized sand dunes, defined as follows:

- Biological soil crusts: A complex mosaic of cyanobacteria, green algae, lichens, mosses, microfungi, and other bacteria.
- Desert pavement: A ground surface consisting of coarse, densely packed, patinated cobbles and gravels that are covered with layers of ferro-manganese deposits and microscopic organisms.
- Stabilized sand dunes: A sand-covered landscape that is veiled and stabilized by plant cover, so that the sand is no longer borne away by winds.

16. Lands and Realty Management

A. Land Ownership Adjustment

The purpose of this program is to adjust land tenure in the planning area to achieve BLM resource management objectives and improve service to the public. No BLM or private lands will be acquired, exchanged, or disposed of without additional compliance with NEPA and the Endangered Species Act through a site-specific analysis of a proposed action.

i. Land Acquisition

The YFO is authorized under Section 205 of FLPMA to acquire non-Federal lands or interests in lands by purchase, exchange or donation. Acquired land must:

- Facilitate access to public lands and resources;
- Maintain or enhance public uses and values;
- Facilitate implementation of this RMP;
- Provide for a more manageable land ownership pattern;
- Include significant natural or cultural resource values; or
- Eliminate split-estate by acquiring either the surface or subsurface rights, if acquisition of rights would be in the public interest.

ii. Land Disposal

All land-disposal actions are discretionary. The YFO will evaluate lands it selects for disposal for significant natural and cultural resources, threatened and endangered plants and animals, floodplain/flood hazards, prime and unique farmlands, and other critical factors. These actions would trigger NEPA compliance, and the YFO would conduct an effects analysis on listed species and their critical habitat. The YFO would conduct section 7 consultations with USFWS according to the effects determination. Some of the factors considered during the NEPA process include the importance of the habitat or area to the overall abundance and distribution of the

listed species or its critical habitat; the importance of Federal management to species survival; the foreseeable uses of the habitat or area in non-BLM ownership; and the difference between feasible Federal and non-Federal protection for the habitat or area. National BLM policy (Manual Section 6840.06) which would factor into this decision states in part:

“Ensure activities affecting populations and habitats of threatened and endangered (T&E) species are designed to be consistent with recovery needs and objectives. Screen all proposed actions to determine if T&E species and their habitats may be affected. Ensure no actions adversely affect the likelihood of recovery of any T&E species.”

The RMP identifies 13,100 acres of YFO-administered lands that are targeted for disposal by sale or exchange (RMP Table 2-30). The YFO is not required to dispose of all identified lands. Unforeseen land management concerns, the presence of significant natural resources, or public concerns raised during the NEPA process may prevent disposal or may result in identification of other lands for disposal. However, disposal of other lands would require a land use plan amendment. The decision to consider these lands for disposal is completed and part of the environmental baseline; however, actual selection of specific parcels and their disposal are site-specific actions subject to future section 7 consultation, as appropriate.

B. Land Use Authorization

The YFO may allow use of the public lands or interests in lands through issuance of rights-of-way (ROW), leases and permits. Typical ROW issuances include access roads, powerlines, telephone lines, fiber optic systems, communication facilities, etc.

Ten utility corridors will be designated along existing lines (RMP Table 2-30). Future major cross-Field Office utility ROW proposals will be encouraged to use these corridors unless an evaluation of the project shows that location outside of the designated area is the only practicable alternative.

The YFO will lease recreation areas for concessions, state parks, county parks and city park in accordance with desired ROS settings. These actions may require section 7 consultation at that time.

17. Mineral Resource Management

The YFO manages three categories of mineral resources:

- Saleable Minerals (sand and gravel, stone, and clay resources) - The RMP proposes six new mineral material sites would be developed throughout the planning area over the 15-year life of the plan, for a total of 800 acres.
- Leasable Minerals (oil, gas and geothermal resources) - The RMP identifies four low-temperature geothermal resource regions within the planning area. There are currently no geothermal energy leases in the planning area, and no indications for future leasing activity.
- Locatable Minerals (gold, silver, copper, etc.) - The RMP identifies 290,500 acres that have moderate potential and 268,100 acres that have high potential for metallic locatable

minerals. For non-metallic locatable minerals, the area of moderate potential is 1,127,200 acres, and the area of high potential is 18,700 acres. The RMP requires:

- o Consolidation of surface and subsurface (minerals) estates to improve manageability of the Federal lands;
- o Notices-of-intent when mechanical equipment is used for exploration or processing and cumulative disturbance is less than five acres;
- o Mining plans of operation where disturbance is greater than five acres and where bulk sampling would remove 1,000 tons or more;
- o A validity examination at prior existing claims in mineral withdrawn areas would be required before submittal of a mining plan of operations to verify the valid discovery of a valuable mineral deposit;
- o Mining plans of operation for operations in designated ACECs or currently withdrawn or reserved lands where the mining claim predates the withdrawal or reservation;
- o Mining plans of operation in areas designated as closed to OHV use and in lands or waters known to contain federally listed threatened or endangered species or proposed or designated critical habitat;
- o Reclamation of all disturbances created by casual use mining.

18. Public Health and Safety Management

According to applicable Federal and State laws and regulations, the YFO would identify areas or hazards which have potential impact to public health and safety. The following are public health and safety concerns in the planning area:

- Abandoned mines
- Unexploded ordnance
- International boundary issues
- Hazardous materials

Conservation Measures for Threatened and Endangered Species

In order to protect and enhance threatened and endangered species in addition to the measures listed in Appendix B, the RMP incorporates numerous conservation measures from existing threatened and endangered species recovery plans, the Lower Colorado River Multi-Species Conservation Plan (MSCP), Migratory Bird Executive Order 13186, and the Arizona Partners in Flight Bird Conservation Plan.

The YFO has committed to implementing the following conservation measures, as part of the RMP proposed action. These measures would be implemented within the YFO's scope of authority.

Conservation Measures Common to All Federally-Listed Species

- All proposed activity-level plans will be evaluated to prevent or mitigate any impacts that could degrade or destroy listed or proposed species and their designated or proposed critical habitat.
- All activity-level plans will undergo site specific section 7 compliance before implementation.

Razorback Sucker Conservation Measures

The proposed action adopts and implements the Razorback Sucker Recovery Goals (USFWS 2002a) originally from the Razorback Sucker Recovery Plan (USFWS 1998).

Specific YFO conservation measures would:

- Control non-native fishes to minimize the threat of hybridization or negative interactions with razorback sucker with proper coordination with and authorization from AGFD and CDFG;
- Develop, enhance, and maintain suitable habitats (riverine habitats including oxbows, depressions, and bottomlands) required for all life stages for self-sustaining populations in all recovery units;
- Protect critical habitat from further degradation in habitat conditions and water quality, and restore habitats to meet established recovery goals for razorback sucker;
- Evaluate razorback sucker habitat on BLM-administered lands and develop a strategy to eliminate or reduce adverse effects from BLM-authorized development along shorelines;
- Enhance public awareness through educational programs and posting of informational bulletins of the importance of razorback sucker and potential threat to the species and habitat from recreation and development along the LCR, and;
- Post signs at fishing access points and at tackle shops advising anglers of the potential to take razorback suckers and how to report and release captured fish.

Desert Tortoise (Mohave Population) Conservation Measures

The YFO will implement the recovery strategy addressed in the Desert Tortoise (Mojave Population) Recovery Plan (USFWS 1994b). The recovery objective is to provide habitat capable of maintaining stable or increasing trends in desert tortoise abundance and survivorship in all recovery units. The planning area partially overlaps with the Eastern Colorado recovery units in southeastern California (USBLM 2002). Recovery goals, objectives, strategies, and delisting criteria are described in the recovery plan and would:

- Ensure no net loss in the quality or quantity of Category I and II desert tortoise habitats to the extent practicable, and;
- Establish the goals and criteria for three categories of desert tortoise habitat areas.

The following management actions would apply to all desert tortoise habitats in the planning area:

- Review land use requests during the March 1 through October 15 critical period on a case-by-case basis. Requests may be denied and/or mitigated to achieve Desired Future Conditions (for example, no net loss of Category I and II habitat);

- Compensate for loss of desert tortoise habitat in accordance with the Desert Tortoise Compensation Team (1991);
- When possible, prohibit activities that would fragment or further isolate existing populations of desert tortoises (i.e., canals, highways);
- Reduce take of desert tortoises by removing animals to undisturbed areas out of harm's way;
- Reduce the attraction of predators, such as the common raven (*Corvus corax*), to project areas to the maximum extent possible;
- Reduce take of desert tortoises by injury or death due to the straying of construction and maintenance equipment beyond project areas through establishment of clearly defined work areas;
- Modify activities to avoid injury or harm if a tortoise is found in a project area;
- Confine the period of leasable mineral exploration and major construction work from November 1 to March 1. Minimize surface disturbance associated with authorized activities;
- Perform complete preconstruction inspections of areas to be developed and mitigate for actions to protect desert tortoises and their habitat, including reclamation and bonding (fees committed prior to action to fund cleanup and mitigation), if appropriate. After project completion, measures would be taken to facilitate restoration of the disturbed site;
- Fence new paved roads and highways or major modifications of existing roads through desert tortoise habitat with tortoise barrier fencing. Culverts, to allow safe passage of tortoises, shall be constructed approximately every mile along new paved roads and railroads. Require erection of tortoise barriers around projects that would be sources of mortality (such as canals, heavily used roads, and steep-walled reservoirs), and promote methods that allow safe movement across project areas;
- Minimize blading of new access or work areas. Disturbance to shrub cover would be avoided if possible. If shrubs cannot be avoided during equipment operation or vehicle use, they should be crushed wherever possible rather than excavated or bladed and removed;
- Cover or modify project features that might trap or entangle desert tortoises, such as open trenches, pits, pipes, and others, to prevent entrapment during the active season or when an on-site biologist is not available. After completion, these features would be filled in, covered, or otherwise modified so they are no longer a hazard to desert tortoises;
- Enclose an entire site with a tortoise-proof fence where project activities are to extend over 90 days in desert tortoise habitat. For project activities that are to occur in fewer than 90 days, a temporary fence would be erected around the area of activity;
- Limit vehicular travel and non-motorized competitive events to designated routes;
- Close and rehabilitate existing roads where no public or administrative need exists;
- Limit seismic exploration, new construction, road maintenance, vehicle use, or other surface disturbing activities to existing ROW areas;
- Locate all surface disturbing projects in previously disturbed areas or outside of desert tortoise habitat. When at all possible, avoid habitat and, where not possible mitigate

damage to habitat. If a desert tortoise is found in a project area, activities should be modified to avoid injuring or harming it;

- Implement worker education programs and well-defined operational procedures to avoid the “take” of desert tortoises and their habitat, and;
- Ensure that wild horse and burro abundance is in ecological balance with existing desert tortoise and other wildlife populations.

Yuma Clapper Rail Conservation Measures

The YFO would implement applicable recovery objectives consistent with the Yuma clapper rail recovery plan and any future revisions to:

- Ensure no net loss or fragmentation of marsh-like habitat for major life history requirements (i.e., breeding, feeding or resting cover) of Yuma clapper rail and to maintain natural bird behavior by minimizing indirect effects resulting from human-caused disturbances;
- Maintain riparian areas that form an integrated mosaic with wet sloughs and marshes designed to support the Yuma clapper rail and other marsh and aquatic wildlife;
- Burn decadent marsh vegetation without risking the rarer and more valuable cottonwood willow habitat if research concludes that burning decadent marsh vegetation benefits Yuma clapper rail population;
- Restrict or prohibit human caused disturbances to habitat or individuals in occupied territories during the breeding and molting seasons (March 15–September 1);
- Support research to study the biological requirements of Yuma clapper rail;
- Complete survey and monitoring of Yuma clapper rail populations and breeding areas on BLM-administered lands, and;
- Promote species-habitat recovery using public outreach with education and interpretive programs.

Southwestern Willow Flycatcher Conservation Measures

Recovery tasks found in the various plans including the Southwestern Willow Flycatcher Recovery Plan (USFWS 2002b) and the MSCP (LCR MSCP 2004) were used to create the management action alternatives. A number of these management actions are proposed, or ongoing, for the willow flycatcher. YFO proposes the following conservation measures for the willow flycatcher:

- Provide suitable habitat capable of maintaining stable or increasing population trends of willow flycatcher in the LCR Recovery Unit within the planning area;
- Minimize unauthorized OHV use in riparian habitat with fencing or physical barriers;
- Protect existing willow flycatcher habitats by reducing fire risk to habitat. Avoid hazardous fuel thinning projects that reduce the quality or quantity of willow flycatcher habitat and instead install fire breaks to protect habitat from wildfires;
- Through interagency coordination with AGFD, initiate cowbird control to protect nesting willow flycatcher if sufficient baseline data show cowbird parasitism to be a significant threat for that population;

- Develop new riparian habitat and restore damaged or degraded areas along the LCR and Gila River for the survival and recovery of the willow flycatcher;
- Protect known occupied sites or potential willow flycatcher habitat through acquisition, easements, partnerships, and other means;
- Acquire suitable habitat through land acquisition and easements from willing landowners to compensate for loss of historical willow flycatcher habitat;
- Minimize activities that would promote or encourage attractants of scavengers, predators, and brown-headed cowbirds to protect existing populations of willow flycatcher;
- Minimize recreation activities in potentially suitable willow flycatcher habitat to allow the area to develop breeding habitat;
- Provide on-site monitors and enforcement where recreation use conflicts exist, and;
- Reduce potential impacts from recreation activities by promoting public outreach and education.

In addition to the specific management actions listed above, the YFO is implementing a number of small-scale projects that focus on the restoration/enhancement of native riparian habitat.

STATUS OF THE SPECIES

Razorback Sucker and its Critical Habitat

The razorback sucker was first proposed for listing under the Act on April 24, 1978, as a threatened species, but was later withdrawn for technical reasons. In March 1989, the FWS was petitioned by a consortium of environmental groups to list the razorback sucker as an endangered species. The FWS made a positive finding on the petition in June 1989, which was published in the Federal Register on August 15, 1989. A final rule was published on October 23, 1991, with an effective date of November 22, 1991. The Razorback Sucker Recovery Plan was released in 1998 (USFWS 1998). Recovery Goals were approved in 2002 (USFWS 2002b).

The razorback sucker was once abundant in the Colorado River and its major tributaries throughout the Basin, occupying 3,500 miles of river in the United States and Mexico (Minckley 1983, USFWS 1993). Records from the late 1800s and early 1900s indicated the species was abundant in the LCR and Gila River drainages (Gilbert and Scofield 1898, Minckley 1983, Bestgen 1990). Since 1997, significant new information on recruitment to the wild razorback sucker population in Lake Mead has been developed (Holden et al. 2000) that indicates some degree of successful recruitment is occurring. This degree of recruitment has not been documented elsewhere in the other remaining populations.

Adult razorback sucker use most riverine habitats, although there may be an avoidance of whitewater type habitats. Main-channel habitats tend to be low velocity ones such as pools, eddies, nearshore runs, and sand or gravel bars (Bestgen 1990). Adjacent to the main channel, backwaters, oxbows, sloughs, and flooded bottomlands are also used by this species. From studies conducted in the upper Colorado River basin, habitat selection by adult razorback suckers changes seasonally. They move into pools and slow eddies from November through April, runs and pools from July through October, runs and backwaters during May, and backwaters, eddies,

and flooded gravel pits during June. In early spring, adults move into flooded bottomlands. They use relatively shallow water (ca. 3 feet) during spring and deeper water (five to six feet) during winter.

Razorback sucker also use reservoir habitat, where the adults may survive for many years. In reservoirs they use all habitat types, but prefer backwaters and the main impoundment (USFWS 1998). Much of the information on spawning behavior and habitat comes from fishes in reservoirs where observations can readily be made. Spawning takes place in the late winter to early summer depending upon local water temperatures. Various studies have presented a range of water temperatures at which spawning occurs. In general, temperatures between 10 to 20 degrees Celsius (°C) are appropriate (summarized in Bestgen 1990). They typically spawn over cobble substrates near shore in water three to ten feet deep (Minckley et al. 1991). Razorback sucker are known to spawn on submerged alluvial fans where large washes enter the LCR (C. Minckley, FWS, pers. comm. January 31, 2006). There is an increased use of higher velocity waters in the spring, although this is countered by the movements into the warmer, shallower backwaters and inundated bottomlands in early summer (McAda and Wydoski 1980, Tyus and Karp 1989, Osmundson and Kaeding 1989). Spawning habitat is most commonly over mixed cobble and gravel bars on or adjacent to riffles (Minckley et al. 1991).

Habitat needs of larval and juvenile razorback sucker are reasonably well known. In reservoirs, larvae are found in shallow backwater coves or inlets (USFWS 1998). In riverine habitats, captures have occurred in backwaters, creek mouths, and wetlands. These environments provide quiet, warm water where there is a potential for increased food availability. During higher flows, flooded bottomland and tributary mouths may provide these types of habitats. However; this dependency on slack water habitats, which support large numbers of non-native fish, increases the predation risks to young razorback sucker (Mueller 2003).

Razorback sucker are somewhat sedentary; however, considerable movement over a year has been noted in several studies (USFWS 1998). Spawning migrations have been observed or inferred in several locales (Jordan 1891, Minckley 1973, Osmundson and Kaeding 1989, Bestgen 1990, Tyus and Karp 1990). During the spring spawning season, razorbacks may travel long distances in both lacustrine and riverine environments, and exhibit some fidelity to specific spawning areas (USFWS 1998). Range-wide, the status of razorback sucker is exceedingly poor due to lack of significant recruitment, ongoing habitat loss, and continuing pressure from nonnative species.

Critical Habitat

Razorback sucker critical habitat was designated in 15 river reaches on March 21, 1994 (USFWS 1994a). Critical habitat included portions of the Colorado, Duchesne, Green, Gunnison, San Juan, White, and Yampa rivers in the Upper Colorado River Basin, and the Colorado, Gila, Salt, and Verde rivers in the LCR Basin. The conservation role of the critical habitat is largely intact in all 15 river segments.

The primary constituent elements of razorback sucker critical habitat include water, physical habitat, and biological environment. Water must be of sufficient quantity and quality (i.e. temperature, dissolved oxygen, lack of contaminants, nutrients, turbidity, etc.) required for the

life stages of the species. The physical environment includes bottom lands, side channels, secondary channels, oxbows, backwaters, and other inhabited or potentially habitable areas of the 100-year floodplain of the LCR. The biological environment involves food supply, predation, and competition. Food supply is related to nutrient supply, productivity, and availability. Predation and competition, although natural processes, are increased in the LCR due to the introduction of non-native fish.

Desert Tortoise (Mohave Population)

The desert tortoise populations north and west of the Colorado River in Arizona, and Utah (excluding the Beaver Dam Slope populations) were listed as endangered under an emergency rule on August 4, 1989 (USFWS 1989). Subsequently, the entire Mojave population of the desert tortoise west of the Colorado River in California and Nevada, and north of the river in Arizona and Utah, including the Beaver Dam Slope, was listed as a threatened species on April 2, 1990 (55 FR 12178). Critical habitat was designated in 1994 (59 FR 5820-5846, also see corrections at 59 FR 9032-9036). The Desert Tortoise (Mojave Population) Recovery Plan (DTRP) was signed on June 28, 1994 (USFWS 1994b).

The desert tortoise is an arid land reptile associated with desert scrub vegetation types; primarily creosote bush (*Larrea tridentata*) flats, washes, and hillside slopes or bajadas. A robust herbaceous component to the shrubs and cacti of the creosote bush vegetation type is an important component of suitable habitat. Within these vegetation types, desert tortoise can survive and reproduce where their basic habitat requirements are met. These include: a sufficient amount and quality of forage species; shelter sites for protection from predators and environmental extremes; suitable substrates for burrowing, nesting, and over-wintering; various plants for shelter; and adequate area for movement, dispersal, and gene flow. Further information on the range, biology, and ecology of the desert tortoise can be found in the DTRP (USFWS 1994b).

Desert tortoises are most active during the spring and early summer when annual plants are most abundant. Additional activity occurs during warmer fall months and occasionally after summer rain storms. In Arizona, desert tortoise can be active from mid-March through mid-October. Desert tortoises spend the remainder of the year in burrows to escape the extreme conditions of the desert.

Desert tortoise home range sizes vary with respect to location and year. Over its lifetime, each desert tortoise may require more than 1.5 square miles of habitat and make forays of more than seven miles at a time (Berry 1989). During droughts, desert tortoises forage over larger areas, increasing the likelihood of injury or mortality through encounters with humans and predators. Direct loss of tortoises has occurred from illegal collection by humans for pets or consumption, upper respiratory tract disease, predation on juvenile desert tortoises by common ravens and kit foxes (*Vulpes macrotis*), and collisions with vehicles on paved and unpaved roads. Other threats affecting the desert tortoise include loss of habitat from construction projects such as roads, housing and energy developments, and conversion of native habitat to agriculture.

Grazing and OHV activities have degraded additional habitat. Fire is an increasingly important threat because it degrades or eliminates habitat (Appendix D of USFWS 1994b). Following wildfire, native plant species are often replaced by invasive, non-native species such as red brome (*Bromus rubens*), which can result long-term habitat degradation or loss.

Desert tortoise recovery may occur at the RU level, which allows populations within each of the six RUs to be recovered and de-listed individually. Similarly, the jeopardy and adverse modification standards may be applied within or across RUs. Thus, proposals to implement the Desert Tortoise Recovery Plan in portions of a RU cannot be evaluated with regard to jeopardy or adverse modification in a section 7 consultation without an understanding of proposed or existing management prescriptions occurring elsewhere in the RU.

In 1988, the BLM initiated desert tortoise habitat categorization on public lands (USBLM 1989). Three categories were delineated with the following goals:

- Category 1 - Maintain stable, viable populations and protect existing habitat values; increase populations where possible. Habitat area is essential to maintain large, viable populations.
- Category 2 - Maintain stable, viable populations and halt further decline in tortoise habitat values. Habitat area may be essential to maintain viable populations.
- Category 3 - Limit tortoise habitat and population declines to the extent possible by mitigating impacts. Habitat area is not essential to maintain viable population

In response to the General Accounting Office Report (GAO 2002), the FWS convened the DTRP Assessment Committee (DTRPAC) in 2003 to scientifically assess the DTRP. The DTRPAC Report (Tracy et al. 2004) produced a number of findings and recommendations that will serve as the basis for revision of the 1994 Recovery Plan. In particular, this report recognizes that threats to the desert tortoise have cumulative, synergistic, and interactive effects, and that tortoise recovery depends on managing multiple threats. Threats facing desert tortoises have been increasing since the DTRP, including in the Northeastern Mojave RU, and recovery actions have not been fully implemented. The DTRPAC Report also recognizes that tortoise populations may be distributed in metapopulations rather than single, large populations in RUs. In addition to reducing multiple threats within management areas, it is important to protect the corridors among habitat patches. For recovery, tortoise meta-populations require areas of suitable habitat, but these areas may be periodically vacant of tortoises.

Critical Habitat

Twelve areas in Arizona, California, Nevada, and Utah were designated as desert tortoise critical habitat in 1994. Critical habitat units (CHUs) were based on recommendations for DWMAs outlined in the draft Recovery Plan (USFWS 1994b). These DWMAs are also identified as “desert tortoise areas of critical environmental concern (ACECs)” by the BLM. Some critical habitat units extend across State lines and are listed below.

- Arizona: Beaver Dam Slope, Gold Butte-Pakoon
- California: Fremont-Kramer, Superior-Cronese, Ord-Rodman, Chuckwalla, Pinto Mountain, Chemehuevi, Ivanpah, Piute-Eldorado
- Nevada: Piute-Eldorado, Mormon Mesa, Gold Butte-Pakoon, Beaver Dam Slope

- Utah: Beaver Dam Slope, Upper Virgin River

Because the CHU boundaries were drawn to optimize reserve design, the CHU may contain both "suitable" and "unsuitable" habitat. Suitable habitat can be generally defined as areas that provide the primary constituent elements of desert tortoise critical habitat:

- Sufficient space to support viable populations within each of the six recovery units and provide for movements, dispersal, and gene flow;
- Sufficient quantity and quality of forage species and the proper soil conditions to provide for the growth of such species;
- Suitable substrates for burrowing, nesting, and over-wintering;
- Burrows, caliche caves, and other shelter sites;
- Sufficient vegetation for shelter from temperature extremes and predators; and
- Habitat protected from disturbance and human-caused mortality.

At the time of CHU designation, all lands in the CHUs had been impacted by past land management activities to some degree. Appendix D of the DTRP (USFWS 1994b) discusses the types of human actions that occurred in desert tortoise habitat before and after the designation of critical habitat that have had effects to the physical habitat components of critical habitat. Designation of most CHUs as DWMAs/ACECs has aided in protection of these areas, particularly by limiting off-highway vehicle use and other ground-disturbing activities, and reducing or eliminating wild burros and livestock grazing in many units.

Yuma Clapper Rail

The Yuma clapper rail was listed as an endangered species on March 11, 1967, under endangered species legislation enacted in 1966 (Public Law 89-669) (USFWS 1967). Only populations found in the United States were listed as endangered; those in Mexico were not listed under the 1966 law or the subsequent Endangered Species Act of 1973 (as amended). Yuma clapper rail critical habitat has not been designated. The Yuma Clapper Rail Recovery Plan was issued in 1983 (USFWS 1983).

The Yuma clapper rail is a 14-16 inch long marsh bird with a long, down-curved beak. Both sexes are slate brown above with light cinnamon underparts and barred flanks. The Yuma clapper rail is distinguished from other clapper rail subspecies using distributional data, plumage color, and wing configurations (Banks and Tomlinson 1974). The Yuma clapper rail is a secretive species and is not often seen in the wild. It does have a series of distinctive calls that are used to identify birds in the field.

Yuma clapper rail inhabits both freshwater and brackish marshes dominated by dense cattail (*Typha spp.*). The most productive areas consist of uneven-aged stands of cattails interspersed with open water of variable depths (Conway et al. 1993). Other important factors in habitat suitability include the presence of vegetated edges between marshes and shrubby tamarisk or willow thickets (Eddleman 1989), and the amount and rate of water level fluctuations within the habitat. Water flow in the open channels within the marsh is desirable (Todd 1971, Tomlinson and Todd 1973). Yuma clapper rail also uses cattail habitats in quiet backwater ponds, flowing

stream or riverside areas, irrigation canals and drainage ditches, reservoirs and small lakes or other small marshlands. Artificially constructed marshes can also provide suitable habitat.

Yuma clapper rail breeds from February through early July (Eddleman 1989). Nests are constructed in marsh vegetation or low growing riparian plants at waters' edge. Non-native (introduced) crayfish (*Procamberus clarki*) form the primary prey base for Yuma clapper rails today (Todd 1986). Prior to the introduction of crayfish, isopods, aquatic and terrestrial insects, clams, plant seeds, and small fish dominated the diet. Once believed to be highly migratory (with most birds thought to spend the winter in Mexico), telemetry data showed most Yuma clapper rails do not migrate (Eddleman 1989). Very little is known about the dispersal of adult or juvenile birds, but evidence of populations expanding northward along the lower Colorado River, the Salton Sea, and central Arizona over the last 80 years indicates that Yuma clapper rails can effectively disperse to new habitats provided that habitat corridors exist between the old and new sites (Rosenberg et al. 1991).

Additional life history information is found in the Recovery Plan (USFWS 1983), Todd 1986, Eddleman 1989, and Rosenberg et al. 1991.

The Yuma clapper rail has two major population centers in the United States: the Salton Sea and surrounding wetlands in California, and the LCR marshes from the border with Mexico north to Havasu National Wildlife Refuge. Smaller numbers of rails are found along the lower Gila River in Yuma County, the Phoenix metropolitan area (including portions of the Gila, Salt and Verde rivers) in Maricopa County, Roosevelt Lake in Gila County, Picacho Reservoir in Pinal County, and the Bill Williams River in La Paz County, Arizona (FWS annual survey data). Yuma clapper rails have also recently been documented from southern Nevada in Clark County (McKernan and Braden 2000, Tomlinson and Micone 2000) and the Virgin River in Washington County, Utah and Mohave County, Arizona (McKernan and Braden 2000).

Annual survey data compiled by the FWS for the period 1990 through 2005 documented between 464 and 1076 rails observed (via calls or visual observation) at the survey sites. Most recent available survey data from 2005 documented 885 birds (USFWS 2006).

Declines in actual numbers heard or seen on survey transects since the early 1990's have not been positively connected to any event on the lower Colorado River or Salton Sea; however, changes in habitat quality caused by overgrown marsh vegetation is suspected of influencing rail numbers in those areas. Habitat restoration through mowing or burning over-age cattail stands is under evaluation in several locations to determine future management needs.

Southwestern Willow Flycatcher

The southwestern willow flycatcher was listed as endangered, without critical habitat, on February 27, 1995 (USFWS 1995). Critical habitat was later designated on July 22, 1997 (USFWS 1997). A correction notice was published in the Federal Register on August 20, 1997 to clarify the lateral extent of the designation (62 FR 44228).

On May 11, 2001, the 10th circuit court of appeals set aside designated critical habitat in those states under the 10th circuit's jurisdiction (New Mexico). The FWS decided to set aside willow flycatcher critical habitat in all other states (California and Arizona) until it could re-assess the economic analysis.

On October 19, 2005, the USFWS re-designated willow flycatcher critical habitat (USFWS 2005). A total of 737 river miles across southern California, Arizona, New Mexico, southern Nevada, and southern Utah were included in the final designation. The lateral extent of critical habitat includes areas within the 100-year floodplain. The primary constituent elements of critical habitat are based on riparian plant species, structure and quality of habitat, and insects for prey. A variety of river features such as broad floodplains, water, saturated soil, hydrologic regimes, elevated groundwater, fine sediments, etc. help develop and maintain these constituent elements (USFWS 2005).

The Southwestern Willow Flycatcher Recovery Plan was completed in 2002 (USFWS 2002b). This plan describes the reasons for endangerment, current willow flycatcher status, addresses important recovery actions, and provides recovery goals. Recovery is based on reaching numerical and habitat related goals for each specific Management Unit established throughout the willow flycatchers' range and establishing long-term conservation plans (USFWS 2002b).

The willow flycatcher is a small grayish-green passerine bird measuring approximately 5.75 inches. The song is a sneezy "fitz-bew" or a "fit-a-bew", the call is a repeated "whitt". It is one of four currently recognized willow flycatcher subspecies (Phillips 1948, Unitt 1987, Browning 1993). It is a neotropical migrant that breeds in the southwestern U.S. and migrates to Mexico, Central America, and possibly northern South America during the non-breeding season (Phillips 1948, Stiles and Skutch 1989, Peterson 1990, Ridgely and Tudor 1994, Howell and Webb 1995). Willow flycatcher breeding range includes southern California, Arizona, New Mexico, western Texas, southwestern Colorado, southern Utah, extreme southern Nevada, and extreme northwestern Mexico (Sonora and Baja) (Unitt 1987, USFWS 2002b).

