

CHAPTER 2.0

DESCRIPTION OF ALTERNATIVES

2.1 INTRODUCTION

This EIS evaluates five resource management alternatives identified by the letters A, B, C, D, and E (the Proposed Plan). The No Action (Alternative A) represents the continuation of current management direction. The YFO developed the Action Alternatives B, C, and D with input from the public during scoping, from cooperating agencies, and from YFO resource specialists. Once developed, the YFO analyzed Alternatives A through D to predict their impacts on the environment.

The YFO used the impacts analysis of Alternatives A through D, along with knowledge of specific issues raised throughout the planning process; recommendations from cooperating agencies and YFO resource specialists; consideration of planning criteria; and resolution of resource conflicts to select Alternative E, the Proposed Plan. Each alternative provides a different emphasis for managing public lands and resources within the planning area, and each Action Alternative represents a complete and reasonable LUP that meets the purpose and need described in Chapter 1. This chapter is organized by resource rather than by alternative, so that readers may more easily compare how proposed management under each of the alternatives may affect the resources under YFO's administration.

Following is a brief general description of each of the five alternatives. Detailed management prescriptions are presented under the applicable resource headings.

- **Alternative A (No Action)** describes 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 describes current resource and land management plan direction as represented in the *Yuma District Resource Management Plan* 1986 and 1987, as amended (1987 *Yuma District RMP*); *Lower Gila South Resource Management Plan* (1988), as amended; and *Lower Gila North Management Plan* (1983), as amended. This alternative results in no revision to the existing plans.
- **Alternative B** generally places an emphasis on consumer-driven uses and the widest array of uses, emphasizing recreation, mineral, and energy development. It identifies areas most appropriate for these various uses. It places a greater emphasis on developed and motorized recreation opportunities and less on remote settings and primitive recreation.
- **Alternative C** provides visitors with opportunities to experience natural and cultural resource values of the planning area. It allows visitation and development within the planning area, while ensuring that resource protection is not compromised. It is generally managed with decisions that have a greater balance of multiple uses. Alternative C identifies a

combination of natural processes and active management techniques for resource and use management and it provides for both motorized and non-motorized recreation opportunities.

- **Alternative D** generally places emphasis on preservation of the planning area's natural and cultural resources through limited public use and discontinuation of livestock grazing. It focuses on natural processes and other unobtrusive methods for natural resource use and management. It proposes greater opportunities for dispersed non-motorized recreation and fewer motorized and developed recreation opportunities.
- **Alternative E (Proposed Plan)** reflects the best combination of decisions to achieve BLM goals and policies, meet the Interdisciplinary Team purpose and need, address the planning issues, and consider the recommendations of cooperating agencies and YFO specialists. The Proposed Plan proposed actions would include but are not limited to management of recreation, wildlife, minerals, cultural resources, livestock grazing, land tenure, designation of ACECs, access to public lands, and other topics.

Throughout this chapter, information is displayed at a broad overview level which then moves to the specific. The chapter is organized by resource, the presence or abundance of which may vary from location to location within the planning area. Land use plan decisions are presented in this PRMP/FEIS as proposals for each resource by alternative. They would become valid when one alternative is chosen and the ROD is signed.

According to the BLM Land Use Planning Handbook, land use plan decisions are broad-scale decisions which guide future land management actions and subsequent site-specific implementation decisions. Land use plan decisions identify specific areas of public land or mineral resources where certain uses or management actions are allowed, are excluded, or may be restricted in order to achieve a desired future condition or to protect certain resource values. Land use plan 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. Alternatives may include specific land use restrictions to meet desired future conditions and may exclude certain land uses to protect resource values. For example, alternatives considered for this PRMP/FEIS revision may open, close, or limit OHV access, allow or prohibit firewood collection, or make certain lands available for livestock grazing. Because

the alternatives identify 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 PRMP/FEIS 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 PRMP/FEIS.

2.2 LAND HEALTH STANDARDS

Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (Standards and Guidelines) were developed, pursuant to 43 CFR 4180, through a collaborative process involving BLM staff and the Arizona BLM Resource Advisory Council and were approved by the Secretary of the Interior in April of 1997. The Standards and Guidelines have been developed to identify the characteristics of healthy ecosystems on public lands and the management actions that promote them. When approved, the *Standards and Guidelines* became Arizona BLM policy, guiding the planning for and management of BLM-administered lands. *Arizona Standards and Guidelines*, therefore, have been incorporated into this 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 Arizona BLM program-wide. 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 RMP in the Livestock Grazing Management, Management Actions/Prescriptions section.

2.2.1 STANDARD 1: UPLAND SITES

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.
- 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.
- 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
- Exceptions and exemptions (where applicable): None.

2.2.2 STANDARD 2: RIPARIAN–WETLAND SITES

Riparian–wetland areas are in properly functioning condition.

Criteria for Meeting Standard 2

- 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.
- 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.

- 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
- 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: DESIRED RESOURCE CONDITIONS

Productive and diverse upland and riparian–wetland plant communities of native species exist and are maintained.

Criteria for Meeting Standard 3

- 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, Clean Water Act, and appropriate laws, regulations, and policies.
- 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
- 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 (Maps 2-1a through 2-1e). The planning area's special designations by alternative are shown below in Table 2-1.

**Table 2-1
Special Designations by Alternative**

Special Designation	Alternative				
	A	B	C	D	E
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 Acres	167,800				
National Historic Trail (total miles)					
Juan Bautista de Anza	111	111	111	111	111
National Recreation Trail (total miles)					
Betty's Kitchen	0.5	5.5	0.5	0.5	0.5
National Byways (total miles)					
Back Country Byways					
Agua Caliente	0	11	11	0	11
Brenda	0	21	21	0	0
Clanton Hills	0	52	0	0	0
Gold Nugget	0	34	34	0	0
Plomosa	0	10	10	0	10
Red Cloud	0	53	0	0	0
Red Raven	0	39	0	0	0
Total Miles	0	220	76	0	21
Scenic Byway					
Highway 95	0	0	64	0	64
Areas of Critical Environmental Concern (total acres)					
Big Marias	4,500	4,500	4,500	9,200	4,500
Dripping Springs	0	0	11,700	9,800	11,700
Gila River Terraces & Trails	0	0	0	140,400	0
Limitrophe	0	CMA	SCRMA	4,500	CMA
Palomas Plain	0	WHA	WHA	429,900	WHA
Sears Point	3,700	3,700	28,500	28,500	28,500
Walters Camp	0	0	SCRMA	4,500	SCRMA
Total Acres	8,200	8,200	44,700	626,800	44,700

CA = California; AZ = Arizona; ACEC = Area of Critical Environmental Concern; CMA = Coordinated Management Area; SCRMA = Special Cultural Resource Management Area; WHA = Wildlife Habitat Management Area

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). The NLCS brings into a single system some of the BLM's premier designations. By putting these lands into an organized system, the BLM hopes to increase public awareness of these areas' scientific, cultural, educational, ecological, and other values. Inclusion in the NLCS does not create any new legal protections for these lands, but it does provide field offices with overall guidance and direction for management of the system. Components of the NLCS include National Conservation Areas, National Monuments, Wilderness Areas, WSAs, Wild and Scenic Rivers, and National Historic and Scenic Trails. Wilderness Areas and a NHT are the only components present of the NLCS 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 (alternatives Maps 2-1a through 2-1e). Wilderness is managed according to the Wilderness Act of 1964 (16 U.S.C. 1131-1136, 78 Stat. 890), the Arizona Desert Wilderness Act of 1990, 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. This RMP would not address reducing or eliminating existing designated Wilderness Areas, changing existing Wilderness Area boundaries, or allowing motorized vehicles or other use of mechanical transportation in any Wilderness Areas not already authorized. Only Congress can change the boundaries of designated Wilderness Areas.

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

Management provisions for these areas are:

- BLM would classify all Congressionally Designated Wilderness Areas as VRM Class I;
- Wilderness Areas were withdrawn from mineral entry under the Arizona Desert Wilderness Act of 1990 and California Desert Protection Act of 1994; and
- Under the Wilderness Act of 1964, no motor vehicles, motorized equipment or other form of mechanical transport are permitted in Wilderness Areas.

Guidance for the application of special provisions permitted by the Wilderness Act and subsequent laws would be provided by the following plans:

- Muggins Mountains Wilderness Management Plan;
- Eagletail Mountains Wilderness Management Plan;

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- Kofa New Water Mountains Wilderness Management Plan; and
- Trigo Mountains Wilderness Management Plan (in progress).

Desired Future Conditions

- Provide for the long-term protection and preservation of the designated area's wilderness character under the principle of non-degradation. Wilderness Areas' naturalness and untrammled condition, opportunities for solitude, opportunities for primitive and unconfined types of recreation, and any ecological, geological, or other features of scientific, educational, scenic, or historic value would be managed so that they remain unimpaired.
- Manage uses permitted by the Wilderness Act's special provisions and subsequent laws in a manner that would prevent undue degradation of the area's wilderness character. In managing these uses, emphasis would be placed on maintaining wilderness character.
- Accommodate the traditional or sacred uses that may be identified in the future by Native American tribes who traditionally used the Wilderness Areas.

Management Actions

- Continue management of 167,800 acres of Congressionally Designated Wilderness under all alternatives.
- Delineate base camps and install the appropriate facilities adjacent to Wilderness boundaries to accommodate equestrian use and hunting groups.
- 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.
- Limit equestrian use authorized by SRPs to pre-selected trails on a case-by-case basis.

Administrative Actions

- 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.
- Complete a *Minimum Requirements Decision Guide* analysis prior to all non-emergency actions within Wilderness.
- Arizona BLM would continue to coordinate with California BLM on the portions of four California Wilderness Areas administered by YFO.

B. NATIONAL HISTORIC TRAIL

The Juan Bautista de Anza National Historic Trail (Anza Trail) extends from Mexico to California for a total length of approximately 1,200 miles in the U.S. (Maps 2-1a through 2-1e). Congress designated this trail through Public Law 101-365 in 1990. 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. Proposed actions would require extensive coordination and partnerships, as these BLM-administered lands are not contiguous within the designated corridor. Establishing an operational trail for recreational use within the designated corridor would remain common to all alternatives. The National Trail System Act of 1992 provides that connecting or side trails may be established and designated as components of a NHT.

Desired Future Conditions

- Accommodate increased recreational use of the trail while providing for resource protection and public education regarding the route's cultural, historical, and natural resource values.
- Provide adjacent communities with convenient opportunities to exercise and improve their physical fitness at the multiple-use recreational Anza Trail.
- Provide recreational trail connectivity along the Anza Trail through the planning area to both the BLM El Centro and Lower Sonoran Field Offices.
- Management activities along Anza Trail would be conducted to assure that no adverse impacts occur to those resources and values identified in the legislation designating the trail.

Management Actions Common to All Alternatives

- Reduce hazardous fuels and non-native invasive species along the Anza Trail.
- Designate portions of the Anza Trail through BLM-administered lands for motorized and non-motorized recreation as appropriate.
- Upon designation of motorized portions of the Anza Trail, use of motor vehicles would be limited to the designated NHT only and would 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.
- Install NHT signs and interpretive materials in conformance with the NPS Anza Trail Management Plan.

Administrative Actions

- Manage the Anza Trail consistently with the NPS Anza Trail Management Plan and in cooperation with the NPS to the extent practicable.
- Work with interested stakeholders to identify the appropriate locations of a recreational Anza Trail and its associated trailheads and campsites.
- Nominate the designated Anza Trail for inclusion in the Arizona State Parks Trail System.
- Work with interested stakeholders to secure legal public access to the Anza Trail and its associated trailheads.

- 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.
- Monitor the operational trail to identify and mitigate impacts to sensitive cultural resources at risk along the trail corridor.

2.3.2 NATIONAL RECREATION TRAIL

The existing one-half mile Betty's Kitchen NRT (Maps 2-1a through 2-1e) is managed by YFO. This trail would be carried forward under all alternatives. YFO proposes a trail extension under Alternative B that would head northward approximately five miles toward a point south of the Hidden Shores Recreational Vehicle (RV) Village BLM concession lease. Options to extend the trail would be addressed in cooperation with AGFD when a revision to the *Mittry Lake Wildlife Area Management Plan* is done.

Desired Future Conditions

- Provide universal accessibility on the existing portion of the Betty's Kitchen NRT.
- Ensure that any NRT extension proposed under the alternatives accommodates hiking, bicycling, and equestrian use.

Management Actions

- Develop and construct a 5.0-mile extension under Alternative B.
- Continue management of an existing 0.5-mile trail under Alternatives A, C, D, and the Proposed Plan.
- Install and maintain interpretive signs along the existing and extended NRT, as needed.

Administrative Actions

- Any trail extension would be developed and constructed in accordance with NRT standards in coordination with AGFD and Reclamation as funding and labor become available.
- Continue to provide environmental education and interpretation opportunities related to recreation and wildlife.

2.3.3 NATIONAL BYWAYS

The National Byways program was established by the U.S. Department of Transportation (USDOT)/ FHWA under the Intermodal Surface Transportation Efficiency Act of 1991 and reauthorized under the Transportation Equity Act for the 21st Century in 2003. 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 alternatives identify one proposed National Scenic Byway and one to seven proposed Back Country Byways, which vary by alternative (Maps 2-1a through 2-1e). Coordination would occur with adjacent BLM field offices, and RODs would be coordinated prior to signing.

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 National Scenic Byways Discretionary Grants* program provides funding for byway-related preservation projects annually as part of the FHWA *Discretionary Grants Program*. The planning area currently has no byways as defined by BLM *Handbook H-8357-1*.

The four types of Back Country Byways are described below based on the characteristics of the roads.

- Type I. Roads which can accommodate normal touring cars. These roads are paved or have an all-weather surface and have grades that are negotiable by a normal touring car. These roads are usually narrow, slow speed, secondary roads.
- Type II. Roads which require high-clearance-type vehicles. These roads are usually not paved, but may have some type of surfacing. Grades, curves, and road surface are such that they can be negotiated with a two-wheel drive high-clearance vehicle without undue difficulty.
- Type III. Roads which require four-wheel-drive vehicles or other specialized vehicles such as dirt bikes and OHVs. These roads are usually not surfaced. However, the roads are maintained for safety and resource protection purposes. They have grades, tread surfaces, and other characteristics that require specialized vehicles to negotiate.
- Type IV. Trails that are managed to accommodate dirt bike, mountain bike, snowmobile, or OHV use. They are usually single-track trails.

Further details on prescribed recreation settings and VRM classifications along proposed byways are found in the Recreation and VRM sections of this chapter. Additional details of proposed National Scenic Byway and Back Country Byways are shown in Table 2-2.

Desired Future Conditions

- Byways expose visitors to local recreation opportunities and various multiple-use management programs, and interpret natural, cultural, geological, and scenic features.
- Provide interconnectivity between local communities and a working partnership for regional development of eco- and recreational tourism.
- Provide for public safety by communicating to the public the type of vehicle needed to safely travel on each byway.
- Promote sustainable outdoor ethics along the byways to educate the OHV community on how to reduce potential impacts to natural and cultural resources.

**Table 2-2
Proposed National Scenic Byway and Back Country Byways**

Name	Outstanding Resources or Destination	Byway Length (total miles)	Type	Alternative				
				A	B	C	D	E
National Scenic Byway								
Highway 95	<ul style="list-style-type: none"> Views of Castle Dome, Chocolate, Laguna, and Gila Mountains Information on the differing missions of BLM, Kofa NWR, and YPG along the route Connectivity of major winter visitor destinations Horse and burro viewing 	64	Paved road			X		X
National Back Country Byways								
Agua Caliente	<ul style="list-style-type: none"> Wildlife habitat Views of Gila Bend Mountains Geologic features (lava flows and cinder cones) Prehistoric and historic sites 	11	Type II		X	X		X
Brenda	<ul style="list-style-type: none"> Views of New Water Mountains Wildlife viewing Geologic features Unique vegetation 	21	Type III		X	X		
Clanton Hills	<ul style="list-style-type: none"> Views of Eagletail Mountains Wildlife viewing Unique vegetation 	52	Type III		X			
Gold Nugget	<ul style="list-style-type: none"> Views of New Water Mountains Connectivity to proposed Plomosa Back Country Byway and proposed Highway 95 Scenic Byway 	34	Type III		X	X		
Plomosa	<ul style="list-style-type: none"> Adjacent public use cultural site Views of Plomosa Mountains Values of and connection to Lake Havasu Field Office Back Country Byway nomination 	10	Type I		X	X		X
Red Cloud	<ul style="list-style-type: none"> Views of Yuma Wash, Imperial NWR, Trigo Mountains, Cibola NWR, Cibola Lake, Martinez Lake, Fishers Landing Burro viewing Historic mining 	53	Segment I Highway 95 to Imperial NWR headquarters turn off is Type I; Segment 2 Imperial Refuge to Oxbow is Type III.		X			
Red Raven	<ul style="list-style-type: none"> Views of Eagletail Mountains Wildlife viewing Unique vegetation 	39	Type III		X			

BLM = Bureau of Land Management; NWR = National Wildlife Refuge; YPG = Yuma Proving Ground

- Manage the byways in partnership that would address the public demand for OHV experiences in a sustainable manner.
- Focus OHV travel into corridors that YFO and its byway partners would be capable of managing.
- Maintain the long-term scenic quality on BLM-administered lands within the view shed of the byways through application of the BLM VRM system.
- Byway plans would strive to minimize impacts to wildlife and would provide appropriate wildlife viewing opportunities.

Management Actions

- Designate the 11-mile Agua Caliente, 21-mile Brenda, 52-mile Clanton Hills, 34-mile Gold Nugget, 10-mile Plomosa, 53-mile Red Cloud, and 39-mile Red Raven Back Country Byways under Alternative B.
- Designate the 64-mile Highway 95 Scenic Byway, the 11-mile Agua Caliente, 21-mile Brenda, 34-mile Gold Nugget, and 10-mile Plomosa Back Country Byways under Alternative C.
- Designate the 64-mile Highway 95 Scenic Byway, the 10-mile Plomosa Back Country Byway, and the 11-mile Agua Caliente Back Country Byway under the Proposed Plan.
- Upon completion of the nomination process and final approval, a management plan would be developed for each Back Country Byway with cooperating partners. Ensure that the following issues are addressed in the byway management plans:
 - Prevent habitat fragmentation by maintaining Type III and IV byway segments within their existing classification and do not upgrade them by means of widening, grading, paving, or surfacing;
 - Install speed limit, directional, vehicle safety, and interpretive signs to enhance public use, enjoyment, and stewardship of byways;
 - Install byway facilities outside of allocated Wildlife Habitat Management Areas (WHAs);
 - Manage for compatibility between minerals and energy development including ROWs, leases, and permits and other resource uses;
 - Coordinate with byway partners to ensure legal public access to and along proposed routes;
 - Maintain road conditions 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 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 would 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.

Administrative Actions

- Prior to the Back Country Byway nomination process, complete locale-specific visitor use and potential resource impact studies to determine if byway designation is appropriate.
- Follow the nomination and designation process outlined within BLM H-8357-1-Byways by partnering with interested agencies and organizations.
- Manage byways for compatibility with the prescribed recreation settings, mining, and other resource uses.
- Develop maps and brochures of the byways.
- 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 would 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.
- For the Plomosa and Agua Caliente proposed byways, Lake Havasu and Lower Sonoran Field Offices would lead nomination, implementation, management, and partnerships.

2.3.4 AREAS OF CRITICAL ENVIRONMENTAL CONCERN

YFO is evaluating five proposed ACECs and the expansion of two existing ACECs under various alternatives in this PRMP/FEIS (Maps 2-1a through 2-1e). 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 “areas of critical environmental concern” in their land use planning process (FLPMA 43 U.S.C. § 1702 [a]). ACECs must meet the relevance and importance criteria in 43 CFR 1610.7-2(b) and must require special management (43 CFR 1601.0-5[a]) to:

- Protect the area and prevent irreparable damage to resources or natural systems, 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. An ACEC Evaluation Report can be found in Appendix 2-A which clarifies special management attention needed for each area proposed as an ACEC under the Proposed Plan. Appendix 2-A also describes other management prescriptions which would provide adequate resource protection for areas not proposed as ACECs in the Proposed Plan.

Desired Future Conditions Common to All ACECs

- Provide protection for special status species, wildlife, scenic, riparian, and significant cultural resource values. Maintain the viewsheds and landscape character of ACECs to the extent practicable through the BLM's VRM system.
- Vegetation diversity would be maintained in accordance with ecological site description guides (USDOA NRCS 2005).
- Manage OHV access in a manner which does not damage important cultural resources and wildlife habitat.

Management Actions Common to All ACECs

- New land use authorizations would be discouraged within ACECs and only authorized when it is necessary for resource protection and/or when no reasonable alternative exists.
- Protection of resource values would take precedence over leasable/locatable materials. If an area is not withdrawn from mineral entry, special mitigation would be required to avoid impacts to resources. All locatable mineral actions would require an approved Mining Plan of Operations in accordance with BLM Manual 3809 regulations. Leasable mineral exploration and development would be evaluated on a case-by-case basis.
- New mineral material disposal (salable mineral) sites would not be authorized. Existing material sites would be evaluated and closed, if found to be impacting significant resources.
- Treatment for hazardous fuels reduction and non-native invasive species would be allowed. These treatments would be carried out in a manner that avoids or minimizes impacts to important resources.
- Grazing for commercial purposes would not be allowed within designated ACECs.
- Prohibit new routes within the proposed ACECs except as needed to manage and interpret resources or as required by law, such as access to valid mining claims or private property.
- OHV travel would 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 would be limited to the designated routes only and would 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.
- Limit equestrian use to existing inventoried routes within 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.
- Install interpretation to increase public awareness of resource sensitivity, promote public stewardship, and reduce inadvertent damage to important resources.
- 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

2.0 Description of Alternatives

closures, erosion control, backfilling, repairing, shoring up, or stabilizing structures, restricting uses, access, and closures.

- Establish *Supplementary Rules* to enforce any restrictions within ACECs according to the guidelines set forth in 43 CFR 8365.1-6.

Administrative Actions Common to All ACECs

- Work collaboratively with stakeholders for coordinated management purposes.
- Provide opportunities for participation in interpretation by Native Americans and other interested entities.
- Issue SRPs for public use of the ACEC on a case-by-case basis, when it is determined that adverse impacts can be avoided.
- The YFO would retain the ACEC in public ownership and seek to acquire non-Federal lands and interests in lands within the ACECs from willing sellers by purchase, exchange, or donation. Acquisitions would include surface and subsurface rights, and water rights whenever possible. Future acquisitions of inholdings and edgeholdings would be managed in accordance with the designated ACEC.
- Horseback riders would be encouraged to use weed-free hay and use feed buckets. (Refer to Management Actions in the Section 2.5.5 Vegetation Management, Invasive Species).
- Inventory, document, monitor, and protect cultural resources of importance and relevant features prior to developing interpretation programs in order to preserve the future integrity of the site prior to public use.
- Monitor resources within the ACECs to detect change and prevent future deterioration.
- Ensure that commercial tour operators provide appropriate educational information on archaeological site etiquette and resource conservation to their customers. Tour operators would be required to report any vandalism or damage to sites.
- Monitor and maintain designated recreational trails to reduce trail use, proliferation, and damage to resources within 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 2-1e-1). The relevance and importance for this ACEC includes a high concentration of nationally significant intaglio features; a density of other 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

- Promote the Blythe Intaglios Complex as a heritage tourism destination to enhance public understanding and appreciation.

- Improve interpretation design and protection measures at the Blythe Intaglios Complex in coordination with interested partners.
- Protect and conserve the important cultural resource sites contained within the ACEC, including the many rare intaglio features that are situated on the desert pavement covered terraces above the Colorado River.

Management Actions

- Under Alternatives A, B, C, and the Proposed Plan, continue management of the existing 4,500 acres of the Big Marias ACEC.
- Under Alternative D, expand the existing 4,500-acre Big Marias ACEC to encompass 9,200 acres.
- Close the ACEC to all vegetative product sales.
- In the event that Reclamation relinquishes their second form withdrawal in the Big Marias ACEC, YFO would propose to withdraw 2,900 acres of the ACEC from mineral entry under Alternatives A, D, and the Proposed Plan. The withdrawal would be subject to all existing rights.
- Allow no leasable mineral development surface occupancy within the ACEC to protect cultural resources.
- Allow construction, maintenance, and improvement of existing or new hiking trails, barriers, and signs as necessary.
- Limit parking within the Blythe Intaglios Complex to designated areas.
- Install and maintain interpretive materials at main points of access and interest within 2,900 acres of the ACEC (see Map 2-1e-1). Interpretive locations include but are not limited to parking areas, hiking trails, and cultural resource sites.
- Limit 2,900 acres of the Big Marias ACEC to day-use only (see Map 2-1e-1).
- Restrict any additional communications facilities to the currently authorized Big Maria Communications Site boundaries.
- Restrict utilities, to the extent practical, to the Highway 95 corridor.
- Require visitors to stay on the designated interpretive hiking trails inside the Blythe Intaglio Complex.
- Prohibit collection of dead, downed, and detached firewood and vegetative materials within 2,900 acres of the ACEC (see Map 2-1e-1).

Administrative Actions

- Develop an interpretive plan for the Blythe Intaglios Complex in coordination with interested partners.
- Develop a Cultural Resource Management Plan for the ACEC that addresses appropriate monitoring and protection measures for each known intaglio feature.

2.0 Description of Alternatives

- Coordinate any modifications or amendments to designated routes with the California Desert District.
- Consider constructing platforms for visitors to view fenced intaglio areas that are allocated to public use.
- Authorize no new routes within the ACEC, unless they are the only feasible access to private land.

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 2-1e-2). A 640-acre area around the spring is proposed as a core area for management purposes described below.

Desired Future Conditions

- Balance public use and interpretation of the proposed ACEC with the conservation of the many relevant and important resource values of the area.

Management Actions

- Designate the 11,700-acre Dripping Springs ACEC under Alternative C and the Proposed Plan.
- Designate the 9,800-acre Dripping Springs ACEC under Alternative D.
- Under Alternatives C, D, and the Proposed Plan, withdraw the 640-acre core area (rounded to 600 acres) from mineral entry (see Map 2-1e-2). The proposed withdrawal would not affect valid existing mining claims.
- Designate a Closed OHV Management Area within 440 acres of the core area.
- Limit 440 acres of the core area to day-use only.
- Except for prior existing rights, surface occupancy for discretionary actions, including but not limited to oil and gas leases, mineral material disposals, and ROWs, would not be authorized inside the 640-acre core area. Surface occupancy for discretionary actions within the ACEC but outside of the core area would be avoided to the extent practicable. Installation of facilities to protect, interpret, or manage ACEC resource values would be allowed within the entire ACEC, including the core area.
- Prohibit new routes within the proposed ACEC, except as needed to manage and interpret resources or as required by law, such as for access to valid existing mining claims or private property.
- Establish a parking area at both the north and south sides of the proposed ACEC. Install post-and-cable or other barriers as needed to manage access.
- Install and maintain interpretive materials at main points of access and interest. Interpretive locations include, but are not limited to, parking areas, hiking trails, the spring, historic structures, and petroglyph concentrations.

- Close the proposed ACEC to all vegetative product sales.
- Close the proposed 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.
- Prohibit wood collection inside the proposed ACEC boundaries.
- Construct, maintain, and improve designated hiking trails as necessary.
- Develop an interpretive hiking trail in the vicinity of the spring. Require visitors to stay on this trail when visiting the area surrounding the spring.

Administrative Actions

- Create a detailed map of the 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.
- Develop an interpretive plan for the area around the spring in coordination with interested partners.
- Discourage new routes within the proposed ACEC, except as needed to manage and interpret resources or as required by law, such as access to valid existing mining claims or private property.

C. GILA RIVER TERRACES AND TRAILS ACEC

The proposed Gila River Terraces and Trails ACEC includes public lands along the Gila River which were the location of the Gila Trail, Butterfield Overland Stage Route, Anza Trail, Southern Overland Trail, and Mormon Battalion Trail. The proposed ACEC would also encompass the Sears Point ACEC, Fred J. Weiler Greenbelt Vegetation Habitat Management Area (VHA), and upland river terraces which contain prolific cultural resources. This area would adjoin with the proposed Gila River Terraces and Southern Trail Cultural Resource ACEC within the BLM Lower Sonoran Field Office (Phoenix District) DRMP/DEIS.

Desired Future Conditions

- Maintain properly functioning riparian areas that provide habitat for neotropical and game birds, and other wildlife.
- Ensure that significant cultural resources are available for appropriate uses by present and future generations.
- Ensure historic trail corridors are accessible for cultural and historical interpretation and visitation.
- Restore or rehabilitate riparian habitat along the Gila River to meet habitat requirements for breeding and migratory birds.

Management Actions

- Designate the 140,400-acre Gila River Terraces and Trails ACEC under Alternative D.
- Sign trails according to NPS standards, in a manner consistent with the Anza Trail NPS Management Plan.
- Implement Management Actions for Anza Trail as outlined in Section 2.3.2

Administrative Actions

- Work with stakeholders to write a management plan for the ACEC.

D. LIMITROPHE ACEC

The Limitrophe ACEC name refers to the Limitrophe Division of the lower Colorado River, which is a riverine corridor extending from the Northerly International Boundary (1.1 miles north of Morelos Dam) downriver to the Southerly International Boundary with Mexico at San Luis, Arizona. The Limitrophe area forms the International Boundary, both sides of which contain significant natural resource values, traditional values for local Native Americans, and conditions that warrant highlighting in order to satisfy concerns about safety and public welfare. The Limitrophe was analyzed as a Coordinated Management Area (CMA) under Alternative B and the Proposed Plan for 4,500 acres, and a SCRMA under Alternative C for 4,500 acres. The relevance and importance of this ACEC includes neotropical migratory bird habitat, endangered species habitat, riparian values, traditional use values, proximity to the International Border, hunting and fishing opportunities, and public health and safety concerns.

The area is a focal point of several U.S. agencies. For example, the United States section, International Boundary and Water Commission (USIBWC) is proposing to physically mark the boundary, may possibly develop a pilot channel, and is responsible for treaty agreements with Mexico. Reclamation is responsible for the Colorado River water delivery and maintenance of some of the structures, such as canals, in the proposed ACEC. A recently signed MOU among U.S. Departments of Homeland Security, USDOJ, and USDOA regarding cooperation on Federal lands along the U.S. borders explains some of the interrelationships between these agencies operating along the border (USDOJ BLM 2006a).

Desired Future Conditions

- Balance public health and safety issues (resulting from illegal immigration, diversionary fires and litter, and general criminal activity) with resource protection and appropriate recreation opportunities, while considering diverse agency constraints.
- Protect and maintain riparian habitat and marsh vegetation to retain biological diversity and enhance potential habitat to support neotropical migratory birds, special status species, and other wildlife.
- Protect and maintain the characteristics of the Limitrophe area that have been identified by Native American tribes as important for traditional use.

- 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 through government-to-government consultation.

Management Actions

- Designate the Limitrophe ACEC under Alternative D for a total 4,500 acres.
- Prepare an ACEC management plan in cooperation with stakeholders upon designation.
- Allow no surface occupancy for leasable minerals.
- BLM would retain jurisdictional authority for the management of BLM-administered lands.

Administrative Actions

- Work collaboratively with interested stakeholders for coordinated management purposes.
- Remove litter and illegal dumping as funding and personnel allow.

E. PALOMAS PLAIN ACEC

The proposed Palomas Plain ACEC is considered to be the largest contiguous area of public land within the planning area and would be designated for its extensive natural resource values. The BLM Lower Sonoran Field Office (Phoenix District) proposed an adjacent 265,400-acre area as the Gila Bend Mountains WHA. The Palomas Plain ACEC was analyzed as a WHA under Alternatives B and C (704,800 acres), and the Proposed Plan (627,700 acres). The relevance and importance of this ACEC includes unfragmented wildlife habitat, big game, plant community values, and Sonoran Desert tortoise habitat.

Desired Future Conditions

- Maintain a balance between the undeveloped nature and character of land, while providing for undeveloped recreational opportunities and wildlife management actions.

Management Actions

- Under Alternative D, designate the 429,900-acre Palomas Plain ACEC.
- Maintain and enhance suitable habitat for the potential reintroduction of the endangered Sonoran pronghorn (*Antilocapra americana sonoriensis*) in coordination with AGFD.
- Require vehicles to stay on existing inventoried routes until designated or within existing camping areas and pull-outs. Close or limit motorized routes, if necessary, to maintain suitable habitat and reduce habitat fragmentation.

F. SEARS POINT (GILA RIVER CULTURAL AREA) ACEC

The approved RMP would supersede the plan previously 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 2-1e-3).

Desired Future Conditions

- Reduce visitor impacts to Sears Point by enhancing public understanding and appreciation of the cultural resources in the ACEC.
- Manage the Anza Trail corridor inside the ACEC for public use while providing protection and preservation for cultural and natural resources.
- Provide reliable and safe legal administrative access to the ACEC from Interstate 8.

Management Actions

- Under Alternatives C, D, and the Proposed Plan, the ACEC would be expanded to encompass 28,500 acres (Map 2-1e-3).
- An ACEC plan would be written in coordination with interested partners. The plan would provide additional management prescriptions for cultural resources protection and proactive management of public visitation. Until the plan is written, the ACEC would be managed according to the Management Actions listed below.
 - Designate hiking and equestrian trails and OHV routes within the ACEC to control access to the ACEC and prevent damage to cultural resources.
 - Maintain and improve designated hiking trails as necessary.
 - Establish a parking area and install post-and-cable or other barriers as needed to manage access. Determine an appropriate location for the parking area in coordination with stakeholders and Native American tribes.
 - Install interpretive exhibit panels at the central mesas that have been allocated to public use.
 - Install and maintain interpretive materials at main points of access and interest.
 - Provide facilities for public health and safety as needed.
 - Establish a visitor host location under Alternatives C, D, and the Proposed Plan to monitor sensitive resources and maintain a presence in the area.
 - Install traffic counters at main points of access into the ACEC.
 - Establish recreational trail connectivity from the Anza Trail to the Sears Point interpretive area once sensitive resources are adequately protected.
- Under all alternatives, all non-Federal lands acquired within the Gila River Cultural ACEC boundary established and withdrawn by *Public Land Order 7212* (September 5, 1996) would be managed under the current existing withdrawal. Under Alternatives C, D, and the Proposed Plan, 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*.
- Under Alternatives C and D, propose withdrawing up to an additional 1,200 acres of land within the Sears Point ACEC.

- Under the Proposed Plan, propose withdrawing up to an additional 4,900 acres within the proposed Sears Point ACEC expansion (see Map 2-1e-3).
- Except for prior existing rights, surface occupancy for discretionary actions, including but not limited to oil and gas leases, mineral material disposals, and ROWs, would not be authorized inside the 3,700-acre core area. Surface occupancy for discretionary actions within the ACEC, but outside of the core area, would be avoided to the extent practicable. Installation of facilities to protect, interpret, or manage ACEC resource values would be allowed within the entire ACEC, including the core area.
- Prohibit collection of dead, downed, and detached firewood and of vegetative materials inside the 3,700-acre core area (see Map 2-1e-3).
- Limit the 3,700-acre core area to day-use only (see Map 2-1e-3).
- Follow the management actions for the Fred J. Weiler Vegetation Management Area, which are located in Section 2.5, Vegetation Management.

Administrative Actions

- The existing Gila River Cultural Area ACEC would be renamed as the Sears Point ACEC under Alternatives B, C, D and the Proposed Plan.
- Develop an ACEC plan that includes specific management prescriptions for balancing increasing public visitation with protection of natural and cultural resources, in coordination with interested partners.
- Require visitors to stay on designated hiking trails in the interpretive area once the trails are established.
- Throughout the life of the plan, determine the public demand for overnight camping opportunities within the ACEC expansion 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.
- Work with interested partners to establish an operational recreational trail within the designated Anza Trail Corridor.
- Inventory and monitor mesquite trees along the Gila River to determine age, structure, and health. Develop protection measures if necessary.

G. WALTERS CAMP ACEC

The Walters Camp ACEC lies adjacent to the Colorado River and an existing 18-acre BLM recreation concession lease. The private lands adjacent to the proposed ACEC are being developed for seasonal housing. The recreational opportunities and development in this area is causing increased public use, including OHV and boater/personal watercraft use, in and around the proposed ACEC. The proposed area was also analyzed as a SCRMA under Alternative C and the Proposed Plan. The relevance and importance for this ACEC includes significant cultural and biological resources which include cultural resource sites, Native American traditional use, riparian corridors, washes, wildlife habitat, rare geologic features, high scenic quality, and river access.

Desired Future Conditions

- Maintain properly functioning riparian areas that provide habitat for neotropical migratory birds and other wildlife.
- Ensure that the proposed ACECs recreational, natural, and cultural resources remain available for present and future generations.

Management Actions

- Designate the 4,500-acre Walters Camp ACEC under Alternative D.
- Acquire available private and State inholdings from willing sellers for improved comprehensive management.

Administrative Actions

- Inventory vegetation and wildlife within the ACEC to understand the riparian habitat values that exist in the area.
- Coordinate management objectives utilizing the *Final Ehrenberg-Cibola Recreation Area Management Plan* (USDOI BLM 1994a).
- Coordinate and collaborate with Native American tribes, Reclamation, CDFG, and USFWS on issues including habitat restoration, invasive species, and water quality and delivery.

2.4 COORDINATED MANAGEMENT AREAS

Currently there are two areas within the planning area that are managed in coordination with other agencies. These are Fortuna Pond (30 acres) and Mittry Lake Wildlife Area (3,800 acres) (see Maps 2-2a and 2-2c). CMAs are not allocations under the *Land Use Planning Handbook* or FLPMA. However, they are recognized areas with specific management prescriptions and partnerships. Fortuna Pond and Mittry Lake were established under different authorities than FLPMA. FLPMA applies to these areas because BLM takes actions to manage the areas as agreed to by other agencies (i.e. DM 613, management responsibilities for recreation, endangered species, etc.).

**Table 2-3
Coordinated Management Areas by Alternative**

Coordinated Management Area	Alternative (total acres)				
	A	B	C	D	E
Fortuna Pond	30	30	30	30	30
Limitrophe	n/a	4,500	SCRMA	ACEC	4,500
Mittry Lake Wildlife Area	3,800	3,800	3,800	3,800	3,800

2.4.1 FORTUNA POND COORDINATED MANAGEMENT AREA

The Fortuna Pond CMA would continue the existing 30-acre area under all alternatives (Map 2-2a). The approved RMP would carry forward BLM responsibilities to manage recreation and wildlife activities in the Fortuna Pond area under DM 613. Reclamation and AGFD also have responsibilities for managing the pond under their individual authorities. The pond is a mitigation requirement to replace lost fishing opportunities on the Colorado River as a result of the Colorado River Salinity Control Project.

Vision for Coordinated Management

- Ensure that Fortuna Pond continues to provide recreational fishing opportunities as mitigation under the Title I contract for the Colorado River Basin Salinity Control Project.
- Provide adequate facilities for the site to accommodate visitor use.

Management Actions

- Continue managing the 30-acre Fortuna Pond in cooperation with the AGFD and Reclamation.
- Finalize and implement the *Fortuna Pond Management Plan*, which would guide management of the area. Until the document is finalized and implemented by the three agencies, the *Draft Fortuna Pond Management Plan* would serve as guidance.

Administrative Actions

- Identify the responsibilities of each agency having management authority.
- Achieve consensus with Reclamation, AGFD, and resource stakeholders to cooperatively manage Fortuna Pond for recreation and fishing opportunities.
- Remove litter and illegal dumping as funding and personnel allow.

2.4.2 LIMITROPHE COORDINATED MANAGEMENT AREA

The Limitrophe Division of the lower Colorado River was identified as the proposed Limitrophe CMA in Alternative B and the Proposed Plan. The Limitrophe CMA would encompass the same 4,500 acres of land along the International Boundary with Mexico identified in the Limitrophe ACEC under Alternative D (Map 2-2b). 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 proposed Limitrophe CMA is to unite the mandates, communicate 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. BLM land use planning decisions which apply to the Limitrophe area are found in other sections in the RMP.

Vision for Coordinated Management

- 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 would not be controlled by any single agency.
- Develop an MOU and promote cooperation between its signers to create a partnership for the future of the Limitrophe.
- Ensure that each resource value or issue identified by the stakeholders is addressed in the planning and management of the area.
- Each agency or sovereign nation with land management jurisdiction would make decisions independently of the stakeholder group, using information and facts from group meetings and the MOU. A charter would not be needed, because the group would not have voting capability for actions where decisions are required by agencies.
- Protect and maintain riparian habitat and marsh vegetation to retain biological diversity and enhance potential habitat to support neotropical migratory birds, special status species, and other wildlife.

Management Actions

- Prepare a 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 management plan would:
 - 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 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 through government-to-government consultation.
 - Balance International Border public health and safety issues with resource protection.
 - 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: 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.
- Allow no surface occupancy for leasable minerals.
- Allow no salable mineral materials within the Limitrophe area.
- Restore degraded or salt cedar habitats to appropriate vegetation when and where practicable.

Administrative Actions

- Participate in working groups, meetings, and task force settings to collaborate with interested stakeholders.
- Invite public as well as agencies and organizations to participate in the RMP.
- Remove litter and illegal dumping as funding and personnel allow.

2.4.3 MITTRY LAKE WILDLIFE AREA

The Mittry Lake Wildlife Area 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. The Mittry Lake Wildlife Area CMA would continue the 3,800-acre CMA within all alternatives (Map 2-2c). The approved RMP would carry forward BLM responsibilities to manage recreation and wildlife activities on Reclamation-withdrawn land at Mittry Lake under DM 613.

Vision for Coordinated Management

- Provide wildlife habitat for the benefit of wildlife and compatible opportunities for fish and wildlife-oriented recreation.

Management Actions

- Follow the lease, cooperative agreement, contract agreement, and wildlife area management plan to guide management of the wildlife area under the provisions of the Fish and Wildlife Coordination Act.

Administrative Actions

- Each agency would coordinate activities on a regular basis under guidance of the contract agreement.
- Remove litter and illegal dumping as funding and personnel allow.
- Implementation of the NRT extension at Betty's Kitchen would be a site-specific action and would be coordinated with AGFD under the Mittry Lake Wildlife Area lease and cooperative agreement and according to the Sikes Act. Before any ground-disturbing activity, AGFD, Reclamation, and BLM would need to reach agreement on specific aspects of the trail extension. The Federal action would be disclosed to the public for comment according to the NEPA process.

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.

2.0 Description of Alternatives

Vegetation communities within the planning area include mixed riparian habitat and wetlands, mesquite bosques, desert wash woodlands or xeroriparian scrub, paloverde-mixed cacti on bajadas and rocky slopes, creosote-bursage, mountain uplands, and isolated dune complexes. YFO strives to maintain the health of upland vegetation and riparian-wetland communities according to Arizona BLM's Land Health Standards 2 and 3 (see Land Health Standards Section of this chapter) and according to Riparian 2000, a BLM initiative which identifies a goal of 75 percent of riparian areas in proper functioning condition.

The basis for managing vegetation, riparian-wetland, and invasive or noxious weeds on BLM-administered lands can be found in the following Federal and State laws, regulations, policies, and guidance: Arizona Native Plant Law of 1993; FLPMA of 1976; Public Rangelands Improvement Act of 1978; CWA of 1977; EO 11990 Protection of Wetlands; EO 11988 Floodplain Management; Colorado River Floodway Protection Act of 1986; Federal Noxious Weed Act of 1974; EO 13112 Invasive Species Control; BLM MS 1740 *Renewable Resource Improvements and Treatments*; BLM Manual 9011 *Chemical Pest Control*; *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); LCR MSCP (USDOI Reclamation et al. 2004); USDOA NRCS *Ecological Site Guides*; BLM Manual 6500 – *Wildlife, Fish and Plant Resources*; and BLM Manual 6840 – *Special Status Species*.

Guidance for the management of riparian areas, both flowing lotic systems and stationary lentic systems, is derived from BLM Technical Reference on Proper Functioning Conditions (1737-9, 1737-11, and 1737-15).

Desired Future Conditions

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

- Biological diversity of native plant communities and rare species is maintained in balance with multiple-uses of the land and sustained ecological function.
- Upland and riparian-wetland areas exhibit a mosaic of native plant communities.
- 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.
- Forage on rangelands continues to support wildlife and grazing in a manner consistent with other resource management objectives or uses.
- Special status species and VHAs are protected from ground-disturbing recreation, such as OHV use.

Management Actions

The following management actions would be applied throughout the entire planning area.

- 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.

- Maintain vegetation communities that stabilize soils and reduce erosion and air quality degradation.
- Unproductive or non-functioning upland and riparian–wetland sites would be restored to desired plant communities based on ecological site and capability potential.
- Ensure that restoration and maintenance actions would benefit special status and priority plant and animal species and their habitats. (Appendix 2-B lists special status and priority plants and animals).

Administrative Actions

- Assess rehabilitation of burned areas on a case-by-case basis. Preference would be given to VHAs, riparian areas with habitat for special status species, ACECs, and WHAs.

2.5.1 DESIRED PLANT COMMUNITIES COMMON TO ALL ALTERNATIVES

The following Desired Future Conditions would be applied wherever the following desired plant communities exist in the planning area.