The willow flycatcher breeds in dense riparian habitats from sea level in California to approximately 8,500 feet in Arizona and southwestern Colorado. Historical egg/nest collections and species' descriptions throughout its range describe the willow flycatcher's widespread use of willow (*Salix spp.*) for nesting (Phillips 1948, Phillips et al. 1964, Hubbard 1987, Unitt 1987, San Diego Natural History Museum 1995). Currently, willow flycatcher primarily use Geyer willow (*Salix geyeriana*), coyote willow (*Salix exigua*), Goodding's willow (*Salix gooddingii*), boxelder (*Acer negundo*), tamarisk (*Tamarix sp.*), Russian olive (*Elaeagnus angustifolius*), and live oak (*Quercus agrifolia*) for nesting. Other plant species less commonly used for nesting include: buttonbush (*Cephalanthus sp.*), black twinberry (*Lonicera involucrata*), cottonwood

(*Populus* spp.), white alder (*Alnus rhombifolia*), blackberry (*Rubus ursinus*), and stinging nettle (*Urtica* spp.). Four basic vegetation communities provide willow flycatcher habitat: monotypic willow, monotypic exotic, native broadleaf dominated, and mixed native/exotic (Sogge et al. 1997).

Tamarisk is an important component of the willow flycatcher's nesting, foraging, and migrating habitat in the bird's range. In 2006 in Arizona, 68 percent of known willow flycatcher nests were built in a tamarisk tree (Graber et al. 2007). Tamarisk had been believed to provide of lesser quality willow flycatcher habitat. However comparisons of reproductive performance (USFWS 2002b), prey populations (Drost et al. 2001) and physiological conditions (Owen and Sogge 2002) of willow flycatcher breeding in native and exotic vegetation has revealed no difference (Sogge et al. 2005).

Willow flycatcher habitat is dynamic and can change rapidly: nesting habitat can grow out of suitability; tamarisk habitat can develop from seeds to suitability in five years; heavy runoff can remove/reduce habitat suitability in a single flood event; or river channels, floodplain width, location, and vegetation density may change over time. The willow flycatcher habitat use in different successional stages may also be dynamic. For example, over-mature or young habitat not suitable for nest placement can be occupied and used for foraging and shelter by migrating, breeding, dispersing, or non-territorial willow flycatcher (Cardinal and Paxton 2005, McLeod et al. 2005). That same habitat may subsequently grow or cycle into habitat used for nest placement. Willow flycatcher habitat can quickly change and vary in suitability, location, use, and occupancy over time (Finch and Stoleson 2000).

There are currently 284 known southwestern willow flycatcher breeding sites in California, Nevada, Arizona, Utah, New Mexico, and Colorado (all sites from 1993 to 2006 where a resident willow flycatcher has been detected) holding an estimated 1,262 territories (Durst et al. 2007). A grand total of willow flycatcher territories can not be determined because not all sites are surveyed annually. Numbers have increased since the bird was listed and some habitat remains un-surveyed; however, after nearly a decade of intense surveys, the existing numbers are just past the upper end of Unitt's (1987) estimate of 20 years ago (500-1000 pairs).

While numbers have significantly increased in Arizona (145 to 495 territories from 1996 to 2005) (English et al. 2006), overall distribution of willow flycatcher throughout the state has not changed very much. Survey effort in 2006 was reduced in some key areas (i.e. sites at the San Pedro River study area that have formerly supported relatively large numbers of flycatchers) therefore; statewide results should not be compared to previous years. Surveyors detected 624 resident willow flycatchers at 53 sites along 12 drainages. There were 351 willow flycatcher territories, with 276 pairs documented at 39 sites (the remaining 75 territories were classified as lone males) found in 2006 (Graber et al. 2007).

Currently, population stability in Arizona is believed to be largely dependent on the presence of two large populations (Roosevelt Lake and San Pedro/Gila River confluence). Therefore, the result of catastrophic events or losses of significant populations either in size or location could greatly change the status and survival of the species. Conversely, expansion into new habitats or discovery of other populations will improve willow flycatcher stability and status.

ENVIRONMENTAL BASELINE

The environmental baseline includes past and present impacts of all Federal, State, or private actions in the action area, the anticipated impacts of all proposed Federal actions in the action area that have undergone formal or early section 7 consultation, and the impact of State and private actions which are contemporaneous with the consultation process. The environmental baseline defines the current status of the species and its habitat in the action area to provide a platform to assess the effects of the action now under consultation.

A. STATUS OF THE SPECIES WITHIN THE ACTION AREA

Razorback Sucker and its Critical Habitat

Razorback sucker are found in the LCR from the top of the planning area downstream to Imperial Dam and Senator Wash Reservoir. The Recovery Plan establishes the need to augment or reestablish populations of the fish in its critical habitat (USFWS 2002a). Razorback sucker spawning has not been documented in the planning area. Numerous management actions are proposed or ongoing for the razorback sucker including stocking programs in a number of locations. AGFD released 200 sonic-tagged razorback suckers into the LCR and associated backwaters at Imperial Dam and the six miles upstream to study habitat use (Bradford and Gurtin 2002). AGFD has also stocked approximately 58,400 razorback sucker (>10 inches in length) into the A-7 and A-10 Backwaters in the Palo Verde Division of the LCR.

The BOR contracted Arizona State University (ASU) to assess the razorback sucker stocking success in the LCR from Parker Dam downstream to Yuma. ASU captured nine razorback suckers in the vicinity of the Oxbow Recreation Area (Palo Verde Division) in May 2004 ((LCR MSCP 2004). ASU captured an additional 1,100 razorback sucker in these efforts as of July 2006. Small razorback sucker populations are developing near the A-7 Backwater. Overall, survival remains low, yet long-term trends have yet to be determined.

Razorback sucker spawning habitat has not recently been documented in the main LCR channel (Minckley 1993). Razorback sucker spawning has only been observed in Senator Wash Reservoir within the planning area (Minckley 1983, Medel-Ulmer 1993, Kretschmann and Leslie 2006). Senator Wash Reservoir is used to store excess water in the Imperial Division when large floods occur upstream and/or when downstream irrigation needs are low. Water surface fluctuations up to two meters can occur overnight (Kretschmann and Leslie 2006). Kretschmann and Leslie (2006) observed spawning behavior but later failed to find razorback sucker eggs or fry. Eggs and fry are not surviving due to predation from other fish species and large water level fluctuations which expose and desiccate eggs and fry (Kretschmann and Leslie 2006). These same fluctuations prevent or limit establishment of emergent or aquatic vegetation which may also provide razorback sucker habitat (Minckley 1993, Kretschmann and Leslie 2006).

Critical habitat in the planning area includes the LCR and its 100-year floodplain between Poston, Arizona and Imperial Dam. The primary constituent elements of habitat are present but the biological environment (presence of non-native fish) in particular is in a degraded condition.

Desert Tortoise (Mohave Population)

The desert tortoise (Mohave Population) is found in the planning area in California. Neither desert tortoise critical habitat nor DWMAs were designated in the planning area. The closest designated critical habitat; the Chemehuevi Unit, located three to four miles west of Lake Havasu City, Arizona, will not be affected by the proposed action. The Chuckwalla DWMA, located a few miles west of Palo Verde, California is administered by the California Desert BLM District. Neither area occurs in the action area.

Desert tortoise habitat in the YFO was categorized in 1989 (USBLM 1989). These habitat categories are based upon field surveys and transects conducted in potential, suitable, or known desert tortoise habitat. Two desert tortoise habitat areas were categorized in the planning area (Map 2a and 2b). The Big Maria Mountains is a category 2 area that totals 7,232 acres. The YFO estimated relative desert tortoise densities of 32 to 55 animals per square mile in this habitat area (USBLM 1989). The Palo Verde Foothills is a category 3 area and totals 9,622 acres. The YFO estimated relative desert tortoise densities of 10 to 24 animals per square mile in this habitat area.

Desert tortoises in the Big Maria Mountains are within the Big Maria ACEC. The desired future condition common to all ACECs includes protection for special status species (desert tortoise). Management actions that would protect desert tortoises within the ACEC include:

- All locatable mineral actions require an approved Mining Plan of Operation;
- New mineral disposal site (sand and gravel pits) would not be authorized;
- OHV use is limited to existing inventoried routes until future route evaluation and designation is completed in the ACEC, and;
- Public use of the ACEC would be limited to day-use only.

Desert tortoises in the Big Maria Mountains are also located within the Blythe Intaglios Heritage RMZ (RMP Map 2-7e USBLM 2007). This RMZ is managed to enhance the preservation and interpretation of cultural resources. Management actions that would protect cultural resources such as intaglios (large geoglyphs on the desert surface) from ground disturbing activities would also protect desert tortoise.

The Palo Verde Foothills desert tortoise habitat area is located within the small portion of the Palo Verde Mountains Wilderness. The remaining wilderness is administered by the California Desert BLM District. Wilderness management provides long-term protection and preservation of all ecological values which includes desert tortoises. The remaining desert tortoise habitat in this area, approximately 8,850 acres, is under no special area designation.

Although desert tortoise or their sign are occasionally found outside of categorized habitat, non-categorized areas are not considered to contain habitat features suitable to support viable desert tortoise populations. Desert tortoise densities are extremely low in these areas. Excluding the two desert tortoise habitat areas and areas along the LCR, there are approximately 12,000 acres of uncategorized desert tortoise habitat in the California-portion of the planning area, of which approximately 3,800 acres is located in isolated sections intermixed with State and NWR lands.

It is very difficult to survey desert tortoises in low density areas (Freilich et al. 2000). To derive desert tortoise densities outside of the habitat areas, we multiplied the average densities of desert tortoises in the habitat areas by 0.1 as done in the case with consultations by the FWS Ventura California Office (USFWS 2007). It was believed that estimating densities at 10 percent of the higher density areas was a reasonable approximation (Ray Bransfield, USFWS pers. comm. April, 4, 2008, USFWS 2007). We assume that based upon an average of 18 desert tortoises found per square mile in the Palo Verde Mountains habitat area that desert tortoise densities are approximately 1.8 desert tortoises per square mile in the uncategorized habitats.

We also assume desert tortoise densities to be lower than 1.8 per square mile in areas dominated by desert pavement soil types. Desert pavement occurs where soil is covered by a single layer of tightly-packed gravel. These areas are typically devoid of any perennial vegetation due to the low infiltration and rapid runoff that occurs during infrequent precipitation. Sufficient quantity and quality of vegetative forage species and vegetative cover are considered important components of desert tortoise habitat (USFWS 1994b). Annual vegetation occurs only when suitable winter precipitation occurs (Turner and Brown 1994). Desert pavement is found in the Senator Wash Reservoir area.

Yuma Clapper Rail

Clapper rail populations are widespread along the LCR in the planning area. Clapper rail survey results are presented in Table 1.

Table 1. Yuma clapper rail survey data (individual birds) 1997-2007 (USFWS 2007) ¹ Not surveyed											
Location	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Palo Verde Division	0	NS ¹	2	NS	9	NS	3	NS	NS	0	NS
Cibola NWR	41	61	89	49	31	56	60	54	82	42	NS
Imperial Division	104	1	10	23	15	13	21	22	36	29	11
Imperial NWR	37	56	51	11	24	56	46	27	26	47	21
S. Imperial Dam	29	3	NS	27	4	3	34	NS	NS	17	29
Mittry Lake	18	NS	NS	6	NS	NS	10	NS	NS	8	7
Teal Alley	35	34	40	34	32	20	24	23	23	21	27
YPG Slough	37	28	31	23	17	37	51	40	23	33	29
Yuma Division	1	NS	6	NS	2	1	NS	5	1	0	2
Limitrophe Division	6	NS	0	NS	NS	3	NS	NS	9	0	NS

Southwestern Willow Flycatcher

Willow flycatcher breeding has yet to be documented in the planning area. Willow flycatchers have not been documented nesting downstream of the Bill Williams River-LCR confluence since surveys began in 1995 (McLeod et al. 2007). Migrants moving through the LCR corridor may use BLM-administered lands to travel to breeding grounds and back to Central America for the winter. Two other subspecies of willow flycatcher, (*E. t. brewsteri* and *E. t. adastus*) may also migrate through the LCR corridor (Sogge et al. 1997).

A portion of the Parker-Southerly International Boundary Management Unit of the LCR Southwestern Willow Flycatcher Recovery Unit is located in the planning area. Willow flycatcher habitat in this MU is primarily monotypic exotic tamarisk along the LCR and associated backwaters.

Critical habitat

There is no designated willow flycatcher critical habitat within the planning area.

B. FACTORS AFFECTING SPECIES' ENVIRONMENT WITHIN THE ACTION AREA

Natural riverine and floodplain habitats were replaced by reservoirs after construction of the numerous dams along the LCR. Downstream of these dams, effects to sediment inputs and transport, and water temperature occurred. Control of water flows from the large dams to provide for agricultural and municipal/industrial uses and flood control significantly altered the natural river hydrograph and reduced flow variations on a seasonal scale while increasing them on a daily scale. Floodplain protection through levees, channelization by dredging and bank stabilization confined the river channel and eliminated the meandering course through the valleys. Significant changes to species habitats resulted from the direct and indirect effects of these actions. Some of the indirect effects of baseline actions will continue to alter the system into the future until a new equilibrium is reached. Examples of these indirect effects are channel incisement resulting from bank stabilization, prevention of erosive events that provide sediments to the system, and changes in sediment movement and sub-composition below large dams.

Riparian habitats were affected by actions in the environmental baseline in several ways. The large reservoirs drowned out river valleys that once supported floodplains with cottonwood-willow and mesquite woodlands. Controlled flows reduced the potential for seasonal flooding that provided for maintenance, elimination and regeneration of riparian woodlands in a successional cycle. The effects of controlled flows, when combined with levees and stabilized banks that shut off the floodplain and prevented the river from meandering, reduced the opportunity for natural regeneration of riparian vegetation. The lack of natural flooding prevented moist soil conditions needed for seedling establishment and growth. Incised channels worsened the situation for regeneration by dropping the water table under the floodplain woodlands. While adult trees might be able to follow the dropping water table if the change was slow enough, young trees and seedlings could not. Wildfire, conversion to agriculture, and other human development eliminated existing cottonwood-willow and mesquite stands on the floodplain. The inability of the modified river system to provide suitable conditions for riparian woodland establishment and maintenance has resulted in the current low levels of native riparian

habitat on the LCR. This has also encouraged the spread of non-native tamarisk (*Tamarix sp.*) on the LCR. This expansion has further reduced the acreage available and suitable for native riparian trees. Under the present set of conditions, the remaining acreage of cottonwood-willow habitat will be lost and not replaced by the same vegetation type. The mesquite woodlands face similar issues and continue to be lost.

Marshes and backwaters were formed, maintained and ultimately destroyed by the meandering river. Marshes also developed near the confluences with tributary streams such as the Bill Williams and Gila Rivers as well as along the edges of backwater lakes and river channels. Development of agricultural, recreational, residential and commercial areas in the floodplains has eliminated any backwaters or marshes found there. Those that remain are along the river corridor on undeveloped lands. Marshes and backwaters are transitory habitats with a distinct natural aging process. A backwater can be connected to the river or isolated (as in a cut-off oxbow). Once formed, it begins to fill in with vegetation from adjacent riparian or marshes and sediment transported overland or from the river flows. Depending on the size and initial depth of this backwater and the natural flows over the years, the aging process may be rapid or more prolonged. As the backwater becomes shallower, it becomes more and more marsh-like as cattails and bulrush grow in the shallow water. Eventually, even the shallow water is gone, and the marsh may persist for some years. If the river changes its channel away from the backwater/marsh, it may dry out enough to support riparian vegetation. Under natural fluvial processes, backwaters and marshes are actively created and destroyed by the river as it meanders and passively created or destroyed by the natural aging process if the river does not migrate back to the location. Very large floods eliminate most or all backwaters or marshes on the floodplain, but also create new backwaters from the receding waters of the same flood event. Under the present conditions, the river cannot meander and create new backwaters and marshes; however, the existing backwaters and marshes are more permanent since they are not cyclically created and destroyed.

The only backwaters and marshes that will remain in the future are those actively maintained in place by Reclamation or other Federal, Tribal, State or private landowners. Reclamation has a mitigation responsibility to maintain a number of backwaters resulting from NEPA and Fish and Wildlife Coordination Act (FWCA) compliance for various channelization, dredging and stabilization activities. Maintenance largely consists of periodic dredging to set back the natural aging process. Thus, a number of backwaters are artificially maintained in the same place they originally formed. Backwaters not covered by mitigation commitments are not maintained unless a multi-agency group can raise the funds to dredge the backwater.

Aquatic habitats in the LCR have been simplified by the changed flows and channelization of the river. The main channel of the LCR is managed to deliver water efficiently, not to provide a varied habitat for fish. Backwaters, eddies, side channels and other features of a meandering river system are lost as the channel is constricted and incised and the natural hydrograph is eliminated. Nutrient inputs from marshes and riparian areas flooded by spring and summer high flows are lost, as are the shallow waters needed as nursery areas for fish. Eddies, gravel and cobble bars, side channels and braided channels do not provide for efficient delivery of water and have been eliminated or significantly reduced. For example, dredging of wash fans, a significant

source of sands, gravels and cobble to the system, reduces this input and further homogenizes the channel. Controlled flows alter water depths and velocities on a daily basis with the effects greatest below the large dams and attenuated downstream. Depending on water depths, this variation may be enough to dry up connected backwaters and expose spawning or shallow nursery habitats. The conditions in the main channel of the LCR have not improved over the years and conditions will continue to decline as indirect effects of baseline actions continue to occur.

Federal agencies have formally consulted on 19 actions in the planning area which addressed adverse effects to listed species. These actions included management plans, ROWs, utility lines, fire management, habitat improvement projects, and land tenure adjustments.

Razorback sucker and its critical habitat

Razorback sucker have declined in numbers largely due to the introduction and proliferation of nonnative sportfishes such as flathead catfish, largemouth bass, channel catfish, and carp which prey on them and compete for food and space. Before large numbers of non-native fish were stocked into reservoirs, razorback sucker spawning resulted in successful recruitment.

Large dams, such as Glen Canyon and Hoover dams, have greatly decreased the amount of suspended sediment in the LCR (Ligon et al. 1995, Schmidt et al. 1998, and Van Steeler and Pitlick 1998). Razorback sucker evolved in waters with much higher levels of suspended sediment that occurred in the pre-dam period (Johnson and Hines 1999, USFWS 1991, and USFWS 1998). Suspended sediment in rivers generally increases in the spring as a result of peak runoff from spring snow melt (Pitlick and van Steeler 1998). This natural flow and sediment transport regime is altered by water storage in upstream reservoirs (Ligon et al. 1995, Pitlick and Van Steeler 1998, Van Steeler and Pitlick 1998). The average suspended sediment load in the Lower Colorado River was 3.5 times higher than after construction of Glen Canyon Dam (Blinn and Cole 1995). Razorback suckers, particularly young-aged class fish, are more susceptible to predation in clearer water than in more turbid water (Johnson and Hines 1999). Most non-native fish in the LCR are sight feeders, whereas young razorback sucker lack avoidance mechanisms needed to elude visually-oriented predators (Minckley 1983, Johnson et al. 1993).

Riverine habitat in LCR in the planning area has been altered by the construction of the Palo Verde Diversion and Imperial Dam. These structures slow river flow and accumulate large amounts of sediment. Pre-dam, the large washes would have deposited coarse sand and gravel on to alluvial fans in the LCR. These alluvial fans would have provided shallow, coarse substrate spawning areas preferred by razorback sucker (Tyus and Karp 1990, Minckley et al. 1991). Today, slowed water and the lack of large floods allow fine sediment deposition to accumulate behind Imperial Dam. Large wetlands and stands of non-native riparian woodland that became established on the accumulated sediment now hinder sediment transport from large washes into the LCR main channel. There are no alluvial deposits observed from aerial photography along the LCR in the planning area (Mapquest.com February 13, 2008). There are numerous sandbars within the river channel. These deposits are likely to consist of fine sands which are not used as spawning habitat. Sandbars that may be suitable for spawning beds are also popular recreation sites on large rivers and lakes (Asplund and Cook 1999). Thick tamarisk

and phragmites stands and large boulder rip-rap limit recreationist access to the LCR shoreline. These sandbars provide the only sites for camping, picnicking, and resting. Heavy boat traffic over these shallow deposits may also reduce their suitability for razorback sucker spawning.

Pollutants such as petroleum products and runoff from developed recreation facilities or urban areas may reduce water quality for razorback sucker in shallow water areas near boat ramps and developed shorelines. The Environmental Protection Agency (EPA) passed a regulation in 1996 to regulate exhaust admissions from new spark-ignition gasoline marine engines (including outboard engines, personal water craft engines and jet boat engines) due to very high hydrocarbon emissions (EPA 1996). These new emission standards are expected to reduce hydrocarbon emissions by more than 75%. Although originally considered an air quality issue, these new restriction would also limit the amount of hydrocarbons entering the water, reducing hydrocarbon pollution entering the LCR in the future.

Since 1997, FWS-Arizona Ecological Services Office has processed seven formal section 7 consultations involving razorback sucker for Federal actions within the planning area.

Desert Tortoise

Human developments and disturbances have increased the effects of predation, especially in and adjacent to areas experiencing rapid population growth in the planning area. Free-roaming dogs kill hatchlings and young desert tortoises near human development. Ravens, which also kill hatchlings and young desert tortoises, are attracted to human development by garbage and other artificial food sources (Boarman 2002a). Conservation measures established by the BLM are working to address this threat.

Roads and highways affect desert tortoise and their habitats. Direct impacts include road kills and illegal collection. Many tortoises are killed on highways, with mortality rates dependent upon traffic speed and volume, age and width of the road and the density of tortoises in the surrounding area (Boarman 2002b). There is also a desert tortoise population depression zone along highways which may extend up to 0.25 mile (0.4 km) or more from the roadway (Nicholson 1978 In Boarman 2002b). Within this zone, increased vegetation growth, particularly annuals, often occurs as a result of runoff from the impervious pavement surface after rainfall. This vegetation flush attracts desert tortoises to highways where they can be killed on the road, during mowing operations, when vehicles pull off the road, or after they feed on the plants that have been sprayed with herbicides (Boarman 2002b).

Utility corridors (UC) can also directly affect desert tortoise and their habitats. UCs cross areas too remote and rugged for highways, thus impact desert tortoises in areas farther away from other human disturbances. Raven predation has increased as a result of transmission line construction which provides nest structure and perches used for hunting (Boarman 2000a). UCs can affect desert tortoise depending upon the service they provide. Open trenches during pipeline construction can trap desert tortoise causing mortality through overheating or being crushed and /or buried during pipeline installation. Future UC maintenance can affect desert tortoises when authorized and unauthorized vehicles drive along maintenance roads.

Recreational activities in desert tortoise habitat have been documented as a source of mortality. Off-highway vehicles can kill or injure desert tortoise or negatively affect its habitat through destruction of vegetation needed for forage or cover, or causing soil compaction, destruction of soil crusts, and increase soil erosion.

The LCR MSCP (2004) addressed BOR operations and maintenance on the LCR. The LCR MSCP objective was to provide a long-term framework for compliance with the Act for ongoing, proposed and future projects. Proposed activities related to land conversions to agriculture may result in the loss of 192 acres of desert tortoise habitat. Other desert tortoise habitat may be affected during the development of riparian-wetland habitats for other MSCP-covered species. Desert tortoise habitat site conditions may be too dry for any of these projects to take place. However, infrastructure such as roads and utility lines needed for the development of the other MSCP-covered species may cross desert tortoise habitat. The MSCP plan proposes to acquire up to 230 acres of unprotected occupied desert tortoise habitat to mitigate for the anticipated loss of 192 acres of habitat. Since 1989, Arizona has completed four formal section 7 consultations for desert tortoise in the planning area.

Yuma Clapper Rail

Yuma clapper rails prefer dense stands of cattails with access to open water and shorelines for foraging. Dense cattail with large amounts of dead material from previous years provides less suitable clapper rail habitat. Clapper rails have limited mobility and less foraging and nesting space in these situations. When the Colorado River had a natural hydrograph with high and low water cycles, marshes were created and destroyed with regularity and seldom were in place long enough to become overgrown. After dam construction, natural river processes were constrained and marshes have stabilized. Such stability enables cattail overgrowth to occur. Further, marshes age and become dryer land with the accumulation of sediments and dead plant materials that raise the ground surface above the water. Many LCR marshes exhibit this aging process. Prescribed fire, dredging or other marsh improvement projects, proposed by the BOR and FWS NWRs, create and maintain heterogeneous age-class stands of clapper rail habitat. The most significant areas of clapper rail habitat on the LCR are in Federal ownership and are protected from development pressures.

The number of wildfires varies from year to year in the planning area. The twenty-year annual average is approximately 36 fires, burning an average of 3,022 acres per year. Most of these fires are in the LCR (South) Fire Management Unit (FMU) (LCR from Interstate 10 south to the International Border) (USBLM 2006). Almost all fires on the LCR are human-caused. Most, if not all, clapper rail habitat in the planning area is located within the LCR (South) FMU. This unit has a history of large fires, with a total of eight fires ranging from 240 to 4,100 acres burning over the past 20 years (USBLM 2006). Wildland fire is not likely to kill cattail, unless conditions are such that roots are destroyed (Nelson and Dietz 1966, Beule 1979). Most fires in cattail only burn the above ground biomass and do little to reduce the size of these marshes (Nelson and Dietz 1966). Cattail re-growth within these sites would resume immediately if wildfires occur in winter to early spring (Sojda and Solberg 1993). Cattail densities may actually increase immediately after burning and return to pre-fire densities three to four years post-fire (Ponzio et al. 2004). Fires that occur in the summer would remove clapper rail habitat temporarily until the growing season resumes the following spring.

The magnitude of recreational boating on the lower Colorado River has increased dramatically over the past several decades. Recreational boating is a significant economic input for the local community. Boating affects clapper rails through direct harassment and disturbance of nesting and feeding birds. Clapper rails are flushed from nests which may increase the threat of egg predation. Clapper rails are considered weak fliers and are likelier to run away from disturbance than fly as in the case of other waterbirds (Rodgers and Schwikert 2002). Appropriate buffer zones to prevent boating disturbance to clapper rails is difficult to determine since flushed or disturbed birds may not be observed.

Eddleman (1989) identified selenium as a potential threat to the survival and recovery of the clapper rail. High levels of selenium can result in acute toxicity, chronic poisoning and tissue damage, and reproductive impairment (e.g., developmental abnormalities, embryo mortality, and reduced survival or growth of young) in birds. The LCR (including the Salton Sea and Mexico) does not contain local sources of selenium that contribute to selenium levels in the biological environment. However, the Colorado River in the Upper Basin (Utah, Wyoming and Colorado) picks up selenium from the seleniferous soils of the Mancos shale formations (return flows of irrigation water are the primary vector) and transports it to the LCR. Selenium is concentrated in the water through evaporation, and then becomes deposited into the sediments and can be accumulated by vegetation, invertebrates, and fish. Clapper rails become contaminated through their diet of crayfish, other invertebrates, and fish. Even at the current level of 2 parts per billion in the LCR water, selenium is likely accumulating in sediments and clapper rail forage species. Levels of selenium in LCR-supported clapper rail habitats in the United States and Mexico may have increased over the last 10-15 years due to irrigation returns (historical data on predevelopment selenium levels are not available) and are at levels above that considered of concern for reproductive impairment (King et al. 2000). Earlier studies (Rusk 1991, Roberts 1996, Andrews et al. 1997, Garcia-Hernández et al. 2001) documented selenium as an issue of concern for the clapper rail in the LCR and the Salton Sea, and suggested that it could become a concern in the Cienega de Santa Clara in Mexico.

The LCR MSCP (2004) addressed BOR operations and maintenance on the LCR. The LCR MSCP objective was to provide a long-term framework for compliance with the Act for ongoing, proposed and future projects. Flow-related activities have resulted in take of Yuma clapper rail. Diversions in reaches 3, 4, and 5 will lower groundwater levels sufficiently to reduce habitat quality in 133 acres of Yuma clapper rail habitat (acreages were not separated out by reach in the plan). Proposed mitigation by the LCR MSCP creates or improves up to 512 acres of low value or marginal quality habitat. The MSCP does not specify what reaches this mitigation would occur.

Since 1983, Arizona has completed 11 formal section 7 consultations including the Yuma clapper rail in the planning area.

Southwestern Willow Flycatcher

The most significant factor affecting willow flycatcher within the planning area is habitat loss through fragmentation and vegetation modification. The construction of Morelos, Laguna, and

Imperial Dams has interfered with the natural flood regime which is necessary to maintain and establish willow flycatcher breeding habitat. Willow flycatcher nesting has not been documented in the planning area since the species was federally-listed. The lack of flood pulses, levee construction, rip rapping of shoreline, and narrowing of shorelines due to river regulation may limit the availability of native riparian nesting habitat to develop. However, most willow flycatcher nests have been located in tamarisk which is extremely abundant along the LCR (LCR MSCP 2004). The water delivery management actions that may hinder native riparian vegetation establishment and maintenance are beyond the control of YFO management in the planning area. These water delivery management actions were recently consulted upon and numerous conservation measures were developed to compensate for their effects (FWS file number 02-21-04-F-0161).

Cottonwood and willow replacement by tamarisk and phragmites (*Phragmites* sp.) has changed the historical fire regime on the LCR. Cottonwoods are often killed by fire, but willows and mesquites can re-sprout from the root crowns. Tamarisk become established in riparian communities where native species are stressed by water table declines and where flow regimes that allow for native vegetation establishment and maintenance have been changed or eliminated. As in the case with willow, tamarisk aggressively re-sprouts after burning; however, tamarisk is more efficient in water acquisition and can gain a competitive edge on the LCR (Busch and Smith 1995). Tamarisk flammability increases with the build-up of dead and senescent woody material within the plant community. Dense tamarisk stands can be highly flammable where limited or non-existent flooding allows leaf litter to accumulate (UFSWS 2002b).

The LCR MSCP (2004) addressed BOR operations and maintenance on the LCR. The LCR MSCP objective was to provide a long-term framework for compliance with the Act for ongoing, proposed and future projects. Flow-related activities may result in take of willow flycatcher. Diversions in the action area will lower groundwater level sufficiently to reduce habitat quality in 355 acres of occupied habitat and 214 acres of unoccupied habitat. Proposed mitigation by the LCR MSCP will create at least 4,050 acres of suitable habitat. The RMP does not specify the location of where mitigation will occur. Significant willow flycatcher habitat improvements are expected to occur over the life of the LCR MSCP. Since 1994, Arizona has completed eight formal section 7 consultations involving the southwestern willow flycatcher in the planning area.

EFFECTS OF THE ACTION

Effects of the action refer to the direct and indirect effects on a listed species or critical habitat, together with the effects of other activities that are interrelated and interdependent with that action that will be added to the environmental baseline. 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.