A. MIXED RIPARIAN HABITAT AND WETLANDS

- Riparian habitats would contain a diversity of native trees and herbaceous plants adapted to hydric soils. Lands along the Colorado and Gila rivers would 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.
- Bank vegetation would be composed of native species capable of withstanding flood events to reduce soil loss and bank erosion.
- River corridor (including floodplains) and riparian-wetland associated habitat types covered in the LCR MSCP would 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

- Mesquite bosques/woodland communities would contain trees of various size and age classes, with an understory of native perennial grasses, forbs, and shrub species.
- Identify and protect mesquite bosque communities within the planning area.

C. DESERT WASH WOODLANDS

- Multi-layered desert wash woodlands (xeroriparian scrub) would be 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).
- Diverse vegetative composition and structure would 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 argemone*), 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.
- Ensure sufficient bank and floodplain vegetation (including along braided channel floodplains) that provides landscape habitat connectivity and physical stability which in turn supports ground- and stem-dwelling species.

D. PALOVERDE–MIXED CACTI ON BAJADAS AND ROCKY SLOPES

- Paloverde–mixed cacti communities would 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 would support medium-to-high densities of saguaro, with all age classes represented.

E. CREOSOTE–BURSAGE

- Maintain unfragmented creosote-bursage habitats that function as landscape connectivity corridors (i.e., movement corridors and foraging areas) between adjacent plant communities.
- Maintain ground cover in this vegetation type, 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

- Botanically diverse vegetative communities would 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

- Dunes support a diverse mix of native species composed of shrubs, grasses and annual forbs.

- Identify the location of intact dune complexes throughout the planning area.
- 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).

Management Actions Common to all Desired Plant Communities

- Mitigate where plants and parts of plants would be destroyed from an unavoidable impact as a result of development, disturbance, or disposal.
- For BLM-authorized surface disturbing activities, impacts to vegetation would 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 would 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 would be encouraged; and
 - Salvage of plants and plant parts. Salvage would 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 would be limited to those allowable under the Arizona Native Plant Law. Plants and parts of plants would be replanted on public lands or salvaged for public, private, commercial, educational, research, or other appropriate purposes. Special consideration would be given to educational facilities, botanic gardens, and public institutions.
- Follow ROWs construction with rehabilitation measures including 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.
- Avoid desert wash woodlands to the greatest extent possible during BLM-authorized surface disturbing activities.
- Require use of native plant materials for landscaping at developed recreation sites within public lands.
- Require concessions to get BLM approval for landscaping plans. Require the use of native plants and drought adapted vegetation.

2.5.2 VEGETATION HABITAT MANAGEMENT AREAS

YFO is proposing three VHAs in various alternatives in the planning area (Maps 2-3a through 2-3e), as authorized by IM AZ-2005-007. These areas contain populations of priority plant species (Appendix 2-B) and native plant assemblages and would be allocated as VHAs. The

BLM Land Use Planning Handbook states that VHAs are areas of ecological importance that are recognized for significant factors such as density, diversity, size, public interest, remnant character, or age. An Elephant Tree Community VHA is proposed under Alternative D and the Proposed Plan for 10,000 acres. The Blue Sand Lily Community is proposed under Alternative D and the Proposed Plan for 500 acres. Fred J. Weiler Greenbelt is an existing area which is also proposed under Alternatives C, D, and the Proposed Plan (12,400 acres).

VHA alternatives are presented in Table 2-4 below and Maps 2-3a through 2-3e. VHAs may increase or decrease in acreage based upon new information through adaptive management.

**Table 2-4
Vegetation Habitat Management Areas by Alternative**

Vegetation Habitat Management Areas	Alternative (BLM acres)				
	A	B	C	D	E
Elephant Tree community (<i>Bursera microphylla</i>)	n/a	0	0	10,000	10,000
Blue Sand Lily community (<i>Triteleiosis palmeri</i>)	n/a	0	0	500	500
Fred J. Weiler Greenbelt	12,400	0	12,400	12,400	12,400

The Elephant Tree VHA would 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.

The Blue Sand Lily VHA would 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.

The Fred J. Weiler Greenbelt includes portions of Gila River riparian habitat located in the planning area and would be 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 would 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).

Desired Future Conditions

- Ensure that plant species-populations are stable or increasing with recruitment over all age classes with no net loss of habitat or fragmentation of plant communities.
- Ensure the Fred J. Weiler Greenbelt is managed for habitat values, specifically to benefit dove, quail, and thrasher populations.

Management Actions

- Continue Management of the Fred J. Weiler Greenbelt under Alternatives A, C, D, and the Proposed Plan.
- Allocate the 10,000-acre Elephant Tree Community as a VHA under Alternative D and the Proposed Plan.
- Allocate the 500-acre Blue Sand Lily Community as a VHA under Alternative D and the Proposed Plan.
- Restrict BLM-authorized ground-disturbing activities in the VHAs to protect focal plant species-populations. Restricted activities would include mineral extraction, unmanaged OHV use, and livestock grazing.
- Develop a management plan for the Fred J. Weiler Greenbelt in cooperation with AGFD and USFWS.
- Protect mesquite bosques and native woodlands through implementation of fire breaks and hazard fuels reduction.
- Prioritize treatment of non-native invasive species, where appropriate to meet management objectives.

Administrative Actions

- Inventory and map the focal plant communities in the 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.
- Assess the potential threats to blue sand lily populations in the foothills area of Yuma, Arizona. These focal plant species-populations are potentially threatened by OHV and invasive, non-native species such as Sahara mustard (*Brassica tournefortii*).
- Identify additional plant populations which meet VHA criteria.

2.5.3 BLM SENSITIVE PLANT SPECIES COMMON TO ALL ALTERNATIVES

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 2-B). BLM policy is to provide these species with the same level of protection as is provided for candidate species in BLM Manual 6840.06 C, that is 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. BLM *Manual* 6840.06 E provides factors by which a native species may be listed as “sensitive” if it:

- Could become endangered or extirpated from a State, or within a significant portion of its range in the foreseeable future;

2.0 Description of Alternatives

- Is under status review by the USFWS and/or National Marine Fisheries Service;
- Is undergoing significant current or predicted downward trends in (1) habitat capability that would reduce a species' existing distribution; and/or (2) population or density such that federally listed, proposed, candidate, or State listed status may become necessary;
- Typically consists of small and widely dispersed populations;
- Inhabits ecological refugia, or specialized or unique habitats; or
- Is State-listed, but which may be better conserved through application of BLM sensitive species status.

Desired Future Conditions

- Conserve sensitive plant species and other species at risk where the quantity and quality of habitat to support population persistence is a concern. Maintain or restore unique habitats (e.g., unique assemblages of rare plant species) throughout the planning area.
- Protect sensitive plant species and associated habitats to keep them from becoming listed under the ESA. Provide habitat capable of maintaining native plant species and supporting plant biodiversity to meet ecological integrity and social needs.
- Achieve stable or increasing populations of sensitive plant species over time with adequate pollination, nurse plants, recruitment, and survivorship. Maintain desired habitat conditions or restore degraded habitats to promote pollinator success and survival.
- Enhance public understanding of the importance of maintaining rare and culturally important plants through educational programs regarding native plant conservation, biodiversity, and invasive non-native plant species.

Management Actions

- Protect sensitive plant species and relict populations that are vulnerable to habitat disturbance. Minimize potential threat of imperiled status as a result of land and resource uses-related disturbances on BLM-administered lands.
- Implement protection and restoration measures, such as fencing, seeding by using native species, and native plant seed collection, for sensitive plant species.
- Acquire lands from willing landowners for conservation banking of natural communities with sensitive plant species, especially if loss of essential habitat is anticipated.
- Populations of non-native plants would be reduced or eradicated in occupied and potential rare plant habitat. Aggressively treat non-native invasive species where appropriate to protect sensitive plant species.

Administrative Actions

- Continue to survey and map locations of suitable habitat occupied by sensitive plant species.
- Collect seeds of native plants to be used in rehabilitation and restoration activities. Seeds must be collected in accordance with seed zones or breeding zones for native plants.

- 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*.
- 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.
- During site/project-level analysis, inventory occupied and potential sensitive plant habitats and prioritize opportunities for protection and/or restoration. Also, identify and map areas of non-native plant invasions within rare plant habitats.
- Continue to identify potential botanical special interest areas (i.e., areas with unique habitat features, rare plant communities; or areas with high-quality cryptogamic soil crusts with lichens, bryophytes, and fungi) and recommend them for protection.

2.5.4 PRIORITY PLANT SPECIES COMMON TO ALL ALTERNATIVES

Priority plant species are rare, unusual, or key species that are not BLM sensitive or listed as threatened and endangered. They are worthy of special treatment and indicate ecological health, biological diversity, and unique habitats. Priority plant species have been located on or near the planning area. The priority plant species list (Appendix 2-B) would be updated on a regular basis to reflect new information and survey data. These species are considered priority species due to ecological importance, rarity, and human interest. Identification of priority plant species would help prevent the avoidable loss of these plants due to development and implementation of other multiple use objectives.

Desired Future Conditions

- Ensure that 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.
- Promote landscape-scale conservation of priority plant species to protect or restore botanical resources of concern and to ensure consistent management across jurisdictional boundaries.
- Protect priority plant species and relict populations that are vulnerable to habitat disturbance. Minimize the potential threat of imperiled status as a result of land- and resource-uses-related disturbances on BLM-administered lands.

Management Actions

- 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.
- Acquire lands from willing landowners for conservation banking of natural communities with priority plant species, especially if loss of essential habitat is anticipated.

- Populations of non-native plants would be reduced or eradicated in occupied and potential rare plant habitat. Aggressively treat non-native invasive species where appropriate to protect priority plant species.

Administrative Actions

- Survey, map, and monitor natural plant communities with special emphasis on priority plant species.
- 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.
- 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).
- 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.
- Use regional databases such as Southwest Environmental Information Network (<http://seinet.asu.edu/>) to further understand species status.

2.5.5 INVASIVE NON-NATIVE PLANTS COMMON TO ALL ALTERNATIVES

Non-native, invasive and State and federally listed noxious weed species collectively constitute a major threat to the biodiversity on BLM-administered lands. 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 2-B).

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.

Desired Future Conditions

- Prevent the introduction or spread of non-native, invasive and State and federally listed noxious weed species.
- Enhance non-native invasive species management through a collaborative approach with fire management.

Management Actions

- 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.
- 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.
- 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 would 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.
- Treat giant salvinia (*Salvinia molesta*) and other invasive, non-native species in aquatic ecosystems along the lower Colorado River.

Administrative Actions

- Conduct risk assessments and formulate BMPs to control infestations and spread of noxious or invasive weeds. The integrated pest management approach would 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.
- 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.
- Implement public outreach and interpretive programs to enhance public awareness regarding noxious or invasive weeds and associated impacts on biodiversity.
- Collaborate with State efforts of both California and Arizona (e.g., Arizona Invasive Species Council).
- Encourage equestrian groups to use weed-free hay.
- 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

- Ensure that vegetation resources are used at a sustainable level.
- Promote appropriate levels of dead, downed, and detached wood on the ground to provide wildlife habitat and reduce soil erosion.

Management Actions

Vegetative use authorizations apply to the entire planning area.

- **Wood Cutting.** Wood cutting of native species for commercial or household fuel wood use is currently not allowed in the planning area. It is not a sustainable activity due to the slow growth habit of most native trees. However, in order to achieve management objectives, such as hazardous fuels reduction or native plant propagation, commercial wood cutting would be allowed by issuance of a permit on a case-by-case-basis under Alternatives B, C, D and the Proposed Plan.
- **Plant and Seed Collection.** Commercial seed collection would require a permit on BLM-administered lands and must follow permit stipulations.
- **Plant Salvage.** Plant salvage would be allowed within the planning area on a case-by-case basis. Plant salvage would 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.
- **Scientific Plant Collection.** Scientific collection of vegetative materials, including seeds, would be permitted where appropriate through an annual letter of permission by the Arizona BLM State Office.
- **Native American Traditional Use.** Fees would 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 would not be authorized (see Appendix 2-B).
- **On Site Campfire Wood Collection.** The public may collect dead, downed, and detached wood for personal campfire use, while camping on BLM-administered land. Standing dead wood is not authorized for use, nor is removal by any mechanical means.
- **Firewood Collection.** Under Alternative A, continue 134,700 acres of firewood collection closures. Under Alternative B, close 142,800 acres to firewood collection (Table 2-5). Under Alternative D, close 1,318,000 acres to firewood collection. Under Alternative C close 179,300 acres to firewood collection. Under the Proposed Plan, close 153,000 acres to firewood collection. On-site firewood collection would be closed in the areas illustrated in Maps 2-3a through 2-3e. New closures to firewood collection would be implemented through the establishment of supplementary rules, as outlined in 43 CFR 8365.1-6. Additional

closures to firewood collection may be implemented, if assessments indicate potential resource degradation.

Table 2-5
Firewood Collection Closures by Alternative

Area	Alternative (BLM acres)				
	A	B	C	D	E
La Posa Plain Planning Area	131,500	131,500	131,500	131,500	131,500
Imperial LTVA	3,200	3,200	3,200	3,200	3,200
Big Marias ACEC	0	4,400	4,400	4,400	2,900
Sears Point ACEC	0	3,700	28,500	28,500	3,700
Dripping Springs ACEC	0	0	11,700	11,700	11,700
Remaining Field Office	0	0	0	1,138,700	0
Total Acres Closed	134,700	142,800	179,300	1,318,000	153,000

BLM = Bureau of Land Management; LTVA = Long-term Visitor Area; ACEC = Area of Critical Environmental Concern

- Other Vegetative Collection.** The public does not need written authorization to collect small amounts of commonly available renewable resources such as flowers, berries, nuts, seed, cones, and leaves for non-commercial purposes. Saguaro skeletons may not be collected for personal use or burned in campfires, as such use is not sustainable for this product in the planning area. The collection and possession of dead, downed, and detached ironwood at any one time is limited to three pieces, with an approximate weight not to exceed 10 pounds. The collection of standing dead plant material would not be allowed.

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 basis for fire management on BLM-administered lands can be found in Federal and State laws, regulations, policies, and guidance.

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.

Prior to 1935, wildfire was not a major cause of disturbance within the lower Colorado River riparian ecosystem. Flood control activities initiated after the completion of Hoover Dam allowed the widespread establishment of the exotic salt cedar. Suppression of annual floods has limited the ability of native plant communities to regenerate and has created a system where wildfire has become the major disturbance influencing riparian stand development. Wildfire and

the subsequent progression towards monotypic stands composed of salt cedar have been detrimental to many riparian obligate species.

The entire planning area would be managed as non-fire use. The management of lands is based on the Desired Future Condition of vegetation communities, ecological conditions, and ecological risks. The management of lands is determined by contrasting current and historical conditions and ecological risks associated with any changes. The condition class concept helps describe alterations in key ecosystem components such as species composition, structural stage, stand age, canopy closure, and fuel loadings.

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

- Protect human life (both firefighters and public) and communities, property, and the natural resources on which they depend. Firefighter and public safety are the highest priority in all fire management activities.
- Improve public awareness of the role of fire in ecosystem restoration, wildfire risk and mitigation strategies, and wildfire safe community, preparedness, and response planning.
- Foster interagency and community interactions and cooperation to develop effective and integrated wildland fire and fuel management strategies across administrative boundaries to meet landscape-scale resource condition objectives.
- Reduce hazardous fuels around communities at risk within the WUI using mechanical treatment and prescribed fire, where applicable.
- Appropriate Management Response (AMR) for resource benefits would be full suppression.

Management Actions

- 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.
- Prescribed and wildland fire techniques would be used to protect the values-at-risk (life and property) and to maintain or enhance the ecosystem health.
- Fire and fuels management strategies may include fire suppression, prescribed fire, and non-fire treatments (manual, chemical, mechanical, or biological treatments).
- Identify areas where prescribed fire use would be appropriate to maintain or restore desirable plant communities.

- 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 would focus on the WUI areas and shrublands characterized as Fire Regime Condition Class II and III.
- Identify and implement post-fire stabilization and rehabilitation actions in burned areas to restore a functional landscape to meet the natural resource management objectives.
- 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 would also identify areas for exclusion from fire (through fire suppression), chemical, mechanical, and/or biological treatments.
- To the extent possible, implement the fire management activities-related conservation measures presented in Appendix 2-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 would be required to initiate ESA Section 7 consultation with the USFWS for the specific projects.
- In wilderness areas, when wildland fire suppression occurs, minimum impact suppression tactics identified in the Interagency Standards for Fire and Aviation Operations would be applied.
- Conduct fire management activities along NHTs in a manner that would avoid or minimize adverse impacts to existing resources and values identified in the legislative designation of the trails. For ACECs and Back Country Byways, the desired conditions and management prescriptions would be considered in implementing fire management activities.
- Wildland fire suppression activities would utilize methods with lesser ground disturbance to minimize potential adverse impacts on existing species and habitats. No heavy equipment (such as bulldozers) would be used unless approved by the YFO Manager.
- Use of fire retardants or chemicals adjacent to waterways would 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).
- Protect all known cultural resources from fire management activities-related disturbance through consultation with cultural resource specialists.

Administrative Actions

- Establish an approved burn plan and follow the environmental prescriptions identified in the plan for fuels treatment using prescribed fire.
- 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).

2.0 Description of Alternatives

- Identify AMR-related goals, objectives, and constraints for each fire management unit.
- Comply with Federal and State standards for smoke and air quality management for fuel treatment using prescribed fire.
- Collaborate with communities at risk within the WUI to develop strategies for wildfire hazard mitigations.
- Coordinate implementation of fuel reduction treatments with landowners, agencies, and Native American tribes.
- Establish or update cooperative agreements to maximize coordination with BLM's cooperators.
- Undertake education, enforcement, and administrative activities as measures to minimize human-caused wildfires. Education measures would 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.
- Accomplish enforcement by providing training opportunities for BLM employees interested in fire-cause determination.
- Include expanded fire prevention media outreach and stakeholder/cooperating agencies involvement in administrative activities.

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.

In addition to the Sikes Act, the following laws, regulations, and policies direct the management of fish and wildlife on BLM-administered public lands: Migratory Bird Treaty Act of 1918; Fish and Wildlife Coordination Act of 1958; Fish and Wildlife Conservation Act of 1980; FLPMA; ESA of 1973, as amended; EO 12962- Recreational Fisheries; EO 13112—Invasive Species Control; EO 13186- Conservation of Migratory Birds; BLM Manual 6500—*Wildlife, Fish, and Plant Resources*; and BLM Manual 6840—*Special Status Species*.

The LCR MSCP is a multi-stakeholder Federal and non-Federal partnership 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. This is a long-term (50-year) plan to conserve at least 26 species along the lower Colorado River from Lake Mead to the Southerly International Boundary with Mexico through the implementation of a Habitat Conservation Plan. Most of the covered species are Federal and/or State listed and special status species. Reclamation is the lead Federal agency responsible for implementing the LCR MSCP over the 50-year term of the program. A Steering Committee consisting of 56 entities provides input and oversight functions in support of LCR MSCP implementation.

BLM would 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 State of Arizona manages wildlife, while the BLM manages wildlife habitat. The Arizona BLM's *Five Year Strategy for the Wildlife, Fisheries, Botany, and Threatened and Endangered Species Programs* (USDOI BLM 2004b) would guide management actions.

Desired Future Conditions

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

- 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 would remain in their present quality and quantity, at a minimum.
- Retain high-quality, connected, and sustainable fish and wildlife habitat.
- Fish and wildlife habitats capable of sustaining healthy populations would meet conservation, socio-economic (e.g., hunting, fishing, watchable wildlife), and Tribal needs.
- Suitable habitats and habitat linkages would remain available in both quality and quantity to promote genetic integrity for priority fish and wildlife species when planning terrestrial and aquatic ecosystem restoration.
- All livestock waters would provide safe, usable water for wildlife.
- Natural wildlife waters, such as unmodified tinajas and Dripping Springs, would remain in their natural state. Such waters are essential for ecological integrity and promote biological diversity. Any modifications to unmodified tinajas would be minimal to allow trapped animals to escape (e.g. stairs or escape ramps), and would be analyzed through site-specific NEPA.
- Limit the distribution and abundance of invasive plants and animals to current levels and reduce, from current levels, the impact of invasive species on native ecosystems through active management.
- Minimize the undesirable effects to fish and wildlife populations resulting from human activities, especially during critical life stages, through mitigation of potential impacts.
- Restore native species habitat distribution and occurrence (especially for priority species), conserve biological diversity, and maintain genetic integrity and exchange, and improve availability of suitable habitats and habitat linkages.

Management Actions

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

- 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 would be built to exclude livestock. Where terrain permits, livestock water would be provided at least 0.5 mile outside of the fenced enclosures.

2.0 Description of Alternatives

- 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 would not exceed 20 inches.
 - YFO would install wildlife escape ladders in each facility and provide ramps for small bird and mammal access in cooperation with AGFD and CDFG.
 - Storage tanks would have either a metal or floating vinyl cover to reduce evaporation and prevent wildlife from drowning.
- 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 would be implemented in coordination with AGFD, CDFG, and/or USFWS, as necessary.
- 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 hypugea*), and Aplomado falcon (*Falco femoralis septentrionalis*).
- Manage non-native species identified as pests in accordance with applicable BLM, AGFD, and CDFG management policies depending on administrative area.
- Design and implement 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.
- Construct, maintain, restore, redevelop, or enhance wildlife waters for native wildlife species-populations. Water developments would include design features to ensure safety and accessibility to water by wildlife.
- 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.

Administrative Actions

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

- Develop landscape-specific habitat management plans through collaborative partnership with appropriate agencies.
- Enhance public awareness of fish and wildlife management through conservation education and interpretive programs.
- Maintain all existing wildlife waters to provide a perennial water source.
- Coordinate animal damage control with the Animal and Plant Health Inspection Service and AGFD and CDFG.
- 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 2-B.

Desired Future Conditions Common to All Priority Species

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

- Provide well-distributed habitat and connectivity corridors capable of supporting self-sustaining populations of interacting groups of priority species for biodiversity, socio-economic, and Tribal needs.
- Provide suitable habitat capable of maintaining stable or increasing trends in abundance to help keep species from becoming federally listed.
- Prevent, where and when possible, human-caused disturbance to habitats that result in animal mortalities or undesirable effects to populations of priority species during critical stages.
- Maintain suitability of existing bat roost sites and maintain or enhance accessibility to key open watering sites.
- Minimize adverse effects to big game habitat from project-related disturbance, 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.
- Maintain, restore, or enhance raptor populations through proper habitat management.