Most of the 18 resource management actions will not adversely affect listed species. Other resources, in conjunction with the conservation measures will benefit listed species. Effects of fire suppression and fuels management activities on BLM-administered lands in Arizona were

analyzed in the Biological and Conference Opinion for the BLM Arizona Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality Management (FWS file number 02-21-03-F-0210). Effects of that BO are summarized briefly below. The YFO RMP BA includes the same conservation measures for activities within federally-listed species habitats that were included in the 2004 BO (USBLM 2007). The vegetation communities found in the planning area are not fire-adapted or dependent. Therefore the entire YFO planning area is managed as non-fire use.

Mitigation for areas burned by wildfire may include mechanical, biological, chemical, or prescribed fire to maintain non-hazardous levels of fuels, reduce the hazardous effects of unplanned wildland fires, and to meet resource objectives. The YFO did not provide any site-specific information on the prescriptions or appropriate management responses that will be applied in federally-listed species habitats. If YFO plans to include these treatments in habitat for these species, site-specific consultation should occur on these activities prior to implementation to fully analyze potential effects.

Razorback Sucker and its Critical Habitat

Wildland Fire Management

The BA described indirect effects from wildfire suppression on razorback sucker from increased sediment erosion into habitat. Some erosion may occur during and after fire suppression activities. However, razorback suckers evolved in an environment of highly variable discharge, large annual temperature fluctuation, and high turbidity. These river attributes have decreased significantly since the numerous dam constructions on the entire Colorado River system (Schmidt et al. 1998, Van Steeler and Pitlick 1998). Virtually no suspended sediment passes through the large dams on the LCR (Stevens et al. 2001). Despite sediment inputs from upland sources in the planning area, suspended sediment loads are still lower than pre-dam levels because of the present lower post-dam river flow velocities. Lower velocities decrease the LCR's ability to pick up and transport sediment (USBOR 2002). Razorback sucker are not significantly affected by additional sediment input into the LCR, as a result of erosion after wildfires. The BLM Arizona Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality Management biological opinion anticipated the potential for some harassment of razorback suckers during fire suppression.

Recreation

The proposed action will increase recreational opportunities in the planning area. YFO manages recreation areas including boat ramps at Senator Wash, Squaw Lake, and the Palo Verde Oxbow; and concession leases with boat ramps and fuel sales at Hidden Shores and Walter's Camp. Discussion of boating management is very limited in the RMP and BA. Specific locations for new boat ramps are not presented in the RMP. The BA describes the potential effects of these facilities on razorback sucker. However, without more specific information only a general determination can be made on the effects of these facilities on razorback sucker. Future projects may require section 7 consultation.

Petroleum products and other potential pollutants are introduced to the river in a variety of locations. Large volume of boat launching in Squaw Lake and Hidden Shores may expose razorback sucker to spilled boat fuel. However, other fish species, such as carp, are commonly

seen around these facilities. Water flow at these locations may prevent pollutants from concentrating in the area long enough to cause harm to fish.

Razorback sucker may be disturbed from foraging and shelter areas when approached by boaters and other recreationists. Razorback sucker spawn from January through early April which is a period of low visitor use on the LCR. As earlier stated, razorback sucker spawning has only been reported in Senator Wash Reservoir where non-native fish predation and widely fluctuating water levels severely limit spawning success. As a result, boating in Senator Wash Reservoir and the LCR main channel are not likely to significantly affect razorback sucker spawning.

Desert Tortoise

Desert tortoises that are physically moved to prevent mortality or injury from any YFO-authorized activity could be harmed if not handled properly. Urine and large amounts of urates are frequently voided during handling and may represent a severe water loss, particularly to juveniles (Luckenbach 1982). Desert tortoise drink and store large amounts of water after winter rains to allow them to digest dry grasses and forbs in the summer (Oftedal et al. 1993, Peterson 1996). If desert tortoises lose stored water, they are unable to eat dry summer forage and starvation may occur (Peterson 1996).

Desert tortoises can overheat if not placed in the shade when ambient temperatures are equal to or exceed temperature maximums for the species (Desert Tortoise Council 1994, revised 1996). YFO will implement a desert tortoise education program and protocol for handling desert tortoise, ensuring that only qualified individuals handle tortoises and that tortoises would only be handled if necessary, which should reduce these potential effects.

Wildland Fire Management

The RMP proposes to continue full suppression of fire within desert tortoise habitat with minimum surface disturbance, in accordance with guidelines in Duck et al. (1994) and the programmatic Biological and Conference Opinion for the BLM Arizona Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality Management (FWS file number 02-21-03-F-0210) (USBLM 2004). Fire suppression and fire and fuels management activity-effects on BLM-administered lands in Arizona were analyzed. The 2004 effects are summarized in this document. The RMP proposed action includes the same conservation measures (Appendix B, this document) for minimizing take and managing these activities within special status species habitats that were included in the 2004 BO (USBLM 2006). Most, if not all, wildfires on the YFO occur within the LCR corridor. Direct and indirect effects to desert tortoise are likely to occur when vehicles and equipment are transported, operated, and /or parked outside of the LCR corridor during wildfire suppression activities.

Prescribed fire would be used to maintain non-hazardous fuel levels and reduce the hazardous effects of wildfires. Neither of these activities would occur in desert tortoise habitat due to the extremely low vegetation present in these areas. The YFO did not provide any site-specific information on the prescriptions or appropriate management responses that will be applied in listed species habitats. If YFO plans to include these treatments in habitat for these species, site-specific consultation should occur on these activities prior to implementation to fully analyze potential effects.

Lands and Realty

Designated utility corridors will overlap both desert tortoise habitat areas. The Big Maria Mountains habitat area will have a utility corridor along Highway 95 which also forms the boundary of the habitat area. Approximately 11 miles of utility corridor will occur within the Palo Verde Foothills habitat area. This corridor will follow Highway 78 for approximately 4.5 miles and an existing powerline for approximately 0.5 mile. The remainder of the utility corridor follows no existing roads or utilities. This new section of corridor is a reroute around the designated wilderness area to the west. Future utilities, such as powerlines, will follow the new utility corridors.

Two communication sites are proposed within the desert tortoise habitat areas. Both sites have existing facilities, however, only the Big Maria site was previously designated as a communication site. Designating the Palo Verde Gap site could lead to increased use and expansion of the site. New facilities especially at the Palo Verde Gap site will result in a loss of habitat.

Ravens are significant predators on hatchling desert tortoise. Transmission line poles and communication towers provide elevated perches that ravens can hunt from more effectively than from lower, natural perches. These structures also provide nesting substrates for ravens which increase predatory pressure when adult ravens are hunting to feed their young (Boarman 2002a). Transmission lines located across the Palo Verde Mountains and along Highway 95 may result in increased raven predation on hatchling desert tortoise. BLM has developed a conservation measure to reduce the attraction of predators (such as ravens) to the maximum extent practicable.

Powerline construction and future maintenance also require road construction in desert tortoise habitat that allows for increased human access. This increases the risk of vehicular collision, wildfire, spread of invasive plants, and illegal collection or killing of desert tortoise. BLM will initiate section 7 consultation for new ROW authorizations that may affect desert tortoise.

Minerals Resource Management

The Desert Tortoise (Mojave Population) Recovery Plan (USFWS 1994) determined that surface disturbance that diminishes the capacity of the land to support desert tortoises and their habitat were found to be "generally incompatible" with recovery. However, the recovery plan makes exceptions for mining on a case-by-case basis so long as desert tortoises and their habitat are not significantly impacted and mitigation and restoration are implemented.

Minerals development may result in habitat alteration or destruction. Habitat alteration would be similar to that described for vegetation treatment projects. Rehabilitation would be required in most cases, meaning that most adverse effects would be temporary.

Based on the almost complete lack of locatable mining activity, the very low potential for mineral extraction in desert tortoise habitat, and requirements for mitigation and restoration, YFO anticipates that adverse effects from locatable mineral extraction in desert tortoise habitat

would be limited. The approved Mining Plan of Operation requirement, for all locatable mineral actions, would protect desert tortoises and their habitat.

Mineral development may result in injury or mortality of desert tortoise. Vehicle traffic on the access road would increase the potential for adverse effects related to roads (see also Travel Management, below). Direct effects include desert tortoise being struck by vehicles on roads or injured in their burrows. Trash and debris left at the site are likely to attract ravens and increase the risk of predation.

Public lands in desert tortoise habitat in California, outside of designated wilderness, are available for mineral material extraction at the discretion of the YFO. The YFO will consult with the FWS if pits are proposed in desert tortoise habitat in California in the future.

The RMP recommends withdrawal of the Big Maria ACEC from mineral entry (RMP Table 2-30, Appendix D USBLM 2006). If this action is approved by Congress, the entire desert tortoise habitat area will be protected from mining operations.

Recreation

Camping, backpacking, horseback riding, and mountain biking are permitted provided these activities do not significantly impact desert tortoise. Camping is concentrated along the LCR and the Imperial Dam Long-term Visitor Area (LTVA) at Senator Wash Reservoir. Commercial recreation or competitive race events may be authorized in desert tortoise habitat. An increase in the number of vehicles increases the probability of death or injury to desert tortoise from vehicle collisions. Commercial recreation and competitive race events require Special Recreation Permits which would be authorized on a case-by-case basis. The YFO would initiate section 7 consultation as part of the planning process for these activities.

Vehicles will be allowed to pull off of designated roads up to 100 feet in the planning area. Desert tortoise mortality and crushing of burrows could occur as a result of vehicles pulling off the road for recreational activities. However, given the relatively low level of public use and vehicle restrictions in the Palo Verde Foothills, Big Maria ACEC and desert areas near Senator Wash Reservoir, the incidence of injury or mortality should be very low. The highest road concentration, where camping occurs, is at Senator Wash Reservoir and Squaw Lake. Most of these camping areas are located on desert pavement where very few desert tortoises are expected to be found.

Special recreation permits will be issued to commercial enterprises, recreational events, and large groups. Special stipulations for desert tortoise protection will be included with these permits to reduce the likelihood of adverse affects. Desert tortoises would also benefit from additional seasonal stipulations that would be imposed to restrict activities that may otherwise result in adverse effects to desert tortoise would also benefit the species.

The Ehrenberg-Cibola Recreation Area Management Plan (RAMP) includes the Palo Verde Foothills and Big Maria Mountains desert tortoise habitat areas. Consultation with the FWS was completed for the Ehrenberg-Cibola RAMP (FWS file number 2-21-93-1-361) with a finding of not likely to adversely affect the desert tortoise.

The Big Maria Mountain desert tortoise habitat area is also located within the Blythe Intaglios Heritage RMZ (RMP Map 2-7e USBLM 2007). This RMZ is managed to enhance the preservation and interpretation of cultural resources. Management actions that protect cultural resources, such as intaglios (large geoglyphs on the desert surface) from ground disturbing activities, would also protect desert tortoise.

Recreational facilities on the California-side of the planning area occur within the Imperial Dam RMZ. This RMZ is located outside of any desert tortoise habitat areas. These facilities are concentrated along the LCR. Recreational use in the surrounding uplands is limited to unimproved roads that lead from one recreation site to another. This area has extremely low desert tortoise densities.

Travel Management

Desert tortoises may be injured or killed by vehicles traveling on the existing transportation network. However, road miles are not all equal in their effects to desert tortoise due to variables such as road widths, location, and traffic type, speed, and volume. In general, the lower the traffic speed and volume, the lower the likelihood of collision with a desert tortoise. Most scientific literature concerning the effects of transportation systems on wildlife species is based on paved roads with high traffic volumes, traveling at high rates of speed. Desert tortoise habitat in the planning area is bisected by few roads. State highways 78 and 95 are the only two paved roads that cross desert tortoise habitat in the planning area. Both highways are located on the periphery of these habitats.

The Senator Wash Reservoir area contains the majority of dirt roads within desert tortoise habitat in the planning area. Most of these roads cross desert pavement to campsites in the Imperial Dam LTVA along the reservoir or lead to the LCR. There is a very limited time period in which desert tortoise may be adversely affected by road traffic in this area. Most recreational use, outside of holiday weekends in the summer, occurs during the desert tortoise inactive period of October to March. High temperatures that occur during the summer holiday weekends also limit desert tortoise aboveground activity. Most other areas are isolated from vehicle access by the mountainous terrain, LCR, Picacho State Park, or Imperial and/or Cibola NWR.

The RMP route designation process may close specific routes through desert tortoise habitat. Rehabilitation of closed roads or temporary roads that are no longer needed would have moderate short and long-term direct and indirect effects depending upon the habitat and the closure method. Physical closures, such as ripping portions of the road, could result in short-term impacts to desert tortoise through harm, injury or death if done during the activity period. Long-term benefits to desert tortoise would result from closing and rehabilitating roads by eliminating or reversing many of the adverse effects described above.

Road maintenance, especially on remote dirt roads, generally improves vehicle travel conditions that allow increased traffic volume and higher speeds. Such conditions may lead to increased desert tortoise injury or mortality. Desert tortoise could also be crushed by maintenance equipment such as road graders. Road maintenance often involves grading into washes to

improve drainage off the road. Desert tortoise could be injured in drainages, and burrows constructed in the banks of washes could be damaged or destroyed. Desert tortoise could be trapped in collapsed burrows following road maintenance. These adverse effects would be primarily concentrated in the Imperial Dam LTVA at Senator Wash Reservoir. Paved roads within the Imperial Dam LTVA have posted 15 mph speed limits which would decrease the probability of desert tortoise injury or mortality in this area (Mark Lowans, YFO pers. comm. May 1, 2008). The unpaved roads that lead to the North Shore campground at this LTVA are graded as needed. As stated earlier, much of this area is dominated by desert pavement which provides little desert tortoise habitat. Maintenance activity effects to active desert tortoise would be reduced by limiting non-emergency road maintenance to the desert tortoise inactive season, October 15 to March 15. The other desert tortoise areas are protected by wilderness designation or contain roads that are not maintained.

Special Area Designation

The Big Maria ACEC will continue to provide enhanced management capabilities for desert tortoise, while minimizing adverse effects from other resource management programs. Management prescriptions provided in the RMP and in the future ACEC plans will benefit desert tortoise by elevating this species to the highest priority and focusing management direction toward conservation and recovery efforts.

Yuma Clapper Rail

Wildland Fire Management

Yuma clapper rail may be affected by fire suppression actions. The effects of wildfire suppression were previously consulted on in the programmatic consultation with BLM on their statewide fire management activities (FWS file number 02-21-03-F-0210) and are summarized here. Yuma clapper rail habitat suitability could be modified by handline construction and use of backfires. Fire suppression actions could occur in occupied habitats during the nesting season. The proposed action includes conservation measures to avoid or minimize these effects (Appendix B). The probability that fire suppression actions would modify wetland or cattail marsh habitat to the extent that it would no longer be considered suitable for Yuma clapper rails is very low (Nelson and Dietz 1966, Beule 1979).

Recreation

The LCR main channel, within the Imperial Division receives heavy boating use as a result of numerous boat ramps (Hidden Shores, Squaw Lake, Martinez Lake, etc). Interior channels and backwaters are narrow and shallow and difficult to gain access to by most boats. It is difficult for large boats to travel at wake creating speeds in these areas. Most access is by canoe or small boat. Clapper rail habitat in Squaw Lake and the Imperial Channel are protected by posted “no wake” zones.

Much of the LCR shoreline is dominated by dense tamarisk, phragmites, and cattail stands that limit camping access and hiking. Typically, cattails grow in thick dense stands that are inaccessible to hikers. LCR recreational use has the potential to impact clapper rail through increased risk of human-caused fire that can temporarily affect cattail habitat. The RMP

proposes to reduce or eliminate campfire use in riparian/wetland areas. Recreation activities that reduce habitat suitability for clapper rail are prohibited.

Southwestern Willow Flycatcher

Lands and Realty

There are no proposed land disposals in areas that would directly or indirectly affect willow flycatcher (RMP Map 12e). No utility corridors have been designated along existing lines that would affect willow flycatcher breeding habitat (RMP Map 12e). The RMP states that utilities, outside of designated corridors, would not be placed in priority wildlife habitat areas, which include potential willow flycatcher breeding habitats.

Vegetation removal resulting from issued leases, permits or other authorized activities may decrease some migratory habitat. However, unless this results in long distances between habitat patches of greater than 94 miles (150 km) (Otahal 1998) to 140 miles (225 km) (Yong and Finch 1997), this should not adversely affect the willow flycatcher during migration (USFWS 2002b). Willow flycatcher insect foraging needs during migration can be met from native and introduced plant species such as tamarisk (Owen and Sogge 2002) and is expected to continue given the preponderance of tamarisk along the LCR. Land cover map data from the LCR MSCP Biological Assessment (LCR MSCP 2004) measured 72,172 acres of cottonwood/willow, tamarisk, mesquite and tamarisk/mesquite habitat within the entire planning area. Tree removal resulting from YFO-authorized leases or permits are not likely to be a significant impact to migrating willow flycatcher as is it not likely to cause great distances between available foraging habitats.

Vegetation Management

Vegetation treatments would not be authorized in willow flycatcher habitats or in areas adjacent to potential habitat during the spring migration and nesting season (May through August). Although not currently known to breed in the planning area, this protection may protect unknown breeding willow flycatchers. Therefore, willow flycatchers are not likely to be adversely affected by vegetation treatments.

Indirect effects of vegetation restoration and treatments may include changes to plant community composition and species dynamics. The duration of these indirect effects depends upon the degree of tamarisk removal. As stated above under Land and Realty, willow flycatcher migratory habitat is plentiful in the planning area. Total tamarisk removal may permit cottonwood and willow establishment where suitable hydrologic conditions (protection from scouring floods and shallow water table) exist. Willow flycatcher would be benefited if native vegetation is restored and catastrophic wildfire risk in tamarisk-dominated habitat is reduced.

Fire and Fuels Management

Fire use and suppression effects could include disturbance from fire line construction through habitat, fire crew or vehicle presence during suppression, and loud noise from gasoline-powered equipment, fireboat and helicopter use. Fuel reduction projects in tamarisk communities may be implemented to protect structures and important wildlife habitat. These actions can temporarily affect habitat and reduce its suitability for foraging or rest during migration. However, given the

preponderance of migratory habitat within the planning area, it is unlikely that these disturbances would be significant.

Recreation

Recreational use in riparian areas along the LCR and Gila River has the potential to impact migrating willow flycatcher as a result of noise and disturbance. These activities may compact soils and remove and impair vegetation regeneration, and increase trash, pollution, and human-caused fires that may degrade habitat. The potential for recreational activity to produce negative impacts depends on the frequency, intensity, location, and type of use, and is often determined by ease of access to riparian areas. As the frequency and intensity of use increases, the creation and use of new trails would also increase access.

Existing recreational use levels have not prevented suitable willow flycatcher migratory habitat from developing on the LCR. Willow flycatchers do not appear to be adversely affected by recreational use along the LCR during migration. This can be a result of high temperatures in the early summer and/or high availability of migratory habitat in the planning area.

The YFO has implemented a 72-acre riparian restoration project on the Pratt Agricultural Lease and adjacent South Mitty Lake Restoration area. To date, 15 acres have been re-vegetated with cottonwood and willow. This site is adjacent to the Betty's Kitchen National Recreation Trail (NRT). Although willow flycatchers have not nested at this site, the YFO anticipates that birds may begin to when the project is completed. Early summer recreationists hiking, picnicking, or bird watching may disturb willow flycatchers when birds are establishing territories and nesting sites. Mid-to-late-summer recreation use at the Betty's Kitchen NRT is limited by the high temperatures that coincide with the willow flycatcher breeding season.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

The planning area has experienced considerable growth in the last decade and projections for future growth indicate the trend will continue. Many activities outside of the Federal nexus occur and are expected to continue in Federally-listed species habitat, as described below.

Razorback Sucker and its Critical Habitat

As areas along the LCR become developed, the amount of non-point source pollution being carried into razorback sucker habitat and critical habitat is likely to increase. There are numerous washes that drain developed lands in the towns and cities into the LCR. Razorback sucker may be adversely affected by these pollutants if they are spawning in the shallow areas where these washes enter spawning areas. Recreational site development and encroachment around occupied reaches and designated critical habitat may further fragment or destroy upland or riparian vegetation and negatively affect water quality and quantity, and the primary constituent elements of critical habitat. Continued visitation and recreation could affect water

quality by increasing petroleum product spills and contaminants as well as discharging treated and un-treated sewage. Recreation activities may also result in increased disturbances to fish and their spawning areas.

Because of the 2002 EPA transfer of the section 402 Clean Water Act National Pollutant Discharge Elimination System (NPDES) program to the State of Arizona, further economic development of private lands near rivers will require less Federal permitting. Continued development will lead to more public use of the river and shoreline areas eliminating opportunities to restore historical wetlands and flood plains for fish habitats.

Desert Tortoise

The primary cumulative effect in the planning area for desert tortoise is continued development on private lands. Communities in and around the Arizona-California border have experienced tremendous growth over the last decade. Desert tortoise loss will occur in these developing areas. If significant population growth occurs in or adjacent to desert tortoise habitat increased recreation, illegal activities (e.g. trash dumping, off-highway vehicle use, collection of tortoises), and elevated predation of tortoises by dogs and ravens are likely to occur. The exact locations and size of new developments or of additions to existing developments cannot be stated with certainty, though the YFO anticipates considerable growth adjacent to existing communities.

Traffic will continue to increase on roads and highways causing increases in fires and habitat destruction, and the spread of invasive plant species. Traffic may also increase on secondary and un-maintained roads in desert tortoise habitat, leading to higher desert tortoise mortality rates from vehicular impacts.

Desert tortoise mortality may occur from illegal shooting. A high percentage of desert tortoise carcasses from the western Mohave Desert show evidence of having been shot (Berry 1986). The stability of desert tortoise populations is highly dependent on low adult mortality. Adults are the most visible segment of the population and the most susceptible to death or injury by gunshot. This problem has the potential to become more serious as human populations continue to increase in the planning area.

Yuma Clapper Rail

There will be additional future demands for water placed on the LCR. Water supply needs for cities and agriculture in Arizona, Nevada and California may result in future efforts to manipulate the LCR's course which may decrease available marsh habitats. The exact locations and sizes of new developments or of additions to existing developments can not be stated with certainty.

Southwestern Willow Flycatcher

The planning area is largely Federal lands, either under management by United States International Water and Boundary Commission (USIBWC), BLM, or BOR. All future Federal actions will undergo section 7 consultations as needed. However, the planning area is part of the international boundary between the United States and Mexico, and there is considerable activity from illegal border crossing throughout the area. This increased human activity may disturb

birds during migration or negatively impact migratory habitat from fires set by illegal immigrants.

Large tamarisk stands, which may provide migratory habitat, are found on private lands on and adjacent to the Gila River in the planning area. Most of these habitats are adjacent to agricultural land in the Wellton-Mohawk Irrigation District. Willow flycatcher habitat loss could occur if additional lands are cleared for farming.

As development increases on private lands along the LCR and Gila River it can be anticipated that increased recreation effects and wild fire risk are likely to occur.

CONCLUSIONS

The conclusions of this biological opinion are based on the project as described in the “Description of the Proposed Action” section of this document. Conservation measures incorporated into this project as implemented will further reduce project effects. After reviewing the current status of the desert tortoise, Yuma clapper rail, southwestern willow flycatcher, and razorback sucker, along with the environmental baseline for the planning area, the effects of the proposed actions, and the cumulative effects, it is our biological opinion that the Yuma Resource Management Plan is not likely to jeopardize the continued existence of these species, and is not likely to destroy or adversely modify designated razorback sucker critical habitat.

We note that 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.

We base these conclusions on the following reasons:

Razorback Sucker and its Critical Habitat

1. Most of the RMPs proposed actions maintain or improve the physical and vegetation components of razorback sucker habitat.
2. Actions that may have negative effects on razorback sucker critical habitat generally will include measures to minimize those effects.
3. The YFO will analyze all projects and plans completed under this RMP for effects to razorback suckers, and request consultation if necessary.

Desert Tortoise

1. The proposed action would affect a relatively small amount of desert tortoise habitat in California. The Big Maria and Palo Verde Foothills desert tortoise habitat areas are immediately adjacent to areas categorized by the BLM California Desert District as habitat category 3. These habitats are not essential to maintenance of viable populations (USBLM 1989).
2. Most of the planning area in California is uncategorized desert tortoise habitat. This area has extremely low desert tortoise densities due to low quality habitat. Much of this area is dominated by desert pavement, which is generally devoid of perennial vegetation, or steep, rugged mountains which are not generally used by desert tortoise in the Mohave Desert.
3. The RMP includes numerous conservation measures, as part of the proposed action, to protect desert tortoise during surface disturbing activities and fire suppression.
4. The RMP does not propose to dispose of any desert tortoise habitat.

Yuma Clapper Rail

1. Many of the proposed actions in the RMP, including emergent and riparian vegetation establishment projects, will maintain or improve clapper rail habitat.
2. Large clapper rail habitat patches within the planning area are located on the Cibola and Imperial NWRs, and the Mittry Lake Wildlife Area. These habitats are protected by regulation established by the NWRs and AGFD, and would not be significantly affected by BLM activities.

Southwestern Willow Flycatcher

1. To date, willow flycatchers have not been documented breeding on YFO-administered lands in the planning area (Koroniewicz et al. 2004, McLeod et al. 2005).
2. Many of the RMPs proposed actions will generally maintain or improve the habitat for willow flycatchers.
3. The YFO will analyze all projects and plans completed under this RMP for effects to listed species, including the willow flycatcher, and request future consultation if necessary.
4. The YFO proposes a number of conservation measures that act together to reduce or eliminate potential adverse effects from the RMP.

5. Vegetation treatments will avoid the willow flycatcher migration and breeding seasons.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulations 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 defined (50 CFR 17.3) 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 (50 CFR 17.3) as intentional or negligent actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior 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 and not intended as part of 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.

AMOUNT OR EXTENT OF TAKE

Razorback Sucker

We can not conclude that there is a reasonable certainty for take of individual razorback sucker from implementation of the proposed action except for fire management. Individual razorback suckers may be subjected to mild temporary disturbance associated with recreational use of shallow waters and shorelines. However, we do not anticipate that this disturbance would rise to the level of take. Specific spawning locations, outside of Senator Wash Reservoir, in the planning area are unknown. However, the peak recreational use period in the summer occurs when razorback sucker would not be using the shallow waters for spawning. Overall, given persistence of the species and the heavy boat traffic within the planning area, razorback sucker have likely become habituated to this disturbance (L. Fitzpatrick, FWS pers. comm. February 25, 2008).

Incidental take in the form of harassment was anticipated in the BLM LUP Amendment BO due to fire suppression and remains the same in this BO. (FWS file number 02-21-03-F-0210).

Desert Tortoise

Recreation and travel management in the two desert tortoise habitat areas was consulted on in 1993 (FWS file number 2-21-93-1-361). The FWS concurred that the Ehrenberg-Cibola Recreation Area Management Plan implementation was not likely to adversely affect desert tortoises.

Desert tortoise densities outside of the Palo Verde Foothills and Big Maria Mountains desert tortoise habitat areas are very low (USBLM 2007). Desert tortoise habitat located outside of the two habitat areas will be designated as a Limited OHV Management Area (Appendix D Map 2-8e, USBLM 2006). OHV use will be limited to existing, inventoried or designated routes.

There are very few roads that pass through un-categorized desert tortoise habitat. The only paved roads in these areas are the Imperial and Senator Wash roads. Most of Imperial Road is separated from desert tortoise habitat by the All-American Canal. The Senator Wash Road, leading from Imperial Dam to Squaw Lake, is four miles in length. Both of these roads provide access to the BOR facilities along the LCR; Imperial Dam and the Senator Wash Reservoir pumping station. They are located on BOR-withdrawn lands therefore they are not under YFO administration or authority.

Most unpaved roads are concentrated in an area one and one-half square miles around Senator Wash Reservoir. This area includes large tracts of desert pavement. Approximately two miles of un-paved roads pass through un-categorized desert tortoise habitats elsewhere in the planning area.

Incidental take may occur as a result of the proposed utility corridors and resultant structure construction. Future towers and powerlines may attract ravens and increase localized predation on desert tortoise hatchlings. Desert tortoises may be killed during construction and use of associated access roads. The RMP does not provide specific information on these proposed utility corridors. Site specific projects will be consulted upon in the future.

We anticipate that incidental take of desert tortoises could occur as a result of minerals exploration and development. Incidental take is expected to be in the form of harm (injury or mortality related to project activities, increased human access and uses) and/or harassment (resulting from habitat degradation or loss, or moving animals out of harm's way). We anticipate that incidental take of desert tortoises could occur as a result of implementing the RMP. During project implementation, desert tortoises found in harm's way may be captured and moved. Due to special area designation protections, few projects are proposed in either of the two desert tortoise habitat areas. Areas outside of these habitat areas have very low desert tortoise densities. We estimate that five tortoises will be taken over the life of the project. A tortoise refers to one desert tortoise or one clutch of desert tortoise eggs.

This estimate is based upon the small number of desert tortoises that occur in the planning area, the timing of surface disturbing activities during the tortoise inactive period, the additional protections provided by special area designation of a majority of the desert tortoise habitat areas (wilderness, ACEC, and the Blythe Intaglios Heritage RMZ).

In the Statewide consultation on BLM lands for fire and fuels, we anticipated that incidental take of desert tortoises could occur as a result of fire suppression. Almost all wildfires occur outside of desert tortoise habitat, within the LCR corridor. Incidental take is mostly likely to occur when vehicles and equipment are driven, operated, and parked outside of the corridor during suppression activities. The portion of incidental take already anticipated to occur in the action area is as follows:

1. Two desert tortoises every two years resulting from the following activities: a) operation of vehicles and equipment; b) development of crew camps, equipment staging areas, and

aircraft landing/fueling sites; c) construction of firelines; d) use of retardants; and e) setting of backfires.

2. Five desert tortoises every five years as a result of moving animals from harm's way during fire suppression activities.

Yuma Clapper Rail

The established “no wake” zones in Squaw Lake, Imperial Channel, and associated backwaters and narrow channels decrease the disturbance potential of recreational boating and fishing on Yuma clapper rail. Current levels of boating and other recreational uses have not prevented clapper rail numbers from stabilizing over the past five years (USFWS 2006). Outside of occasional harassment of individual birds in the vicinity of heavy boating use, effects from boating are likely insignificant to the population. We do not believe this harassment rises to the level of take. Clapper rails are likely to have become habituated to boat traffic in heavy use areas such as the Imperial Division (L. Fitzpatrick, FWS pers. comm. February 25, 2008).

Although boat wakes are known to flood waterbird nests elsewhere (Asplund 2000), clapper rails generally nest well within the interior of large cattail stands. Dense vegetation buffers the effects of boat wakes reducing their potential effect to clapper rail nests (L. Fitzpatrick, FWS pers. comm. February 25, 2008). Many clapper rail nesting areas, outside of the LCR main channel, are “no wake” zones, which also limits nest flooding.

As a result, we anticipate the only incidental take of clapper rails from RMP implementation would be that already identified in the BLM LUP Amendment BO regarding incidental take anticipated due to fire and fuels management projects (FWS file number 02-21-03-F-0210). This incidental take is incorporated into the current biological opinion as follows:

“We anticipate that incidental take of clapper rails could occur as a result of prescribed fire. We anticipate this incidental take will be difficult to detect because specific project areas have not been identified, the species is secretive, it occurs in dense vegetation unsafe to access during a fire, and dead or impaired birds would not likely be found following a fire. YFO proposes using prescribed fire within 100 acres of clapper rail habitat during the course of this plan (Appendix C). Prescribed burns will not take place during the breeding/molting season (conservation measure CR-2). Clapper rail nests would not be destroyed, and rail would be capable of flight to avoid active fire. There would be no direct loss of birds. Take of this species can be anticipated by loss of 100 acres of habitat to prescribed burns within a two-year period. Pre-project surveys are part of the proposed action (conservation measure FT-3). The amount of harassment can also be quantified based on the number of birds detected during these pre-project surveys. This will be the level of take due to harassment anticipated as a result of each site-specific project, and will be determined during site-specific consultation for these projects. The incidental take is anticipated to be in the form of harassment resulting from temporary loss of habitat from prescribed burns, resulting in loss of cover and food in the burned area for up to two years.”

We do not anticipate mechanical or chemical treatments would result in incidental take of clapper rails because the conservation measures are expected to be effective in preventing such take from occurring.

Southwestern Willow Flycatcher

Our effects analyses found that incidental take of willow flycatcher in the planning area would be difficult to detect due to the preponderance of migratory habitat that is available in the LCR corridor. Migrating willow flycatchers are also known to use many different vegetation communities outside of the LCR during migration.

Although the effects analysis found that some proposed activities could potentially disturb willow flycatchers we do not anticipate this to rise to the level of take. Migrating willow flycatchers are in the planning area for a short period of time and they are spread out over a large area during migration. The likelihood of incidental take is also lowered because of the numerous conservation measures in the proposed action.

Incidental take was identified in the BLM LUP Amendment BO due to fire and fuels management projects (FWS file number 02-21-03-F-0210). However, no breeding birds are known in the action area, therefore no take is anticipated.

EFFECT OF THE TAKE

In this biological opinion, the FWS determines that these levels of anticipated take are not likely to result in jeopardy to the federally-listed species addressed in this consultation.

REASONABLE AND PRUDENT MEASURES AND TERMS AND CONDITIONS

In order to be exempt from the prohibitions of section 9 of the Act, YFO must comply with the following terms and conditions, which implement the reasonable and prudent measures (RPM) and outline reporting/monitoring requirements. The terms and conditions (TC) are non-discretionary.

Razorback Sucker

The FWS completed a biological opinion for the BLM LUP Amendment BO regarding incidental take anticipated due to fire and fuels management projects (FWS file number 02-21-03-F-0210). That opinion issued an incidental take statement to cover this species if fire suppression adversely affected razorback sucker. The BLM LUP Amendment BO determined that the following reasonable and prudent measure and term and condition were necessary and appropriate to minimize take of razorback sucker from fire suppression activities:

RPM1. Minimize the effects of harassment of razorback sucker.

TCa. The BLM shall coordinate all fire suppression actions along and adjacent to the Lower Colorado River with FWS during the razorback sucker spawning season (January 1 to June 30).

No additional incidental take is anticipated as a result of implementing other YFO-administered activities described in the proposed action, therefore, there are no additional reasonable and prudent measures and terms and conditions are required under this consultation for razorback sucker.

Desert Tortoise

The following reasonable and prudent measures and terms and conditions are necessary and appropriate to minimize take of desert tortoise:

RPM1. BLM shall implement programs and procedures to minimize injury or mortality of tortoises except if precluded by protection of property, or human safety.

TCa. All equipment taken into desert tortoise habitat will be cleaned and free of any noxious weed seeds and/or propagules prior to use.

TCb. For drilling activities, where technically and economically feasible, use directional drilling, or horizontal, or multiple wells from the same pad to reduce surface disturbance.

TCc. Powerlines shall include anti-perching mechanisms to discourage ravens. Monitoring of such use may be necessary. Powerline alignment should be kept within existing utility corridors, where feasible.

RPM2. BLM shall take measures to minimize incidental take from recreational activities and travel.

TCa. Upon implementation of the route designation/closure plan, make available to the public a route designation map that displays all open routes and clearly explains vehicle, camping, recreational, and other public use regulations and opportunities in the desert tortoise habitat.

TCb. Use various mechanisms of public outreach to inform the public about the desert tortoise. These mechanisms may include interpretive displays, news releases, and open houses.

Although incidental take is anticipated to desert tortoise associated with Fire Management, as stated in the 2004 LUP BO, all reasonable measures to minimize take have been incorporated into the conservation measures. Therefore, no reasonable and prudent measures are given for fire suppression.

Yuma Clapper Rail

One reasonable and prudent measure and term and condition was issued in the 2004 BO, and is repeated here.

RPM1. Minimize disturbance to Yuma clapper rails during prescribed fire activities.

TCa. To allow for a better estimate of the number of birds in the affected area, BLM or their designated representative shall conduct surveys of the site to be prescribed burned during the breeding season prior to the burn. Since prescribed fires would be conducted during September to March, the surveys shall be done the preceding March to May.

No additional incidental take is anticipated as a result of implementing the proposed action, therefore, there are no new reasonable and prudent measures and terms and conditions required under this consultation.

Southwestern Willow Flycatcher

No incidental take is anticipated as a result of implementing the proposed action, therefore, there are no reasonable and prudent measures and terms and conditions required under this consultation.

REPORTING REQUIREMENTS

The BLM shall submit annual monitoring reports to the AESO by February 1 beginning in year 2010. These reports shall briefly document for the previous calendar year the effectiveness of the terms and conditions and locations of listed species observed, and, if any are found dead, suspected cause of mortality. The report shall also summarize tasks accomplished under the conservation measures and terms and conditions. The report shall make recommendations for modifying or refining conservation measures and terms and conditions to enhance listed species protection or reduce needless hardship on the YFO and its permittees.

Disposition of Dead or Injured Listed Species

Upon locating a dead, injured, or sick listed species initial notification must be made to the FWS's Law Enforcement Office, 2450 W. Broadway Rd, Suite 113, Mesa, Arizona, 85202, telephone: 480/967-7900) within three working days of its finding. Written notification must be made within five calendar days and include the date, time, and location of the animal, a photograph if possible, and any other pertinent information. The notification shall be sent to the Law Enforcement Office with a copy to this office. Care must be taken in handling sick or injured animals to ensure effective treatment and care and in handling dead specimens to preserve the biological material in the best possible state.

CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize 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.

We recommend that the YFO:

1. Conduct surveys in all desert tortoise habitats in the planning area to determine population density estimates. Desert tortoises have not been surveyed in the planning area since 1989. Coordinate with the survey protocols being evaluated and developed by the DTRPAC to determine which survey protocol will be most appropriate for this area.
2. Record and document all desert tortoise sightings (tortoises and sign) into appropriate special status species databases for future work.
3. Support and participate in annual clapper rail monitoring in the planning area. The RMP states that clapper rail surveys will be done every other year; however, the multi-agency protocol is to conduct surveys annually (Conway 2005). The clapper rail five-year review identifies the need for improved standardization of clapper rail surveys (USFWS 2006).
4. Continue to support inventories and monitoring of southwestern willow flycatcher and their habitats.

In order for the FWS to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the FWS requests notification of the implementation of any conservation recommendations.

REINITIATION NOTICE

This concludes formal consultation on the actions outlined in the request. As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency 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. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

In keeping with our trust responsibilities to American Indian Tribes, we are providing for participation of the Bureau of Indian Affairs (BIA) in this consultation and, by copy of this memorandum, are notifying the Chemehuevi Tribe, Havasupai Tribe, Hopi Tribe, Quechan

Tribe, Colorado River Indian Tribe, Fort Mojave Tribe, Kaibab Band of Paiute Indians, Hualapai Tribe, and the Navajo Nation. We also encourage you to coordinate with the BIA and invite all affected Tribes to participate in the consultation process.

We appreciate your efforts to identify and minimize effects to listed species from the proposed action. If you have any questions about this document, please contact Dave Smith (928) 226-0614 or Mary Richardson (602) 242-0210 (x242). For further information on project implementation please contact Erin Fernandez (520) 670-6150 (x238) or Jim Rorabaugh (520) 670-6150 (x230).

/s/ Debra Bills for

Steven L. Spangle

cc: Chief, Habitat Branch, Arizona Game and Fish Department, Phoenix, AZ
Director, Environmental Protection, Chemehuevi Indian Tribe, Havasu Lake, CA
Director, Environmental Protection, Colorado River Indian Tribes, Parker, AZ
Director, Wildlife Conservation, Fort Mojave Indian Tribe, Fort Mohave, AZ
Manager, Natural Resources Department, Hopi Tribe, Kykotsmovi, AZ
Manager, Wildlife & Parks, Hualapai Tribe, Peach Springs, AZ
Director, Game and Fish Department, Quechan Tribe, Yuma, AZ
Honorable Chairman, Chemehuevi Indian Tribe, Havasu Lake, CA
Honorable Chairman, Fort Mojave Indian Tribe, Fort Mohave, AZ
Honorable Chairman, Hopi Tribe, Kykotsmovi, AZ
Honorable Chairman, Hualapai Tribe, Peach Springs, AZ
Honorable Chairman, Havasupai, Supai, AZ
Honorable Chairman, Kaibab Band of Paiutes, Fredonia, AZ
Honorable Chairman, Navajo Tribe, Window Rock, AZ
Honorable Chairman, Cocopah, Somerton, AZ
Director, Bureau of Indian Affairs, Phoenix, AZ
Luke Air Force Base, AZ

W:\MARY RICHARDSON\DAVE\YUMA_FINAL_BO 1.27.09.DOCX:CGG

LITERATURE CITED

- Andrews, B.J., K.A. King, and D.L. Baker. 1997. Environmental Contaminants in Fish and Wildlife of Havasu National Wildlife Refuge, Arizona. USFWS-Arizona Ecological Services Office-Contaminants Program. Phoenix, Arizona.
- Asplund, T.R. and C. Cook. 1999. Can no-wake zones effectively protect littoral zone habitat from boating disturbance? Lakeline. March 1999. 8 pp.
- Asplund, T.R. 2000. The effects of motorized watercraft on aquatic ecosystems. PUBL-SS-948-00. Wisconsin Department of Natural Resources, Madison, Wisconsin.
- Banks, R.C. and R.E. Tomlinson. 1974. Taxonomic status of certain clapper rails of southwestern United States and northwestern Mexico. Wilson Bulletin. 86(4):325-335.
- Berry, K.H. 1986. Incidence of gunshot death in desert tortoises in California. Wildlife Society Bulletin 14(2):127-132.
- Berry, K.H. 1989. The status of the desert tortoise in California in 1989. Report to the US Fish and Wildlife Service. 94 pp.
- Bestgen, K.R. 1990. Status review of the razorback sucker, *Xyrauchen texanus*. Report to U.S. Fish and Wildlife Service, Salt Lake City, Utah. Contribution 44, Larval Fish Laboratory, Colorado State University, Fort Collins, Colorado.
- Beule, J.D. 1979. Control and management of cattails in southeastern Wisconsin wetlands. Technical Bulletin. Number 112. Department of Natural Resources, Madison, Wisconsin.
- Blinn, D.W. and G.A. Cole. 1995. Algal and invertebrate biota in the Colorado River: A comparison of pre- and post-dam conditions. In Colorado River ecology and dam management. Proceedings of a symposium. Santa fe New Mexico pp. 102-123. The National Academies Press, Washington, DC.
- Boarman, W.I. 2002a. Reducing predation by common ravens on desert tortoises in Mohave and Colorado Deserts. U.S. Geological Survey Report prepared for the Bureau of Land Management.
- Boarman, W.I. 2002b. Threats to desert tortoise populations: A critical review of the literature. Prepared for the Western Mohave Planning team, Bureau of Land Management, San Diego, California.
- Bradford, R.H. and Gurtin, S.D. 2000. Habitat use by hatchery-reared adult razorback sucker released into the lower Colorado River, California-Arizona: North American Journal of Fishery Management 20: 154-167.

- Browning, M.R. 1993. Comments on the taxonomy of *Empidonax traillii* (willow flycatcher). *Western Birds* 24:241-257.
- Busch, D.E. and S.D. Smith. 1995. Mechanisms associated with decline of woody species in riparian ecosystems of the southwestern United States. *Ecological Monographs* 65(3):347-370.
- Cardinal S.N. and E. H. Paxton. 2005. Home range, movement, and habitat use of the southwestern willow flycatcher at Roosevelt Lake, AZ – 2004. U.S. Geological Survey Report to the U.S. Bureau of Reclamation, Phoenix, Arizona.
- Conway, C.J., W.R. Eddleman, S.H. Anderson, and L.R. Hanebury. 1993. Seasonal changes in Yuma clapper rail vocalization rate and habitat use. *Journal of Wildlife Management*. 57(2):282-289.
- Conway, C.J. 2005. Standardized North American Marsh Bird Monitoring Protocols. Wildlife Research Report #205-04. USGS- Arizona Cooperative Fish and Wildlife Research Unit, University of Arizona, Tucson, Arizona.
- Desert Tortoise Council. 1994 with 1996 revisions. Guidelines for handling desert tortoises during construction projects. Desert Tortoise Council, San Bernardino, California.
- Drost, C.D., E.H. Paxton, M.K. Sogge, and M.J. Whitfield. 2001. Food habitats of the endangered southwestern willow flycatcher. USGS Colorado Plateau Field Station Report to the Bureau of Reclamation, Salt Lake City, Utah. 33 pp.
- Duck, T.A., T.C. Esque, and T.J. Hughes. 1994. Fighting wildfire in desert tortoise habitat: considerations for land managers. *In* A. Fletcher-Jones (ed), *Proceedings of the Desert Tortoise Council Symposium*. 1994:58-67.
- Durst, S.L., M.K. Sogge, S.D. Stump, S.O. Williams, B.E. Kus, and S.J. Sferra. 2007, Southwestern Willow Flycatcher Breeding Site and Territory Summary – 2006: USGS Open File Report 2007-1391. [<http://pubs.usgs.gov/of/2007/1391/>]
- Eddleman, W.R. 1989. Biology of the Yuma clapper rail in the southwestern U.S. and northwestern Mexico. Final Report. Intra-Agency Agreement No. 4-AA-30-02060. Wyoming Cooperative Research Unit, University of Wyoming, Laramie, Wyoming. 127 pp.
- English, H.C., A.E. Graber, S.D. Stump, H.E. Telle, and L.A. Ellis. 2006. Southwestern willow flycatcher 2005 survey and nest monitoring report. Nongame and Endangered Wildlife Program Technical Report 248. Arizona Game and Fish Department, Phoenix, Arizona.
- Environmental Protection Agency. 1996 Control of Air Pollution; Final Rule for New Gasoline Spark Ignition Marine Engines. *Federal Register*, 61 (194):1–62.

- Finch, D.M. and S.H. Stoleson, eds. 2000. Status, ecology, and conservation of the southwestern willow flycatcher. General Technical Report. RMRS-GTR-60. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. Ogden, Utah 131 pp.
- Freilich, J.E., K.P. Burnham, C.M. Collins, and C.A. Garry. 2000. Factors affecting population assessments of desert tortoise. *Conservation Biology* 14(5):1479-1489.
- Garcia-Hernández, J., K.A. King, A.L. Velasco, E. Shumilin, M. A. Mora, and E.P. Glenn. 2001. Selenium, selected inorganic elements, and organochloride pesticides in bottom material and biota from the Colorado River Delta. *Journal of Arid Environments* 49:65-89.
- General Accounting Office. 2002. Endangered species: research strategy and long term monitoring needed for the Mohave desert tortoise recovery program. Report GAO-03-23. December 2002. General Accounting Office Washington, D.C.
- Gilbert, C.H., and N.B. Scofield. 1898. Notes on a collection of fishes from the Colorado basin in Arizona. *Proceedings of the U.S. National Museum* 20:1131.
- Graber, A.E., D.M. Weddle, H.C. English, S.D. Stump, H.E. Telle, and L.A. Ellis. 2007. Southwestern willow flycatcher 2006 survey and nest monitoring report. Nongame and Endangered Wildlife Program. Technical Report 249. Arizona Game and Fish Department, Phoenix, Arizona
- Holden, P.B., P.D. Abate, and J.B. Ruppert. 2000. Razorback sucker studies on Lake Mead, Nevada. 1998-1999 Annual Report PR-578-3 to Southern Nevada Water Authority, Las Vegas, Nevada. 49 pp.
- Howell, S.N.G. and S. Webb. 1995. A guide to the birds of Mexico and northern Central America. Oxford University Press, New York City, New York. 851 pp.
- Hubbard, J.P. 1987. The status of the willow flycatcher in New Mexico. Endangered Species Program, New Mexico Department of Game and Fish, Santa Fe, New Mexico. 29 pp.
- Johnson, J.E., M.G. Pardew, and M.M. Lytle. 1993. Predator recognition and avoidance by larval razorback sucker and northern hog sucker. *Transactions of the American Fisheries Society*. 122:271-277.
- Johnson, J.E. and R.T. Hines. 1999. Effects of suspended sediment on vulnerability of young razorback suckers to predation. *Transactions of the American Fisheries Society*. 128:648-655.
- Jordan, D.S. 1891. Report of explorations in Colorado and Utah during the summer of 1889 with an account of the fishes found in each of the river basins examined. *Bulletin of the United States Fish Commission* 9:24.

- King, K.A., A.L. Velasco, J. Garcia-Hernandez, B.J. Zaun, J. Record, and J. Wesley. 2000. Contaminants in potential prey of the Yuma clapper rail: Arizona and California, USA, and Sonora and Baja, Mexico, 1998-1999. U.S. Fish and Wildlife Service, Arizona Ecological Services Field Office, Phoenix, Arizona 21 pp.
- Koronkiewicz, T.J., M.A. McLeod, B.T. Brown, and S.W. Carothers. 2004. Southwestern willow flycatcher surveys, demography, and ecology along the lower Colorado River and tributaries, 2003. Annual report submitted to the U.S. Bureau of Reclamation, Boulder City, NV by SWCA Environmental Consultants, Flagstaff, AZ. 125 pp.
- Kretschmann, A.E. and L.L. Leslie. 2006. Razorback sucker (*Xyrauchen texanus*) status, reproduction, and recruitment in Senator Wash Reservoir, CA. Research Branch, Arizona Game and Fish Department. Final Report Cooperative Agreement No. 00-FG-34-009 to the Bureau of Reclamation, Boulder City, Nevada.
- Ligon, F.K., W.E. Dietrich, and W.J. Trush. 1995. Downstream ecological effects of dams: A geomorphic perspective. *BioScience* 45(3):183-192.
- Lower Colorado River Multi-Species Conservation Program. (LCR MSCP) 2004. Lower Colorado River Multi-Species Conservation Program, Draft Habitat Conservation Plan. April 2004. Jones & Stokes Inc. Sacramento, California.
- Luckenbach, R.A. 1982. Ecology and management of the desert tortoise (*Gopherus agassizii*) in California. Pages 1-37 In North American Tortoises: Conservation and Ecology. R.B. Bury (ed.). U.S. Fish and Wildlife Service. Wildlife Research Report 12. Washington, DC.
- McAda, C.W., and R.S. Wydoski. 1980. The razorback sucker, *Xyrauchen texanus*, in the upper Colorado River basin, 1974-76. U.S. Fish and Wildlife Service Technical Paper 99. Washington, DC. 50 pp.
- McKernan, R.L. and G.T. Braden. 2000. The status of Yuma clapper rail and yellow-billed cuckoo along portions of Virgin River, Muddy River and Las Vegas Wash, Southern Nevada, 2000. Report from San Bernardino County Museum, Redlands, California to U.S. Fish and Wildlife Service Southern Nevada Field Office, Las Vegas and Southern Nevada Water Authority, Las Vegas, Nevada. 20 pp.
- McLeod, M.A., T.J. Koronkiewicz, B.T. Brown, and S.W. Carothers. 2005. Southwestern willow flycatcher surveys, demography, and ecology along the lower Colorado River and tributaries. Annual report submitted U.S. Bureau of Reclamation, Boulder City, NV, by SWCA Environmental Consultants, Flagstaff, Arizona.
- McLeod, M.A., T.J. Koronkiewicz, B.T. Brown, and S.W. Carothers. 2007. Southwestern willow flycatcher surveys, demography, and ecology along the lower Colorado River and

- tributaries. Annual report submitted U.S. Bureau of Reclamation, Boulder City, Nevada, by SWCA Environmental Consultants, Flagstaff, Arizona.
- Medel-Ulmer, L. 1983. Movement and reproduction of the razorback sucker (*Xyrauchen texanus*) inhabiting Senator Wash Reservoir, Imperial County, Arizona. Proceedings of Desert Fishes Council. 1.
- Minckley, W.L. 1973. Fishes of Arizona. Arizona Game and Fish Department, Phoenix, Arizona. 293 pp.
- Minckley, W.L. 1983. Status of the razorback sucker, *Xyrauchen texanus* (Abbott), in the lower Colorado River Basin. The Southwestern Naturalist 28:165-187.
- Minckley, W.L., P.C. Marsh, J.E. Brooks, J.E. Johnson, and B.L. Jensen. 1991. Management toward recovery of the razorback sucker. pp 303-357 *In* Battle against Extinction: Native fish management in the American West. University of Arizona Press, Tucson, Arizona.
- Mueller, G. 2003. The role of stocking in the reestablishment and augmentation of native fish in the Lower Colorado River mainstream (1998-2002). U.S. Geological Survey Open-File Report 03-288. Denver, Colorado.
- Nelson, N.F. and R.H. Dietz. 1966. Cattail control methods in Utah. Utah Division of Wildlife Resources. Publication. 66-2. Salt Lake City, Utah. 31 pp.
- Nicholson, L. 1978. The effects of roads on desert tortoise populations. Proceeding of the Desert Tortoise Council Symposium 1978:127-129.
- Oftedal, O.T., P.S. Barboze, M.E. Allen, and D.E. Ullrey. 1993. Nutritional research on the desert tortoise *Gopherus agassizi* in southern Nevada. Final report submitted to The Nature Conservancy, 4220 South Maryland Parkway, Building A, Suite 222, Las Vegas, Nevada.
- Osmundson, D.B., and L.R. Kaeding. 1989. Studies of Colorado squawfish and razorback sucker use of the "15-mile reach" of the Upper Colorado River as part of conservation measures for the Green Mountain and Ruedi Reservoir water sales. Final Report, U.S. Fish and Wildlife Service, Region 6. Grand Junction, Colorado. 81 pp.
- Otahal, C.D. 1998. Fall stopover behavior of willow flycatchers using a riparian corridor in central California. North American Bird Bander 23(4):115-123.
- Owen, J.C. and M.K. Sogge. 2002. Physiological condition of southwestern willow flycatchers in native and salt cedar habitats. USGS Colorado Plateau Field Station Report to the Arizona Department of Transportation. Phoenix, Arizona. 27 pp.
- Peterson, C.C. 1996. Ecological energetics of the desert tortoise (*Gopherus agassizii*): effects of rainfall and drought. Ecology 77(6):1831-1844.

- Peterson, R.T. 1990. A field guide to western birds. Third edition. Houghton Mifflin Company, Boston, Massachusetts. 432 pp.
- Phillips, A.R. 1948. Geographic variation in *Empidonax traillii*. *The Auk* 65:507-514.
- Phillips, A.R., J. Marshall, and G. Monson. 1964. The Birds of Arizona. University of Arizona Press, Tucson, Arizona. 212 pp.
- Pitlick, J. and M.M. Van Steeler. 1998. Geomorphology and endangered fish habitats of the upper Colorado River: 2. Linking sediment transport to habitat maintenance. *Water Resources Research* 34(2):303-316.
- Ponzio, K.J., S.J. Miller, and M.A. Lee. 2004. Long-term effects of prescribed fire on *Cladium jamaicense* crantz and *Typha domingensis* pers. densities. *Wetlands Ecology and Management* 12:123-133.
- Ridgely, R.S. and G. Tudor. 1994. The Birds of South America: Suboscine Passerines. University of Texas Press, Austin, Texas.
- Roberts, C.L. 1996. Trace element and organochlorine contamination in prey and habitat of the Yuma clapper rail in the Imperial Valley, California. U.S.Fish and Wildlife Service, Carlsbad Field Office, Carlsbad, California. 24 pp.
- Rodgers Jr., J.A. and S.T. Schwikert. 2002. Buffer zone distances to protect foraging and loafing waterbirds from disturbance by personal watercraft and outboard-powered boats. *Conservation Biology*. 16:216-224.
- Rosenberg, K.V., R.D. Ohmart, W.C. Hunter, and B.W. Anderson. 1991. Birds of the Lower Colorado River Valley. University of Arizona Press, Tucson, Arizona. 416 pp.
- Rusk, M.K. 1991. Selenium Risk to Yuma Clapper Rails and Other Marsh Birds of the Lower Colorado River. Research Report. Arizona Cooperative Fish and Wildlife Research Unit, University of Arizona, Tucson, Arizona.
- San Diego Natural History Museum. 1995. *Empidonax traillii extimus* in California. The willow flycatcher workshop. 17 November 1995. 66 pp.
- Schmidt, J.C., R.H. Webb, R.A. Valdez, G.R. Marzolf, and L.E. Stevens. 1998. Science and values in river restoration in the Grand Canyon. *BioScience* 48(9):735-747.
- Sogge, M.K., E.H. Paxton, and A.A Tudor. 2005. Saltcedar and southwestern willow flycatchers: lessons from long-term studies in central Arizona. In: Aguirre-Bravo, Celedonio, and others (eds). Monitoring science and technology symposium: unifying knowledge for sustainability in the Western Hemisphere. September 20-24, 2004;

- Denver, CO. Proceedings RMRS-P037 CD ROM. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. Fort Collins, Colorado.
- Sogge, M.K., R.M. Marshall, S.J. Sferra, and T.J. Tibbitts. 1997. A southwestern willow flycatcher survey protocol and breeding ecology summary. National Park Service/Colorado Plateau Research Station/Northern Arizona University Technical Report NRTR-97/xx.
- Sojda, R.S. and K.L. Solberg. 1993. Management and control of cattails. Fish and Wildlife Leaflet 13.4.13. Waterfowl Management Handbook. U. S. Fish and Wildlife Service. Washington, DC.
- Stevens, L.E., T.J. Ayers, J.B. Bennett, K. Christensen, M.J.C. Kearsley, V.J. Meretsky, A.M. Phillips III, R.A. Parnell, J. Spence, M.K. Sogge, A.E. Springer, and D.L. Wegner. 2001. Planned Flooding and Colorado River Riparian Trade-Offs Downstream from Glen Canyon Dam, Arizona. *Ecological Applications*. 11(3):701-710.
- Stiles, F. G., and A. F. Skutch. 1989. A guide to the birds of Costa Rica. Comstock, Ithaca, New York. 364 pp.
- Todd, R.L. 1971. Report on the study of the Yuma clapper rail along the Colorado River. Unpublished report for the Colorado River Wildlife Council Meeting, April 5-6, 1971 at Las Vegas, Nevada. 16 pp.
- Todd, R.L. 1986. A saltwater marsh hen in Arizona: a history of the Yuma clapper rail (*Rallus longirostris yumanensis*). Arizona Game and Fish Department, Federal Aid Project W-95-R. Completion Report. 290 pp.
- Tomlinson, R.E. and R.L. Todd. 1973. Distribution of two western clapper rail races as determined by responses to taped calls. *Condor* 75(2):177-183.
- Tomlinson, C.R. and K. Micone. 2000. Breeding status for the southwestern willow flycatcher and initial surveys for the Yuma clapper rail at various sites in southern Nevada. Program Activities Report, January 1, 1999 through December 31, 1999. Nevada Division of Wildlife, Las Vegas, Nevada. 20 pp.
- Tracy, C. R., R. Averill-Murray, W. I. Boarman, D. Delehanty, J. Heaton, E. McCoy, D. Morafka, K. Nussear, B. Hagerty, and P. Medica. 2004. Desert Tortoise Recovery Plan Assessment. University of Nevada, Reno, Nevada. <http://www.brrc.unr.edu/>
- Turner, R.M. and D.E. Brown. 1994. Tropical-subtropical desertlands: 154.1 Sonoran Desertscrub. In D.E. Brown editor. Biotic communities: Southwestern United States and Northwestern Mexico. University of Utah Press, Salt Lake City, Utah.

- Tyus, H.M., and C.A. Karp. 1989. Habitat use and streamflow needs of rare and endangered fishes, Yampa River, Colorado. U.S. Fish and Wildlife Service, Vernal, Utah. 27 pp.
- Tyus, H.M., and C.A. Karp. 1990. Spawning and movements of razorback sucker, *Xyrauchen texanus*, in the Green River basin of Colorado and Utah. *Southwestern Naturalist* 35(4):427-433.
- Unitt, P. 1987. *Empidonax traillii extimus*: An endangered subspecies. *Western Birds* 18:137-162.
- U.S. Bureau of Land Management (USBLM). 1989. Status of the desert tortoise in the Yuma District. Yuma District Office, Bureau of Land Management, Yuma, Arizona. 40 pp.
- U.S. Bureau of Land Management (USBLM). 1991. Final Environmental Impact Statement: Vegetation treatment on BLM Lands in Thirteen Western States. Wyoming State Office, Cheyenne, Wyoming.
- U.S. Bureau of Land Management (USBLM). 1992. Yuma District resource management plan. Yuma District Office, Bureau of Land Management, Yuma, Arizona
- U.S. Bureau of Land Management (USBLM). 2002. Northern and Eastern Colorado Desert resource management plan, California Desert District Office, Bureau of Land Management, Barstow, California.
- U.S. Bureau of Land Management (USBLM). 2004. Proposed Arizona statewide land use plan amendment for fire, fuels, and air quality management. BLM Arizona State Office, Phoenix, Arizona.
- U.S. Bureau of Land Management (USBLM). 2006. Yuma Field Office draft resource management plan and draft environmental impact statement. Volumes 1 and 2. DES 06-35. U.S. Department of the Interior, Bureau of Land Management, Yuma, Arizona.
- U.S. Bureau of Land Management (USBLM). 2007. Biological Assessment for Yuma Field Office Draft Resource Management Plan and Draft Environmental Impact Statement. U.S. Department of the Interior, Bureau of Land Management. Yuma, Arizona.
- U.S. BLM. 1997. Water quality. BLM Manual, Washington, D.C.
- U.S. Bureau of Reclamation. (BOR) 2002. Imperial Irrigation District Final Environmental Impact Statement. Bureau of Reclamation, Boulder City, Nevada.
- U.S. Fish and Wildlife Service. 1967. Native fish and wildlife. Endangered species. *Federal Register* 32(48):4001. March 11, 1967.
- U.S. Fish and Wildlife Service. 1983. Yuma clapper rail recovery plan. U.S. Fish and Wildlife Service, Albuquerque, New Mexico. 51 pp.