A. BATS

Management Actions

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

Administrative Actions

- 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.
- Identify key open watering sites for bats.
- Prioritize natural and manmade roosts for protection, especially those containing large populations of a single species or diverse collections of species.
- Monitor the potential effects of land management and resource use, and other natural or human-caused disturbances on bat habitat.
- Evaluate the effectiveness of conservation measures or management actions implemented including bat gates, manmade roosts, and other habitat protection and restoration actions.
- 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

- Comply with BLM guidelines to prohibit domestic sheep and goat grazing within nine miles of desert bighorn sheep habitat to avoid disease transmission according to Instruction Memorandum (IM) 98-140 *Revised Guidelines for Management of Domestic Sheep and Goats in Native Wild Sheep Habitat*.
- 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

- 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).
- 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 would 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

- Ensure that 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.
- Support the conservation intent of the conventions of the Migratory Bird Treaty Act by integrating bird conservation principles, measures, and practices into YFO activities and by avoiding or minimizing, to the extent practicable, adverse impacts on migratory bird resources when conducting BLM actions.

Management Actions

- Restore and enhance the habitat of migratory birds, as practicable.
- Integrate fire management into upland and riparian habitat restoration actions for non-game bird species.
- Prevent or abate the pollution or detrimental alteration of the environment for the benefit of migratory birds, as practicable.
- Consolidate areas with high actual or potential value for non-game migratory bird habitat through voluntary land exchange or acquisition.
- 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.

Administrative Actions

- Prioritize breeding and migratory stopover bird habitat for protection or mitigation.
- Identify major habitat modifications and other threats that may have significant negative effects on the survival of migratory bird species-populations.
- 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.
- 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

2.0 Description of Alternatives

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.

- Within the scope of its 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.
- Identify possible mitigation measures through project-specific NEPA analysis. Avoid to the degree practicable, adverse impacts on non-game bird habitats.
- Through public outreach and education, develop a broad awareness and understanding of the importance of non-game bird species and their value to our natural heritage.
- Promote recreational opportunities for bird watching and photography.
- Develop interpretive displays for use at professional meetings, county fairs, and other outreach opportunities.
- 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.
- 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.
- Recognize and promote economic and recreational values of birds, as appropriate.
- Develop partnerships with non-Federal entities to further bird conservation.
- 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).
- 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, etc.) as practicable, and coordinate with other agencies and non-Federal partners in planning efforts.
- 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

Management Actions

- Pursue all land acquisition options (i.e., purchase, exchange, donation, and easement from willing land owners) 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 1992a).
- Plant trees in suitable areas to provide perch sites and enhance foraging habitat for raptors.

Administrative Actions

- 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.
- 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.
- 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.
- Participate in cooperative research initiatives with other Federal and State agencies, universities, and non-governmental organizations.
- 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

- Create or maintain habitat for dove and quail at suitable sites such as riparian restoration areas or retired agricultural leases.
- Create a management plan for the Fred J. Weiler Greenbelt through cooperation with the AGFD.

Administrative Actions

- Coordinate with AGFD to provide hunting opportunities for dove and quail.
- Monitor the potential effects of land management and resource use, and other natural or human-caused disturbances on game bird habitat.

2.7.2 WILDLIFE HABITAT MANAGEMENT AREAS

Priority Wildlife Habitats were designated as wildlife-related special interest areas under the 1987 Yuma District RMP, as demonstrated under Alternative A. Five types of WHAs are proposed for the entire planning area and generally vary by acres between alternatives. These management areas are as follows: Colorado and Gila River Riparian, Desert Mountains, Dunes, Palomas Plain, and Wildlife Movement Corridors. These five areas are proposed under Alternatives B, C, D, and the Proposed Plan with the following two exceptions: Dunes is excluded from Alternative B (0 acre), and Palomas Plain is proposed as an ACEC under Alternative D (429,900 acres).

WHA designations are presented by alternative in Table 2-6 below and Maps 2-4a through 2-4e.

Desired Future Conditions Common to All

- Promote healthy terrestrial, aquatic, and riparian ecosystems for biological diversity, ecological integrity and sustainability, and social and cultural needs.
- Reduce fragmentation of land cover by land use to sustain ecosystem composition, structure, functions, and processes.
- Emphasize conservation measures for special status species, priority species, and other at-risk species while balancing the multiple uses of public lands.
- Provide well-distributed habitats and connective corridors for a functional landscape to maintain self-sustaining, complex interacting groups of species or wildlife assemblages.
- Limit additional human-caused disturbance and land-cover changes that may cause adverse effects on native and desired non-native fish and wildlife species habitats.

**Table 2-6
Wildlife Habitat Management Areas by Alternative**

Wildlife Habitat Management Areas	Alternative (BLM acres)				
	A	B	C	D	E
Priority Wildlife Habitat	539,500*	0	0	0	0
Colorado River and Gila River Riparian	n/a	38,900	38,900	38,900	38,900
Desert Mountains	n/a	664,000	664,000	664,000	664,000
Dunes	n/a	0	59,400	59,400	57,500
Palomas Plain	n/a	704,800	704,800	ACEC	627,700
Wildlife Movement Corridors	n/a	138,100	138,100	138,100	138,100

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

*1987 Yuma District RMP identified Priority Wildlife Habitat. Acreage includes portions of the Lake Havasu Field Office.

Management Actions Common to All

- 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.
- Where practicable, additional uses in WHAs would be limited to compatible activities and those actions whose impacts could be mitigated to preserve or enhance wildlife values.

- Limit developments where practicable (i.e., livestock facilities, roads, lands actions, mining and minerals) on WHAs to those that are compatible with wildlife habitat.
- Acquire private and State lands in WHAs from willing landowners through purchase or exchange.
- Transmission class ROWs within WHAs would be confined to designated ROW Corridors whenever practicable.

A. COLORADO AND GILA RIVER RIPARIAN WHA

This proposed 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 desert southwest, wildlife use riparian areas disproportionately more than any other type of habitat, and many species are riparian-obligates (i.e., use only riparian habitats). For example, within the planning area, more than 400 species are either directly dependent on riparian areas or use them more than other habitats (USDOJ 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.

Desired Future Conditions

- Provide suitable habitat for aquatic and riparian species in the lower Colorado and Gila rivers.
- Promote restoration of native fish habitat in the lower Colorado River.
- Enhance desired watershed conditions in the lower Colorado River and Gila River through maintenance of hydrologic integrity, reduction of accelerated soil erosion and sedimentation, and protection of water quality from point- and non-point-source pollutants.
- Maintain riparian-wetland and floodplain areas in proper functioning condition along the lower Colorado River and Gila River corridors.

Management Actions

- Allocate 38,900 acres to Colorado and Gila River Riparian WHA under Alternatives B, C, D, and the Proposed Plan.
- 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.
- No salable mineral permits would be issued within the Colorado and Gila River Riparian WHA.
- No surface occupancy for oil and gas leases would be applied within the Colorado and Gila River Riparian WHA.

- Implement vegetation management to rehabilitate riparian plant communities dominated by non-native species such as salt cedar.

B. DESERT MOUNTAINS WHA

This proposed 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.

Desired Future Conditions

- Maintain well-distributed habitats and connective corridors to support self-sustaining populations of native wildlife species (i.e., desert bighorn sheep, desert tortoise [Sonoran and Mohave populations], CFPO, raptors, and bats).
- Maintain habitat to promote stable or increasing population trends in the Desert Mountains-associated priority species.

Management Actions

- Allocate 664,000 acres to Desert Mountains WHA under Alternatives B, C, D, and the Proposed Plan.
- Limit mineral materials permits within the Desert Mountains WHA, by making appropriate use of the proposed community pits.
- No surface occupancy for oil and gas leases would be applied within the Desert Mountains WHA where AGFD has identified sensitive desert bighorn sheep habitat.
- Confine distribution and transmission-class ROWs within Desert Mountains WHA to designated corridors whenever practical.

Administrative Actions

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

C. DUNES WHA

This proposed 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 would 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.

Desired Future Conditions

- Maintain sand dune habitats that 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*).
- Reduce non-native invasive species (e.g., Russian thistle [*Salsola kali*] and Sahara mustard) that threaten dune complexes.

Management Actions

- Allocate the Dunes WHA 57,500 acres under the Proposed Plan and 59,400 acres under Alternatives C and D.
- Dune areas which support sensitive, special status, and/or priority species would not be available for future Open OHV Management Area designations.
- Lands authorizations would avoid to the extent practicable, minimize, or mitigate impacts to dunes with sensitive species.

Administrative Actions

- Identify areas of high ecological sensitivity.

D. PALOMAS PLAIN WHA

The Palomas Plain proposed 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. The Lower Sonoran Field Office proposed an adjacent 265,400-acre area as the Gila Bend Mountains Wildlife Management Area.

Desired Future Conditions

- Promote landscape juxtaposition and connectivity with adjacent planning areas.
- Maintain 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

- Allocate the Palomas Plain WHA 704,800 acres under Alternatives B and C, and 627,700 acres under the Proposed Plan.
- Concentrate developments such as utility facilities in areas already developed or disturbed.

Administrative Actions

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

- Monitor and evaluate habitat use by native wildlife populations (including mule deer, desert bighorn sheep, desert tortoise, and raptor species).
- In cooperation with AGFD and other agencies, determine the feasibility of reintroduction of Sonoran pronghorn to its historic range.

E. WILDLIFE MOVEMENT CORRIDORS WHA

This proposed 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.

Desired Future Conditions

- 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

- Allocate 131,800 acres to Wildlife Movement Corridors WHA under Alternatives B, C, D, and the Proposed Plan.
- Minimize new developments or improvements (i.e., roads, fences, canals, quarries, developed campgrounds) which would 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

- Coordinate with ADOT to reduce wildlife highway fatalities in problem areas.

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 (special status plants are addressed in the Vegetation Management section of this chapter). 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 Endangered Species Act) Species; and (3) BLM Sensitive Species. Appendix 2-B contains a list of special status species in the planning area.

YFO shall carry 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 (43 USC. 1701 et seq.) 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.

LUP decisions would be consistent with BLM's mandate to protect and recover species listed under the ESA and would be consistent with objectives and recommended actions in approved recovery plans, conservation agreements and strategies, MOUs, and applicable biological opinions for threatened or endangered species.

In addition to the ESA, the following laws, regulations, and policies direct the management of special status species on BLM-administered public lands: Migratory Bird Treaty Act of 1918, as amended; Bald Eagle Protection of 1940, as amended 1962; Fish and Wildlife Coordination Act of 1958; California Native Plant Protection Act of 1977; California Endangered Species Act of 1984; Arizona Native Plant Law of 1993; EO 12962 - Recreational Fisheries; EO 13186 - Conservation of Migratory Birds; USDOJ Manual 520 - *Riparian Habitat*; BLM Manual 6500 - *Wildlife, Fish, and Plant Resources*; BLM Manual 6840 - *Special Status Species*; BLM Manual 1737 - *Riparian; Recovery Plans for 12 Federally Listed Species*; FTHL *Rangewide Management Strategy* (2003; Conservation Agreement signed in 1997); *Management Plan for the Sonoran Desert Population of the Desert Tortoise in Arizona* (1996); Biological Opinion for Small Projects Affecting [Mojave] Desert Tortoise Habitat in California; Biological Opinion on Yuma District LUP 1998 and amendments; LCR MSCP EIS/*Environmental Impact Report* (USDOJ Reclamation et al. 2004), Appendix B (dated September 3, 2004); and *Biological and Conference Opinion for the BLM Arizona Statewide LUP Amendment for Fire, Fuels, and Air Quality Management* (File number AESO/SE: 02-21-03-F-0210).

The following Desired Future Conditions, Management Actions, and Administrative Actions for special status species would be applied to the entire planning area.

Desired Future Conditions

- Maintain, enhance, and restore terrestrial and aquatic habitats for the survival and recovery of species listed under the ESA and to help keep proposed or candidate species from becoming listed as endangered or threatened under the ESA. Management actions either contribute to or do not prevent recovery or delisting of species listed under the ESA.
- Achieve 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).
- Maintain, enhance, or restore habitat historically or currently supporting special status species and existing habitat capable of supporting special status species in the future. Ecological restoration actions would address long-term threats to special status species and the short-term need to protect special status species and their habitats.
- Ensure 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

- No activities or projects that would jeopardize the continued existence of special status species would be permitted on BLM-administered lands.
- 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.
- Require projects and land-use authorizations to minimize adverse impacts to special status species through mitigation.
- 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 would reduce a species' existing distribution; and (3) species undergoing significant current or predicted downward trend in population or density.
- Minimize or avoid human-caused habitat destruction, degradation, and fragmentation to protect special status species. Habitat modifications from land and resource uses would be at levels that do not threaten the persistence of threatened, endangered, proposed, or candidate species populations.

Administrative Actions

- During site/project-level analysis, identify practices or facilities that would 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.
- 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.
- Implement the applicable species-specific conservation measures within rendered biological opinions.
- 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.
- 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.

Desired Future Conditions

- None.

Management Actions

- None.

Administrative Actions

- Provide public education, outreach, and interpretive programs.
- Enforce existing State and Federal regulations for protection of listed species.
- Continue to assist USFWS in retrieving weakened, transient California brown pelicans for rehabilitation.

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

Adopt and implement the *Gila Topminnow Revised Recovery Plan* (USDOI USFWS 1998a), which identifies the following as actions needed: (1) Prevent extinction by protecting remaining natural and long-lived reestablished populations; (2) reestablish and protect populations throughout historic range; (3) monitor natural and reestablished populations and their habitats; (4) develop and implement genetic protocol for managing populations; (5) study life-history, genetics, ecology, and habitat of Gila topminnow and interactions with nonnative aquatic species; and (6) inform and educate the public and resource managers.

The *Bonytail Chub Recovery Goals* (USDOI USFWS 2002a) identifies similar management actions addressed in the *Razorback Sucker Recovery Goals* (USDOI USFWS 2002c).

Adopt and implement the *Desert Pupfish Recovery Plan* (USDOI USFWS 1993), which identifies the following as actions needed: (1) protect natural populations and their habitats; (2) re-establish populations; (3) establish a refugium population of Quitobaquito pupfish; (4) develop protocol for exchange of genetic material; (5) monitor natural and replicated populations; (6) determine factors affecting population persistence; and (7) provide information and education.

YFO would implement applicable recovery objectives consistent with the recovery plans and any future revisions for these three species.

Desired Future Conditions

- Provide suitable perennial waters capable of supporting self-sustaining populations of Gila topminnow, bonytail chub, and desert pupfish, as appropriate. Protection of populations in currently occupied habitat is the highest priority, followed by reintroduction into suitable habitat within their historic range. Retain sufficient shoreline vegetation to reduce soil erosion and protect spawning habitat along shorelines of perennial waters from excess siltation above natural or background levels.

- In cooperation with the AGFD and the USFWS, reestablish Gila topminnow, bonytail chub, and desert pupfish into currently or potentially suitable habitat areas within the planning area.
- Limit streambank vegetation alteration due to recreation activities and livestock grazing in riparian areas along stream reaches occupied by Gila topminnow, bonytail chub, and desert pupfish.

Management Actions

- 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.
- Limit fuel treatments in watersheds with occupied reaches or sites of Gila topminnow, bonytail chub, and desert pupfish to no more than ½ of the watershed area in any two-year period.

Administrative Actions

- None.

C. MOJAVE DESERT TORTOISE (THREATENED)

Adopt and implement the recovery strategy addressed in the *Desert Tortoise (Mojave Population) Recovery Plan* (USDOI USFWS 1994). The overall recovery objective is to provide habitat capable of maintaining stable or increasing trends in abundance and survivorship of Mojave desert tortoise (*Gopherus agassizii [xerobates]*) in all recovery units in the Mojave region. The planning area partially overlaps with the Eastern Colorado recovery units in southeastern California (USDOI BLM 2002b). Recovery goals, objective, strategy, and delisting criteria are described in the recovery plan.

Desired Future Conditions

- Ensure no net loss in the quality or quantity of Category I and II desert tortoise habitats to the extent practicable.
- When possible, prohibit activities that would fragment or further isolate existing populations of desert tortoises (i.e., canals, highways).
- Reduce take of desert tortoises through the removal of these animals to undisturbed areas out of harm's way.
- Ensure that wild horse and burro abundance is in ecological balance with existing desert tortoise and other wildlife populations.
- Reduce the attraction of predators, such as the common raven, to project areas to the maximum extent possible.
- Establish the goals and criteria for three categories of desert tortoise habitat areas. These categories are:

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

Management Actions

The following management actions would apply to all Mojave Desert tortoise habitat within 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 *Arizona Interagency Desert Tortoise Team Management Plan* (1996).
- 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, 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 of new paved roads and railroads. Require erection of tortoise barriers around projects that would be sources of mortality (such as canals, heavily used roads, 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.
- All BLM-authorized surface-disturbing projects would be located in previously disturbed areas or outside of Mohave 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.

- 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 BLM-authorized surface-disturbing activities to existing ROW Corridor areas.

Administrative Actions

- Implement worker education programs and well-defined operational procedures to avoid the “take” of desert tortoises and their habitat.
- Ensure that wild horse and burro abundance is in ecological balance with existing desert tortoise and other wildlife populations.

D. RAZORBACK SUCKER (ENDANGERED)

Adopt and implement the *Razorback Sucker Recovery Goals* (USDOI USFWS 2002b) of the *Razorback Sucker Recovery Plan* (USDOI USFWS 1998b). Actions identified to achieve the recovery objective (downlisting or delisting), include (1) reestablishing populations with hatchery-produced fish; (2) providing and legally protecting habitat (including flow regimes necessary to restore and maintain required environmental conditions) necessary to provide adequate habitat and sufficient range for all life stages to support recovered populations; (3) providing passage over barriers within occupied habitat to allow unimpeded movement and, potentially, range expansion; (4) minimizing entrainment of subadults and adults at diversion/out-take structures; (5) ensuring adequate protection from overutilization; (6) ensuring adequate protection from diseases and parasites; (7) regulating nonnative fish releases and escapement into the main river, floodplain, and tributaries; (8) controlling problematic non-native fishes as needed; (9) minimizing the risk of hazardous-material spills in critical habitat; (10) remediating water-quality problems; and (11) providing for the long-term management and protection of populations and their habitat beyond delisting (i.e., conservation plans).

The planning area is within the lower Colorado River Basin recovery unit. Recovery goals, including site-specific management actions and tasks by recovery factors, for the recovery unit are addressed in the *Razorback Sucker Recovery Goals* (USDOI USFWS 2002b).

Desired Future Conditions

- Minimize known threats to razorback sucker, which include habitat modification, competition with and predation by non-native fish species, and pesticides and pollutants.
- 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.
- Protect critical habitat from further degradation in habitat conditions and water quality, and restore habitats to meet established recovery goals for razorback sucker.

Management Actions

- 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.

Administrative Actions

- 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.
- 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.
- 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.

E. SONORAN PRONGHORN (ENDANGERED)

Adopt and implement the recovery strategy addressed in 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). The recovery criteria for the Sonoran pronghorn is to establish an estimated population of 300 adults in one self-sustaining population in the U.S. for a minimum of 5 years and establish at least one other self-sustaining population in the U.S. Criteria for downlisting the subspecies to threatened status include the maintenance of a stable population for a minimum of 5 years and protection and securing of the necessary habitat.

Desired Future Conditions

- Provide unfragmented habitat capable of contributing to the potential reintroduction of Sonoran pronghorn in the planning area as a step toward recovery of the species within the historic range.
- Manage for maximum plant species richness. Prescribed fire and livestock herd management could be utilized to improve plant species richness.
- Manage pronghorn habitat to minimize shrub and tree encroachment following evaluation of potential reintroduction sites in accordance with the recovery plan.

Management Actions

- Use prescribed fire, chemical, and mechanical treatments to reduce shrub and tree components. Prescribed fire can be used to supplement natural grassland renewal, especially to increase forbs and reduce shrubs.
- 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

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

F. SOUTHWESTERN WILLOW FLYCATCHER (ENDANGERED)

The overall recovery objective for the southwestern willow flycatcher (SWFL; *Empidonax traillii extimus*) identified in the *Southwestern Willow Flycatcher Final Recovery Plan* (USDOI USFWS 2002d) is to attain a population level and an amount and distribution of habitat sufficient to provide for the long-term persistence of metapopulations, even in the face of local losses (e.g., extirpation). YFO would implement applicable recovery objectives consistent with the recovery plan and any future revisions.

The planning area is within the Lower Colorado and Gila Recovery Units, as identified in the recovery plan. Specific river reaches within the planning area where recovery efforts should be focused are identified in the recovery plan. Substantial recovery value exists in areas of currently or potentially suitable habitat.

Desired Future Conditions

- Provide suitable habitat capable of maintaining stable or increasing population trends of SWFL in the Lower Colorado Recovery Unit within the planning area.
- Develop new riparian habitat and restore damaged or degraded areas along the lower Colorado River and Gila River for the survival and recovery of SWFL.
- Minimize activities that would promote or encourage attractants of scavengers, predators, and brown-headed cowbirds to protect existing populations of SWFL (for example, livestock grazing, bird feeders, forest thinning).
- Minimize recreation activities where potentially suitable SWFL habitat has been identified to allow the area to recover vegetative features needed by the species.
- Protect existing SWFL habitats by reducing fire risk to habitat.

Management Actions

- Use fencing or physical barriers to protect riparian habitat from unauthorized OHV use.
- Avoid hazardous fuel thinning projects that reduce the quality or quantity of SWFL habitat and instead install fire breaks to protect habitat from wildfires.

- Through interagency coordination with AGFD, initiate cowbird control to protect a particular SWFL population only after sufficient baseline data show cowbird parasitism to be a significant threat to that population.

Administrative Actions

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

G. YUMA CLAPPER RAIL (ENDANGERED)

The overall recovery objective for the Yuma clapper rail (*Rallus longirostris yumanensis*) identified in the *Yuma Clapper Rail Recovery Plan* (USDOI USFWS 1983) is to protect sufficient habitat in the U.S. and Mexico with sufficient breeding and wintering habitat capable of supporting a population of 700-1,000 breeding birds in the U.S. YFO would implement applicable recovery objectives consistent with the recovery plan and any future revisions.

Desired Future Conditions

- Ensure no net loss or fragmentation of marshlike habitat for major life history requirements (i.e., breeding, feeding or resting cover) of Yuma clapper rail and 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.

Management Actions

- 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).

Administrative Actions

- 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.
- Initiate public outreach with education and interpretive programs to promote species–habitat recovery.

2.8.2 FEDERAL CANDIDATE SPECIES

YELLOW-BILLED CUCKOO

The yellow-billed cuckoo (*Coccyzus americanus*) is a candidate for listing under the ESA. 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. However, proposed rules have not yet been issued, because such actions are precluded at present by other listing activity. No recovery plans or objectives have been developed for this species. All projects and activities occurring on public lands within the planning area would be evaluated to ensure that they would not contribute to the need to list the yellow-billed cuckoo as threatened or endangered under the ESA. YFO would ensure the conservation of yellow-billed cuckoo habitats and the ecosystems of which they are components as a means to conserve or improve the status of the species in the wild and reduce the need to list the species as endangered or threatened.