- U.S. Fish and Wildlife Service. 1989. Endangered and threatened wildlife and plants; emergency determination of endangered status for the Mohave population of the desert tortoise. Federal Register 54(149):32326.
- U.S. Fish and Wildlife Service. 1991. Endangered and threatened wildlife and plants; the razorback sucker (*Xyrauchen texanus*) determined to be an endangered species. Federal Register 56(205):54957-54967 (October 23,1991).
- U.S. Fish and Wildlife Service. 1993. Colorado River endangered fishes critical habitat draft biological support document. Salt Lake City, Utah. 225 pp.
- U. S. Fish and Wildlife Service. 1994a. Endangered and threatened wildlife and plants: Determination of critical habitat for the Colorado River fishes – Razorback sucker, Colorado River squawfish, humpback chub, and bonytail chub. Federal Register 59(54):13374-13400 (March 21, 1994).
- U.S. Fish and Wildlife Service. 1994b. Desert tortoise (Mojave population) recovery plan. Portland, Oregon. 73 pp. plus appendices.
- U.S. Fish and Wildlife Service. 1995. Final rule determining endangered status for the southwestern willow flycatcher. Federal Register 60:10694-10715.
- U.S. Fish and Wildlife Service. 1997. Final determination of critical habitat for the southwestern willow flycatcher. Federal Register 62(140):39129-39146.
- U.S. Fish and Wildlife Service. 1998. Razorback sucker recovery plan. U.S. Fish and Wildlife Service, Denver, Colorado. 81 pp.
- U.S. Fish and Wildlife Service. 2002a. Razorback sucker (*Xyrauchen texanus*) recovery goals. Amendment and supplement to the razorback sucker recovery plan. U.S. Fish and Wildlife Service, Denver, Colorado. 78 pp + appendix.
- U.S. Fish and Wildlife Service. 2002b. Southwestern willow flycatcher recovery plan, Region 2, Albuquerque, New Mexico.
- U.S. Fish and Wildlife Service. 2003. Supplement and Amendment to the 1998 Final Revised Sonoran Pronghorn Recovery Plan (*Antilocapra americana sonoriensis*). U.S. DOI Fish and Wildlife Service, Albuquerque, New Mexico. i-iv + 60pp., A1-3, B1-30, C1-8.
- U.S. Fish and Wildlife Service. 2005. Final Rule: designation of critical habitat for the southwestern willow flycatcher (*Empidonax traillii extimus*). Federal Register 70:60886-61009.
- U.S. Fish and Wildlife Service. 2006. Yuma clapper rail – five year review. Arizona Ecological Service, Phoenix, Arizona.

- U.S. Fish and Wildlife Service. 2007. Amendment to the biological opinion for the California Desert Conservation Area Plan [Desert Tortoise] (6840 CA93 (P)) (1-8-04-F-43R). Ventura Fish and Wildlife Service Office, Ventura, California.
- Van Steeler, M.M. and J. Pitlick. 1998. Geomorphology and endangered fish habitats of the Upper Colorado River. 1. Historic changes in streamflow, sediment load, and channel morphology. *Water Resources Research* 34(2):287-302.
- Yong, W. and D.M. Finch. 1997. Migration of the willow flycatcher along the Middle Rio Grande. *Wilson Bulletin* 109:253-268.

APPENDIX A. CONCURRENCE

Sonoran Pronghorn (*Antilocapra americanus sonoriensis*)

We concur with your determination that the proposed action may affect but is not likely to adversely affect the Sonoran pronghorn for the following reasons:

1) The proposed action implements or supports the following Recovery Tasks from the 2003 Supplement and Amendment to the 1998 Final Revised Sonoran Pronghorn Recovery Plan (USFWS 2003):

- Task 1.53 Investigate expansion of present range through barriers such as east of Highway 85, south of Highway 2 in Mexico, north of Interstate 8, Wellton Canal, fences, agriculture (portions of the Wellton-Mohawk Irrigation and Drainage District) to Gila River historical habitat;
- Task 1.6 Investigate potential competition in areas where livestock occur in Sonoran pronghorn habitat. If competition occurs, evaluate decreasing livestock numbers to eliminate negative effects on Sonoran pronghorn;
- Task 2.21 Determine evaluation techniques; use recent literature to evaluate techniques applicable to the Sonoran pronghorn;
- Task 2.22 Determine habitat criteria for reintroduction based on habitat use preferences learned from collared Sonoran pronghorn;
- Task 2.243 Determine habitat status and availability of preferred forage at reintroduction sites;
- Task 2.242 Determine necessity for fencing;
- Task 2.243 Determine status and availability of preferred forage; and
- Task 2.44 Determine if available water at release site is sufficient.

2) There are 3,402 acres of pronghorn habitat in the planning area administered by the YFO; however it is located within the northern-most portion of the current distribution of pronghorn and pronghorn observations in this part of their range have been rare and infrequent. It is not likely that pronghorn occur within these YFO-administered lands because they are located along Interstate 8 and is mostly isolated by agricultural and residential use. Therefore, potential direct effects to pronghorn from the proposed action are discountable.

3) Because the closest area frequented by pronghorn, the North Tactical Range (NTR) of the Barry M. Goldwater Range, is located outside, to the south, of the planning area administered by the YFO, we do not anticipate activities associated with the proposed action will adversely impact pronghorn using the NTR.

4) Some of the actions associated with the proposed action, such as those that support or implement recovery tasks for the pronghorn, are expected to be wholly beneficial. For example, the project area may contain potential pronghorn re-establishment habitat in the Palomas Plain. The first re-establishment in the vicinity of the project area would likely occur in the King Valley of the Kofa National Wildlife Refuge (pronghorn would likely be established as non-essential,

experimental population under 10(j) of the ESA). If successful these animals may at some point disperse onto BLM lands. However, should this occur, for the purposes of section 7, these pronghorn would be treated as a proposed species on YFO-administered lands, assuming they are re-established under a 10(j) rule.

APPENDIX B. CONSERVATION MEASURES

The following conservation measures are from Appendix 2-C of the RMP (USBLM 2006) and were referenced in the BA (USBLM 2007). These conservation measures originated from the BLM Arizona State Office Proposed Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality Management (USBLM 2004). These conservation measures will be implemented as part of the proposed action for all management activities that YFO authorizes. These conservation measures, as listed, were developed for all BLM Field Offices in Arizona. Not all conservation measures may be applicable to implementation in the YFO planning area. For example, the YFO planning is considered non-fire use in the RMP.

Wildland Fire Suppression

The following Conservation Measures will be implemented during fire suppression operations, unless firefighter or public safety, or the protection of property, improvements, or natural resources, render them infeasible during a particular operation. Each Conservation Measure has been given an alphanumeric designation for organizational purposes (e.g., FS-1). Necessary modifications of the Conservation Measures or impacts to federally protected species and habitat during fire suppression operations will be documented by the Resource Advisor, and coordinated with the USFWS.

- FS-1** Protect known locations of habitat occupied by federally listed species. Minimum Impact Suppression Tactics (MIST) will be followed in all areas with known federally protected species or habitat (Interagency Standards for Fire and Aviation Operations 2003).

- FS-2** Resource Advisors will be designated to coordinate natural resource concerns, including federally protected species. They will also serve as a field contact representative (FCR) responsible for coordination with the USFWS. Duties will include identifying protective measures endorsed by the Field Office Manager, and delivering these measures to the Incident Commander; surveying prospective campsites, aircraft landing and fueling sites; and performing other duties necessary to ensure adverse effects to federally protected species and their habitats are minimized. On-the-ground monitors will be designated and used when fire suppression activities occur within identified occupied or suitable habitat for federally protected species.

- FS-3** All personnel on the fire (firefighters and support personnel) will be briefed and educated by Resource Advisors or designated supervisors about listed species and the importance of minimizing impacts to individuals and their habitats. All personnel will be informed of the conservation measures designed to minimize or eliminate take of the species present. This information is best identified in the incident objectives.

- FS-4** Permanent road construction will not be permitted during fire suppression activities in habitat occupied by federally protected species. Construction of temporary roads is approved only if necessary for safety or the protection of property or resources, including federally protected species habitat. Temporary road construction should be coordinated with the USFWS, through the Resource Advisor.
- FS-5** Crew camps, equipment staging areas, and aircraft landing and fueling areas should be located outside of listed species habitats, and preferably in locations that are disturbed. If camps must be located in listed species habitat, the Resource Advisor would be consulted to ensure habitat damage and other effects to listed species are minimized and documented. The Resource Advisor should also consider the potential for indirect effects to listed species or their habitat from the siting of camps and staging areas (*e.g.*, if an area is within the water flow pattern, there may be indirect effects to aquatic habitat or species located off-site).
- FS-6** All fire management protocols to safeguard federally protected species will be coordinated with local fire suppression agencies that conduct fire suppression on BLM-administered lands to ensure that the agency knows how to minimize impacts to federally protected species in the area.
- FS-7** The effectiveness of fire suppression activities and Conservation Measures for federally protected species should be evaluated after a fire, when practical, and the results shared with the USFWS and AGFD. Revise future fire suppression plans and tactical applications as needed and as practical.

Fuels Treatments, Prescribed Burning and other Fuels Management Actions

The following Conservation Measures are mandatory when implementing wildland fire use, prescribed fires, and proposed vegetation treatments using mechanical, chemical, and/or biological treatment methods:

- FT-1** Biologists will be involved in the development of prescribed burn plans and vegetation treatment plans to minimize effects to federally protected species and their habitats within, adjacent to and downstream from proposed project sites. Biologists will consider the protection of seasonal and spatial needs for federally protected species (*e.g.*, avoiding or protecting important use areas or structures and maintaining adequate patches of key habitat components) during project planning and implementation.
- FT-2** MIST will be followed in all areas with known federally protected species or habitats.
- FT-3** Pre-project surveys and clearances (biological evaluations/assessments) for federally protected species will be required for each project site before implementation. All applicable Conservation Measures will be applied to areas with unsurveyed suitable habitat for federally protected species, until a survey has been conducted by qualified personnel to clear the area for the treatment activity.

- FT-4** Use of motorized vehicles during prescribed burns or other fuels treatment activities in suitable or occupied habitat will be restricted, to the extent feasible, to existing roads, trails, washes, and temporary fuel breaks or site-access routes. If off-road travel is deemed necessary, any cross-country travel paths would be surveyed prior to use and would be closed and rehabilitated after the prescribed burn or fuels treatment project is completed.
- FT-5** As part of the mandatory fire briefing held prior to prescribed burning, all personnel (firefighters and support personnel) will be briefed and educated by Resource Advisors or designated supervisors about listed species and the importance of minimizing impacts to individuals and their habitats. All personnel will be informed of the Conservation Measures designed to minimize or eliminate take of the species present.

Rehabilitation and Restoration

- RR-1** When rehabilitating important areas for federally listed species that have been damaged by fire or other fuels treatments, the biologist will give careful consideration to minimizing short-term and long-term impacts. Someone who is familiar with fire impacts and the needs of the affected species will contribute to rehabilitation plan development. Appropriate timing of rehabilitation and spatial needs of federally listed species will be addressed in rehabilitation plans.
- RR-2** Seed from regionally native or sterile alien (non-native) species of grasses and herbaceous vegetation will be used in areas where reseeding is necessary following ground disturbance to stabilize soils and prevent erosion by both wind and water.
- RR-3** Sediment traps or other erosion control methods will be used to reduce or eliminate influx of ash and sediment into aquatic systems.
- RR-4** Use of motorized vehicles during rehabilitation or restoration activities in suitable or occupied habitat will be restricted, to the extent feasible, to existing roads, trails, or washes, and to temporary access roads or fuel breaks created for fire suppression, prescribed burn, or fuels treatment activities to occur. If off-road travel is deemed necessary for rehabilitation or restoration purposes, any cross-country travel paths would be surveyed prior to use and would be closed and rehabilitated after use.
- RR-5** All temporary roads, vehicle tracks, skid trails, and off-road vehicle (ORV) trails resulting from fire suppression and the proposed fire management activities will be rehabilitated (water bars, etc.), and be closed or made impassible for future use.
- RR-6** Burned area emergency rehabilitation (BAER) activities and long-term restoration activities should be monitored, and the results provided to the USFWS and AGFD. Section 7 consultation for BAER activities will be conducted independently, if necessary.

- RR-7 (Recommended)** Develop public education plans that discourage or restrict fires and fire-prone recreation uses during high fire-risk periods. Develop brochures, signs, and other interpretive materials to educate recreationists about the ecological role of fires, and the potential dangers of accidental fires.

Fire Management Activities in Riparian and Aquatic Habitats

The following Conservation Measures be implemented during fire suppression and fuels treatment operations in riparian, wetland, or aquatic habitats, unless firefighter or public safety, or the protection of property, improvements, or natural resources, render them infeasible during a particular operation. Fuels treatment activities include prescribed fire and mechanical, chemical, and/or biological vegetation treatments in riparian, wetland, and aquatic habitats. Necessary modifications of the Conservation Measures or impacts to federally protected species and habitat during fire suppression operations will be documented by the Resource Advisor, and coordinated with the USFWS.

- RA-1** During wildfire suppression, apply MIST within riparian areas. Fire suppression actions in riparian areas should be prioritized to minimize damage to stands of native vegetation from wildfire or suppression operations. To the extent possible, retain large, downed woody materials and snags that are not a hazard to firefighters.
- RA-2** Fire suppression and rehabilitation in riparian corridors will be coordinated with the Resource Advisor or qualified biologist approved by BLM.
- RA-3** Site-specific implementation plans that include project areas with federally protected aquatic or riparian-obligate species will specify fire management objectives and wildland fire suppression guidance, taking into account the special concerns related to these species.
- RA-4** In riparian areas, use natural barriers or openings in riparian vegetation where possible as the easiest, safest method to manage a riparian wildfire. Where possible and practical, use wet firebreaks in sandy overflow channels rather than constructing firelines by hand or with heavy equipment.
- RA-5** Construction or development of a crossing for motorized vehicles across a perennial stream will not be permitted, unless an established road already exists or where dry, intermittent sections occur.
- RA-6** Avoid the use of fire retardants or chemical foams in riparian habitats or within 300 feet of aquatic habitats, particularly sites occupied by federally protected species. Apply operational guidelines as stated in the *Interagency Standards for Fire and Fire Aviation Operations 2003 (or updates)*, “Environmental Guidelines for Delivery of Retardant or Foam Near Waterways.”

- RA-7** Priority for placement of fire camps, fire staging areas, and aircraft landing or refueling sites will be outside riparian areas or river/stream corridors.
- RA-8** When using water from sources supporting federally protected species, care must be taken to ensure adverse impacts to these species are minimized or prevented. Unused water from fire abatement activities will not be dumped in sites occupied by federally protected aquatic species to avoid introducing non-native species, diseases, or parasites.
- RA-9** If water is drafted from a stock tank or other body of water for fire suppression, it would not be refilled with water from another tank, lakes, or other water sources that may support non-native fishes, bullfrogs, crayfish, or salamanders.
- RA-10** Use of containment systems for portable pumps to avoid fuel spills in riparian or aquatic systems will be required.
- RA-11** **(Recommended)** Develop and implement restoration plans for affected riparian or aquatic areas, including long-term monitoring, to document changes in conditions in the riparian zone and watershed that maintain flood regimes and reduce fire susceptibility. Monitor stream water quality and riparian ecosystem health to determine effects of wildfire and fire management activities. Coordinate efforts and results with the USFWS and AGFD.
- RA-12** Fire management treatments within or adjacent to riparian and aquatic habitats be designed to provide long-term benefits to aquatic and riparian resources by reducing threats associated with dewatering and surface disturbance, or by improving the condition of the watershed and enhancing watershed function.
- RA-13** For priority fire/fuels management areas (e.g., wildlife-urban interface (WUI) areas) with federally protected species or designated critical habitat downstream, BLM biologists and other resource specialists, as appropriate, in coordination with USFWS and AGFD, determine:
- A) The number of acres and the number of projects or phases of projects to occur within one watershed per year.
 - B) An appropriately-sized buffer adjacent to perennial streams in order to minimize soil and ash from entering the stream.
 - C) Where livestock grazing occurs in areas that have been burned, specialists will determine when grazing can be resumed. Such deferments from grazing will only occur when necessary to protect streams from increased ash or sediment flow into streams.¹

¹"Project" means any surface-disturbing activities proposed that may cause disturbance of desert tortoise habitat and/or death or injury of a desert tortoise, with the exception of grazing by livestock and activities associated with fire suppression.

If agreement cannot be reached or treatment would not meet fuel reduction objectives, BLM will re-initiate consultation. Our authority to make these types of changes is in the regulations at 43 CFR 4110.3-3(b).

Species Specific Conservation Measures

In addition to the general Conservation Measures listed in **Section 1.0**, the following species-specific Conservation Measures will be applied to management actions in special status species habitats to the extent possible, and will be required during fuels and vegetation treatment activities. Necessary modifications of the Conservation Measures or impacts to federally protected species and habitat during implementation of management actions will be documented by the BLM biologist, and coordinated with the FWS.

Desert tortoise, Mojave population

DT-1. Minimize or eliminate effects to desert tortoise from authorized projects¹.

- DT-1.A.** For each authorized project¹, BLM will designate a field contact representative (FCR) who will be responsible for overseeing compliance with these conservation measures and for coordination on compliance with the FWS. The FCR will be a qualified biologist approved by BLM, and will have the authority and the responsibility to halt all project activities that are in compliance with these conservation measures. These individuals will have a copy of these conservation measures while on the work site.
- DT-1.B.** To the extent possible, project features will be located in previously-disturbed areas or outside of desert tortoise habitat.
- DT-1.C.** To the extent possible, project activities will be scheduled when tortoises are inactive (October 15 through March 15). The following project activities will only be authorized between October 15 through March 15: surface disturbance associated with mineral leasing; organized, non-speed vehicular events; construction and non-emergency maintenance activities in ROWs; and non-emergency maintenance of existing roads.
- DT-1.D.** Pre-construction surveys will be conducted to locate desert tortoises that may be injured or killed as a result of proposed activities. Projects will be altered or tortoises in harm's way will be relocated to avoid lethal take of tortoises in project areas. Prior to any surface-disturbing activities associated with "projects," work sites will be surveyed for desert tortoises by a qualified biologist approved by BLM. Areas of new disturbance will be surveyed with 100-percent coverage.
- DT-1.D.1.** Between October 15 and March 15 any new disturbance will be preceded by 100-percent surveys conducted within one week of the proposed activities. During surveys, occupied desert tortoise burrows in or within 40 feet of areas to be disturbed will be excavated using hand tools under the supervision of an authorized biologist. Tortoises discovered in burrows will be relocated. Burrows will then be collapsed or blocked to prevent entry by tortoises. Desert tortoises and any desert tortoise eggs found in areas to be disturbed will be relocated in accordance with conservation measure DT-1.D.4. All handling of desert tortoises and their eggs will be in accordance with conservation measure DT-1.D.4.

- DT-1.D.2.** For project activities occurring during the desert tortoise active season (March 15 through October 15), surveys will be conducted within 24 hours of initiation of surface-disturbing activities. For surface-disturbing activities conducted from March 15 to October 15 in desert tortoise habitat, construction and operation activities will be monitored by a qualified desert tortoise biologist approved by BLM. The biologist will be present during all activities in which encounters with tortoises may occur. The biologist will watch for tortoises wandering into construction areas; check under vehicles; check at least three times per day any excavations that might trap tortoises; and conduct other activities necessary to ensure that death or injury of tortoises is minimized.
- DT-1.D.3.** Only biologists authorized and permitted by the Service and Arizona Game and Fish Department will handle desert tortoises. Additional biologists could be authorized if BLM submits the name(s) of the proposed authorized biologist(s) to the Service for review and approval at least 15 days prior to the onset of activities that could result in a take. Minimum requirements for authorized biologists include attending the Desert Tortoise Council's training course for handling desert tortoises and/or training by an authorized biologist. Authorized biologists must have all valid state and federal permits.
- DT-1.D.4.** The authorized biologist will maintain a record of all desert tortoises encountered during project activities. This information will include for each desert tortoise:
1. The locations and dates of observation
 2. General condition and health, including injuries and state of healing and whether animals voided their bladders
 3. Location moved from and location moved to
 4. Diagnostic markings (i.e. identification numbers of marked lateral scutes)
- Desert tortoises that are handled will be marked for future identification. An identification number (using the acrylic paint/epoxy technique) will be placed on the 4th costal scute (Fish and Wildlife Service 1992). No notching of scutes or replacement of fluids with a syringe is authorized.
- DT-1.E.** If a tortoise or clutch of tortoise eggs is found in a project area, to the extent practicable activities will be modified to avoid injuring or harming it. If activities cannot be modified, the tortoise/clutch will be moved from harm's way by an the authorized biologist the minimum distance possible within appropriate habitat to ensure its safety from death, injury, or collection associated with the project or other activities. The authorized biologist will have some discretion to ensure that survival of each relocated desert tortoise/clutch is likely. Desert tortoises/clutches will not be translocated to lands outside the administration of the Federal government without the written permission of the landowner. Handling procedures for desert tortoises and their eggs will adhere to protocols outlined in Desert Tortoise Council (1994 with 1996 revisions).
- DT-1.F.** Areas of new construction or disturbance will be flagged or marked on the ground prior to construction. All construction workers will strictly limit their activities and vehicles to areas that have been marked. Construction personnel will be trained to recognize markers and understand the equipment movement restrictions involved.
- DT-1.G.** A desert tortoise education program will be presented to all project personnel that may encounter tortoises; such as employees, inspectors, supervisors, contractors, and subcontractors; prior to initiation of activities that may result in disturbance of desert

tortoise habitat or death or injury of desert tortoises. The education program will include discussions of the following:

1. legal protection of the desert tortoise and sensitivity of the species to human activities;
2. a brief discussion of desert tortoise distribution and ecology;
3. the terms and conditions of applicable biological opinions;
4. project features designed to reduce adverse effects to desert tortoises and their habitat, and to promote the species' long-term survival;
5. protocols during encounters with desert tortoises and associated reporting requirements; and
6. the definition of take and penalties for violations of Federal and State laws.

DT-1.H. During the tortoise active season (March 15 through October 15), project features that might trap or entangle desert tortoises such as open trenches, pits, open pipes, etc will be covered or modified to prevent entrapment.

DT-1.I. Long-term or permanent project sites in which continued encounters with desert tortoises are expected (such as construction of schools under an R&PP lease, roads, power plants, or office buildings) will be enclosed with desert tortoise barrier fencing to prevent tortoises from wandering onto the project site where they may be subject to collection, death, or injury. Barrier fencing should consist of wire mesh with a maximum mesh size of 1-inch (horizontal) by 2-inch (vertical) fastened securely to posts. The wire mesh will extend at least 18 inches above the ground and preferably 12 inches below the surface of the ground. Where burial is not possible, the lower 12 inches will be folded outward, away from the enclosed site, and fastened to the ground so as to prevent tortoise entry. Any gates or gaps in the fence will be constructed and operated to prevent desert tortoise entry (such as installing "tortoise guards" similar to cattle guards, and/or keeping gates closed). Specific measures for tortoise-proofing gates and gaps will be addressed project by project. Once fence construction is complete, all tortoises within the fence will be relocated outside the fence in accordance with conservation measure DT-1.D.4. If more than 20 tortoises be relocated from any one area enclosed by a fence, the Bureau or NPS will contact the Service in regard to disposition of the animals. After the area within the fence has been cleared of tortoises, construction and operation activities may occur within the fence without the presence and monitoring of a biologist (see conservation measure DT-1.D.).

DT-1.J. Temporary fencing, such as snow fencing, chain link, and other suitable materials will be used in designated areas as determined by the Bureau to reduce encounters with tortoises from March 15 to October 15 on short-term projects, such as construction of power lines, burial of fiber optic cables, etc, where encounters with tortoises are likely.

DT-1.K. Blading of work areas will be minimized to the extent possible. Disturbance to shrubs will be avoided if possible. If shrubs cannot be avoided during equipment operation or vehicle use, wherever possible they will be crushed rather than excavated or bladed.

DT-1.L. Project vehicle use will be limited to designated routes (existing routes prior to designation) to the extent possible.

DT-1.M. At no time will vehicle or equipment fluids be dumped on public lands. All accidental spills must be reported to BLM and cleaned up immediately, using the best available practices according to the requirements of the law. All spills of federally or State-listed

hazardous materials that exceed reportable quantities will be promptly reported to the appropriate State agency and the BLM.

- DT-1.N.** Vehicles associated with Bureau-authorized projects traveling on unpaved roads in desert tortoise habitat will not exceed speed limits established by the Bureau as necessary to protect desert tortoises. These speed limits will generally not exceed 40 mile per hour even on the best-unpaved roads but may be much less than this on some roads.
- DT-1.O.** New paved roads and highways in desert tortoise habitat or major reconstruction or modifications of existing paved roads through desert tortoise habitat will be fenced with desert tortoise barrier fencing (see DT-1.I. and J.). Culverts, to allow safe passage of tortoises, will be constructed approximately every mile of new or reconstructed paved road (culverts can also serve the more typical purpose of conducting water under roads). The culvert diameter needed to encourage tortoise use is correlated with culvert length, but generally short culverts of large diameter are most likely to be used. The floor of the culvert will be covered with dirt and maintenance should be performed as necessary to maintain an open corridor for tortoise movement. Culvert design will be coordinated with and approved by the Service.
- DT-1.P.** Unleashed dogs will be prohibited in project areas.
- DT-1.Q.** Temporary access routes created during project construction will be modified as necessary to prevent further use. Closure of access routes could be achieved by ripping, barricading, posting the route as closed, and/or seeding and planting with native plants.
- DT-1.R.** To reduce attraction of potential desert tortoise predators, project sites in desert tortoise habitat will be maintained in a sanitary condition at all times; waste materials at those sites will be placed in covered receptacles and disposed of promptly at an appropriate waste disposal site. "Waste" refers to all discarded matter, including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment. All reasonable effort will also be taken to reduce or eliminate water sources associated with project activities that might attract ravens and other predators.
- DT-1.S.** After completion of the project, trenches, pits, and other features in which tortoises could be entrapped or entangled, will be filled in, covered, or otherwise modified so they are no longer a hazard to desert tortoises.
- DT-1.T.** After project completion, measures will be taken to facilitate restoration. Restoration techniques will be tailored to the characteristics of the site and the nature of project impacts. Techniques may include removal of equipment and debris, recontouring; and seeding, planting, transplanting of cacti and yuccas, etc. Only native plant species, preferably from a source on or near the project area, will be used in restoration.
- DT-2** Take appropriate action to suppress all wildfires in desert tortoise habitat.
- DT-2.A.** As soon as practical, all personnel involved in wildfire suppression (firefighters and support personnel) will be briefed and educated about desert tortoises and the importance of protecting habitat and minimizing take, particularly due to vehicle use. Fire crews will be briefed on the desert tortoise in accordance with Appendix II of Duck et al. (1995).
- DT-2.B.** If wildfire or suppression activities cannot avoid disturbing a tortoise, the Resource Advisor or monitor will relocate the tortoise, if safety permits. The tortoise will be

moved into the closest suitable habitat within two miles of the collection site that will ensure the animal is reasonably safe from death, injury, or collection associated with the wildfire or suppression activities. The qualified biologist will be allowed some discretion to ensure that survival of each relocated tortoise is likely. If the extent or direction of movement of a fire makes sites within two miles of the collection site unsuitable or hazardous to the tortoise or biologists attempting to access the area, the tortoise may be held until a suitable site can be found or habitat is safe to access and not in immediate danger of burning. The Resource Advisor will contact the USFWS Arizona Ecological Services Field Office (AESFO) as soon as possible concerning disposition of any animals held for future release. Desert tortoises will not be placed on lands outside the administration of the Federal government without the written permission of the landowner. Handling procedures for tortoises, including temporary holding facilities and procedures, will adhere to protocols outlined in Desert Tortoise Council (1994).

- DT-2.C.** Upon locating a dead, injured, or sick desert tortoise, initial notification must be made to the appropriate USFWS Law Enforcement Office within three working days of its finding. Written notification must be made within five calendar days and include the date, time, and location of the animal, a photograph, and any other pertinent information. The notification will be sent to the Law Enforcement Office with a copy to the AESFO.
- DT-2.D.** Care must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible state. If possible, the remains of intact desert tortoises will be placed with educational or research institutions holding appropriate State and Federal permits. If such institutions are not available, the information noted above will be obtained and the carcass left in place. Arrangements regarding proper disposition of potential museum specimens will be made with the institution prior to implementing the action. Injured animals should be transported to a qualified veterinarian by an authorized biologist. Should any treated desert tortoise survive, the USFWS should be contacted regarding final placement of the animal.
- DT-2.E.** The Resource Advisor or monitor(s) will maintain a record of all desert tortoises encountered during fire suppression activities. This information will include for each desert tortoise: 1) locations and dates of observation; 2) general condition and health, including injuries and state of healing, and whether animals voided their bladders; 3) location moved from and to; and 4) diagnostic markings (i.e., identification numbers of marked lateral scutes). No notching of scutes or replacement of fluids with a syringe is authorized.
- DT-2.F.** Prior to moving a vehicle, personnel will inspect under the vehicle for tortoises. If a tortoise is found under the vehicle, the tortoise will be allowed to move away from the vehicle on its own accord, if possible. Otherwise, an individual will move the tortoise to a safe locality in accordance with FS-2 and DT-1.E.
- DT-2.G.** Off-road vehicle activity will be restricted to the minimum necessary to suppress wildfires. Vehicles will be parked as close to roads as possible, and vehicles will use wide spots in roads or disturbed areas to turn around. Whenever possible, a biologist or crewperson trained to recognize tortoises and their shelter sites will precede any vehicle

traveling off-road to direct the driver around tortoises and tortoise burrows. Whenever possible, local fire-fighting units should provide direction and leadership during off-road travel because of their expertise and knowledge of area sensitivities.

- DT-2.H.** Fire-related vehicles will drive slow enough to ensure that tortoises on roads can be identified and avoided.
- DT-2.I.** Fire crews or rehabilitation crews will, to the extent possible, obliterate off-road vehicle tracks made during fire suppression in tortoise habitat, especially those of tracked vehicles, to reduce future use.
- DT-2.J.** To the maximum extent practical, campsites, aircraft landing/fueling sites, and equipment staging areas will be located outside of desert tortoise habitat or in previously disturbed areas. If such facilities are located in desert tortoise habitat, 100 percent of the site will be surveyed for desert tortoises by a qualified biologist approved by BLM or NPS, whenever feasible. Any tortoises found will be moved to a safe location in accordance with FS-2 and DT-1.E. All personnel located at these facilities will avoid disturbing active tortoise shelter sites.
- DT-2.K.** Elevated predation by common ravens or other predators attributable to fire suppression activities will be reduced to the maximum extent possible. Work areas, including campsites, landing/fueling sites, staging areas, etc. will be maintained in a sanitary condition at all times. Waste materials at those sites will be contained in a manner that will avoid attracting predators of desert tortoises. Waste materials will be disposed of at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.
- DT-2.L.** Backfiring operations are permitted where necessary in desert tortoise habitat. Burning out patches of identified habitat within or adjacent to burned areas is not permitted as a standard fire suppression measure unless necessary for firefighter or public safety or to protect property, improvements, or natural resources.
- DT-2.M.** Use of foam or retardant is authorized within desert tortoise habitat.
- DT-2.N.** Rehabilitation of vegetation in tortoise habitat will be considered, including seeding, planting of perennial species, etc.
- DT-2.O.** Recovery of vegetation will be monitored, including establishing and monitoring paired plots, inside and outside burned areas in tortoise habitat. Recovery plans will be coordinated with the USFWS and AGFD.
- DT-2.P.** The effectiveness of wildfire suppression activities and desert tortoise Conservation Measures will be evaluated after a wildfire. Procedures will be revised as needed.

Southwestern willow flycatcher

WF-1. Management Guidance for Fire Suppression and Related Actions

- WF-1.A.** Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats.
- WF-1.B.** Except where fires are active in occupied habitat, minimize unnecessary low-level helicopter flights during the breeding season (April 1 – September 30). Approach bucket dip sites at a 90-degree direction to rivers to minimize flight time over the river corridor and occupied riparian habitats. Locate landing sites for helicopters at least ¼ mile from occupied sites to avoid impacts to willow flycatchers and their habitat.

- WF-1.C.** Minimize use of chainsaws or bulldozers to construct firelines through occupied or suitable habitat except where necessary to reduce the overall acreage of occupied habitat or other important habitat areas that would otherwise be burned.
- WF-1.D.** Implement activities to reduce hazardous fuels or improve riparian habitats (prescribed burning or vegetation treatments) within occupied or unsurveyed suitable habitat for southwestern willow flycatchers only during the non-breeding season (October 1 to March 31).
- WF-1.E.** Avoid developing access roads that result in fragmentation or a reduction in habitat quality. Close and rehabilitate all roads that were necessary for project implementation.
- WF-1.F.** Prescribed burning will only be allowed within 0.5 mile of occupied or unsurveyed suitable habitat when weather conditions allow smoke to disperse away from the habitat when birds may be present (breeding season of April 1 – September 30).
- WF-1.G.** Vegetation treatment projects adjacent to occupied or unsurveyed suitable habitat will only be conducted when willow flycatchers are not present (October 1 – March 31).
- WF-1.H.** Continue to implement the riparian fire management plan to minimize fire damage in riparian areas, especially those with suitable or potential flycatcher habitat.

Yuma clapper rail

CR-1. Management Guidance for Fire Suppression and Related Actions

- CR-1.A.** Implement the Conservation Measures for Fire Management Activities in Riparian and Aquatic Habitats.
- CR-1.B.** Any prescribed fire or vegetation treatment project in occupied or suitable marsh habitat only occur between September 1 and March 15 to avoid the Yuma clapper rail breeding and molting seasons.
- CR-1.C.** Mechanical removal of overstory habitat (e.g. tamarisk) could occur as early as August 15, after the breeding season for Yuma clapper rails.
- CR-1.D.** Herbicide application will not occur in Yuma clapper rail habitat and drift-inhibiting agents will be used to assure that the herbicide does not enter adjacent marsh areas.
- CR-1.E.** Evaluate past surveys for Yuma clapper rails as part of the planning for prescribed fire projects. Post-project surveys should also be conducted to document the re-growth of cattail habitats and occupancy by clapper rails.
- CR-1.F.** After fire suppression is completed in Yuma clapper rail habitat, review any available survey records of the burn site and record in the fire report the number of rails recorded from the vicinity during these surveys.

**APPENDIX C.
DESERT TORTOISE MONITOR AND
BIOLOGIST RESPONSIBILITIES AND QUALIFICATIONS**

DESERT TORTOISE MONITOR -- Approved by the FWS to monitor project activities within desert tortoise habitat, ensure proper implementation of protective measures, and record and report desert tortoise and sign observations in accordance with approved protocol. The monitor will report incidents of noncompliance in accordance with a biological opinion or permit, and move desert tortoises from harm's way when desert tortoises enter project sites and place these animals in "safe areas" pre-selected by Authorized Biologists, or maintain the desert tortoises in their immediate possession until an Authorized Biologist assumes care of the animal. Monitors assist Authorized Biologists during surveys and often serve as "apprentices" to acquire experience. Monitors are not authorized to conduct presence/absence or clearance surveys unless directly supervised by an Authorized Biologist; "directly supervised" means the Authorized Biologist is in direct voice and sight contact with the Monitor.

AUTHORIZED BIOLOGIST – Approved by the FWS to conduct all activities described in the previous section for Desert Tortoise Monitors, and to locate desert tortoises and their sign (i.e., conduct presence/absence and clearance surveys) and ensure that the effects of the project on the desert tortoise and its habitat are minimized in accordance with this biological opinion incidental take permit. Authorized Biologists must keep current with the latest information on U.S. Fish and Wildlife Service protocols and guidelines. An Authorized Biologist must have thorough and current knowledge of desert tortoise behavior, natural history, and ecology, physiology, and demonstrated substantial field experience and training to safely and successfully:

- handle and temporarily hold desert tortoises
- excavate burrows to locate desert tortoise or eggs
- relocate/translocate desert tortoises
- reconstruct desert tortoise burrows
- unearth and relocate desert tortoise eggs
- locate, identify, and record all forms of desert tortoise sign

Page intentionally left blank.

APPENDIX D:

AREAS OF CRITICAL ENVIRONMENTAL CONCERN EVALUATION REPORTS

To be designated as an ACEC, an area must meet the relevance and importance criteria listed in BLM Manual 1613 (1988) and require special management to protect and prevent irreparable damage to relevant and important resource values. The YFO interdisciplinary team answered specific evaluation questions listed in the manual for relevance and importance for each ACEC proposal area. Three of the ACEC proposals were determined to require special management attention. The management prescriptions that will be used to manage these three areas can be found throughout Chapter 2 of the Approved RMP.

Table D-1
Areas of Critical Environmental Concern

Name	Previous ACEC Acreage	ACEC Acreage under Approved RMP	Values of Concern
Big Marias	4,500	4,500	Cultural resources, riparian habitat.
Dripping Springs	0	11,700	Perennial spring, desert bighorn sheep, cultural resources.
Sears Point	3,700	28,500	Cultural resources, historic and prehistoric trails, migratory birds, riparian habitat.

ACEC = Area of Critical Environmental Concern

1.1 BIG MARIAS ACEC

1.1.1 RELEVANCE

A. A SIGNIFICANT HISTORIC, CULTURAL, OR SCENIC VALUE

The Big Marias ACEC contains the single greatest concentration of geoglyphs in North America. The density of intaglio features in this ACEC is extremely rare and presents unique management challenges for cultural resource protection and opportunities for scientific research. The ground figures within the ACEC are known to be of tremendous importance to several Native American tribes. The Blythe Intaglios, one of the most well-known intaglio sites in the country, is a public use site that is located inside this ACEC. This prominent intaglio site was listed on the NRHP on August 22, 1975.

B. A FISH AND WILDLIFE RESOURCE

Desert bighorn sheep are known to inhabit the Big Maria Mountains within this ACEC. The Big Marias ACEC also contains habitat for the rosy boa snake, a special status species.

C. A NATURAL PROCESS OR SYSTEM

Not applicable.

D. NATURAL HAZARDS

Not applicable.

1.1.2 IMPORTANCE

A. HAS MORE THAN LOCALLY SIGNIFICANT QUALITIES WHICH GIVE IT SPECIAL WORTH, CONSEQUENCE, MEANING, DISTINCTIVENESS, OR CAUSE FOR CONCERN, ESPECIALLY COMPARED TO ANY SIMILAR RESOURCE

The intaglio features found in this ACEC are of international significance. Similar ground figure techniques exist in Peru, Chile, England, and Australia. These delicate designs in the desert pavement, which can only be found in this region of the U.S., provide important insights into early lifeways along the lower Colorado River landscape. Two sensitive plant species that are known to occur within the ACEC, Alverson's foxtail cactus and barrel cactus, also make this area more than locally significant.

B. HAS QUALITIES OR CIRCUMSTANCES THAT MAKE IT FRAGILE, SENSITIVE, RARE, IRREPLACEABLE, EXEMPLARY, UNIQUE, ENDANGERED, THREATENED, OR VULNERABLE TO ADVERSE CHANGE

Intaglio designs are created on sensitive desert pavement surfaces by removing the darker surface gravels to reveal the lighter gravels and soils underneath. Consequently these features are extremely fragile and vulnerable to damage. Tracks caused by vehicle tires are currently the largest threat to the desert pavement designs. Other human uses of the area and natural processes, such as weathering of the ground surface, threaten the preservation of these features.

C. HAS BEEN RECOGNIZED AS WARRANTING PROTECTION IN ORDER TO SATISFY NATIONAL PRIORITY CONCERNS OR TO CARRY OUT THE MANDATES OF FLPMA

The potential for impacts to the ACEC's cultural resource values make this area a priority concern for management attention. Protection of this area's relevant and important features will carry out the FLPMA mandate to protect the quality of the planning area's scientific, ecological, environmental, and archeological values.

D. HAS QUALITIES WHICH WARRANT HIGHLIGHTING IN ORDER TO SATISFY PUBLIC OR MANAGEMENT CONCERNS ABOUT SAFETY AND PUBLIC WELFARE

Not applicable.

E. POSES A SIGNIFICANT THREAT TO HUMAN LIFE AND SAFETY OR TO PROPERTY

Not applicable.

1.1.3 APPROVED RMP MANAGEMENT STRATEGY

The resource values within the existing 4,500-acre Big Marias ACEC, originally designated in the 1987 Yuma District RMP, continue to warrant special management attention as an ACEC.

2.1 DRIPPING SPRINGS ACEC

2.1.1 RELEVANCE

A. A SIGNIFICANT HISTORIC, CULTURAL, OR SCENIC VALUE

The Dripping Springs ACEC contains a combination of archaeological and historic features that are frequently visited by the public and that are eligible for listing on the NRHP. The indigenous features in the ACEC include a concentration of large petroglyph boulders that are an excellent example of the Patayan culture style. In addition, remains of historic habitation, such as a two-room stone cabin and several other smaller stone structures, add to the cultural resource values of the area. A mini oasis with rock outcroppings, sheer cliffs along the backdrop of the area, exposed bedrock, and significant cholla stands add to the scenic value of the ACEC. A waterfall with seasonal flows is located within a canyon adjacent to the spring. The area has had unusual displays of wildflowers after rains.

B. A FISH AND WILDLIFE RESOURCE

The Dripping Springs ACEC contains a watering hole that is an important source of water for wildlife in the area. The area is crucial bighorn sheep habitat. The bighorn sheep herd in the area is used as a source of sheep transplants. The spring is a perennial water source and the only natural spring within the planning area and this water is crucial for wildlife in times of drought. The area surrounding the spring supports a dense cover of native plants that provide refuge and forage for wildlife. Plant species in the area include willow, jojoba, mesquite, palo verde, scrub oak, wolfberry, primrose, cholla, desert lavender, saguaro, and native grasses and forbs. The area also supports an abundant pollinator population.

C. A NATURAL PROCESS OR SYSTEM

The Dripping Springs ACEC contains the only perennial spring in the planning area. This area also contains a relic stand of scrub oak, skunk bush, and other plants found in the chaparral of Arizona. Similar occurrences are documented in other southwestern Arizona mountains, such as the nearby Kofa Mountains (Brown 1978). The waterfall located in a canyon adjacent to the spring fills tinajas and potholes after rains. Surface waters in the area consist of the spring (primary), waterfall, and natural catchments, which have continued to function as a hydrologic system during extended droughts. Water is crucial to wildlife populations in times of drought.

D. NATURAL HAZARDS

This ACEC area is prone to flash flooding.

2.1.2 IMPORTANCE

A. HAS MORE THAN LOCALLY SIGNIFICANT QUALITIES WHICH GIVE IT SPECIAL WORTH, CONSEQUENCE, MEANING, DISTINCTIVENESS, OR CAUSE FOR CONCERN, ESPECIALLY COMPARED TO ANY SIMILAR RESOURCE

The indigenous cultural features within the Dripping Springs ACEC tie into other Patayan sites throughout the region. The natural spring at the center of the ACEC is the only perennial spring in the planning area. The spring inside the ACEC does not currently require human maintenance and should be protected because of the rarity of natural springs in the planning area. Any water in the desert is more than locally significant, due to the scarcity of water resources. The surface waters in the ACEC sustain wildlife through long periods of drought. The area also provides connectivity to resources important to wildlife.

B. HAS QUALITIES OR CIRCUMSTANCES THAT MAKE IT FRAGILE, SENSITIVE, RARE, IRREPLACEABLE, EXEMPLARY, UNIQUE, ENDANGERED, THREATENED, OR VULNERABLE TO ADVERSE CHANGE

The petroglyph panels, historic structure remains, and other cultural resource features in the Dripping Springs ACEC are vulnerable to vandalism, looting, and impacts from other land uses. Human visitation during hot and/or dry periods may impact wildlife use of the area. Impacts of visitation during these periods may need to be monitored. The ACEC's proximity to the intensive recreational uses in and around the Town of Quartzsite increases the likelihood of recreational damage occurring to the resources. Use of OHVs through the area increases the potential of non-native invasive species unintentionally being spread into the ACEC.

C. HAS BEEN RECOGNIZED AS WARRANTING PROTECTION IN ORDER TO SATISFY NATIONAL PRIORITY CONCERNS OR TO CARRY OUT THE MANDATES OF FLPMA

The potential for impacts to the ACEC's natural and cultural resource values make this ACEC a BLM management priority. Protection of this area's relevant and important features will carry out the FLPMA mandate to protect the quality of the planning area's scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values.

D. HAS QUALITIES WHICH WARRANT HIGHLIGHTING IN ORDER TO SATISFY PUBLIC OR MANAGEMENT CONCERNS ABOUT SAFETY AND PUBLIC WELFARE

Soil erosion through natural flooding and weathering of bedrock limit the type of access that can be sustained in the area. Erosion has caused portions of the existing road within the ACEC to become unsafe and poses a risk to public welfare.

E. POSES A SIGNIFICANT THREAT TO HUMAN LIFE AND SAFETY OR TO PROPERTY

Not applicable.

2.1.3 APPROVED RMP MANAGEMENT STRATEGY

Under the Approved RMP, 11,700 acres at Dripping Springs will be designated as an ACEC. This area warrants special management attention to manage the high amount of recreational use in the area while simultaneously protecting the area's relevant and important resource values.

3.1 SEARS POINT ACEC

3.1.1 RELEVANCE

A. A SIGNIFICANT HISTORIC, CULTURAL, OR SCENIC VALUE

The Sears Point ACEC contains the Sears Point Archaeological District, which was listed on the NRHP in 1985. Occupation of the Sears Point area spanned over thousands of years and is evidenced by extensive rock art panels concentrated along the basalt mesas overlooking the Gila River. The ACEC contains a rare example of a combination of elements from three archaeological cultures. First the Desert Archaic and then the Patayan and Hohokam cultures contributed to the petroglyphs at Sears Point. In addition, the ACEC is along an historic travel corridor with portions of the Anza Trail, Butterfield Overland Mail Route, Mormon Battalion Trail, and the Gila Trail all following the same course along the Gila River floodplain. The scenic values of this area include volcanic geology, prominent mesas, riparian vegetation, and the absence of levees.

B. A FISH AND WILDLIFE RESOURCE

This ACEC contains a mesquite bosque composed of mature mesquite trees that provides habitat for quail, dove, deer, and a variety of other wildlife species. In 1954, a segregation order on the Fred J. Weiler Greenbelt withdrew a total of 62,735 acres under Public Land Order 1015 for wildlife habitat. BLM manages 12,400 acres of the Fred J. Weiler Greenbelt, a portion of which overlaps with the Sears Point ACEC.

C. A NATURAL PROCESS OR SYSTEM

The mesquite bosque within the Sears Point ACEC is the largest and oldest in the planning area. Salt cedar has not invaded several of the mesquite stand areas. The floodplain at this location has not been modified for agriculture or flood control. The Gila River maintains the hydrological function of the natural floodplain when the river is at flood stage, such as during the 1993 flood or during the releases from Painted Rock Dam in 2005.

D. NATURAL HAZARDS

Not applicable.

3.1.2 IMPORTANCE

A. HAS MORE THAN LOCALLY SIGNIFICANT QUALITIES WHICH GIVE IT SPECIAL WORTH, CONSEQUENCE, MEANING, DISTINCTIVENESS, OR CAUSE FOR CONCERN, ESPECIALLY COMPARED TO ANY SIMILAR RESOURCE

The rock art at Sears Point is one of the most extensive examples of petroglyphs in Arizona and has become an international tourist destination. The location is also significant through its association with the congressionally designated Anza Trail, which connects Mexico to San Francisco, California. In addition, many Native American tribes have a traditional connection to Sears Point.

B. HAS QUALITIES OR CIRCUMSTANCES THAT MAKE IT FRAGILE, SENSITIVE, RARE, IRREPLACEABLE, EXEMPLARY, UNIQUE, ENDANGERED, THREATENED, OR VULNERABLE TO ADVERSE CHANGE

The archaeological district at Sears Point contains a rare density of cultural features for this corner of the Sonoran Desert. The area's indigenous artifact scatters, intaglios, trail networks, and other desert pavement features are extremely fragile and vulnerable to impacts from other land uses such as recreational OHV. The ACEC's basalt mesas contain one of the most extensive examples of petroglyphs in the region, and these panels are a unique and irreplaceable part of America's heritage that requires increased protection to prevent looting and vandalism.

C. HAS BEEN RECOGNIZED AS WARRANTING PROTECTION IN ORDER TO SATISFY NATIONAL PRIORITY CONCERNS OR TO CARRY OUT THE MANDATES OF FLPMA

FLPMA directs the BLM to manage the public lands "in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values." The relevance and importance of this ACEC illustrates this area's extensive natural and cultural resource values. The potential for impacts to the ACEC's archaeological features, geologic features, and riparian vegetation, including the mesquite bosque and Fred J. Weiler Greenbelt, make this ACEC a BLM management priority.

D. HAS QUALITIES WHICH WARRANT HIGHLIGHTING IN ORDER TO SATISFY PUBLIC OR MANAGEMENT CONCERNS ABOUT SAFETY AND PUBLIC WELFARE

Not applicable.

E. POSES A SIGNIFICANT THREAT TO HUMAN LIFE AND SAFETY OR TO PROPERTY

Not applicable.

3.1.4 APPROVED RMP MANAGEMENT STRATEGY

The existing 3,700-acre Sears Point ACEC, originally designated in the 1988 Lower Gila South RMP, and an additional 24,800 acres in the Sears Point area were evaluated for ACEC designation in this plan. It was determined that the entire 28,500-acre area requires special management attention to manage the increasing amount of recreational use in the area while simultaneously protecting the relevant and important resource values at Sears Point.

APPENDIX E:

LISTS OF FEDERALLY PROTECTED, STATE LISTED, SPECIAL STATUS, PRIORITY, AND INVASIVE SPECIES IN PLANNING AREA

Table E-1
Federally Protected Species (Listed, Proposed, Candidate) in Arizona and California Considered in the Planning Area

Common Name	Scientific Name	Status	Vegetation Community	County
Mammals (1 species)				
Sonoran pronghorn	<i>Antilocapra americana sonoriensis</i>	Endangered	Sonoran Desert Scrub	Maricopa, Yuma (AZ)
Birds (7 species)				
Bald eagle, Desert population	<i>Haliaeetus leucocephalus</i>	Threatened	Upland Sonoran Desert Scrub, Riparian	La Paz, Maricopa, Yuma (AZ)
California brown pelican	<i>Pelecanus occidentalis californicus</i>	Endangered	Riparian/Aquatic	La Paz, Maricopa, Yuma (AZ)
Northern aplomado falcon	<i>Falco femoralis septentrionalis</i>	Endangered, Proposed NEP	Semidesert Grassland	Yuma (AZ) Extirpated from AZ
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	Endangered, Proposed Critical Habitat	Riparian	La Paz, Maricopa, Yuma (AZ)
Yuma clapper rail	<i>Rallus longirostris yumanensis</i>	Endangered	Riparian	La Paz, Maricopa, Yuma (AZ)
Western yellow-billed cuckoo	<i>Coccyzus americanus</i>	Candidate	Riparian	La Paz, Maricopa, Yuma (AZ)
Reptiles (1 species)				
Desert tortoise, Mojave population	<i>Gopherus agassizii (xerobates)</i>	Threatened	Mohave Desert Scrub, Lower Sonoran Desert Scrub	Riverside, Imperial (CA)
Fish (4 species)				
Bonytail chub	<i>Gila elegans</i>	Endangered	Riparian/Aquatic within Sonoran Desert Scrub	La Paz (AZ)
Razorback sucker	<i>Xyrauchen texanus</i>	Endangered, Designated Critical Habitat	Riparian/Aquatic within Mohave Desert Scrub, Lower Sonoran Desert Scrub, Semi-desert Grassland	La Paz, Maricopa, Yuma (AZ)
Desert pupfish	<i>Cyprinodon macularius</i>	Endangered	Riparian/Aquatic within Upland Sonoran Desert Scrub	Extirpated from planning area
Gila topminnow	<i>Poeciliopsis occidentalis occidentalis</i>	Endangered	Riparian/Aquatic within Upland Sonoran Desert Scrub	Extirpated from planning area

AZ – Arizona; CA – California; NEP – Nonessential Experimental Population

Table E-2
BLM Sensitive and State Species of Concern in Arizona and
California Considered in the Planning Area

Common Name	SCIENTIFIC NAME	Status
Mammals		
Bats		
Allen's (Mexican) big-eared bat	<i>Idionycteris phyllotis</i>	BLM
Arizona myotis	<i>Myotis lucifugus occultus</i>	BLM, CASC
Big free-tailed bat	<i>Nyctinomops macrotis</i>	BLM, CASC
California leaf-nosed bat	<i>Macrotus californicus</i>	AZSC, CASC
Cave myotis	<i>Myotis velifer</i>	BLM, CASC
Fringed myotis	<i>Myotis thysanodes</i>	BLM
Greater western mastiff bat	<i>Eumops perotis californicus</i>	CASC
Mexican long-tongued bat	<i>Choeronycteris mexicana</i>	AZSC, CASC
Pallid bat	<i>Antrozous pallidus</i>	CASC
Pale Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	CASC
Pocketed free-tailed bat	<i>Nyctinomops femorosaccus</i>	BLM, CASC
Spotted bat	<i>Euderma maculatum</i>	AZSC, CASC
Western red bat	<i>Lasiurus blossevillei</i>	AZSC
Western yellow bat	<i>Lasiurus xanthinus</i>	AZSC
Western small-footed myotis	<i>Myotis ciliolabrum</i>	BLM
Rodents		
Colorado River cotton rat	<i>Sigmodon arizonae plenus</i>	CASC
Yuma hispid cotton rat	<i>Sigmodon hispidus eremicus</i>	CASC
Large Mammals		
Yuma mountain lion	<i>Puma concolor browni</i>	AZSC, CASC
Birds		
Grebes		
Clark's grebe	<i>Aechmophorus clarki</i>	AZSC
Pelicans		
American white pelican	<i>Pelecanus erythrorhynchos</i>	CASC
Cormorants		
Double-crested cormorant	<i>Phalacrocorax auritus</i>	CASC ³
Herons, Egrets, Bitterns		
American bittern	<i>Botaurus lentiginosus</i>	AZSC
Western least bittern	<i>Ixobrychus exilis hesperis</i>	AZSC, CASC
Great egret	<i>Casmerodius albus</i>	AZSC
Snowy egret	<i>Egretta thula</i>	AZSC
Ibises & Spoonbills		
White-faced ibis	<i>Plegadis chihi</i>	CASC ³
Storks		
Wood stork	<i>Mycteria americana</i>	CASC
Swans, Geese & Ducks		
Fulvous whistling duck	<i>Dendrocygna bicolor</i>	CASC

Table E-2
BLM Sensitive and State Species of Concern in Arizona and
California Considered in the Planning Area (cont.)

Common Name	SCIENTIFIC NAME	Status
Birds (cont.)		
Hawks, Kites & Eagles		
Osprey	<i>Pandion haliaetus</i>	AZSC
Northern harrier	<i>Circus cyaneus</i>	CASC
Cooper's hawk	<i>Accipiter cooperi</i>	CASC ³
Common black hawk	<i>Buteogallus anthracinus</i>	AZSC
Swainson's hawk	<i>Buteo swainsoni</i>	CAT
Harris' hawk	<i>Parabuteo unicinctus</i>	CASC
Ferruginous hawk	<i>Buteo regalis</i>	AZSC, CASC
Bald eagle	<i>Haliaeetus leucocephalus</i>	AZSC, CASC
Golden eagle	<i>Aquila chrysaetos</i>	CAFP
Falcons & Caracaras		
Merlin	<i>Falco columbarius</i>	CASC ³
Peregrine falcon	<i>Falco peregrinus anatum</i>	AZSC, CAE, CAFP
Prairie falcon	<i>Falco mexicanus</i>	CASC
Rails, Gallinules & Coots		
California black rail	<i>Laterallus jamaicensis coturniculus</i>	AZSC, CAT
Plovers		
Snowy plover	<i>Charadrius alexandrinus</i>	AZSC, CASC
Mountain plover	<i>Charadrius montanus</i>	CASC
Sandpipers & Allies		
Long-billed curlew	<i>Numenius americanus</i>	CASC ³
Gulls, Terns & Allies		
Black tern	<i>Chlidonias niger</i>	CASC
California gull	<i>Larus californicus</i>	CASC ³
Owls		
Cactus ferruginous pygmy-owl	<i>Glaucidium brasilianum</i>	AZSC
Elf owl	<i>Micrathene whitneyi</i>	CAE
Long-eared owl	<i>Asio otus</i>	CASC
Short-eared owl	<i>Asio flammeus</i>	CASC
Western burrowing owl	<i>Athene cunicularia hypugea</i>	BLM, CASC
Swifts		
Vaux's swift	<i>Chaetura vauxi</i>	CASC
Kingfishers		
Belted kingfisher	<i>Ceryle alcyon</i>	AZSC
Woodpeckers		
Gila woodpecker	<i>Melanerpes uropygialis</i>	CAE
Gilded flicker	<i>Colaptes chrysoides</i>	CAE
Tyrant Flycatchers		
Brown-crested flycatcher	<i>Myiarchus tyrannulus</i>	CASC ³
Thick-billed kingbird	<i>Tyrannus crassirostris</i>	AZSC
Vermilion flycatcher	<i>Pyrocephalus rubinus</i>	CASC
Swallows		
Bank swallow	<i>Riparia riparia</i>	CAT
Purple martin	<i>Progne subis</i>	CASC

Table E-2
BLM Sensitive and State Species of Concern in Arizona and
California Considered in the Planning Area (cont.)

Common Name	SCIENTIFIC NAME	Status
Birds (cont.)		
Mockingbirds & Thrashers		
Bendire's thrasher	<i>Toxostoma bendirei</i>	CASC
Crissal's thrasher	<i>Toxostoma crissale</i>	CASC
Gray catbird	<i>Dumetella carolinensis</i>	AZSC
Le Conte's thrasher	<i>Toxostoma lecontei</i>	CASC
Shrikes		
Loggerhead shrike	<i>Lanius ludovicianus</i>	CASC
Vireos		
Arizona's bell vireo	<i>Vireo belli arizonae</i>	CAE
Wood-Warblers		
American redstart	<i>Setophaga ruticilla</i>	AZSC
Sonoran yellow warbler	<i>Dendroica petechia sonorana</i>	CASC
Yellow-breasted chat	<i>Icteria virens</i>	CASC
Tanagers		
Summer tanager	<i>Piranga rubra</i>	CASC
Cardinals		
Northern cardinal	<i>Cardinalis cardinalis</i>	CASC ³
Sparrows		
Bell's sage sparrow	<i>Aimophila belli bellii</i>	CASC
Large-billed savannah sparrow	<i>Passerculus sandwichensis rostratus</i>	CASC
Reptiles		
Banded Gila monster	<i>Heloderma suspectum cinctum</i>	BLM, CASC
Chuckwalla	<i>Sauromalus ater</i>	BLM
Flat-tailed horned lizard	<i>Phrynosoma mcallii</i>	AZSC
Mojave fringe-toed lizard	<i>Uma scoparia</i>	AZSC
Rosy boa	<i>Charina trivirgata</i>	BLM
Sonoran Desert tortoise	<i>Gopherus agassizii</i>	AZSC
Yuma desert (Cowles) fringe-toed lizard	<i>Uma notata rufopunctata</i>	AZSC
Amphibians		
Colorado River toad	<i>Bufo alvarius</i>	CASC
Couch's spadefoot toad	<i>Scaphiopus couchii</i>	CASC
Lowland leopard frog	<i>Rana yavapaiensis</i>	AZSC, CASC
Fish		
None		
Invertebrates		
Cheese-weed moth lacewing	<i>Oliarces clara</i>	BLM
MacNeill sooty wing skipper	<i>Hesperopsis graciellae</i>	BLM

AZSC – Arizona Species of Concern; BLM – BLM Sensitive; CAE – California Endangered; CAFP – California Fully Protected; CASC – California Species of Concern; CAT – California Threatened

Table E-3
BLM Priority Animal Species Considered in the Planning Area

Common Name	SCIENTIFIC NAME	Status
Bats		
Lesser long-nosed Bat	<i>Leptonycteris curasoae</i>	Rare
California Myotis	<i>Myotis californicus</i>	Common
Silver-haired Bat	<i>Lasionycteris noctivagans</i>	Rare
Western Pipistrelle	<i>Pipistrellus hesperus</i>	Common
Big Brown Bat	<i>Eptesicus fuscus</i>	Locally common
Hoary Bat	<i>Lasiurus cinereus</i>	Rare
Spotted Bat	<i>Euderma maculatum</i>	Rare
Townsend's Big-eared Bat	<i>Plecotus townsendi</i>	Rare
Pallid Bat	<i>Antrozous pallidus</i>	Locally Common
American Free-tailed Bat	<i>Tadarida brasiliensis</i>	Common
Pocketed Free-tailed Bat	<i>Tadarida femorosaccus</i>	Uncommon
Big Game		
Mule Deer	<i>Odocoileus hemionus</i>	Common
Desert Bighorn Sheep	<i>Ovis Canadensis Mexicana</i>	Locally common
Collard Peccary	<i>Pecari tajacu</i>	Uncommon
Mountain Lion	<i>Puma concolor</i>	Rare
Game Birds		
Mourning Dove	<i>Zenaida macroura</i>	Common, year-round
White-winged Dove	<i>Zenaida asiatica</i>	Common, summer
Gambel's Quail	<i>Callipepla gambelii</i>	Common, year-round
Ring Necked Pheasant	<i>Phasianus colchicus</i>	Uncommon, year-round
Nongame Migratory Birds (Migratory Bird Treaty Act) and Raptors		
Loons		
Pacific Loon	<i>Gavia pacifica</i>	Rare, winter
Common Loon	<i>Gavia immer</i>	Uncommon, winter
Grebes		
Pied-billed Grebe	<i>Podilymbus podiceps</i>	Common, year-long
Eared Grebe	<i>Podilymbus nigricollis</i>	Uncommon, winter
Western Grebe	<i>Aechmophorus occidentalis</i>	Common, year-round
Clark's Grebe	<i>Aechmophorus clarkii</i>	Common, year-round
Pelicans		
American White Pelican	<i>Pelecanus erythrorhynchos</i>	Uncommon, year-round
Cormorants		
Double-breasted Comorant	<i>Phalacrocorax auritus</i>	Common, year-round
Hérons, Egrets, Bitterns		
American Bittern	<i>Botaurus lentiginosus</i>	Rare, winter
Least Bittern	<i>Ixobrychus exilis</i>	Uncommon, year-round
Great Blue Heron	<i>Ardea herodias</i>	Common, year-round
Great Egret	<i>Ardea alba</i>	Common, year-round
Snowy Egret	<i>Egretta thula</i>	Common, year-round
Little Blue Heron	<i>Egretta caerulea</i>	Rare, transient
Cattle Egret	<i>Bubulcus ibis</i>	Uncommon, year-round
Green Heron	<i>Butorides virescens</i>	Uncommon, year-round
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	Common, year-round
Ibises & Spoonbills		
White-faced Ibis	<i>Eudocimus albus</i>	Uncommon, year-round

Table E-3
BLM Priority Animal Species Considered in the Planning Area (cont.)