Desired Future Conditions

- Maintain connective riparian corridors within and between known yellow-billed cuckoo breeding areas along the lower Colorado River and Gila River.
- Reduce or eliminate recreational use-related impacts and other disturbance factors to nursery beds during and after seedling establishment.
- Protect currently unprotected occupied or potential yellow-billed cuckoo habitat through acquisition, easements, partnerships, and other means.
- Manage for no net loss or fragmentation of breeding and migratory habitats, and maintain natural bird behavior by minimizing indirect effects resulting from human-caused disturbances.

Management Actions

- 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. Restore reaches of riparian habitat by encouraging private/public partnerships for fencing and habitat restoration through Federal, State, and non-government programs.
- Promote regeneration of native vegetation in riparian areas by minimizing impacts from land/resource uses such as livestock grazing, water diversion, inundation, wood cutting, and OHV travel.
- Manage for large, contiguous blocks of native riparian habitat (>30 acres) in conjunction with removal of competing exotic species (such as salt cedar).

Administrative Actions

- Collaborate with Federal and State agencies, and private organizations conducting research, survey, and monitoring of yellow-billed cuckoo to develop regionwide conservation strategies.
- Monitor and evaluate livestock grazing impacts on cottonwood and willow seedlings in riparian areas and reduce or remove grazing pressure when vegetative regeneration is being negatively impacted.
- Survey and monitor riparian vegetation areas that are currently regenerating to determine occupancy by yellow-billed cuckoo.

2.8.3 STATE-LISTED SPECIES

YFO shall carry out management for the conservation of plants and 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 (43 U.S.C. 1701 et seq.) and other Federal laws. YFO would develop policies that would assist California and Arizona in achieving their management objectives for State-listed species. It is BLM policy to manage for the conservation of State-listed species and their associated habitats and to ensure that actions authorized, funded, or carried out do not contribute to the need to list these species as threatened or endangered.

The species listed in this section are those with specific management guidelines applicable to the planning area.

A. BALD EAGLE

Adopt and implement the recovery objectives addressed in the *Bald Eagle (Southwestern Population) Recovery Plan* (USDOI USFWS 1982). The recovery plan includes the following guidelines: (1) Maintain and protect the existing nest territories; (2) enhance nest territories to increase the production of young above the present average of 1.02 fledglings per active nest; (3) continue using a production index and annual monitoring program to determine whether the population is increasing, decreasing, or stable; (4) identify, maintain, and improve wintering habitat; and (5) promote research that would lead to increased eagle survival.

Desired Future Conditions

- Protect riparian areas capable of providing special habitat components for nesting and wintering birds along the lower Colorado River and Gila River.
- Protect, maintain, or enhance the existing known occupied sites for bald eagles.

Management Actions

- None

Administrative Actions

- 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.
- Locate, map, and evaluate non-nesting habitats by the transient bald eagle population.
- Enhance public outreach designed to gain support for the protection of bald eagles.

B. BURROWING OWL

Adopt and implement conservation strategies outlined by the AGFD and CDFG for this species. Overall, the conservation objective is to provide habitat capable of maintaining stable or increasing trends in abundance of burrowing owls.

Desired Future Conditions

- Maintain suitable habitats of sufficient quality and quantity with adequate patch sizes that could support burrowing owls.
- Conserve burrowing animals, which are essential to creating nest sites for burrowing owls.
- Maintain large, contiguous areas of treeless, native grasslands.

Management Actions

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

Administrative Actions

- 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

Overall, the conservation objective is to provide habitat capable of maintaining stable or increasing trends in abundance of CFPOs in all management areas within the Sonoran Region.

Desired Future Conditions

- Protect all currently known CFPOs and the integrity of their territories, including adequate dispersal habitat. Identify and maintain an interconnected system of habitat patches extending from the northern portion of their historical range south to areas in Mexico. Reduce or eliminate the threats or limiting factors to the persistence of CFPOs.
- Provide well-distributed habitat capable of contributing to the survival and recovery of self-sustaining populations of CFPO. Habitat management for CFPO would 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.
- 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*), burweed (*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

- 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.
- Consider restrictions on special use permits and special closure stipulations for public access, where appropriate. 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).

- Restrict permitted recreational activities 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) within 0.25 mile of active CFPO territories during critical periods of the breeding season.
- 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.

Administrative Actions

- Protect all currently known (since 1993) CFPOs and the integrity of the territories, including adequate dispersal habitat. Identify and maintain an interconnected system of habitat patches contributing to reproduction and dispersal of CFPOs.
- Support research to study the life history and habitat requirements of CFPO.
- Complete survey and monitoring of CFPOs to understand population demographics, dispersal movement and habitats, and genetic diversity and isolation.
- 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.
- 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.
- Provide public education and outreach to increase public awareness on the importance of survival and recovery of CFPOs.

D. FLAT-TAILED HORNED LIZARD

Adopt and implement the conservation strategies described in the revised FTHL *Rangewide Management Strategy* (FTHL Interagency Coordinating Committee 2003), whose objectives included the following: (1) conserve sufficient habitat to maintain viable populations of FTHLs in five management areas; (2) maintain a long-term stable or increasing population trend in all management areas; (3) maintain a research area; (4) encourage the protection of FTHL through strong conservation management; (5) outside of FTHL management areas, limit the loss of habitat and effects on populations of FTHL through the application of effective mitigation and compensation; and (6) encourage adoption of a FTHL conservation program in Mexico. YFO would implement applicable objectives consistent with the management strategy and any future revisions.

Desired Future Conditions

- Maintain self-sustaining populations of FTHL in perpetuity. Minimize loss or degradation of FTHL habitat and maintain or establish effective habitat corridors between naturally adjacent populations.

Management Actions

- 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.
- Limit the loss of habitat and effects on FTHL populations through the application of effective mitigation and compensation.

Administrative Actions

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

E. SONORAN DESERT TORTOISE

Overall, the conservation objective for the Sonoran desert tortoise is to provide habitat capable of maintaining stable or increasing trends in abundance of desert tortoise in all management areas within the Sonoran Region.

Desired Future Conditions

- Category I and II desert tortoise habitat would retain all natural shelter sites (boulders, caliche caves, or similar features used by tortoises for sheltering), and maintain the land in an unfragmented state.
- Habitat would consist 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.
- No net loss in quantity or quality of Category I and II desert tortoise habitat would occur (Table 2-7).

**Table 2-7
Goals and Criteria for Categories I, II, and III of 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

- Adopt and implement the conservation strategy addressed in the *Management Plan for the Sonoran Population of the Desert Tortoise in Arizona* (Arizona Interagency Desert Tortoise Team 1996).
- Limit the loss of suitable habitat and effects on desert tortoise populations through the application of effective mitigation and compensation.
- 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.
- Assess all mining plans of operations for potential impacts to desert tortoise habitat on a case-by-case basis. Adverse impacts to desert tortoise would be mitigated to the extent allowable in BLM 3809 regulations.
- If adverse impacts to 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 would be pursued.
- Authorize no salable mineral material permits in Category I and II desert tortoise habitat.
- Locate new livestock waters at least two miles from Category I and II desert tortoise habitat.
- Exclude range improvement projects, including water developments, which would create conflicts with desert tortoise populations.
- Manage rangelands to increase distribution and density of native perennial grasses. 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.

- Defer grazing (or rest pastures) from spring, which is concurrent with desert tortoise emergence, through October, to include peak 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.
- Prohibit feeding of roughage, such as hay, hay cubes, or grain, to livestock as a means to supplement forage quantity.
- Retain desert tortoise habitat in public ownership, unless land disposal through an exchange provides greater benefits to desert tortoises.

Administrative Actions

- 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.
- Adopt and implement to the extent practicable actions from the pending State of Arizona conservation agreement for the Sonoran desert tortoise.
- Monitor and evaluate vegetation use by large ungulates and trends in site conditions in designated desert tortoise habitats.
- Enhance public awareness of desert tortoise habitat management and species conservation through educational and interpretive programs.
- Support research and interagency collaboration that would promote the conservation of desert tortoise or desert ecosystems.

2.9 LIVESTOCK GRAZING MANAGEMENT

BLM's objectives for rangeland management are to carry out the intent of the Taylor Grazing Act, as amended and supplemented, FLPMA of 1976, and the Public Rangelands Improvement Act of 1978. The objectives are (1) to maintain on a continuing basis an inventory of all public lands and their resources, and their present and future use projected through land use planning processes; (2) to manage public lands on the basis of multiple use and sustained yield; (3) to manage public lands in a manner that would protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values; (4) where appropriate, to preserve and protect certain public lands in their natural condition; (5) to provide food and habitat for fish and wildlife and domestic animals; (6) to provide for outdoor recreation and human occupancy and use; and (7) to manage, maintain, and improve the condition of the public rangelands so that they become as productive as feasible for all rangeland values in accordance with management objectives and the land use planning process.

The CFR allows for implementation of the various laws listed above as they relate to livestock grazing on public lands. The regulations in 43 CFR 4100 address grazing administration. These

regulations require, among other things, the implementation of *Standards and Guidelines* for grazing administration to achieve fundamentals of rangeland health.

The Taylor Grazing Act provides for two types of authorized use: (1) a Grazing Permit, which is a document authorizing the use of the public lands within an established grazing district; and (2) a Grazing Lease, which is a document authorizing the use of the public lands outside an established grazing district. Grazing district means the specific area within which the public lands are administered in accordance with Section 3 of the Taylor Grazing Act; Public lands outside grazing district boundaries are administered in accordance with Section 15 of the Taylor Grazing Act.

A permit or lease would include:

1. The number and kind of livestock;
2. The period(s) of use;
3. The allotment(s) to be used; and
4. The amount of use, in Animal Unit Months (AUMs).

The Special Ephemeral Rule, published December 7, 1968 (Appendix 2-D) allows a variance to the mandatory stipulations above. The permit or lease does not specify number and kind of livestock, period of use, or the amount of use in AUMs. The rule establishes that on applicable grazing lands, livestock grazing is feasible when certain climatic conditions create favorable conditions for grazing, primarily on annual vegetation. When these conditions occur, and the permittee or lessee applies for grazing use, the YFO determines the amount and period of authorized use. Such use is authorized when forage is available and there is a high probability that the forage would continue to be available through the period applied for and authorized.

The regulations at 43 CFR 4100 require that permits and leases include terms and conditions that ensure conformance with either the fall-back standards or those approved for the area within which the allotment is located. The Arizona Standards for Rangeland Health and Guidelines for Grazing Administration apply to all allotments within the planning area. No grazing is authorized within riparian and wetland areas.

Other terms and conditions may be specified in grazing permits or leases, which would assist in achieving management objectives, provide for proper range management, or assist in the orderly administration of the public rangelands. These terms and conditions, which are not all inclusive, are contained at 43 CFR 4130.3.

Terms and conditions for grazing permits and leases must be in conformance with resource and management objectives and program constraints, as identified in land use plans.

BLM-administered lands available for livestock grazing are presented in Table 2-8 and Map 2-5a (Alternative A), Map 2-5b (Alternative B), and Map 2-5c (Alternative C and the Proposed Plan).

**Table 2-8
Livestock Grazing Availability by Alternative**

Available/Unavailable for Livestock Grazing	Alternative (BLM acres)				
	A	B	C	D	E
Available YFO	1,005,600	680,900	428,300	0	428,300
Available LHFO	215,200*	215,200*	215,200*	0	215,200*
Unavailable	309,500	637,100	889,700	1,533,200	889,700
Total Acres*	Total YFO and managed portions of LHFO = 1,533,200 acres				

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

*215,200 acres available in LHFO, managed by YFO. LHFO acres are only calculated for areas available.

BLM allotments in Arizona are classified as Perennial, Ephemeral, or Perennial-Ephemeral. These classifications correspond to the following types of designated rangelands:

- **Perennial.** Rangeland which consistently produces perennial forage to support a year-round livestock operation;
- **Ephemeral.** Rangelands that do not consistently produce enough forage to sustain a year-round livestock operation, but may briefly produce unusual volumes of forage to accommodate livestock grazing. There is a Special Rule for Ephemeral Ranges; and
- **Perennial-Ephemeral.** Rangeland which produces perennial forage each year and also periodically provides additional ephemeral vegetation. In a year of abundant moisture and favorable climatic conditions, annual forbs and grasses add materially to the total grazing capacity.

The number of acres proposed available or unavailable for livestock grazing can be found within Alternative A through the Proposed Plan and primarily differ by the number of acres. The entire planning area is proposed unavailable under Alternative D.

Desired Future Conditions

- Provide forage on a sustained yield basis for livestock consistent with meeting Land Health Standards and multiple use objectives.
- Conduct livestock use and associated management practices 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.
- Maintain or improve healthy, sustainable rangeland ecosystems to meet *Land Health Standards* (USDOI BLM 1997a) and produce a wide range of public values such as wildlife habitat, livestock forage, recreation opportunities, clean water, and functional watersheds.

Management Actions

- Continue existing grazing allotments and acreage under Alternative A.

2.0 Description of Alternatives

- Remove four inactive livestock grazing allotments from availability encompassing 324,700 acres under Alternative B.
- Remove 12 inactive livestock grazing allotments from availability encompassing 577,300 acres under Alternative C and the Proposed Plan.
- Remove all livestock grazing allotments under Alternative D, making 1,533,200 acres unavailable for grazing.
- Authorize and maintain range improvement projects in accordance with grazing regulations and policies.
- 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:
 - Custodial (C), custodial management to protect resource conditions and values,
 - Maintain (M), management to maintain current satisfactory resource conditions and active management to ensure that the conditions of resource values do not decline, and
 - Improve (I), active management to improve unsatisfactory resource conditions.
- Change the category of grazing allotments as objectives are accomplished and/or conditions change. Chapter 3, Livestock Grazing, lists current specific allotment category assignments, grazing systems, preference, and such.
- Guidelines for grazing administration, as approved in the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration, apply to all livestock grazing activities.

2.9.1 ARIZONA GUIDELINES FOR GRAZING ADMINISTRATION

The Arizona Guidelines for Grazing Administration are a series of management practices used to ensure that grazing activities meet the Land Health Standards.

Guidelines for 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.

Guidelines for 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.

Guidelines for 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.

2.9.2 CRITERIA FOR CLASSIFYING ALLOTMENTS AS EPHEMERAL

Allotments may be classified as ephemeral in accordance with the Special Ephemeral Rule published December 7, 1968 through Rangeland Health Assessments. BLM has established criteria based upon the Special Rule through which allotments can be classified as ephemeral. These criteria include:

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.

Administrative Actions

- Land health standard evaluations would continue on all grazing allotments in accordance with established schedules, grazing regulations and policies. The above criteria would be addressed as individual allotments are evaluated for compliance with the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration.

2.10 WILD HORSE AND BURRO MANAGEMENT

Wild horses and burros are protected by the Wild Free-Roaming Horse and Burro Act of 1971, as amended by FLPMA of 1976, and Public Rangelands Improvement Act of 1978 (Public Law 95-514). After the passage of the Act, BLM became the managing agency responsible for protecting these animals 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 in accordance with the 1971 Act.

BLM YFO manages one Herd Area (HA) and one Herd Management Area (HMA) that share identical boundaries. The Cibola-Trigo HMA was identified in 1973 and is comprised of slightly

more than one million acres located entirely within the planning area. In Arizona, the Cibola-Trigo HMA supports both wild horses and burros. While in southwestern California, only the wild burro roams between the Colorado River and the Chocolate/Mules and Picacho HMAs. In California, wild horses and burros are managed in accordance with the *Proposed Northern and Eastern Colorado Desert Coordinated Management Plan and Final EIS* (USDOI BLM 2002a).

The HA represents a historic range and therefore the acres remain the same for each alternative. The number of acres proposed for the Cibola-Trigo HMA under Alternative A is the same as the historic range. The HMA boundary would be adjusted to only include those portions of the HA west of Highway 95 and south of I-10 under Alternative B through the Proposed Plan. HMAs by alternative for Wild Horse and Burro Management are presented in Table 2-9 and Map 2-6a (Alternative A) and Map 2-6b (Alternative B through the Proposed Plan).

Table 2-9
Wild Horse and Burro Herd and Herd Management Areas by Alternatives

HMA	Alternative (BLM acres)				
	A	B	C	D	E
Herd Area (historic)	263,700	263,700	263,700	263,700	263,700
Cibola-Trigo HMA	263,700	179,000	179,000	179,000	179,000

HA = Herd Area; HMA = Herd Management Area

Desired Future Conditions

- Maintain a viable and sustainable population of wild, free roaming horses and burros in the Cibola-Trigo HMA, while maintaining a thriving natural ecological balance with other resources and consistent with other management agencies objectives.
- Wild horses and burros would 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.

Management Common to All Alternatives

- The Appropriate Management Level (AML₂) for the Cibola-Trigo HMA would be 165 burros and 150 horses. Monitoring data, including climate, population, and vegetative data, would be collected and used to support removals and/or the revision of AML₂ for either wild horses, burros, or both.
- NWRs are not included within the boundaries of the Cibola-Trigo HMA. Imperial and Cibola NWRs would allow burro use if impacts to xero-riparian vegetation are kept to a minimum by maintaining the AML₂.

Management Actions

- Reduce the Cibola-Trigo HMA to 179,000 acres under Alternatives B, C, D, and the Proposed Plan.

**Table 2-10
Wild Horse and Burro Management Actions by Alternative**

Management Action	Alternative				
	A	B	C	D	E
YFO would 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.	X	X	X	X	X
Identify objectives for herd composition, animal characteristics, and habitat development. The AML ₂ may be adjusted based on monitoring data and subsequent evaluations.		X	X	X	X
Wild horses and burros utilizing the HA east of Highway 95 would 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 AML ₂ ; all others would be offered for adoption through the Wild Horse and Burro Adoption Program.		X	X	X	X

YFO = Yuma Field Office; AML₂ = Appropriate Management Level; HA = Herd Area; HMA = Herd Management Area

Administrative Actions

- 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.
- 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.
- Conduct herd monitoring annually in accordance with established protocol. Monitoring data would be used for periodic review of the AML₂ and guide animal removal decisions.

2.11 RECREATION MANAGEMENT

There are several regulations, laws, policies, and guidelines that authorize and direct BLM recreation management activities. FLPMA originally mandated that the BLM was to manage outdoor recreation resources on public lands. Section 202(c)(9) calls for land use planning consistent with Statewide Comprehensive Outdoor Recreation Plans. FLPMA’s implementing regulations enable the BLM to collect SRP fees for organized group events, commercial activities, and use of specially designated public lands, such as the planning area’s two LTVAs. The Federal Lands Recreation Enhancement Act (FLREA) authorizes the BLM to collect amenity recreation fees for the public use of developed recreation facilities. YFO currently manages seven developed recreation sites that charge amenity recreation fees under the authority of FLREA. YFO is required to reinvest all SRP and amenity recreation fees back into each respective fee program for recreation maintenance, enhancement, and development.

Recreation along the lower Colorado River is managed in coordination with Reclamation and conforms to the *Lower Colorado River LUP* of 1964 (USDOI 1964) and the Colorado River

Floodway Protection Act of 1986, as amended. The planning area's two recreation concession leases are managed according to the 1993 BLM *Yuma District's Concession Review Program* (USDOI BLM 1993a). YFO recreation management also adheres to the BLM *Arizona Standards for Rangeland Health and Guidelines for Grazing Administration*, ESA of 1973, as amended, NHPA of 1966, as amended, and NEPA of 1969, as amended.

BLM recognizes that natural resource-based recreation is a significant economic contributor in most communities adjacent to public lands. The *BLM's Priorities for Recreation and Visitor Services* (USDOI BLM 2003a) states, "Our 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." The document sets three primary goals for the BLM recreation program:

1. Improve access to appropriate recreation opportunities on USDOI-managed or -partnered lands and waters;
2. Ensure a quality experience and enjoyment of natural and cultural resources on USDOI-managed or -partnered lands and waters; and
3. Provide for and receive fair value in recreation.

The public lands are primarily managed to maintain a freedom of recreational choice with a minimum of regulatory constraints. As such, a majority of public lands have recreation opportunities that can be appropriately provided for in conjunction with the other resource demands sanctioned by the BLM's multiple-use mission.

The YFO would manage recreational opportunities on the public lands to maintain six different prescribed recreation settings, ranging from Primitive to Urban (as defined in Chapter 3). Prescribed recreation settings were based on the results of a 2005 Recreation Opportunity Spectrum (ROS) Inventory of the public lands within the YFO (see Map 3-25). The results of the ROS Inventory were adjusted to accommodate the various other resource allocations proposed under each alternative. While YFO would strive to manage the public lands to support these prescribed recreation settings, they would not ultimately restrict or authorize future Management and Administrative Actions. Table 2-11 and Maps 2-7a through 2-7d convey the acreages and locations of the six different types of prescribed recreation settings the YFO would manage for under each alternative.

Table 2-11
Prescribed Recreation Settings by Alternative

Prescribed Recreation Settings	Alternatives (BLM acres)				
	A*	B	C	D	E
Primitive	n/a	167,800	167,800	167,800	167,800
Semi-primitive	n/a	147,400	135,400	436,700	154,700
Rural Natural	n/a	786,700	689,100	282,200	723,900
Rural Developed	n/a	171,800	144,900	65,600	131,700
Suburban	n/a	2,500	2,500	2,500	5,700
Urban	n/a	8,300	8,300	8,300	4,700

*Recreation settings were not prescribed for the planning area in previous plans.

Desired Future Conditions

- The prescribed recreation settings 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.

Management Actions

Management Actions by alternative for recreation are presented in Table 2-12 below.