Common Name	SCIENTIFIC NAME	Status
Nongame Migratory Birds (Migratory Bird Treaty Act) and Raptors (cont.)		
Storks		
Wood Stork	<i>Mycteria americana</i>	Rare, summer
Swans, Geese & Ducks		
Fulvous Whistling-Duck	<i>Dendrocygna bicolor</i>	Rare, summer
Tundra Swan	<i>Cygnus columbianus</i>	Rare, winter
Greater White-fronted Goose	<i>Anser albifrons</i>	Rare, winter
Snow Goose	<i>Chen caerulescens</i>	Uncommon, winter
Ross's Goose	<i>Chen rossii</i>	Rare, winter
Canada Goose	<i>Branta Canadensis</i>	Common, winter
Wood Duck	<i>Aix sponsa</i>	Rare, winter
Green-winged Teal	<i>Anas crecca</i>	Common, winter
Mallard	<i>Anas platyrhynchos</i>	Common, winter
Northern Pintail	<i>Anas acuta</i>	Common, winter
Blue-winged Teal	<i>Anas discors</i>	Uncommon, transient
Cinnamon Teal	<i>Anas cyanoptera</i>	Common, year-round
Northern Shoveler	<i>Anas clypeata</i>	Common, winter
Gadwall	<i>Anas strepera</i>	Common, winter
American Wigeon	<i>Anas americana</i>	Common, winter
Canvasback	<i>Aythya valisneria</i>	Uncommon, winter
Redhead	<i>Aythya americana</i>	Uncommon, winter
Ring-necked Duck	<i>Aythya collaris</i>	Common, winter
Greater Scaup	<i>Aythya marila</i>	Rare, winter
Lesser Scaup	<i>Aythya affinis</i>	Common, winter
Common Goldeneye	<i>Bucephala clangula</i>	Common, winter
Barrow's Goldeneye	<i>Bucephala islandica</i>	Common, winter
Bufflehead	<i>Bucephala albeola</i>	Common, winter
Hooded Merganser	<i>Lophodytes cucullatus</i>	Rare, winter
Common Merganser	<i>Mergus merganser</i>	Common, winter
Red-breasted Merganser	<i>Mergus serrator</i>	Uncommon, winter
Ruddy Duck	<i>Oxyura jamaicensis</i>	Common, winter
American Vultures		
Turkey Vulture	<i>Cathartes aura</i>	Common, year-round
Hawks, Kites & Eagles		
Osprey	<i>Pandion haliaetus</i>	Common, year-round
White-tailed Kite	<i>Elanus leucurus</i>	Rare, winter
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Uncommon, year-round
Northern Harrier	<i>Circus cyaneus</i>	Uncommon, winter
Sharp-shinned Hawk	<i>Accipiter striatus</i>	Uncommon, winter
Cooper's Hawk	<i>Accipiter cooperii</i>	Uncommon, year-round
Common Black-Hawk	<i>Buteogallus anthracinus</i>	Rare, summer
Harris' Hawk	<i>Parabuteo unicinctus</i>	Uncommon, year-round
Swainson's Hawk	<i>Buteo swainsoni</i>	Uncommon, transient
Zone-tailed Hawk	<i>Buteo albonotatus</i>	Rare, summer
Red-tailed Hawk	<i>Buteo jamaicensis</i>	Rare, summer
Ferruginous Hawk	<i>Buteo regalis</i>	Uncommon, winter
Rough-legged Hawk	<i>Buteo lagopus</i>	Rare, winter
Golden Eagle	<i>Aquila chrysaetos</i>	Uncommon, year-round

Table E-3
BLM Priority Animal Species Considered in the Planning Area (cont.)

Common Name	SCIENTIFIC NAME	Status
Nongame Migratory Birds (Migratory Bird Treaty Act) and Raptors (cont.)		
Falcons & Caracaras		
American Kestrel	<i>Falco sparverius</i>	Common, year-round
Merlin	<i>Falco columbarius</i>	Uncommon, winter
Peregrine Falcon	<i>Falco peregrinus</i>	Rare, transient
Prairie Falcon	<i>Falco mexicanus</i>	Uncommon, year-round
Rails, Gallinules & Coots		
Black Rail	<i>Laterallus jamaicensis</i>	Uncommon, year-round
Clapper Rail	<i>Rallus longirostris</i>	Uncommon, year-round
Virginia Rail	<i>Rallus limicola</i>	Uncommon, year-round
Sora	<i>Porzana carolina</i>	Uncommon, winter
Common Moorhen	<i>Gallinula chloropus</i>	Uncommon, year-round
American Coot	<i>Fulica americana</i>	Common, year-round
Cranes		
Sandhill Crane	<i>Grus canadensis</i>	Uncommon, winter
Plovers		
Black-bellied Plover	<i>Pluvialis squatarola</i>	Uncommon, transient
Snowy Plover	<i>Charadrius alexandrinus</i>	Rare, transient
Semipalmated Plover	<i>Charadrius semipalmatus</i>	Uncommon, transient
Killdeer	<i>Charadrius vociferous</i>	Common, year-round
Mountain Plover	<i>Charadrius montanus</i>	Rare, winter
Avocets & Stilts		
Black-necked Stilt	<i>Himantopus mexicanus</i>	Uncommon, year-round
American Avocet	<i>Recurvirostra americana</i>	Uncommon, transient
Sandpipers & Allies		
Greater Yellowlegs	<i>Tringa melanoleuca</i>	Uncommon, winter
Lesser Yellowlegs	<i>Tringa flavipes</i>	Uncommon, transient
Solitary Sandpiper	<i>Tringa solitaria</i>	Uncommon, winter
Willet	<i>Catoptrophorus semipalmatus</i>	Uncommon, transient
Spotted Sandpiper	<i>Actitis macularia</i>	Common, winter
Whimbrel	<i>Numenius phaeopus</i>	Rare, transient
Long-billed Curlew	<i>Numenius americanus</i>	Uncommon, transient
Marbled Godwit	<i>Limosa fedoa</i>	Uncommon, transient
Red Knot	<i>Calidris canutus</i>	Rare, transient
Sanderling	<i>Calidris alba</i>	Rare, transient
Western Sandpiper	<i>Calidris mauri</i>	Common, transient
Least Sandpiper	<i>Calidris minutilla</i>	Common, winter
Baird's Sandpiper	<i>Calidris bairdii</i>	Uncommon, transient
Pectoral Sandpiper	<i>Calidris melanotos</i>	Uncommon, transient
Dunlin	<i>Calidris alpina</i>	Uncommon, winter
Short-billed Dowitcher	<i>Limnodromus griseus</i>	Rare, transient
Long-billed Dowitcher	<i>Limnodromus scolopaceus</i>	Common, winter
Common Snipe	<i>Gallinago gallinago</i>	Common, winter
Wilson's Phalarope	<i>Phalaropus tricolor</i>	Uncommon, transient
Red-necked Phalarope	<i>Phalaropus lobatus</i>	Rare, transient

Table E-3
BLM Priority Animal Species Considered in the Planning Area (cont.)

Common Name	SCIENTIFIC NAME	Status
Nongame Migratory Birds (Migratory Bird Treaty Act) and Raptors (cont.)		
Gulls, Terns & Allies		
Franklin's Gull	<i>Larus pipixcan</i>	Rare, transient
Bonaparte's Gull	<i>Larus philadelphia</i>	Rare, winter
Ring-billed Gull	<i>Larus delawarensis</i>	Common, winter
California Gull	<i>Larus californicus</i>	Common, winter
Herring Gull	<i>Larus argentatus</i>	Rare, winter
Caspian Tern	<i>Sterna caspia</i>	Uncommon, transient
Common Tern	<i>Sterna hirundo</i>	Uncommon, transient
Forster's Tern	<i>Sterna forsteri</i>	Uncommon, winter
Least Tern	<i>Sterna antillarum</i>	Rare, transient
Black Tern	<i>Chlidonias leucopterus</i>	Uncommon, transient
Pigeons & Doves		
White-winged Dove	<i>Zenaida asiatica</i>	Common, summer
Mourning Dove	<i>Zenaida macroura</i>	Common, year-round
Inca Dove	<i>Columbina inca</i>	Uncommon, year-round
Common Ground Dove	<i>Columbina passerina</i>	Uncommon, year-round
Ruddy Ground Dove	<i>Columbina talpacoti</i>	Rare, winter
Cuckoos & Roadrunners		
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	Rare, summer
Greater Roadrunner	<i>Geococcyx californianus</i>	Rare, summer
Owls		
Barn Owl	<i>Tyto alba</i>	Uncommon, year-round
Western Screech Owl	<i>Otis kennicottii</i>	Uncommon, year-round
Great Horned Owl	<i>Bubo virginianus</i>	Uncommon, year-round
Elf Owl	<i>Micrathene whitneys</i>	Uncommon, summer
Burrowing Owl	<i>Speotyto cunicularia</i>	Uncommon, year-round
Long-eared Owl	<i>Asio otus</i>	Rare, winter
Short-eared Owl	<i>Asio flammeus</i>	Rare, winter
Nightjars		
Lesser Nighthawk	<i>Chordeiles acutipennis</i>	Common, summer
Common Poorwill	<i>Phalaenoptilus nuttallii</i>	Uncommon, summer
Swifts		
Vaux's Swift	<i>Chaetura pelagica</i>	Uncommon, transient
White-throated Swift	<i>Aeronautes saxatalis</i>	Common, year-round
Hummingbirds		
Black-chinned Hummingbird	<i>Archilochus alexandri</i>	Common, summer
Anna's Hummingbird	<i>Calypte anna</i>	Common, year-round
Costa's Hummingbird	<i>Calypte costae</i>	Common, year-round
Calliope Hummingbird	<i>Stellula calliope</i>	Rare, transient
Rufous Hummingbird	<i>Selasphorus rufus</i>	Uncommon, transient
Allen's Hummingbird	<i>Selasphorus sasin</i>	Rare, transient
Kingfishers		
Belted Kingfisher	<i>Ceryle alcyon</i>	Common, winter

Table E-3
BLM Priority Animal Species Considered in the Planning Area (cont.)

Common Name	SCIENTIFIC NAME	Status
Nongame Migratory Birds (Migratory Bird Treaty Act) and Raptors (cont.)		
Woodpeckers		
Lewis's Woodpecker	<i>Melanerpes lewis</i>	Rare, winter
Gila Woodpecker	<i>Melanerpes uropygialis</i>	Common, year-round
Red-naped Sapsucker	<i>Sphyrapicus nuchalis</i>	Uncommon, winter
Ladder-backed Woodpecker	<i>Picoides scalaris</i>	Common, year-round
Gilded Flicker	<i>Colaptes chrysoides</i>	Common, year-round
Northern Flicker	<i>Colaptes auratus</i>	Common, winter
Tyrant Flycatchers		
Olive-sided Flycatcher	<i>Contopus borealis</i>	Uncommon, transient
Western Wood-Pewee	<i>Contopus sordidulus</i>	Uncommon, transient
Willow Flycatcher	<i>Empidonax traillii</i>	Uncommon, summer
Hammond's Flycatcher	<i>Empidonax hammondii</i>	Uncommon, transient
Dusky Flycatcher	<i>Empidonax oberholseri</i>	Rare, transient
Gray Flycatcher	<i>Empidonax wrightii</i>	Uncommon, transient
Pacific-slope flycatcher	<i>Empidonax difficilis</i>	Uncommon, transient
Cordilleran flycatcher	<i>Empidonax occidentalis</i>	Uncommon, transient
Black Phoebe	<i>Sayornis nigricans</i>	Common, year-round
Say's Phoebe	<i>Sayornis saya</i>	Common, year-round
Vermilion flycatcher	<i>Pyrocephalus rubinus</i>	Uncommon, year-round
Ash-throated Flycatcher	<i>Myiarchus cinerascens</i>	Common, summer
Brown-crested Flycatcher	<i>Myiarchus tyrannulus</i>	Rare, summer
Cassin's Kingbird	<i>Tyrannus vociferans</i>	Rare, transient
Western Kingbird	<i>Tyrannus verticalis</i>	Common, summer
Larks		
Horned Lark	<i>Eremophila alpestris</i>	Common, year-round
Swallows		
Purple Martin	<i>Progne subis</i>	Rare, transient
Tree Swallow	<i>Tachycineta bicolor</i>	Common, winter
Violet-green Swallow	<i>Tachycineta thalassina</i>	Uncommon, transient
North, Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	Common, summer
Bank Swallow	<i>Riparia riparia</i>	Uncommon, transient
Cliff Swallow	<i>Hirundo pyrrhonota</i>	Common, summer
Barn Swallow	<i>Hirundo rustica</i>	Common, transient
Jays & Crows		
Western Scrub Jay	<i>Aphelocoma californica</i>	Rare, winter
American Crow	<i>Corvus brachyrhynchos</i>	Uncommon, winter
Common Raven	<i>Corvus corax</i>	Common, year-round
Verdins & Bushtits		
Verdin	<i>Auriparus flaviceps</i>	Common, year-round
Bushtit	<i>Psaltiriparus minimus</i>	Rare, winter
Nuthatches & Creepers		
Red-breasted Nuthatch	<i>Sitta canadensis</i>	Rare, transient
Brown Creeper	<i>Certhia Americana</i>	Rare, winter

Table E-3
BLM Priority Animal Species Considered in the Planning Area (cont.)

Common Name	SCIENTIFIC NAME	Status
Nongame Migratory Birds (Migratory Bird Treaty Act) and Raptors (cont.)		
Wrens		
Cactus Wren	<i>Campylorhynchus brunneicapillus</i>	Common, year-round
Rock wren	<i>Salpinctes obsoletus</i>	Common, year-round
Canyon Wren	<i>Catherpes mexicanus</i>	Common, year-round
Bewick's Wren	<i>Thryothorus ludovicianus</i>	Uncommon, year-round
House Wren	<i>Troglodytes aedon</i>	Common, winter
Winter Wren	<i>Troglodytes troglodytes</i>	Rare, winter
Marsh Wren	<i>Cistothorus palustris</i>	Common, year-round
Kinglets, Gnatcatchers & Allies		
Golden-crowned Kinglet	<i>Regulus satrapa</i>	Rare, winter
Ruby-crowned Kinglet	<i>Regulus calendula</i>	Common, winter
Blue-gray Gnatcatcher	<i>Poliophtila caerulea</i>	Uncommon, year-round
Black-tailed Gnatcatcher	<i>Poliophtila melanura</i>	Common, year-round
Western Bluebird	<i>Sialia Mexicana</i>	Uncommon, winter
Mountain Bluebird	<i>Sialia currucoides</i>	Uncommon, winter
Townsend's Solitaire	<i>Myadestes townsendi</i>	Rare, winter
Swainson's Thrush	<i>Catharus ustulatus</i>	Uncommon, transient
Hermit Thrush	<i>Catharus guttatus</i>	Uncommon, winter
American Robin	<i>Turdus migratorius</i>	Uncommon, winter
Mockingbirds & Thrashers		
Northern Mockingbird	<i>Mimus polyglottos</i>	Common, year-round
Sage Thrasher	<i>Oreoscoptes montanus</i>	Uncommon, transient
Curve-billed Thrasher	<i>Toxostoma curvirostre</i>	Uncommon, year-round
Crissal Thrasher	<i>Toxostoma crissale</i>	Uncommon, year-round
Le Conte's Thrasher	<i>Toxostoma lecontei</i>	Uncommon, year-round
Pipits		
American Pipit	<i>Anthus rubescens</i>	Common, winter
Waxwings		
Cedar Waxwing	<i>Bombycilla cedrorum</i>	Uncommon, winter
Silky-Flycatchers		
Phainopepla	<i>Phainopepla nitens</i>	Common, year-round
Shrikes		
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Common, year-round
Vireos		
Bell's Vireo	<i>Vireo bellii</i>	Uncommon, summer
Gray vireo	<i>Vireo vicinior</i>	Rare, transient
Cassin's vireo	<i>Vireo cassinii</i>	Uncommon, winter
Plumbeous Vireo	<i>Vireo plumbeus</i>	Uncommon, winter
Warbling Vireo	<i>Vireo gilvus</i>	Common, transient
Wood-Warblers		
Orange-crowned Warbler	<i>Vermivora celata</i>	Common, winter
Nashville Warbler	<i>Vermivora ruficapilla</i>	Common, transient
Virginia's Warbler	<i>Vermivora virginiae</i>	Rare, transient
Lucy's Warbler	<i>Vermivora luciae</i>	Uncommon, summer
Yellow Warbler	<i>Dendroica petechia</i>	Uncommon, summer
Yellow-rumped Warbler	<i>Dendroica coronata</i>	Common, winter
Black-throated Gray Warbler	<i>Dendroica nigrescens</i>	Common, transient
Townsend's Warbler	<i>Dendroica townsendi</i>	Common, transient

Table E-3
BLM Priority Animal Species Considered in the Planning Area (cont.)

Common Name	SCIENTIFIC NAME	Status
Nongame Migratory Birds (Migratory Bird Treaty Act) and Raptors (cont.)		
Wood-Warblers (cont.)		
Hermit Warbler	<i>Dendroica occidentalis</i>	Common, transient
Black-and-white Warbler	<i>Dendroica varia</i>	Rare, transient
American Redstart	<i>Setophaga ruticilla</i>	Rare, transient
Northern Waterthrush	<i>Seiurus noveboracensis</i>	Rare, transient
MacGillivray's Warbler	<i>Oporornis tolmei</i>	Common, transient
Common Yellowthroat	<i>Geothlypis trichas</i>	Common, year-round
Wilson's Warbler	<i>Wilsonia pusilla</i>	Common, transient
Yellow-breasted Chat	<i>Icteria virens</i>	Common, summer
Tanagers		
Summer Tanagers	<i>Piranga rubra</i>	Uncommon, summer
Western Tanager	<i>Piranga ludoviciana</i>	Common, transient
Cardinals, Grosbeaks & Allies		
Northern Cardinal	<i>Cardinalis cardinalis</i>	Rare, year-round
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	Rare, transient
Black-headed Grosbeak	<i>Pheucticus melanocephalus</i>	Common, transient
Blue Grosbeak	<i>Guiraca caerulea</i>	Common, summer
Lazuli Bunting	<i>Passerina amoena</i>	Common, transient
Indigo Bunting	<i>Passerina ciris</i>	Rare, summer
Sparrows		
Green-tailed Towhee	<i>Pipilo chlorurus</i>	Uncommon, transient
Spotted Towhee	<i>Pipilo maculatus</i>	Uncommon, winter
Canyon Towhee	<i>Pipilo fuscus</i>	Common, year-round
Abert's Towhee	<i>Pipilo aberti</i>	Common, year-round
Chipping Sparrow	<i>Spizella passerina</i>	Uncommon, winter
Brewer's Sparrow	<i>Spizella breweri</i>	Uncommon, winter
Black-chinned Sparrow	<i>Spizella troglaris</i>	Rare, winter
Vesper Sparrow	<i>Poocetes gramineus</i>	Common, winter
Lark Sparrow	<i>Chondestes grammacus</i>	Uncommon, year-round
Black-throated Sparrow	<i>Amphispiza bilineata</i>	Common, year-round
Sage Sparrow	<i>Amphispiza bellii</i>	Uncommon, winter
Lark Bunting	<i>Calamospiza melanocorys</i>	Rare, transient
Savannah Sparrow	<i>Passerculus sandwichensis</i>	Common, winter
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	Rare, winter
Fox Sparrow	<i>Passerella iliaca</i>	Rare, winter
Song Sparrow	<i>Melospiza melodia</i>	Common, year-round
Lincoln's Sparrow	<i>Melospiza lincolnii</i>	Uncommon, winter
Golden-crowned Sparrow	<i>Zonotrichia atricapilla</i>	Rare, winter
White-crowned Sparrow	<i>Zonotrichia leucophrys</i>	Common, winter
Dark-eyed Junco	<i>Junco hyemalis</i>	Uncommon, winter
Lapland Longspur	<i>Calcarius lapponicus</i>	Rare, winter
Chestnut-collared Longspur	<i>Calcarius ornatus</i>	Rare, winter

Table E-3
BLM Priority Animal Species Considered in the Planning Area (cont.)

Common Name	SCIENTIFIC NAME	Status
Nongame Migratory Birds (Migratory Bird Treaty Act) and Raptors (cont.)		
Blackbirds & Orioles		
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	Common, year-round
Western Meadowlark	<i>Sturnella neglecta</i>	Common, year-round
Yellow-headed Blackbird	<i>Xanthocephalus xanthocephalus</i>	Common, summer
Brewer's Blackbird	<i>Euphagus cyanocephalus</i>	Common, winter
Great-tailed Grackle	<i>Quiscalus mexicanus</i>	Common, year-round
Brown-headed Cowbird	<i>Molothrus ater</i>	Common, year-round
Bronzed Cowbird	<i>Molothrus aeneus</i>	Rare, summer
Hooded Oriole	<i>Molothrus cucullatus</i>	Uncommon, summer
Bullock's Oriole	<i>Icterus bullockii</i>	Uncommon, summer
Scott's Oriole	<i>Icterus parisorum</i>	Rare, summer
Finches		
House Finch	<i>Carpodacus mexicanus</i>	Common, year-round
Pine Siskin	<i>Carduelis pinus</i>	Rare, winter
Lesser Goldfinch	<i>Carduelis psaltria</i>	Uncommon, year-round
Lawrence's Goldfinch	<i>Carduelis lawrencei</i>	Rare, transient
American Goldfinch	<i>Carduelis tristis</i>	Uncommon, winter
Blackbirds & Orioles		
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	Common, year-round
Western Meadowlark	<i>Sturnella neglecta</i>	Common, year-round
Yellow-headed Blackbird	<i>Xanthocephalus xanthocephalus</i>	Common, summer
Brewer's Blackbird	<i>Euphagus cyanocephalus</i>	Common, winter
Great-tailed Grackle	<i>Quiscalus mexicanus</i>	Common, year-round

Table E-4
BLM Sensitive, State Protected, and Priority Plants Considered in the Planning Area

Common Name	Scientific Name	Status
Ajo lily	<i>Hesperocallis undulate</i>	ANPL-SR
Algodones Dune Sunflower	<i>Helianthus niveus ssp. tephrodes</i>	CA-E, CNPS 1B.2
Alverson's Foxtail Cactus	<i>Coryphantha alversonii</i>	Priority
Barrel Cactus	<i>Ferocactus wislizeni</i>	ANPL-SR
Beavertail Cactus	<i>Opuntia basilaris var. basilaris</i>	ANPL-SR
Beehive Cactus	<i>Echinomastus johnsonii</i>	ANPL-SR
Big Galleta	<i>Hilaria rigida</i>	Priority
Bigelow's Nolina	<i>Nolina bigelowii</i>	ANPL-SR, HR
Blue Paloverde	<i>Parkinsonia florida</i>	ANPL-SA
Blue Sand Lily	<i>Triteliopsis palmeri</i>	BLM, ANPL-SR,
Buckhorn Cholla	<i>Opuntia acanthocarpa var. acanthocarpa</i>	ANPL-SR
Bush Muhly	<i>Muhlenbergia porteri</i>	Priority
California Snakewood	<i>Colubrina californica</i>	CNPS
Catclaw Acacia	<i>Acacia greggii</i>	Priority
Cottonwood	<i>Populus fremontii</i>	Priority
Crucifixion Thorn	<i>Castella emoryi</i>	ANPL-SR
Desert Agave	<i>Agave deserti ssp. simplex</i>	ANPL-SR
Desert Holly	<i>Atriplex hymenelytra</i>	ANPL-SR

Table E-4
BLM Sensitive, State Protected, and Priority Plants Considered in the Planning Area (cont.)

Common Name	Scientific Name	Status
Desert Willow	<i>Chilopsis linearis</i>	ANPL-SA
Devil's Cholla	<i>Opuntia kunzei</i>	ANPL-SR
Diamond Cholla	<i>Opuntia ramosissima</i>	ANPL-SR
Dudleya	<i>Dudleya arizonica</i>	ANPL-SR
Dune Buckwheat	<i>Eriogonum deserticola</i>	Priority
Dune Spurge	<i>Euphorbia platysperma</i>	Priority
Elephant Tree, Torote	<i>Bursera microphylla</i>	ANPL-SR
Fairy Duster	<i>Calliandra eriophylla</i>	CNPS
Foothill Paloverde	<i>Parkinsonia microphylla</i>	ANPL-SA
Hall's Tetracoccus	<i>Tetracoccus hallii</i>	CNPS
Hedgehog Cactus	<i>Echinocereus engelmannii</i> var. <i>chrysocentrus</i>	ANPL-SR
Ironwood	<i>Olneya tesota</i>	ANPL-SA, HR
Kearney Sumac	<i>Rhus kearneyi</i> ssp <i>kearneyi</i>	BLM, ANPL- SR
Kofa Mountain Barberry	<i>Berberis harrisoniana</i>	BLM, CNPS 1B.2
Long leaf Sandpaper Plant	<i>Petalonyx linearis</i>	Priority
Mammillaria Cactus	<i>Mammillaria tetrancistra</i>	ANPL-SR
Mesquite	<i>Prosopis</i> spp.	ANPL-SA, HR
Night Blooming Cereus	<i>Peniocereus greggii</i>	ANPL-SR
Ocotillo	<i>Fouquieria splendens</i>	ANPL-SR
Parish Wild Onion	<i>Allium parishii</i>	BLM, AZPL-HS
Pencil Cholla	<i>Opuntia leptocaulis</i>	ANPL-SR
Queen-of-the-Night	<i>Peniocereus greggii</i> var. <i>transmontanus</i>	ANPL-SR
Saguaro Cactus	<i>Carnegiea gigantea</i>	ANPL-SR, CNPS
Saguaro Cactus 'Crested' or 'Fan-top'	<i>Carnegiea gigantea</i>	ANPL-HS
Sand Food	<i>Pholisma sonora</i>	BLM, CNPS 1B.2, ANPL-HS
Scaly Sandplant	<i>Pholisma arenarium</i>	BLM, ANPL-HS
Schott Wire Lettuce	<i>Stephanomeria schottii</i>	BLM
Scrub Oak	<i>Quercus turbinella</i>	Priority
Silver Cholla	<i>Opuntia echinocarpa</i>	ANPL-SR
Smoke Tree	<i>Psoralea argophylla</i>	ANPL-SA
Teddy-bear Cholla	<i>Opuntia bigelovii</i>	ANPL-SR
Thurber's Pilostyles	<i>Pilostyles thurberi</i>	CNPS
Wiggins Croton	<i>Croton wigginsii</i>	CA-R
Goodding's Willow	<i>Salix gooddingii</i>	Priority

ANPL Arizona Native Plant Law (ANPL) Categories of Protection

ANPL-HS Highly Safeguarded Protected Native Plants includes those species of native plants and parts of plants, including the seeds and fruit, whose prospects for survival in Arizona are in jeopardy or which are in danger of extinction.

ANPL-SR Salvage Restricted Protected Native Plants includes those species of native plants that are not included in the highly safeguarded category but are subject to damage by theft or vandalism. In addition to the plants listed under Agavaceae, Cactaceae, Liliaceae, and Orchidaceae, all other species in these families are salvage restricted protected native plants

ANPL-SA Salvage Assessed Protected Native Plants includes those species of native plants that are not included in either the highly safeguarded or salvage restricted category but have a sufficient value of salvaged to support the cost of salvage

ANPL-HR Harvest Restricted Protected Native Plants includes those species of native plants that are not included in the highly safeguarded category but are subject to excessive harvesting or overcutting because of their intrinsic value.

BLM Arizona BLM Sensitive Species

CA-R Categorized by the State of California as "rare"; California Department of Fish and Game, 2000

CA-E Categorized by the State of California as "endangered"; California Department of Fish and Game, 2000

CNPS Listed by California Native Plants Society

1B Rare, threatened, or endangered in California and elsewhere

0.2 Fairly endangered in California

Priority Priority species in planning area

Yuma Field Office

Record of Decision and

Approved Resource Management Plan

January 2010

Table E-5
Invasive or Non-native Plant Species

Common Name	Scientific Name	Habit	Designation	Presence in YFO
Bermuda Grass	<i>Cynodon dactylon</i>	Terrestrial		Common
Buffel Grass	<i>Pennisetum ciliare</i>	Terrestrial	AZ-regulated	Common on roadsides
Camelthorn	<i>Alhagi pseudalhagi</i>	Terrestrial		Small infestations
Dodder	<i>Cuscuta spp.</i>	Terrestrial	AZ-regulated	Uncommon
Eurasian Waternilfoil	<i>Myriophyllum spicatum</i>	Aquatic		Common
Fountain grass	<i>Pennisetum setaceum</i>	Terrestrial		Small infestations
Garden Rocket	<i>Eruca vesicaria</i>	Terrestrial		Small infestations
Giant Reed	<i>Arundo donax</i>	Terrestrial/ Riparian		Uncommon
Giant Salvinia	<i>Salvinia molesta</i>	Aquatic	Federally listed noxious, AZ- prohibited	Widespread
Hydrilla	<i>Hydrilla verticillata</i>	Aquatic	AZ-prohibited	Not known to occur
Iceplant	<i>Mesembryanthemum spp.</i>	Terrestrial		Small infestations
Lead Plant	<i>Leucaena spp.</i>	Terrestrial		Small infestations
Lehmann's Lovegrass	<i>Eragrostis lehmanniana</i>	Terrestrial		Not known to occur
Malta Starthistle	<i>Centaurea melitensis</i>	Terrestrial		Not known to occur
Mediterranean Grass	<i>Scismus barbatus,</i> <i>Scismus arabicus</i>	Terrestrial		Widespread
Pampas Grass	<i>Cortaderia selloana</i>	Terrestrial		Not known to occur
Parrot feather	<i>Myriophyllum aquaticum</i>	Aquatic		Small infestations
Puncturevine	<i>Tribulus terrestris</i>	Terrestrial	AZ-regulated	Uncommon
Ravenna Grass	<i>Erianthus ravennae</i>	Terrestrial		Small infestations
Red Brome	<i>Bromus rubens</i>	Terrestrial		Common
Russian Thistle	<i>Salsola spp.</i>	Terrestrial		Uncommon
Sahara Mustard	<i>Brassica tornefortii</i>	Terrestrial		Widespread
Salt Cedar	<i>Tamarix spp.</i>	Terrestrial/ Riparian		Widespread
Water Hyacinth	<i>Eichhornia crassipes</i>	Aquatic	AZ-restricted	Not known to occur

AZ - Arizona

Literature Cited

Arizona Department of Agriculture

- 2006 *Protected Arizona Native Plants*. Arizona Native Plant Law online database.
<http://www.azda.gov/ESD/nativeplants.htm>.