**Table 2-12
Recreation Management Actions by Alternative**

Management Actions	Alternative				
	A	B	C	D	E
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.	X	X	X	X	X
Authorize SRP activities on a case-by-case basis in conformance with NEPA to provide for a wide range of recreation opportunities on BLM-administered lands. Collect SRP fees for authorized activities and use of the La Posa and Imperial Dam LTVAs.	X	X	X	X	X
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 would 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.	X	X	X		X
Where appropriate, construct and modify recreation facilities and outdoor developed areas 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.	X	X	X	X	X
Construct only flood-proofed facilities within the lower Colorado River 100-year floodplain. Examples include, but are not limited to, boat ramps, boat services, ramadas, kiosks, parking lots, picnic tables, grills, fire rings, trash cans, outdoor showers, restrooms, campsites, and electric hookups.	X	X	X		X
Allow the existing permanent structures to remain in the lower Colorado River 100-year floodplain until they are inundated or their useful life is gone.	X	X			X
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.	X	X			X
No new recreation concession leases would be issued within the planning area.			X	X	
Maintain, install, and improve informational and interpretive kiosks and signs at the main points of access and interest throughout the planning area. Kiosks and signs would focus on informing visitors of applicable regulations and sustainable outdoor recreation ethics.		X	X		X
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.		X			X

**Table 2-12
Recreation Management Actions by Alternative (cont.)**

Management Actions	Alternative				
	A	B	C	D	E
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.		X	X		X
Reduce and or remove hazardous fuels in recreation sites to improve public safety in coordination with the BLM Fire Management program.	X	X	X	X	X
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.			X	X	X
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.	X	X	X		X
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.	X	X	X	X	X
Limit the length of stay for overnight camping at the Mittry Lake Wildlife Area to 10 days per calendar year.	X	X	X	X	X
Allow continuous overnight camping from September 15 to April 15 within the La Posa and Imperial Dam LTVAs.	X	X	X	X	X
Authorize SRPs for competitive events on BLM-administered lands on a case-by-case basis.	X	X			X
Prohibit competitive events on BLM-administered lands within the planning area.			X	X	
Prohibit SRP vending operations within Undeveloped SRMAs.				X	
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.	X	X			X
Limit 2,900 acres of the Big Marias ACEC to day-use only (see Map 2-1e-1).				X	X
Limit 400 acres of the Dripping Springs ACEC to day-use only (see Map 2-1e-2).					X
Limit 3,700 acres of the Sears Point ACEC to day-use only (see Map 2-1e-3).					X

BLM = Bureau of Land Management; FLREA = Federal Lands Recreation Enhancement Act; LTVA = Long Term Visitor Area; NEPA = National Environmental Policy Act; RMP = Resource Management Plan; SRMA = Special Recreation Management Areas; SRP = Special Recreation Permit

Administrative Actions

Administrative Actions by alternative for recreation are presented in Table 2-13.

**Table 2-13
Planning Area-wide Recreation Administrative Actions by Alternative**

Administrative Actions	Alternative				
	A	B	C	D	E
Update publicly reviewed Recreation and Visitor Services' Business Plans as needed to propose changes in the recreation fee program.	X	X	X		X
Determine the need for facilities within designated Open OHV Management Areas to address public safety and resource protection concerns. If facilities are needed, consider collecting recreation fees to cover facility installation and maintenance costs.		X	X		X
Monitor and administer recreation concession leases according to the 1993 Yuma District Concession Review Program.	X	X	X	X	X

**Table 2-13
Planning Area-wide Recreation Administrative Actions by Alternative (cont.)**

Administrative Actions	Alternative				
	A	B	C	D	E
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.	X	X	X	X	X
Develop and enhance partnerships and the YFO volunteer program to improve recreational opportunities and promote community stewardship of the public lands.		X	X		X
Enhance and expand the YFO’s interpretive and outreach programs for the purposes of public education and resource protection.			X	X	X
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.		X	X	X	X

OHV = Off-highway vehicle; YFO = Yuma Field Office

2.11.1 RECREATION MANAGEMENT AREAS

Special Recreation Management Areas (SRMA) are allocated where the resources of the public lands attract visitors from one of the three following recreation markets:

- Public lands with a demonstrated *community* recreation market would be managed as a Community SRMA. A Community SRMA is managed in collaboration with local community partners to primarily benefit the local residents;
- Public lands with a demonstrated *destination* recreation market would be managed as a Destination SRMA. A Destination SRMA is managed as a regional or national destination through local, regional, and national partnerships to provide facilities and services that meet the recreational demands of outside visitors; and
- Public lands with a demonstrated *undeveloped* recreation market would be managed as an Undeveloped SRMA. An Undeveloped SRMA is proactively managed to intentionally sustain dispersed and undeveloped recreation opportunities and experiences.

YFO lands outside of SRMAs are managed as Extensive Recreation Management Areas (ERMA). Recreation management within ERMAs 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. ERMAs are generally managed directly through LUP decisions and do not require additional activity-level planning.

For proposals concerning OHV and other trail-based recreation activities, please see the Travel Management section in this chapter.

Proposed SRMAs are presented in Table 2-14 and Maps 2-8a through 2-8e.

Table 2-14
Special Recreation Management Areas by Alternative (BLM acres)

Allocation	Alternative				
	A*	B	C	D	E
Colorado River Corridor Destination SRMA	n/a	130,100	94,000	11,000	147,300
Greater Yuma Community SRMA	n/a	0	64,900	35,600	123,200
Greater Yuma Destination SRMA	n/a	166,700	0	0	0
Gila River Valley Undeveloped SRMA	n/a	0	101,900	130,900	43,300
Yuma East Undeveloped SRMA	n/a	0	457,400	511,800	528,300
Yuma East Community SRMA	n/a	587,300	0	0	0
La Posa Destination SRMA	n/a	400,300	400,300	239,500	308,400
ERMA	n/a	33,600	199,500	389,200	167,500
Total BLM	1,318,000	1,318,000	1,318,000	1,318,000	1,318,000

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

*The 1994 Final Ehrenberg-Cibola Recreation Area Management Plan allocated 112,700 acres as a Recreation Management Area but did not identify a Destination, Community, or Undeveloped marketing strategy.

2.11.2 RECREATION MANAGEMENT ZONES

Within each SRMA, BLM also allocates Recreation Management Zones (RMZ). An RMZ represents public lands with a distinctive recreation niche (activities, experiences, and benefits) within each SRMA. YFO would focus management, funding, and planning within RMZs to implement and maintain proposed Desired Future Conditions, Recreation Management Objectives, and Management and Administrative Actions.

The allocation of RMZs provides the planning area with an activity-level planning framework for future recreation management. Activity-level recreation management plans based on this framework would provide additional opportunities for public involvement and agency collaboration to further ensure that future proposed actions are compatible with the BLM's multiple-use mission.

The proposed RMZ boundaries are not intended to confer authority, responsibility, or jurisdiction over lands and waters that are not administered by the BLM. Proposed RMZ boundaries reflect the fact that these lands and waters are essential components of comprehensively managing the entire area.

BLM IM Number 2006-060 instructs the BLM to incorporate benefits-based recreation management principles into all new LUPs. Benefits-based management varies from the traditional "activity-based" recreation management approach, which primarily focused on specific activities and the associated facilities needed to support such uses. Benefits-based recreation focuses management on a primary activity within each RMZ. These primary activities provide the public with certain types of experiences on the public lands. Providing these experiences then produces a variety of personal, community, economic, and environmental benefits.

A. COLORADO RIVER CORRIDOR SRMA AND RMZS

Desired Future Conditions for Colorado River Corridor Destination SRMA

- The primary recreation management strategy for the Colorado River Corridor SRMA would 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. These recreation opportunities would be sustained and enhanced through the implementation of identified Recreation Management Objectives and the maintenance of prescribed recreation settings.

Management Actions

- Allocate the Colorado River Corridor Destination SRMA under Alternatives B, C, D, and the Proposed Plan (acreages reflected in Table 2-15).

Table 2-15
Colorado River Corridor SRMA by Alternative

Allocation	Alternative				
	A	B	C	D	E
Primary Marketing Strategy	n/a	Destination	Destination	Destination	Destination
Acreage	n/a	130,100	94,000	11,000	147,300
Access RMZ	n/a	X			
Blythe Intaglios Heritage RMZ	n/a	X	X	X	X
Ehrenberg-Cibola RMZ	n/a	X	X	X	X
Trigo Mountains Wilderness RMZ	n/a	X			X

SRMA = Special Recreation Management Area; RMZ = Recreation Management Zone

Administrative Actions

- Promote the following environmental education programs and topics to ensure that recreational activities remain sustainable within the Colorado River Corridor 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.
- Coordinate and form partnerships with the following agencies and groups for comprehensive and collaborative management of the Colorado River Corridor SRMA: AGFD, Arizona State Lands Department, BLM El Centro Field Office, BLM Palm Springs/South Coast Field Office, CDFG, Arizona and California SHPO, 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.

B. GREATER YUMA SRMA AND RMZS

Desired Future Conditions for Greater Yuma Community SRMA

- Under Alternatives C, D, and the Proposed Plan, the primary recreation management strategy for the Greater Yuma SRMA would 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. These recreation opportunities would be sustained and enhanced through the implementation of identified Recreation Management Objectives and the maintenance of prescribed recreation settings.

Desired Future Conditions for the Greater Yuma Destination SRMA

- Under Alternative B, the primary recreation management strategy for the Greater Yuma SRMA would be to target a *destination* tourism market. YFO would proactively seek to form local, regional, and national partnerships to promote the hiking, camping, boating, fishing, hunting, mountain biking, and horseback riding opportunities within the SRMA as a national destination. These recreation opportunities would be sustained and enhanced through the implementation of identified Recreation Management Objectives and the maintenance of prescribed recreation settings.

Management Actions

- Allocate the Greater Yuma SRMA as a Destination SRMA under Alternative B, and a Community SRMA under Alternatives C, D, and the Proposed Plan (acres reflected in Table 2-16).

Table 2-16
Greater Yuma SRMA by Alternative

Allocation	Alternative				
	A	B	C	D	E
Primary Marketing Strategy	n/a	Destination	Community	Community	Community
Acreage	n/a	166,700	64,900	35,600	123,200
Access RMZ	n/a	X			
Anza NHT RMZ	n/a	X	X	X	X
Gila Mountains RMZ	n/a	X	X		X
Imperial Dam RMZ	n/a	X	X	X	X
Laguna Mountains RMZ	n/a	X	X		X
Limitrophe RMZ	n/a	X	X	X	X
Mittry Lake RMZ	n/a	X	X	X	X
Sears Point Heritage RMZ	n/a	X			
Southern Desert Communities RMZ	n/a	X			X
Urban Recreation Lands RMZ	n/a	X	X	X	X

NHT = National Historic Trail; RMZ = Recreation Management Zone; SRMA = Special Recreation Management Area

Administrative Actions

- Promote the following environmental education programs and topics to ensure that recreational activities remain sustainable within the Greater Yuma 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.

- Coordinate and form partnerships with the following agencies and groups for comprehensive and collaborative management of the Greater Yuma 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, The Marine Corps Air Station–Yuma (MCAS-Yuma), Martinez Lake, Mexico, NPS, Reclamation, Sonoran Desert Invasive Species Council, United Desert Gateway, U.S. Border Patrol, USIBWC, WMIDD, Yuma County, Yuma Historical Society, YPG, Yuma Trails, Inc., private landowners, and local public health agencies.

C. GILA RIVER VALLEY SRMA AND RMZs

Desired Future Conditions for the Gila River Valley Undeveloped SRMA

- The primary recreation management strategy for the proposed Gila River Valley SRMA would be to target the demonstrated *undeveloped* tourism market. Visitors come to this SRMA to enjoy dispersed hiking, hunting, fishing, and cultural resource viewing opportunities. These recreation opportunities would be sustained and enhanced through the implementation of identified Recreation Management Objectives and the maintenance of prescribed recreation settings.

Management Actions

- Allocate the Gila River Valley SRMA as Undeveloped under Alternatives C, D, and the Proposed Plan, with the acreages as reflected in Table 2-17.

Administrative Actions

- Promote the following environmental education programs and topics to ensure that recreational activities remain sustainable within the Gila River Valley 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.

Table 2-17
Gila River Valley SRMA by Alternative

Allocation	Alternative				
	A	B	C	D	E
Primary Marketing Strategy	n/a	None	Undeveloped	Undeveloped	Undeveloped
Acreage	n/a	0	101,900	130,900	43,300
Access RMZ	n/a		X		X
Anza NHT RMZ	n/a			X	X
Gila Mountains RMZ	n/a		X	X	
Laguna Mountains RMZ	n/a			X	
Sears Point Heritage RMZ	n/a		X	X	X
Southern Desert Communities RMZ	n/a		X	X	

SRMA = Special Recreation Management Area; RMZ = Recreation Management Zone

- Coordinate and form partnerships with the following agencies and groups for comprehensive and collaborative management of the Gila River Valley 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.

D. YUMA EAST SRMA AND RMZs

Desired Future Conditions for the Yuma East Undeveloped SRMA

- Under Alternatives C, D, and the Proposed Plan, the primary recreation management strategy for the identified Yuma East SRMA would 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. Recreation opportunities within the SRMA would be sustained and enhanced through the implementation of identified Recreation Management Objectives and the maintenance of prescribed recreation settings.

Desired Future Conditions for the Yuma East Community SRMA

- Under Alternative B, the primary recreation management strategy for the identified Yuma East SRMA would be to target a *community* tourism market. YFO would proactively seek to form partnerships with the surrounding rural communities to expand hiking, wildlife viewing, and OHV riding opportunities for local residents. Recreation opportunities within the SRMA would be sustained and enhanced through the implementation of identified Recreation Management Objectives and the maintenance of prescribed recreation settings.

Management Actions

- Allocate the Yuma East SRMA as a Community SRMA under Alternative B, and an Undeveloped SRMA under Alternatives C, D, and the Proposed Plan with acreages as reflected in Table 2-18.

**Table 2-18
Yuma East SRMA by Alternative**

Allocation	Alternative				
	A	B	C	D	E
Primary Marketing Strategy	n/a	Community	Undeveloped	Undeveloped	Undeveloped
Acreage	n/a	587,300	457,400	511,800	528,300
Access RMZ	n/a	X			
Dispersed Use RMZ	n/a	X	X	X	X
Eagletail Mountain Wilderness RMZ	n/a	X	X	X	X

SRMA = Special Recreation Management Area; RMZ = Recreation Management Zone

Administrative Actions

- Promote the following environmental education programs and topics to ensure that recreational activities remain sustainable within the Yuma East 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.
- Coordinate and form partnerships with the following agencies and groups for comprehensive and collaborative management of the Yuma East 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.

E. LA POSA SRMA AND RMZs

Desired Future Conditions for the La Posa Destination SRMA

- The primary recreation management strategy for the proposed La Posa SRMA would 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 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. These recreation opportunities would be sustained and enhanced through the implementation of identified Recreation Management Objectives and the maintenance of prescribed recreation settings.

Management Actions

- Allocate the La Posa Destination SRMA under Alternatives B, C, D, and the Proposed Plan, with acreages as reflected in Table 2-19.

Table 2-19
La Posa SRMA by Alternative

Allocation	Alternative				
	A	B	C	D	E
Primary Marketing Strategy	n/a	Destination	Destination	Destination	Destination
Acreage	n/a	400,300	400,300	239,500	308,400
Access RMZ	n/a	X	X		X
Dripping Springs Heritage RMZ	n/a	X	X	X	X
Highway 95 RMZ	n/a	X	X	X	X
Intensive Camping RMZ	n/a	X	X	X	X
Intensive Day-use RMZ	n/a	X	X	X	X
New Water Mountain Wilderness RMZ	n/a	X	X		X

SRMA = Special Recreation Management Area; RMZ = Recreation Management Zone

Administrative Actions

- Promote the following environmental education programs and topics to ensure that recreational activities remain sustainable within the La Posa 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.
- Coordinate and form partnerships with the following agencies and groups for comprehensive and collaborative management of the La Posa 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.

2.11.3 DESCRIPTION OF ALL RMZs

A. ACCESS RMZs

- **Recreation Niche:** These RMZs represent some of the most widely used and scenic motorized routes within the planning area. The Red Cloud Road, Gold Nugget Road, Clanton Hills Route, Red Raven Route, and Brenda Route have been identified as Access RMZs in the various RMP alternatives, and provide challenging OHV driving opportunities throughout a variety of stunning desert landscapes. The Agua Caliente Road and Plomosa Road have also been identified as Access RMZs in the various RMP alternatives, and provide exemplary landscape viewing opportunities with two-wheel drive vehicles.
- **Primary Activities:** OHV-based landscape viewing, auto-based landscape viewing, photography, and wildlife viewing.
- **Recreation Management Objective:** Throughout the life of the RMP, collaborate with interested partners to effectively interpret the resource values, identify vehicle safety requirements, and promote sustainable OHV ethics along the identified Access RMZs. Collaborate with adjacent BLM field offices accordingly to effectively manage Access RMZs that cross field office boundaries.

B. ANZA NATIONAL HISTORIC TRAIL RMZ

- **Recreation Niche:** This proposed RMZ represents the congressionally designated Anza Trail corridor within the planning area. 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.
- **Primary Activities:** 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.
- **Recreation Management Objective:** Throughout the life of the RMP, promote the installation and maintenance of a recreational Anza Trail through collaborative partnerships which would provide local residents with convenient opportunities to exercise, effectively interpret Yuma's natural and cultural history, and connect local communities to the public lands.

C. BLYTHE INTAGLIOS HERITAGE RMZ

- **Recreation Niche:** 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 once thrived along the lower Colorado River. The Big Maria Mountains and Riverside Mountains Wildernesses provide primitive non-motorized recreation opportunities.
- **Primary Activities:** Cultural resource viewing, natural landscape viewing, hiking, and hunting.
- **Recreation Management Objective:** Throughout the life of the RMP, ensure that recreational activities are compatible with the ACEC and Wilderness resource values within the RMZ.

D. DISPERSED USE RMZ

- **Recreation Niche:** 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.
- **Primary Activities:** Hunting, camping, OHV riding, hiking, wildlife and wildflower viewing.
- **Recreation Management Objective:** Throughout the life of the RMP, ensure that the RMZ continues to provide undeveloped and wildlife-based recreation opportunities through motorized and non-motorized means.

E. DRIPPING SPRINGS HERITAGE RMZ

- **Recreation Niche:** This RMZ would encompass the 11,700-acre Dripping Springs ACEC that is included in the Proposed Plan. Cultural resource viewing opportunities are available within this proposed RMZ, along with exemplary opportunities to view native vegetation and wildlife. Outstanding visual resources provide an exquisite backdrop for all of these activities.
- **Primary Activities:** Cultural resource viewing, wildlife and wildflower viewing, hiking, and hunting.
- **Recreation Management Objective:** Throughout the life of the RMP, ensure that heritage-based recreation does not negatively impact the natural and cultural resource values of the RMZ.

F. EAGLETAIL MOUNTAINS WILDERNESS RMZ

- **Recreation Niche:** Challenging outdoor adventures to hike, camp, and hunt exist throughout the mountain range's rugged and undeveloped terrain.
- **Primary Activities:** Hiking, hunting, landscape viewing, wildlife viewing, horseback riding, wildflower viewing, and photography.
- **Recreation Management Objective:** Throughout the life of the RMP, ensure that recreational activities remain compatible with the wilderness resource values of the RMZ.

G. EHREMBERG-CIBOLA RMZ

- **Recreation Niche:** 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.
- **Primary Activities:** Camping, fishing, boating, swimming, OHV riding, hunting, horseback riding, and wildlife viewing.
- **Recreation Management Objective:** Throughout the life of the RMP, maintain and upgrade the facilities at the Ehrenberg Sandbowl and Oxbow Recreation and Wildlife Area as needed to meet recreational demands and public health and safety requirements.

H. GILA MOUNTAINS RMZ

- **Recreation Niche:** 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.
- **Primary Activities:** Hiking, OHV riding, horseback riding, picnicking, wildlife viewing, rock hounding, and geocaching.

- **Recreation Management Objective:** Throughout the life of the RMP, ensure that legal public access, wildlife habitat, and cultural resources of the RMZ are not compromised from encroaching urban development and increasing recreational demands.

I. HIGHWAY 95 RMZ

- **Recreation Niche:** Between Yuma and Quartzsite, Highway 95 provides passing motorists with exceptional landscape viewing opportunities of the Chocolate, Gila, and Castle Dome Mountains. Historic sites associated with General Patton's pre-World War II military training operations and wild horse and burro viewing opportunities along the highway provided additional interpretive opportunities. The public lands east of Highway 95 provide OHV riding opportunities and access to the Kofa NWR.
- **Primary Activities:** Auto-based landscape touring, wildlife and wildflower viewing.
- **Recreation Management Objective:** Throughout the life of the RMP, collaborate with interested partners to effectively educate the public about the resource values and different agency missions along Highway 95.

J. IMPERIAL DAM RMZ

- **Recreation Niche:** 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.
- **Primary Activities:** Long-term camping, short-term camping, boating, swimming, river floating, fishing, OHV riding, geocaching, hiking, and wildlife viewing.
- **Recreation Management Objective:** Throughout the life of the RMP, 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.

K. INTENSIVE CAMPING RMZ

- **Recreation Niche:** This proposed RMZ represents the 15,500 acres of public land surrounding the Town of Quartzsite, Arizona, 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.
- **Primary Activities:** Long-term and short-term camping.

- **Recreation Management Objective:** Throughout the life of the RMP, 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.

L. INTENSIVE DAY-USE RMZ

- **Recreation Niche:** This proposed 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.
- **Primary Activities:** OHV riding, landscape viewing, photography, cultural resource viewing, wildlife and wildflower viewing, hiking, rock hounding, geocaching, and model airplane flying.
- **Recreation Management Objective:** Throughout the life of the RMP, reduce the recreational impacts to the RMZ's natural and cultural resources through effective interpretation, adaptive management, and environmental education.

M. LAGUNA MOUNTAINS RMZ

- **Recreation Niche:** 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.
- **Primary Activities:** Mountain bike riding, hiking, OHV riding, and wildlife and landscape viewing,
- **Recreation Management Objective:** Throughout the life of the RMP, reduce user group conflicts and impacts to wildlife and cultural resources while ensuring that a wide variety of trail-based activities remain available.

N. LIMITROPHE RMZ

- **Recreation Niche:** 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.
- **Primary Activities:** Native American cultural/traditional uses, wildlife viewing, hunting, and fishing.
- **Recreation Management Objective:** Throughout the life of the RMP, ensure that traditional use opportunities remain available to local Native Americans so they are able to maintain their cultural identities.

O. MITTRY LAKE WILDLIFE AREA RMZ

- **Recreation Niche:** Sport fishing, hunting, and wildlife viewing opportunities within this proposed 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 National Recreation Trail.
- **Primary Activities:** Fishing, hunting, camping, boating, picnicking, hiking, environmental education, and wildlife viewing.
- **Recreation Management Objective:** Throughout the life of the RMP, effectively collaborate with AGFD and Reclamation, co-managers of the Mittry Lake Wildlife Area, to maintain and enhance wildlife-based recreation opportunities compatible with the purpose of the wildlife areas.

P. NEW WATER MOUNTAINS WILDERNESS RMZ

- **Recreation Niche:** Challenging outdoor adventures to hike, camp, and hunt exist throughout the RMZ's rugged mountain terrain.
- **Primary Activities:** Hiking, camping, hunting, and rock hounding.
- **Recreation Management Objective:** Throughout the life of the RMP, ensure that recreational activities remain compatible with the wilderness resource values of the RMZ.

Q. SEARS POINT HERITAGE RMZ

- **Recreation Niche:** 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.
- **Primary Activities:** Cultural resource viewing, hiking, wildlife and wildflower viewing.
- **Recreation Management Objective:** Throughout the life of the RMP, ensure that heritage-based recreation activities remain compatible with the ACEC's resource values.

R. SOUTHERN DESERT COMMUNITIES RMZ

- **Recreation Niche:** This RMZ encompasses the 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.
- **Primary Activities:** OHV riding, hunting, hiking, picnicking, wildlife and wildflower viewing.