Birds Protected by the Migratory Bird Treaty Act

- <http://www.fws.gov/migratorybirds/intrnltr/mbta/taxolst.html>. Accessed in September 2006.

California Department of Fish and Game

- 2006a *California Natural Diversity Database State and Federally Listed Endangered, Threatened, and Rare Plants of California*. Habitat Conservation Division Wildlife & Habitat Data Analysis Branch, May 2006.

California Department of Fish and Game

- 2006b *Habitat Conservation Planning Branch online database*. <http://www.dfg.ca.gov>.

California Native Plant Society

- 2006 *Inventory of Native Plants* online database. <http://cnps.web.aplus.net>.

U.S. Department of the Interior, Bureau of Land Management

- 2005h *Updated BLM Sensitive Species List for Arizona*. Instruction Memorandum No. AZ-2006-002, Change 1. Arizona State Office Memorandum dated November 4, 2005.

- 2005i *Mammals of the Yuma Field Office*. Pamphlet. Accessed in September 2006.

- 2005j *Birds of the Yuma Field Office*. Pamphlet. Accessed in September 2006.

APPENDIX F: SPECIAL EPHEMERAL RULE

Published in the *Federal Register*, Vol. 33, No. 238, Saturday, December 7, 1968 (Livestock Grazing Ephemeral Range: Arizona, California and Nevada).

In accordance with 43 CFR 4115.2-1 regarding special rules for grazing districts and pursuant to the receipt of recommendations of the State Directors for Arizona, California and Nevada and a factual showing of its necessity, a special rule for range designated as ephemeral is hereby approved.

Ephemeral (annual) ranges lie within the general southwest desert region extending primarily into southern Arizona, southern California and southern Nevada and include portions of the Mohave, Sonoran and Chihuahuan deserts. The region is characterized by desert type vegetation some of which may be classed as ephemeral only. Ephemeral range does not consistently produce forage, but periodically provides annual vegetation suitable for livestock grazing. In years of abundant moisture and other favorable climatic conditions a large amount of forage may be produced. Favorable years are highly unpredictable and the season is usually short lived. Ephemeral areas fall generally below the 3,200-foot contour and below the 8-inch precipitation isoline. A minor percentage of the total plant composition is made up of desirable perennial forage plants and potential to improve range condition and produce a dependable supply of forage by applying intensive management practices is lacking.

Because of the unique characteristics of ephemeral range the following special rule shall apply as follows:

- Applicable allotments or uses shall be formally designated by the District Manager as ephemeral range.
- An annual application by qualified licensees or permittees is not required unless grazing use is desired. On a year-to-year basis whenever forage exists or climatic conditions indicate the probability of an ephemeral forage crop, livestock grazing may be authorized upon application pursuant to any management requirements for the allotment.
- Use of base property (water base) during nonforage years is not feasible or economical and no use of base properties is required except during these periods when ephemeral forage is available and livestock grazing occurs.

Description of the Route Evaluation Tree Process©

USGS Travel Management Workshop

Fort Collins, Colorado

February 22, 2006

The Route Evaluation Tree Process© (Advanced Resource Solutions, Inc.) and its associated software/database is a tool designed to assist land management agency planners and resource specialists with the systematic neutral collection and compilation of data necessary for the thorough evaluation, analysis and/or designation of both motorized and non-motorized routes. It builds upon the history of past efforts of route designation, assists with addressing various issues and concerns raised by both private and public entities (e.g. planning policy, sensitive resource protection, commercial access needs, recreational access preferences) and helps to assess compliance with numerous state and federal statutory requirements (e.g. NEPA, ESA, NHPA, Presidential Executive Orders & Proclamations, Agency Organic Acts, Mining and Grazing Acts) that need to be considered in this type of planning. Additionally, the Route Evaluation Tree Process© helps to build into the land use planning process a means by which to achieve desired outcomes that are specifically tailored to the needs and issues unique to a planning area. The Route Tree Evaluation Process© is not a replacement for NEPA process, documents, or analysis, but rather is a tool designed to assist with the systematic collection of sensitive resource and route-use information that can then be subsequently used to evaluate and designate routes in a NEPA-compliant manner.

In order to address the many facets of route evaluation and transportation planning the Route Evaluation Tree Process© is divided into a number of smaller finite tasks or steps, which allows for the fine-tuning of the collection information needed to successfully evaluate and designate routes. The process is illustrated on the attached Route Evaluation Tree Process© for Travel Management Planning (see Attachment 1).

The actual use of the Route Evaluation Tree©¹ (Evaluation Tree©) (see Attachment 2), is only one sub-step (#17) amongst the 25 identified in the Route Evaluation Process©. Specifically, the Route Evaluation Tree software systematically guides the “evaluator” through a series of questions and associated project-specific drop-down menus that assist with addressing compliance with a variety of pertinent statutory requirements that principally address the need to protect identified sensitive resources, as well as commercial/administrative access needs and public recreational access issues. The questions and menus allow both for narrowly focused route-by-route, as well as landscape scale assessment (the latter of which allows for better consideration of broader network, collective and/or cumulative effects). Specific steps in the

¹ The process has previously been referred to as the “Route Evaluation/Designation Decision Tree Process” or “Decision Tree”. A “decision tree” is a technique or tool for assisting in the decision making process by leading one through a series of yes/no questions based upon input received (flowchart). A “decision” in the context of NEPA has a more legalistic meaning specifically relating to the NEPA process. The name “Decision Tree” was used to indicate it was created in a style, however to avoid the potential for misunderstanding of the meaning of the word “decision”, it has been removed from the title of the process.

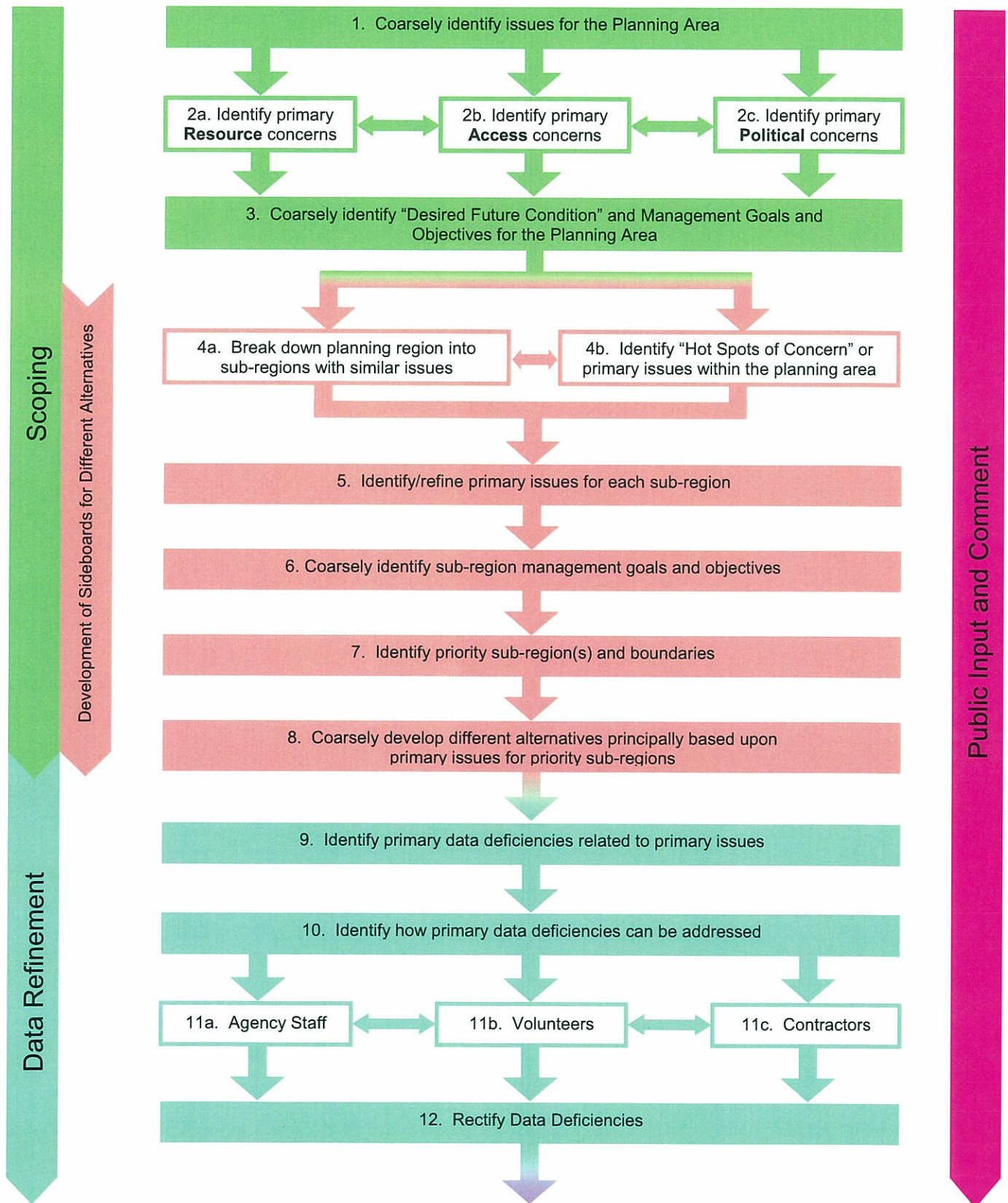
process also allow for the identification and/or delineation of planning areas/units at a number of geographic scales (e.g. Travel Management Areas, sub- regions, watersheds, etc.) thereby allowing the fine tuning of management guidelines and goals at various geographic scales tailored to specific project needs or issues. Additionally, the process provides for the development of project- specific menu choices that allow for the systematic consideration and selection of measures designed to eliminate, minimize or mitigate resource impacts. The result of this process is the creation of different route network options or alternatives that utilize different thresholds of acceptable impact to address the various identified issues. Lastly, the Route Evaluation Tree software compiles all the data collected during the evaluation into a database that can be queried and if desired, integrated with other Access databases (e.g. GIS). Whether used as a stand alone database or integrated with other databases, this information can be utilized to assist in making decisions within the environmental impact analysis process required by the National Environmental Policy Act (NEPA) and/or can be utilized to assist with other planning activities (e.g. grazing, mining, oil & gas permits, timber plans, etc.).

The Route Evaluation Tree Process © has been or is being successfully used by a number of BLM Field Offices and USDA National Forests in the western United States. It is or has been utilized in numerous EIS- and EA- level documents, including BLM Resource Management Plans and Travel Management Plans, and USFS Motorized Travel Plans. Several of these planning efforts include National Monuments. The process has been carefully honed through this experience to meet or exceed the needs of the BLM Planning Handbook and the new USFS rule concerning OHVs and travel management and is continually being refined in response to feedback from both the public and agency staff. The process is not confined exclusively to motorized planning and has been and is being used to evaluate non-motorized access needs as well on a number of projects.

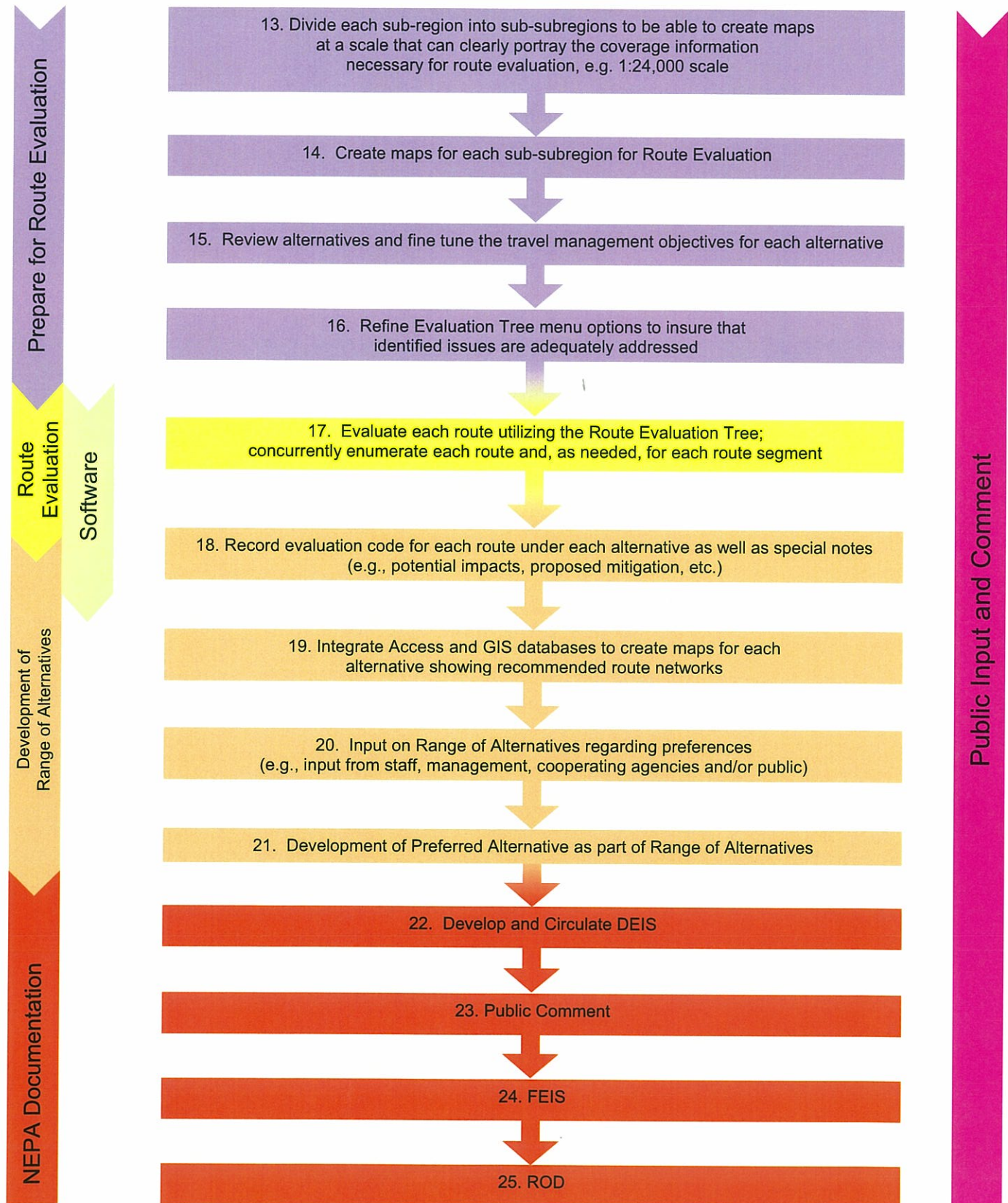
In summary, the Route Evaluation Tree Process is appreciated by agency planners, NEPA specialists, resource specialists and managers as a tool that is primarily helpful for its ability to prompt staff in the systematic collection of a variety of sensitive resource, recreational and commercial data that is necessary both for statutory compliance and to meet concerns raised by the public. It does this in a manner that collects the data neutrally and then stores it in a standardized and easily retrievable format, which is both presentable to the public in a number of easily understood formats, and readily linked to GIS, ACCESS and EXCEL databases. In order to reduce redundancy of effort, the process was specifically designed to build upon and enhance preexisting agency databases. When the process is performed properly, the database that is created not only consists of that information which is necessary for the proper evaluation and designation of routes, but when linked with GIS databases will assist agency staff both in the creation of a range of route network options/alternatives, and in the analysis of specific environmental impacts and cumulative effects as part of their NEPA documentation.

Attachment 1

Route Evaluation Process[®] for Travel Management Planning



Route Evaluation Process[®] for Travel Management Planning



Attachment 2

Main Features Include:

- 1. Logical, standardized, balanced and repeatable approach to route evaluation.
- 2. Systematic questions to assess compliance with a variety of pertinent statutory requirements including:
 - Valid existing rights and other vested rights or permitted uses
 - Degree of potential impact or degradation to specially protected resources, such as species protected by the Federal Endangered Species Act (ESA), cultural, historic and scientific objects protected by the Historic Preservation and Antiquities Acts (e.g. Monument Proclamations, Section 106) and wilderness values as protected by the Wilderness Act.
 - Implementation of Agency Organic Acts and their charge to balance the public's need/desire for access to Federal lands with resource protection through a philosophy of management for “multiple use”. Such consideration includes recognizing the value of providing a range of recreational opportunities and treating those opportunities in accordance with the Organic Acts as a resource worthy of protection.
- 3. Systematic consideration of access opportunities and resource protection needs on both a narrowly focused route by route assessment, as well as a broad-based cumulative assessment of the total network’s effect.
- 4. Systematic consideration of mitigation and/or limited designation as a means by which to ameliorate resource impacts. Recommended designation options include a range from open to closed, and a number of intermediate actions as a means by which to balance access needs and resource protection.
- 5. Systematic recordation of data allowing for future retrieval and review/updating of evaluation information as needed (i.e. evaluation pathways are numerically coded).
- 6. Systematic ability to assess a route’s recommended designation status based upon the management goals of each individual alternative.

How does the Tree Work?

- 1. The region or management area in which the route is located is thoroughly evaluated. Resource protection, recreation and commercial access concerns pertinent to route are identified. The patterns of these identified uses and concerns, as well as their trends are also noted. Other related issues such as law enforcement, route maintenance and user conflicts are further identified.
- 2. The desired future condition and management goals of each proposed alternative are identified and reviewed.
- 3. Each route is systematically numbered. This both allows for tracking the evaluation process and enables the public to make comment on specific routes.
- 4. Each route is systematically assessed by sequentially answering the questions in the Evaluation Tree. Specifically, the questions are assessed and answered in the context of the regional concerns identified in step #1 and the management goals identified in step #2 for each of the alternatives.
- 5. The recommendation of a designation for each route under each alternative is dictated by addressing the management goals for that alternative.
- 6. The specific answers to each question for each route are recorded by the final coded answer.
- 7. Detailed information that may have been critical to the answer of any question(s) or in the determination of the final outcome is recorded as part or the individual route evaluation record.

Route Evaluation Tree®

©Advanced Resource Solutions, Inc. 2003-2005
Patent Pending

Recommended Route Designations

Close
01

Close: A route that is recommended for permanent closure to all use. Physical closure may include restoring the route to the degree possible to blend with surrounding landscape, as well as installation of physical barriers and signing at the original departure point, if necessary.

Mitigate/
Limit
09

Mitigate/Limit: A route that is recommended for limited use by certain parties or entities with valid, vested, or implied rights of access, or to certain vehicle types, seasons of use, etc., following mitigation action(s) aimed at avoiding, minimizing or mitigating certain estimated impacts identified during the route evaluation process.

Limit
05

Limit: A route that is recommended for limited use by certain parties or entities with valid, vested, or implied rights of access, or to certain vehicle types, seasons of use, etc.

Mitigate/
Open
05

Mitigate/Open: A route that is recommended open for all uses, following mitigation action(s) aimed at avoiding, minimizing or mitigating certain estimated impacts identified during the route evaluation process.

Open
02

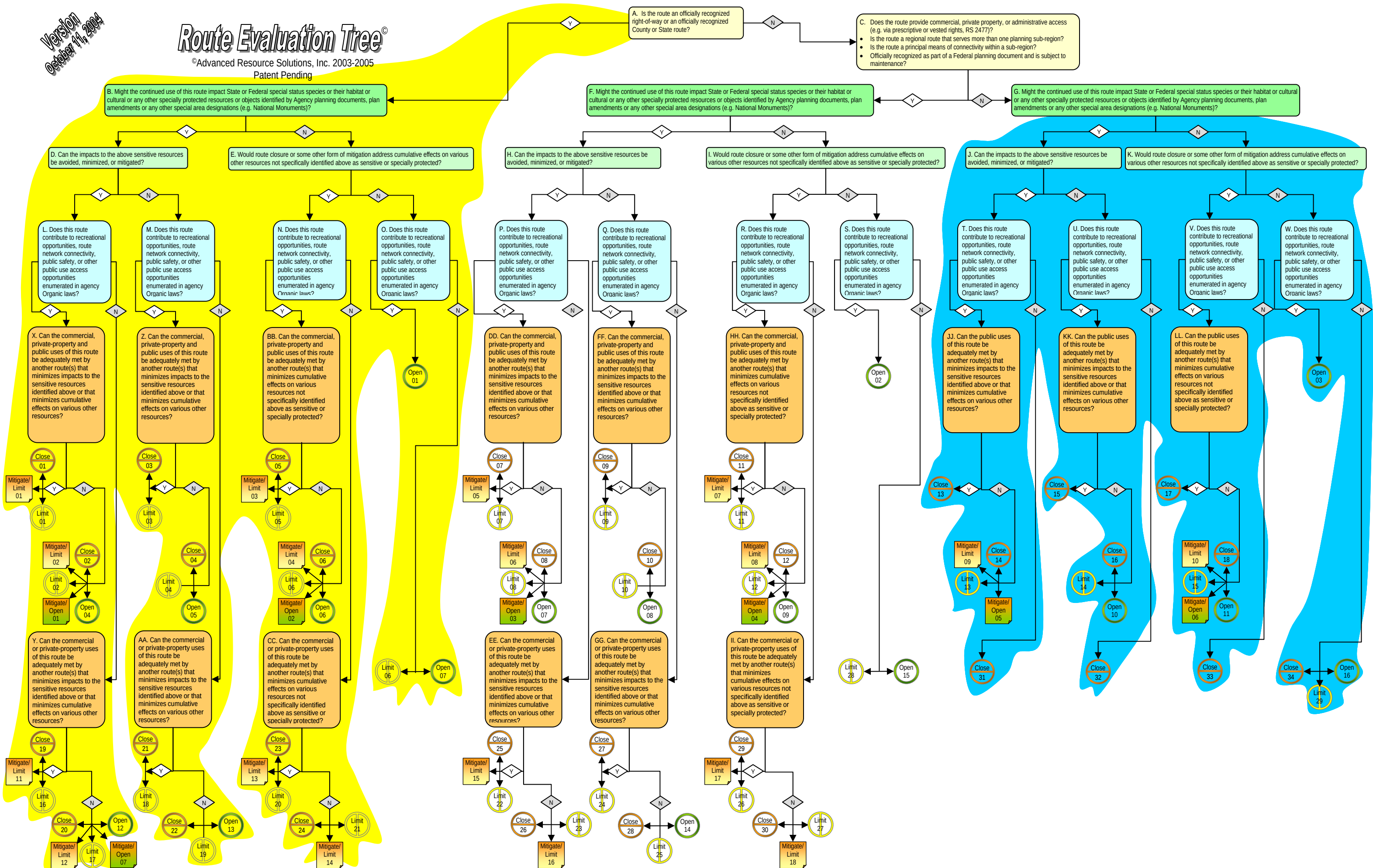
Open: A route that is recommended open for all uses.

Version
October 14, 2004

Route Evaluation Tree®

©Advanced Resource Solutions, Inc. 2003-2005

Patent Pending



APPENDIX H: SPECIAL CULTURAL RESOURCE MANAGEMENT AREAS

SCRMA – An area containing cultural resources (archaeological sites, historic sites or places of traditional cultural importance) that are particularly important for public use, scientific use, traditional use or other uses as defined in BLM Manual 8110.4. Management prescriptions for these areas should reflect and support the primary values for which the areas are allocated. For example, management prescriptions for a SCRMA allocated primarily for public use should focus on developing and interpreting sites for public visitation, including heritage tourism. Management prescriptions for a SCRMA allocated primarily for scientific use should focus on protecting sites for study, supporting field schools and other research efforts. Management prescriptions for a SCRMA allocated primarily for traditional use should seek to accommodate the traditional cultural practices of Native American tribes or other cultural groups that ascribe religious or other heritage values to specific cultural properties or places within the area. Management prescriptions for a SCRMA allocated primarily to protect scarce sites of singular importance that should not be subjected to invasive studies or other uses that would threaten their present condition should focus on conserving sites for the future.

Management prescriptions for a single SCRMA can focus on more than one type of use, just as a single cultural property can be allocated to more than one of the use categories described in Manual 8110.4. For example, a SCRMA might contain a set of cultural properties that, linked together and interpreted as a group, would make a good auto tour route for heritage tourism. At the same time, the area might contain several cultural properties of unusual historic importance that should be segregated from land or resources uses that might impair their present condition or setting. While both kinds of properties should receive management emphasis, they can be subsumed within a single land use allocation with management prescriptions tailored to support public visitation of the sites along the auto tour route, and protection for the sites that warrant segregation.

The primary purpose of this land use allocation is to differentiate some portions of a planning area from others in terms of cultural resource values. The allocation can denote priority for the expenditure of time and funds or the need for special protection to achieve management objectives. The allocation might also indicate priority areas for proactive inventory. However, highlighting a geographic area for its special cultural resource values does not diminish the importance of cultural resources in other areas. Cultural resources on lands not included within SCRMA's still need to be managed for the values they contain and opportunities they afford.

This land use allocation carries no inherent restrictions on competing land uses. Decisions about proposed land uses that may affect individual cultural properties within SCRMA's will be made on a case-by-case basis, weighing the cultural resource values in the balance along with all other considerations. Enclosing cultural properties within SCRMA's does not add value to those

properties beyond what they would have if they were not within SCRMA. SCRMA allocations provide focus to management but they do not in themselves increase the scientific, public, traditional or other values that cultural properties possess. Some cultural properties within SCRMA may, in fact, have little or no value beyond the information gathered by documenting them in the field.

ACEC is a designation that can be used to protect and provide special management attention to areas with significant cultural resource values. ACEC designation should be considered whenever an area containing important cultural resources meets the criteria for designation. However, allocation of a SCRMA can be useful in focusing management attention on an area not meeting the criteria for designation as an ACEC or where designation of an ACEC would be inappropriate. In such cases, a SCRMA can be allocated, incorporating management prescriptions that will provide the special protection or other emphasis needed to achieve management objectives.

APPENDIX I: LANDS IDENTIFIED FOR DISPOSAL

Gila and Salt River Meridian, Arizona

T. 2 N., R. 10 W.,
sec. 2, lots 1, 2, 3, 4, S½N½, and S½;
sec. 11, all.

T. 4 S., R. 10 W.,
sec. 18, lots 1 (subsurface estate), 2 (subsurface
estate), E½NW¼ (subsurface estate).

T. 6 S., R. 11 W.,
sec. 25, S½ (subsurface estate).

T. 7 S., R. 11 W.,
sec. 15, SE¼;
sec. 27, all (subsurface estate);
sec. 28, N½N½ (subsurface estate), SE¼ (subsurface
estate);
sec. 30, E½SW¼.

T. 3 N., R. 12 W.,
sec. 27, NW¼.

T. 7 S., R. 12 W.,
sec. 4, NW¼SW¼SE¼.

T. 7 S., R. 12 W.,
sec. 25, W½SE¼.

T. 6 S., R. 13 W.,
sec. 17, NE¼SW¼, S½SW¼;
sec. 18, SE¼SE¼;
sec. 19, S½SE¼.

T. 7 S., R. 13 W.,
sec. 3, SE $\frac{1}{4}$ SE $\frac{1}{4}$;

T. 8 S., R. 15 W.,
sec. 20, NE $\frac{1}{4}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$,
E $\frac{1}{2}$ W $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 24, W $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 29, SW $\frac{1}{4}$.

T. 4 N., R. 19 W.,
sec. 4, SE $\frac{1}{4}$;
sec. 8, all;
sec. 9, N $\frac{1}{2}$, SW $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$,
SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 10, all;
sec. 11, all;
sec. 14, all;
sec. 15, E $\frac{1}{2}$, N $\frac{1}{2}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ S $\frac{1}{2}$ NW $\frac{1}{4}$,
SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$;
sec. 17, all;
sec. 20, N $\frac{1}{2}$, SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$,
N $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$,
S $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 21, W $\frac{1}{2}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$,
E $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$;
sec. 22, lot 1, NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 23, N $\frac{1}{2}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$,
SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$,
N $\frac{1}{2}$ S $\frac{1}{2}$ SE $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$,
SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$,
E $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 26, S $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$,
SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$,
S $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$,
SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$,
E $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$,
E $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$,
S $\frac{1}{2}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$,
W $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$;
sec. 28, NW $\frac{1}{4}$ SE $\frac{1}{4}$;
sec. 29, W $\frac{1}{2}$ W $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ NE $\frac{1}{4}$,
W $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$,
NW $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$.

T. 3 N., R. 22 W.,
sec. 11, lot 7;
sec. 24, NW $\frac{1}{4}$ NW $\frac{1}{4}$.

T. 9 S., R. 22 W.,
sec. 1, lot 7;
sec. 17, NE $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$,
E $\frac{1}{2}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$,
SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$.

T. 1 S., R. 23 W.,
sec. 5, lot 8 (portion).

T. 8 S., R. 23 W.,
sec. 34, W $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ (portion), W $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$
(portion);
sec. 35, S $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$,
S $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, W $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$,
SE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$.

T. 9 S., R. 23 W.
sec. 28, lot 2;
sec. 29, lots 2, 3, 4, 5, 6 (portion), 7, 8,
N $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 33, W $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$.

T. 8 S., R. 24 W.,
sec. 28, lot 19.

T. 9 S., R. 24 W.,
sec. 8, lot 8.

T. 11 S., R. 24 W.,
sec. 6, lots 7, 8, 9, and N $\frac{1}{2}$ N $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 8, lots 1, 2, 3, 4, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$.

T. 11 S., R. 25 W.,
sec. 1, lots 3, 4, 5, 11 (portion), 14, and 15,
W $\frac{1}{2}$ E $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$,
N $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$;
sec. 11, lot 28;
sec. 12, Block 29, lots 1, 2, and 3;
Block 30, lots 1 to 11, inclusive;
Block 31, lots 1, 2, 3, and 4.

San Bernardino Meridian, California

T. 9 S., R. 21 E.,
sec. 12, lots 1, 2, NE $\frac{1}{4}$.

T. 8 S., R. 22 E.,
sec. 24, lot 4.

T. 9 S., R. 22 E.,
sec. 9, lot 12.