- **Recreation Management Objective:** Throughout the life of the RMP, ensure that recreational activities remain compatible with the wilderness, natural, and cultural resource values within the RMZ.

S. TRIGO MOUNTAINS WILDERNESS RMZ

- **Recreation Niche:** This 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.
- **Primary Activities:** Horseback riding, hiking, camping, hunting, wildlife viewing, and rock hounding.
- **Recreation Management Objective:** Throughout the life of the RMP, ensure that recreational activities remain compatible with the wilderness, natural, and cultural resource values within the RMZ.

T. URBAN RECREATION LANDS RMZ

- **Recreation Niche:** 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 activities such as dog walking, hiking, and wildflower viewing.
- **Primary Activities:** Dog walking, wildflower viewing, wildlife viewing, and hiking.
- **Recreation Management Objective:** Throughout the life of the RMP, ensure that YFO considers the intrinsic values of urban open space prior to authorizing the development of these lands.

2.12 TRAVEL MANAGEMENT

Public lands managed by the BLM YFO are intermingled with other Federal, State, county, and private lands. Managing access to and across the public lands is a vital task for the YFO. Authorities, policies, and regulations guiding BLM travel management include, but are not limited to FLPMA of 1976 (43 USC 1701 et seq.), EO 11644, EO 11989, Title 5 ROWs, *Revised Statute (RS) 2477 Roads*, *National Management Strategy Motorized Off-Highway Vehicle Use on Public Lands* (USDOI BLM 2001), *National Mountain Bicycle Strategic Action Plan* (USDOI BLM 2002c), *State Director Guidance for Arizona Land Use Planning Efforts* (IM No. AZ-2005-007), and the *BLM Roads and Trails Terminology Report* (USDOI BLM 2006b).

The following material proposes to designate OHV Management Areas, provides guidance for establishing the YFO Travel Management Network (TMN), and delineates Travel Management

Areas (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). Criteria for the designation of Limited, Open, and Closed OHV Management Areas are established in 43 CFR 8340.0-5 (f), (g), and (h), respectively. 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 proposed for each alternative are listed in Table 2-20 and identified on Maps 2-9a through 2-9e. However; OHV Management Area designations set forth in this PRMP/FEIS may only be changed through an RMP amendment.

Table 2-20
OHV Management Area Designations by Alternative

Designation	Alternative (BLM acres)				
	A	B	C	D	E
Open Areas					
Blaisdell	0	1,900	1,300	0	0
Ehrenberg Sandbowl	400	800	800	400	400
Martinez Lake	0	1,100	300	0	0
Total Open	400	3,800	2,400	400	400
Closed Areas					
Designated Wilderness	167,800	167,800	167,800	167,800	167,800
Dripping Springs	0	0	600	600	400
Fortuna Wash (Section 33)	100	0	0	0	100
Laguna Mountains	0	0	0	4,400	0
La Paz Valley	1,000	1,000	1,000	1,000	1,000
Muggins Mountains	0	2,200	1,900	1,900	2,200
North Bank Milpitas Wash	100	0	0	100	0
Sears Point	0	0	0	1,400	1,400
Wilderness Characteristics	0	0	0	56,600	0
Total Closed	169,000	171,000	171,300	233,800	172,900
Limited Areas					
Total Limited	1,148,600	1,143,200	1,144,300	1,083,800	1,144,700
Total Acres	1,318,000	1,318,000	1,318,000	1,318,000	1,318,000

A. OPEN OHV MANAGEMENT AREAS

Open OHV Management Areas are defined as areas where all types of vehicle use would be permitted at all times, anywhere in the area; visitors would not be restricted to existing and designated roads and trails. These areas would 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. The YFO would consider installing OHV trailhead facilities at Open OHV Management Areas to protect public health and safety, and adjacent resource values.

All new or expanded Open OHV Management Areas must have a site-specific environmental analysis completed prior to implementation, including NEPA, NHPA Section 106, and ESA Section 7 documentation. If the site-specific analysis reveals that the Open OHV Management Area would have an adverse or significant impact on resources, the footprint of the proposal may be moved or reduced to avoid or minimize impacts. If impacts to resources cannot be sufficiently avoided or mitigated during site-specific analysis, the proposed Open OHV Management Area would not be implemented.

Dune areas which support sensitive, special status, and/or priority species would not be available for future Open OHV Management Area designations.

Management Actions

- Under Alternatives A, D, and the Proposed Plan maintain the 400-acre Ehrenberg Sandbowl Open OHV Management Area.
- Under Alternative B, designate 1,900 acres to the proposed Blaisdell Open OHV Management Area, designate 1,100 acres to the proposed Martinez Lake Open OHV Management Area, and expand the Ehrenberg Sandbowl Open OHV Management Area to a total of 800 acres.
- Under Alternative C, designate 1,300 acres to the proposed Blaisdell Open OHV Management Area, designate 300 acres to the proposed Martinez Lake Open OHV Management Area, and expand the Ehrenberg Sandbowl Open OHV Management Area to a total of 800 acres.

B. CLOSED OHV MANAGEMENT AREAS

Closed OHV Management Areas are defined as areas where off-road vehicle use would be prohibited. Closed OHV Management Areas may be designated to protect persons, property, and public lands and resources where OHV use has been determined to be causing irreparable harm to the existing resources. Congressionally designated Wilderness Areas are statutorily closed to motorized and mechanized use, except for purposes specifically provided for by law. These areas are shown in the LUP along with the acreage affected. The YFO currently maintains 167,800 acres of statutorily closed Wilderness. Non-Wilderness Closed OHV Management Areas are shown on Map 2-9e-1.

Management Actions

- Under all alternatives, maintain 167,800 acres of Closed OHV Management Areas within designated Wilderness and maintain the 1,000-acre Closed OHV Management Area in the La Paz Valley.
- Under Alternative A, maintain the 100-acre Closed OHV Management Area in Fortuna Wash and 100-acre Closed OHV Management Area in the North Bank Milpitas Wash.
- Under Alternative B, designate 2,200-acres in the Muggins Mountains as a Closed OHV Management Area.
- Under Alternative C, designate 1,900-acres in the Muggins Mountains and 600-acres at Dripping Springs as Closed OHV Management Areas.

- Under Alternative D, designate 600-acres at Dripping Springs, 4,400-acres in the Laguna Mountains, 1,900-acres in the Muggins Mountains, 100-acres in the North Bank Milpitas Wash, 1,400-acres at Sears Point, and two areas across 56,600 acres of lands with wilderness characteristics as Closed OHV Management Areas.
- Under the Proposed Plan, maintain the 100-acre Closed OHV Management Area in Fortuna Wash and 1,000-acre closure in La Paz Valley; and designate 400-acres at Dripping Springs, 2,200-acres in the Muggins Mountains, and 1,400-acres at Sears Point as Closed OHV Management Areas.
- Under all alternatives, delineate the boundaries of Closed OHV Management Areas and install wildlife-compatible vehicle barriers on an as-needed basis.

C. LIMITED OHV MANAGEMENT AREAS

Limited OHV Management Areas are where OHV travel is limited at certain times, in certain areas, and/or to certain vehicular use. These limitations may be of any type, but can generally be accommodated within the following type of categories: numbers of vehicles; types of vehicles (OHVs, motorcycles, high clearance, etc.); time or season of vehicle use; permitted or licensed use only; use on existing roads and trails; use on designated roads and trails; limited to administrative use only; and other restrictions. 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 would not cause undue resource damage. Unauthorized cross-country travel which results in the creation of new routes or the widening or extension of existing routes would not be permitted within Limited OHV Management Areas.

Management Actions

- Under Alternatives B, C, D, and the Proposed Plan, 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) until the YFO Transportation System is finalized. Motorized travel would not be allowed on roads, trails, and drivable washes that are not included on the YFO route inventory maps.
- 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. After the YFO Transportation System is finalized, limit motorized use within Limited OHV Management Areas to designated routes only.
- Under Alternatives B, C, D, and the Proposed Plan, allow motorized vehicles to pull off up to 100 feet from a designated route on either side of the centerline. This use would 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 would not be allowed to pull off 100 feet from any designated route on either side of centerline within the impacted area (IM No. AZ-2005-007).

- Under all alternatives, cross-country motorized travel would not be permitted for the retrieval of downed game within Limited OHV Management Areas.
- Allow the use of non-motorized wheeled game carriers to retrieve game kills on all BLM-administered lands, except within Congressionally Designated Wilderness.
- Limit equestrian use authorized by SRPs to pre-selected trails on a case-by-case basis. Within ACECs, limit all equestrian use to existing inventoried routes until the route designation process is complete.
- Cross-country, motorized travel would not be permitted for the retrieval of downed game.
- During the construction of rangeland developments, vehicles would use designated routes wherever possible for access to sites. Where no routes exist, vehicles would 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 would be no wider than needed for reliable access. As a general practice, new roads would not be bladed for use in fence construction. Vehicles would travel cross-country or fences would be built without motorized access.
- Establish Supplementary Rules to enforce these travel limitations according to the guidelines set forth in 43 CFR 8365.1-6.
- Under Alternative A, designate 1,148,600 acres of Limited OHV Management Areas.
- Under Alternative B, designate 1,143,200 acres of Limited OHV Management Areas.
- Under Alternative C, designate 1,144,300 acres of Limited OHV Management Areas.
- Under Alternative D, designate 1,083,800 acres of Limited OHV Management Areas.
- Under the Proposed Plan, designate 1,144,700 acres of Limited OHV Management Areas.

2.12.2 YFO TRANSPORTATION SYSTEM

The YFO Transportation System refers to the sum of the YFO's recognized inventory of linear features (roads, primitive roads, and trails) formally recognized and approved as part of the YFO's Transportation System. The YFO Transportation System would be established through subsequent Travel Management Plans tiered to this RMP. The primary steps in developing BLM Travel Management Plans include the: (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 for this PRMP/FEIS.

Desired Future Conditions

- The unauthorized proliferation of motorized and non-motorized recreation trails is reduced or halted.
- 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.

2.0 Description of Alternatives

- 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.
- 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.
- The YFO Transportation System minimizes impacts to identified sensitive resource values from routes that provide non-essential access.
- 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 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 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 photos.

Management Action

- Under all alternatives, provide additional opportunities during future travel management planning processes for interested stakeholders to identify existing roads, trails, and drivable washes that do not appear on the YFO route inventory maps.

B. ROUTE EVALUATION PROCESS

The YFO route inventory would be brought forward into subsequent Travel Management Plans for each of the five delineated TMAs. All inventoried routes within each TMA would be systematically evaluated, and the positive and negative impacts of each route to the various resource values of the public lands would 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 would be evaluated using the Route Evaluation Tree© process, which is described in detail in Appendix 2-E.

Management Actions

Under all alternatives, evaluate and document each inventoried route's impacts to the following resources and uses of the public lands:

- Sensitive resources, such as:
 - Historic and cultural sites;

- Special status wildlife and plant species, including Threatened, Endangered, Proposed, and Candidate species, Arizona and California State listed species, and BLM Sensitive Species;
- Suitability for special status species reintroduction;
- Wildlife movement corridors;
- Wildlife habitat fragmentation;
 - Hydrology (e.g. springs, riparian and wetland conditions, washes, drainages, and water quality);
- Geology;
- Sensitive soils (e.g. cryptobiotic soils, desert pavement, erosion points); and
 - Air quality (e.g. PM₁₀ non-attainment areas).
- Public access needs, such as:
 - Rights-of-way;
 - Easements;
 - Private property;
 - Highways, State and county roads providing access to the public lands; and
 - Route densities.
- Commercial activities, such as:
 - Mining (e.g. claims, quarries, claim markers, evidence of excavation, mines, open mine shafts);
 - Mineral/material operations;
 - Ranching (e.g., fences, corrals, tanks, troughs);
 - Public utilities (e.g., transmission lines, pipelines, towers, pump houses, telecommunication towers, etc.);
 - Railroads;
 - Apiaries; and
 - Economic impacts.
- 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.
- 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;

2.0 Description of Alternatives

- 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.
- Human interaction issues, such as:
 - User conflicts;
 - Documented trespasses;
 - Illegal dumping; and
 - Route proliferation.
 - Hazards, such as:
 - Unexploded ordinances;
 - Abandoned mines;
 - International Boundary issues; and
 - Other identified safety concerns.

Under all alternatives, provide opportunities during future travel management planning processes for interested stakeholders to identify beneficial and negative impacts from individual routes that should be considered during the route evaluation process.

C. ROUTE DESIGNATION PROCESS

The results of the route evaluation process would provide the baseline data to be considered for the route designation process, where each inventoried route would be designated as open, closed, or limited to public use. In general, 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). 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 Open OHV Management Areas would be exempt from the route evaluation/designation process, specific routes crossing these lands may be identified. No routes would 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.

Management Actions

- Designate all inventoried routes within the YFO as open, closed, or limited to public use.
- Within ACECs and SCRMA, designate resource-compatible roadside pull-offs for overnight camping purposes.
- Provide interested stakeholders with opportunities to provide input and written comments throughout the designation process.
- Identify individual route management needs, including, but not limited to, use specifications, signs, and vegetation management.

- Identify individual route maintenance needs to improve public health and safety and reduce the need to create redundant routes that avoid existing hazards.
- Identify individual route monitoring needs to detect and evaluate travel-related impacts to adjacent resources so that management changes can occur accordingly.
- Identify easements and ROWs (to be issued by BLM or others) needed to maintain or provide legal and safe access to the public lands.

Administrative Actions

- Coordinate with Reclamation to designate levee roads which provide essential access to local communities as open to public use.

D. IMPLEMENTATION OF ROUTE DESIGNATIONS

Following the approval of each individual *Travel Management Plan*, individual route designation decisions would be implemented and maintained on the ground according to the following guidance.

Management Actions

- YFO's strategy for restoring closed or unauthorized routes would be accomplished as rapidly as funding permits. Sensitive resources in immediate danger, or those that have been damaged by unauthorized use, would be a high priority for restoration. Typically, the restoration would be limited to that portion of the route of unauthorized use that is in line of sight from an open route. Each route would be evaluated on a case-by-case basis, and the most appropriate method of restoration would be used based on geography, topography, soils, hydrology, and vegetation. The methods of route restoration would 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 un-restored to provide pullout areas or camping opportunities intended to discourage or prevent new ground disturbance elsewhere.
- Public lands would generally be available for transportation ROWs subject to NEPA evaluation, except where specifically prohibited by law or regulation. To the extent possible, new ROWs would avoid areas such as WHAs, VHAs, SCRMAAs, ACECs, wilderness, and the Anza Trail.

Administrative Actions

- Establish a volunteer workforce to provide essential on the ground implementation of the signing, monitoring, and maintenance of the YFO Transportation System.
- Expand and pursue partnerships and sources of funding for travel management, public education, and law enforcement.
- Require all activities permitted by the YFO to stay on designated routes (IM No. AZ-2005-007).
- 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 purpose of delineating TMAs is to provide more locale-specific transportation management guidance to be considered during the route evaluation, designation, and implementation processes. This guidance is meant to improve the YFO’s ability to protect various resource values and provide a more balanced range of motorized and non-motorized opportunities throughout the planning area. This LUP would establish five TMAs within the planning area: the Greater Yuma, Gila River Valley, Ehrenberg-Cibola, La Posa, and Yuma East TMAs (Maps TMA-1 to TMA-5). These TMAs would account for all acres of BLM-administered land within the planning area. Each of the five TMAs has specific Desired Future Conditions, Management Actions, and Administrative Actions which are listed in Tables 2-21, 2-22, 2-23, 2-24, and 2-25. TMA guidelines will be used to develop the future *Travel Management Plans* for each TMA.

**Table 2-21
Ehrenberg-Cibola TMA (152,300 acres, 650 miles of inventoried routes)**

Desired Future Conditions					
Travel management is comprehensively managed in coordination with the adjacent BLM Palm Springs-South Coast and El Centro Field Offices, Colorado River Indian Tribes (CRIT) Reservation, Reclamation, Cibola and Imperial NWRs, and other interested Tribes and agencies.					
The future route designation process ensures that there is a wide variety of equestrian trail opportunities within the TMA.					
Management Actions	Alternative				
	A	B	C	D	E
Within the Big Marias Heritage RMZ (Big Marias ACEC and 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.			X		X

Table 2-21
Ehrenberg-Cibola TMA (152,300 acres, 650 miles of inventoried routes) (cont.)

Management Actions (cont.)	Alternative				
	A	B	C	D	E
Install and maintain the appropriate recreational trailhead facilities once the TMN has been established.		X	X		X
Sign designated routes and trails consistent with Federal land management agency standards.		X	X	X	X
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. Delineate the boundary of the designated open area on the ground.		X	X		X
Prohibit OHV use within the North Bank Milpitas Wash Restriction until June 1, 2008, in accordance with the notice published in the <i>Federal Register</i> on August 9, 2006.	X				
Lift the North Bank Milpitas Wash OHV Restriction and limit OHV use to existing inventoried routes until designated.		X	X		X
Administrative Actions	Alternative				
	A	B	C	D	E
Coordinate with the BLM Palm Springs-South Coast and El Centro Field Offices, CRIT Reservation, Reclamation, and Cibola and Imperial NWRs and other interested Tribes and agencies to ensure the future route designation process takes into account the other agencies' missions.		X	X	X	X
Develop partnerships and a volunteer workforce to enhance and expand equestrian trail opportunities.		X	X		X
Nominate designated hiking, mountain biking, and equestrian trails to the Arizona State Parks Trail System.		X	X		X

Table 2-22
Gila River Valley TMA (60,500 acres, 180 miles of inventoried routes)

Desired Future Conditions					
A multiple-use Anza NHT provides recreational trail connectivity between the Greater Yuma TMA and the BLM Lower Sonoran Field Office.					
Travel management is comprehensively managed in coordination with the adjacent BMGR, the BLM Lower Sonoran Field Office and other interested Tribes and agencies.					
Management Actions	Alternative				
	A	B	C	D	E
Install and maintain the appropriate recreational trailhead facilities once the TMN has been established.		X	X		X
Sign designated routes and trails consistent with Federal land management agency standards.		X	X	X	X
Establish recreational trail connectivity from the Anza NHT to local communities and the Sears Point ACEC.		X	X		X
Establish and/or improve hiking trails within the Sears Point ACEC in accordance with guidance outlined in the Special Designations Management section of this chapter and the Sears Point ACEC plan (to be developed).			X	X	X
Limit equestrian use within the Sears Point ACEC to 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.			X	X	X

**Table 2-22
Gila River Valley TMA (60,500 acres, 180 miles of inventoried routes) (cont.)**

Administrative Actions	Alternative				
	A	B	C	D	E
Coordinate with the BMGR, BLM Lower Sonoran Field Office and other interested Tribes and agencies to ensure the future route designation process takes into account the other agencies' missions.		X	X	X	X
Nominate designated hiking and equestrian trails to the Arizona State Trails System.		X	X		X
Work with interested cooperators to establish legal and safe public access to Anza NHT trailheads and the Sears Point ACEC from Interstate 8.		X	X		X

**Table 2-23
Greater Yuma TMA (133,600 acres, 650 miles of inventoried routes)**

Desired Future Conditions					
The future route designation process focuses on creating an interconnected system of motorized and non-motorized recreational trails for the use of local community residents.					
A multiple-use Anza NHT provides local community residents with access to the various other recreational trails throughout the TMA.					
Travel management is comprehensively managed in coordination with the adjacent BLM El Centro Field Office, BMGR, WMIDD, Reclamation, Imperial NWR, YPG, Cocopah and Fort Yuma Quechan reservations, and other interested Tribes and agencies.					
The future route designation process provides route-specific use limitations to reduce user conflicts where multiple forms of travel are occurring.					
Management Actions	Alternative				
	A	B	C	D	E
Install and maintain OHV trailhead facilities at the Blaisdell and Martinez Lake Open OHV Management Areas. Delineate the boundaries of the open areas on the ground and ensure that they comply with the NHPA and ESA.		X	X		
Identify an interconnected system of mountain biking and hiking trails within the Laguna Mountains. Establish recreational trail connectivity from the Laguna Mountains to the Mittry Lake Wildlife Area and the Anza NHT.		X	X		X
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.		X	X		X
Establish designated motorized trail connectivity through the East Imperial Hills between Martinez Lake Road and the Hidden Shores RV Village BLM recreation concession lease.		X			X
Install and maintain the appropriate recreational trailhead facilities once the TMN has been established.		X	X		X
Sign designated routes consistent with Federal land management agency standards.		X	X	X	X
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.		X			X
Within the Southern Desert Communities and Gila Mountains RMZs, limit equestrian use to existing inventoried routes until designation and install equestrian trailhead facilities to reduce user and resource conflicts.			X	X	
Administrative Actions	Alternative				
	A	B	C	D	E
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 takes into account the other agencies' missions.		X	X	X	X

**Table 2-23
Greater Yuma TMA (133,600 acres, 650 miles of inventoried routes)
(cont.)**

Administrative Actions	Alternative				
	A	B	C	D	E
Nominate designated hiking, biking, and equestrian trails to the Arizona State Trails System.		X	X		X
Work with interested cooperators to establish legal and safe public access to and across designated recreational routes.		X	X		X
Develop a local volunteer workforce to monitor, maintain, and improve designated recreational routes.		X	X		X

**Table 2-24
La Posa TMA (384,600 acres, 1,710 miles of inventoried routes)**

Desired Future Conditions					
The future route designation process ensures that motorized recreational trails within the La Posa TMA provide opportunities for challenging experiences for OHV riders.					
The future route designation process determines the sustainability of existing rock crawling trails within the TMA.					
Travel management is comprehensively managed in coordination with the adjacent BLM Lake Havasu Field Office, CRIT Reservation, Kofa NWR and other interested Tribes and agencies.					
Management Actions	Alternative				
	A	B	C	D	E
Install and maintain the appropriate recreational trailhead facilities once the TMN has been established.		X	X		X
Sign designated routes consistent with Federal land management agency standards.		X	X	X	X
Establish and/or improve hiking trails within the Dripping Springs ACEC in accordance with guidance outlined in the Special Designations Management section (Section 2.3) of this chapter and the Dripping Springs interpretive plan (to be developed).			X	X	X
Limit equestrian use within the Dripping Springs ACEC to 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.			X	X	X
Administrative Actions	Alternative				
	A	B	C	D	E
Coordinate with the BLM Lake Havasu Field Office, CRIT Reservation, Kofa NWR, and other interested Tribes and agencies to ensure the future route designation process takes into account the other agencies' missions.		X	X	X	X
Nominate designated hiking and equestrian trails to the Arizona State Trails System.		X	X		X

**Table 2-25
Yuma East TMA (587,000 acres, 1,410 miles of inventoried routes)**

Desired Future Conditions
Travel management is comprehensively managed in coordination with the adjacent BLM Lower Sonoran and Hassayampa Field Offices, Kofa NWR and other interested Tribes and agencies.
Travel management strives to retain the undeveloped nature of the TMA by limiting the number of paved roads authorized across BLM lands.

**Table 2-25
Yuma East TMA (587,000 acres, 1,410 miles of inventoried routes)
(cont.)**

Management Actions	Alternatives				
	A	B	C	D	E
Install and maintain the appropriate recreational trailhead facilities once the TMN has been established.		X	X		X
Sign designated routes consistent with Federal land management agency standards.		X	X	X	X
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.		X	X		X
Administrative Actions	Alternatives				
	A	B	C	D	E
Do not authorize the paving of any roads within the TMA which would negatively impact the area's visual resources and wildlife habitat.			X	X	X
Coordinate with the BLM Lower Sonoran and Hassayampa Field Offices, Kofa NWR and other interested Tribes and agencies to ensure the future route designation process takes into account the other agencies' missions.		X	X	X	X
Develop a volunteer workforce to monitor and maintain designated routes.		X	X		X

2.13 VISUAL RESOURCE MANAGEMENT

BLM's responsibility to manage the scenic resources of the public lands is established by law, specifically by FLPMA, as mandated by the following sections.

1. Section 102 (a)(8). States that "...public lands will be managed in a manner which will protect the quality of the scenic (visual) values of these lands."
2. Section 103(c). Identifies "scenic values" as one of the resources for which public land should be managed.
3. Section 201(a). States that "The Secretary shall prepare and maintain on a continuing basis an inventory of all public lands and their resources and other values (including...scenic values)...."
4. Section 505(a). Requires that "Each right-of-way shall contain terms and conditions which will...minimize damage to the scenic and esthetic values...."

BLM is directed by BLM *Manual* 8400 to prepare and maintain on a continuing basis, an inventory of visual values on all public lands for each RMP effort. The VRM system provides a way to identify, evaluate, and determine the appropriate levels of management of scenic values. The inventory of visual values has been documented for the RMP according to BLM *Handbook* 8410-1 and can be found on Map 3-17 in this PRMP/FEIS. The inventory serves as the basis for the VRM Management Class I-IV, which take into account other resource uses on public lands within the planning area. The VRM classes are best defined by their Desired Future Conditions, which are described below. The overall goal of VRM analysis is to minimize visual impacts through development of mitigation measures.

VRM Land Use Designations

The following criteria was used to determine the proposed VRM Class designations for each RMP alternative: the overall management emphasis intended for each alternative; recognition of all applicable special designations and all land use allocations; assertion that other management activities and land uses may be achieved within the applicable VRM Class; and use of the least restrictive class that still achieves stated Desired Future Conditions. Proposed VRM class designations described in Alternatives A through the Proposed Plan primarily differ by the number of acres between each alternative. VRM land use designations are described in Table 2-26 and shown on Maps 2-10a through 2-10e.

Desired Future Conditions

The RMP alternatives would set landscape classes ranging from Class I to IV, and Desired Future Conditions for future projects would adhere to the following VRM class objectives as appropriate:

- **Class I.** 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;

Table 2-26
VRM Land Use Designations by Alternative (BLM acres)

VRM Class	Alternative				
	A	B	C	D	E
I (acres)	167,800	167,800	167,800	192,400	167,800
II (acres)	15,200	541,800	561,100	624,800	618,600
III (acres)	1,135,000	552,300	567,500	496,400	512,400
IV (acres)	0	56,100	21,600	4,400	19,200
Total Acres	1,318,000	1,318,000	1,318,000	1,318,000	1,318,000

- **Class II.** To retain the existing character of the landscape. The level of change to the characteristic landscape should be low;
- **Class III.** To partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate; and
- **Class IV.** 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.

Management Actions

- Under Alternative A, continue existing VRM designations, with 167,800 acres of Class I, 15,200 acres of Class II, 1,135,000 acres of Class III, and 0 acres of Class IV.
- Under Alternative B, designate 167,800 acres of Class I, 541,800 acres of Class II, 552,300 acres of Class III, and 56,100 acres of Class IV

2.0 Description of Alternatives

- Under Alternative C, designate 167,800 acres of Class I, 561,100 acres of Class II, 567,500 acres of Class III, and 21,600 acres of Class IV
- Under Alternative D, designate 192,400 acres of Class I, 624,800 acres of Class II, 496,400 acres of Class III, and 4,400 acres of Class IV.
- Under the Proposed Plan, designate 167,800 acres of Class I, 618,600 acres of Class II, 512,400 acres of Class III, 19,200 acres of Class IV.

Management Actions Common to all Alternatives

- All ROW Corridors and communications sites would be within VRM Class III.
- Incorporate design considerations to minimize potential impacts to public lands' visual values into all BLM-authorized surface disturbing activities, regardless of size. Emphasis would be on BLM providing input during the initial planning and design phase to minimize costly redesign and mitigation at a later time.
- 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.
- 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 would be in view, relative size or scale, season of use, light conditions, recovery time, spatial relationships, atmospheric conditions, and motion.
- 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.

Administrative Actions Common to all Alternatives

- 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 would 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.

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. Wilderness characteristics may be considered in land use planning decisions when BLM determines that those characteristics are reasonably present, of sufficient value and need, and are

practical to manage. BLM IM No. 2003-275-Change 1 provides guidance on considering lands to be managed to maintain existing wilderness characteristics, including prescribing Desired Future Conditions and Management and Administrative Actions.

Considering wilderness characteristics in the land use planning process may result in several outcomes, including, but not limited to 1) emphasizing other multiple uses as a priority over protecting wilderness characteristics; 2) emphasizing other multiple uses while applying management restriction (conditions of use, mitigation measures) to reduce impacts to some or all of the wilderness characteristics; 3) emphasizing the protection of some or all of the wilderness characteristics as a priority over other multiple uses (though the area would not be designated a WSA). BLM would not designate new WSAs through the LUP process; nor would the lands be managed under FLPMA Section 603 “non-impairment standard” and BLM Interim Management Policy for Lands under Wilderness Review. Additionally, lands with wilderness characteristics will not be managed as designated wilderness under the Wilderness Act of 1964 or WSAs.

YFO has evaluated lands within the planning area which may have wilderness characteristics. As stated in IM 2003-275-Change 1, BLM may use a variety of land use plan decisions, including, but not limited to, VRM, SCRMA, ACECs, and WHAs to protect wilderness characteristics. The lands that would be managed to maintain wilderness characteristics by alternative are listed by BLM acres in Table 2-27 and shown on Maps 2-11a to 2-11c.

**Table 2-27
Lands Managed to Maintain Wilderness Characteristics by Alternative (BLM acres)**

Acres	Alternative				
	A	B	C	D	E
Wilderness Characteristics	0	48,400	91,400	301,200	48,400

Desired Future Conditions

For those areas where BLM has identified wilderness characteristics, these characteristics would be managed to be ecologically sustainable and resilient to human-caused disturbances. The following components of wilderness characteristics would 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 would 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

The Management Actions listed in Table 2-28 outline how lands with wilderness characteristics would be managed under each alternative. In those lands identified to maintain wilderness characteristics, these management actions are meant to reduce impacts to some or all of the wilderness characteristics.

**Table 2-28
Wilderness Characteristics Management Actions by Alternative**

Management Actions	Alternative				
	A	B	C	D	E
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 would be low, subject to criteria. (See Management Action 1 Project Criteria for BLM-authorized surface disturbing activities listed below.)	n/a	X	X		X
Allow maintenance of existing facilities.	n/a	X	X	X	X
Allow the construction of temporary roads, structures, and installations for emergency purposes.	n/a	X	X	X	X
Develop and/or construct new hiking and equestrian trails, as appropriate.	n/a	X	X		
Use of motor vehicles and mechanical transport, and the construction of temporary roads, structures, and installations would be allowed for emergency purposes. Any emergency actions would be conducted in a manner that creates the least disturbance and would be reclaimed as soon as possible after the situation has ended.	n/a		X	X	X
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 administrative actions would be conducted in a manner that creates the least disturbance and reclaimed as soon as possible after the administrative need has ended.	n/a	X	X		X
Cross country travel for administrative purposes would be permitted only with prior approval by the authorized officer and following appropriate NEPA analysis. Any administrative action would be conducted in a manner that creates the least disturbance and reclaimed as soon as possible after the administrative need has ended.	n/a	X			X
Allow the use of non-motorized, mechanical transport such as wheeled game carriers.	n/a	X	X		X
Convert, where appropriate, routes closed to motor vehicles through the route designation process for use as bicycle, equestrian, or hiking trails.	n/a	X	X		X
Restore closed routes to natural conditions, where appropriate.	n/a			X	X
Decrease the visual effect of facilities on naturalness or scenic resources, when the opportunity arises, during reconstruction, replacement, or major maintenance.	n/a			X	X
Remove facilities that are no longer used, as funding and labor becomes available.	n/a			X	X
Evaluate and rehabilitate existing, unused, disturbed areas to a natural condition consistent with natural resource restoration objectives.	n/a			X	X
Rehabilitation, stabilization, reconstruction, and restoration work on prehistoric and historic sites and structures, as well as excavations and surface collection would be permitted, if wilderness characteristics are maintained.	n/a			X	
Reclaim sites and areas affected by human activities when such places are no longer needed for authorized land uses.	n/a	X	X	X	X

**Table 2-28
Wilderness Characteristics Management Actions by Alternative (cont.)**

Management Actions (cont.)	Alternative				
	A	B	C	D	E
Allow minimum impact activities to occur such as filming, commercial recreation, guided hunts and other associated activities, when such activities conform to LUP objectives, desired recreation settings, social and managerial settings, and VRM classes.	n/a		X	X	X
Allow vending operations and concession leases.	n/a	X			
Allow recreational or hobby collecting of mineral specimens when conducted without location of a mining claim and limited to hand collection and detection equipment.	n/a	X			
Allow fishing, hunting, and trapping activities. AGFD retains jurisdiction and responsibilities with respect to fish and wildlife management and establishes regulations and enforcement for these uses.	n/a	X	X	X	X
Retain lands managed to maintain wilderness characteristics in public ownership.	n/a	X	X	X	X
At time of renewal of any existing ROWs, YFO would discuss with the grant holder the possibility of relocating the ROW outside of identified lands with high value wilderness characteristics.	n/a	X	X	X	X
Regulate existing mineral leases to prevent unnecessary or undue degradation. Existing mineral materials permits represent a valid existing right, dependent upon the specific terms and conditions of the lease.	n/a	X	X	X	X
Issue any new mineral leases with a no-surface-occupancy stipulation.	n/a		X		
Authorize and issue new mineral leases.	n/a	X	X		X
Authorization of sale and free use permits (sand and gravel) would be allowed.	n/a	X	X		X
Allow existing livestock grazing operations and support facilities to continue.	n/a	X	X	X	X
Use minimum impact suppression tactics during fire suppression operations based on the appropriate management response.	n/a	X	X	X	X
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.	n/a	X	X	X	X
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 would not cause adverse impacts to the wilderness characteristics.	n/a	X	X	X	X
Administrative Actions	Alternative				
	A	B	C	D	E
Develop and adopt monitoring and standards for acceptable change for trail conditions, visitor encounters, vegetation changes, applying Arizona Land Health Standards, and approved motorized activities.			X	X	X

Management Action 1 Project Criteria: In general, projects with a small footprint that would benefit from maintenance of wilderness characteristics and are compatible with other resource objectives could be approved. The criteria that would 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 zone and recreation settings.
- Loss of opportunity for solitude and primitive recreation.
- Potential for use to be accommodated outside of the area.

When approved, projects would 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 would require minimal maintenance; and use of BMPs to minimize surface and vegetation disturbance during construction. When completed, a restoration plan would be implemented to actively restore disturbed areas.

2.15 CULTURAL RESOURCE MANAGEMENT

The management of cultural resources on BLM land must be in compliance with several Federal laws, including the Antiquities Act of 1906; NHPA, as amended; NEPA of 1969; EO 11593, "Protection and Enhancement of the Cultural Environment"; FLPMA of 1976; the American Indian Religious Freedom Act of 1978; the Archaeological Resource Protection Act of 1979; the Native American Graves Protection and Repatriation Act of 1990; EO 13007, "Indian Sacred Sites"; EO 13175, "Consultation and Coordination with Indian Tribal Governments"; and EO 13287, "Preserve America". In addition, the YFO manages its cultural resources according to the BLM *Manual* 8100 series and Arizona BLM Handbooks H-8110, *Guidelines for Identifying Cultural Resources* and H-8120, *Guidelines for Protecting Cultural Resources*.

2.15.1 ALTERNATIVE A, NO ACTION

YFO would continue to manage cultural resources for their cultural values. Sixteen cultural resource sites and areas identified in the 1987 Yuma District RMP would continue to be managed under the "Conservation for Future Use" category, i.e., preserved in place. The locations of these sites and areas are sensitive and were identified in a confidential document separate from the 1987 Yuma District RMP. Some of these sites and areas were withdrawn by Reclamation and therefore are segregated from mineral entry and development.

Management Action

- Certain significant sites and areas would be protected and preserved for future use as funds become available.

2.15.2 MANAGEMENT COMMON TO ALTERNATIVES B, C, D, AND THE PROPOSED PLAN

Desired Future Conditions

- Identify, preserve, and protect significant cultural resources and ensure that they are available for appropriate uses by present and future generations.
- Maintain viewsheds of important cultural resources whose settings contribute significantly to their scientific, public, traditional, or conservation values.
- Provide research opportunities on cultural resources that would contribute to our understanding of the ways humans have used and influenced the landscape.
- Manage historic trails, including the Anza Trail, Butterfield Overland Mail Route, Gila Trail, and Mormon Battalion Trail, to realize their educational, recreational, and scientific values.
- Enhance public understanding of, and appreciation for, cultural resources through educational outreach and heritage tourism opportunities.

Management Actions

- Implement protection measures to stop, limit, or repair damage to 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.
- Design and maintain facilities to preserve the visual integrity of cultural resources, settings, and cultural landscapes consistent with VRM objectives established in the RMP.
- Where feasible, acquire properties adjacent to public lands through donation, exchange, or purchase that contain significant cultural resources including, but not limited to, those properties eligible for inclusion on the NRHP.
- Within all proposed SCRMA's, 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.
- Recommend SCRMA's be withdrawn from mineral entry should Reclamation relinquish their existing withdrawal.

Administrative Actions

- Restrict public information about the locations of cultural resource sites that are not allocated to Public Use, as required by law and regulation.
- Establish collaborative research partnerships with academic institutions, professional and non-profit organizations, and vocational organizations.

2.0 Description of Alternatives

- 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 would focus on the following areas:
 - SCRMA and other areas with predicted cultural resource sensitivity, and
 - Areas where cultural resource sensitivity is unknown because of a lack of previous field inventory.
- Maintain an annual monitoring program that focuses on the condition of cultural resources in the Public Use, Traditional Use, and Conservation for Future Use categories. Develop partnerships with organizations like the Arizona Site Steward Program to achieve monitoring goals.
- Ensure that all proposed undertakings and authorizations are reviewed and conducted in compliance with applicable Federal laws including Section 106 of the NHPA.
- Continue to coordinate and consult with Native American tribes to identify places of traditional importance in accordance with BLM *Manual* 8120.
- Verify that project designs and proposed activities seek to avoid disturbing or removing Native American human remains and associated items.
- 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.
- Monitor cultural resource sites for adverse impacts resulting from increased visitation, and implement protection measures as appropriate, including restricting visitor access or group tour size, establishing a permitting system for large groups, or implementing physical protection measures as needed to protect the resource.
- Follow guidance developed by the BLM – SHPO Cultural Resources Data Sharing Partnership (CRDSP). Ensure that YFO’s cultural resources information is entered into AZSITE database and the California Historical Resources Information System, as appropriate.

2.15.3 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.

Areas on the landscape containing cultural resources that are particularly important for Public Use, Scientific Use, Traditional Use, or other uses as defined in BLM *Manual* 8110.4 would be

allocated as SCRMA. The primary purpose of these categories is to differentiate some portions of a planning area from others in terms of cultural resource values. SCRMA would be considered priority areas for future cultural resource inventory (NHPA Section 110 surveys) and site documentation. Additional areas would be added to the list of SCRMA as they are identified. SCRMA may increase or decrease in acreage based upon new information.

Management of SCRMA reflects and supports the primary values for which the areas are allocated. 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 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

Cultural sites and SCRMA are allocated 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 would further scientific understanding or resource management; and existing threats to sites, including vandalism, erosion processes, or other types of disturbance.

Desired Future Condition

- Cultural properties in this category would be protected until land use conflicts or research in the public interest makes it necessary or advisable to subject them to scientific study.

Management Actions

- Consider and authorize studies using currently available research methods, including methods that would result in the properties' alteration or destruction, on a case-by-case basis.
- Permit scientific and historical studies by qualified researchers at selected sites allocated to Scientific Use.

Administrative Actions

- Use historic contexts and research designs to provide guidance for scientific studies.
- Assign highest priority for study to 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.
- Establish collaborative research partnerships with academic institutions, professional and nonprofit organizations, and vocational organizations.
- Provide opportunities for and encourage Tribal participation in research.

B. PUBLIC USE

Cultural sites and SCRMAAs are allocated 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.

Cultural properties currently managed for public use in the YFO are 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. Other properties considered appropriate for Public Use include the Dripping Springs site and the Tyson Wash petroglyphs.

Desired Future Condition

- Cultural properties managed for Public Use would be protected and developed as interpretive exhibits in place, or for related educational and recreational uses by members of the general public.

Management Actions

- 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.
- Surface occupancy for discretionary actions, including but not limited to oil and gas leases, mineral material disposals, and ROWs, would generally not be authorized. Installation of facilities to protect, interpret, or manage resource values would be allowed.
- Implement appropriate developments necessary for site protection and interpretation, 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.
- Implement actions designed to stabilize, repair, and maintain cultural properties in good condition.
- Authorize commercial tour operators on a case-by-case basis. Include stipulations in SRPs to ensure that commercial tour operations would not damage cultural resources.

Administrative Actions

- Provide opportunities for Tribal participation in interpretation.
- Promote heritage tourism at selected sites, and cooperate with Native American tribes, other agencies, and organizations on heritage tourism projects that benefit local economies.

- Require commercial tour operators 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

Cultural 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.

Desired Future Condition

- Cultural properties allocated to this category would be managed for long-term preservation to accommodate the needs of Native American tribes and other groups for which these places are important.
- Prevent physical damage or intrusions at sites that might impede their use by religious practitioners.
- Develop specific management for sites managed for traditional uses in consultation with the Native American tribes to which they are culturally important.

Management Actions

- Stabilize, fence, or otherwise manage significant sites or features to protect the values ascribed to these sites by Native American tribes.
- Surface occupancy for discretionary actions, including but not limited to oil and gas leases, mineral material disposals, and ROWs, would generally not be authorized. Installation of facilities to protect, interpret, or manage resource values would be allowed.
- Minimize direct and indirect impacts to cultural values pursuant to applicable cultural resource laws and regulations if land use actions cannot be redesigned to avoid culturally sensitive locations.

Administrative Actions

- 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.
- 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.
- Identify sacred sites in consultation with Native American tribes.
- 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

Cultural 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 would result in their physical alteration.

Desired Future Condition

- Cultural properties in this category would be managed to maintain their present condition or setting until conditions are met in the future that would make them available for other uses.

Management Actions

- Segregate cultural properties in this category from all other land or resource uses, including cultural resource uses that would threaten their present condition or setting.
- Implement actions designed to preserve cultural properties and maintain them in good condition.
- Surface occupancy for discretionary actions, including but not limited to oil and gas leases, mineral material disposals, and ROWs, would generally not be authorized. Installation of facilities to protect, interpret, or manage resource values would be allowed.
- Minimize direct and indirect impacts to cultural values pursuant to applicable cultural resource laws and regulations if land use actions cannot be redesigned to avoid culturally sensitive locations.

Administrative Actions

- Conserve sites 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

Cultural sites and SCRMA's allocated to the Experimental Use category are those suited for controlled experimental studies that would result in better management of other cultural properties.

Desired Future Condition

- Cultural properties in this category would be available for studies that would aid in the management of other cultural properties, including studies that would result in the properties' alteration or destruction.

Administrative Actions

- Consider studies 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.
- Implement studies that would develop new research or interpretation methods or would 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.
- Do not apply experimental study to cultural properties with strong research potential, traditional cultural importance, or good public use potential if it would significantly diminish those values.

F. DISCHARGED FROM MANAGEMENT

Cultural properties Discharged from Management are limited to those having no remaining information potential, no traditional values, and no identifiable use. Cultural properties would 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. If a site is identified through government-to-government consultation as having traditional use values, then the site would not be appropriate for this use category.

Desired Future Condition

- Other land uses would take precedence when managing these properties, including land uses that would further diminish the properties' integrity.

Administrative Actions

- Record cultural properties in this category in the field and retain them in the inventory.

2.15.4 SPECIAL CULTURAL RESOURCE MANAGEMENT AREAS

Proposed SCRMA by alternative are shown below in Table 2-29 and Maps 2-12a (Alternative B), 2-12b (Alternative C), 2-12c (Alternative D), and 2-12d (the Proposed Plan). Appendix 2-F provides a more detailed definition of the new SCRMA allocation.

Table 2-29
SCRMA by Alternative

Proposed Special Cultural Resource Management Areas	Alternatives (BLM acres)				
	A ¹	B	C	D	E
Scientific Use					
Cibola Valley	0	0	4,700	4,700	4,700
Laguna Mountains	0	0	2,700	2,700	2,700
Ligurta Area	0	0	4,800	4,800	4,800
Traditional Use					
Limitrophe	0	CMA ³	1,400	ACEC ²	CMA ³

**Table 2-29
SCRMA by Alternative (cont.)**

Proposed Special Cultural Resource Management Areas	Alternatives (BLM acres)				
	A ¹	B	C	D	E
Traditional Use and Conservation for Future Use					
Muggins Mountains Terraces	0	4,300	4,300	4,300	4,300
Sears Point Mesas	0	10,900	ACEC ²	ACEC ²	ACEC ²
Walters Camp	0	0	1,600	ACEC ²	1,600
Conservation for Future Use					
Big Maria Terraces	0	4,700	4,700	ACEC ²	4,700
Mittry Lake	0	0	1,000	1,000	1,000
North Gila Mountains	0	0	1,100	1,100	1,100
Palo Verde Point Area	0	1,300	1,300	1,300	1,300
Senator Wash North	0	0	2,300	2,300	2,300
Total SCRMA Acreage	0	21,200	29,900	22,200	28,500

¹Sixteen cultural resource sites and areas were identified in the 1987 Yuma RMP.

²See the Special Designations section for descriptions of, and management prescriptions for, ACECs.

³See Coordinated Management Area section for descriptions of, and management prescriptions for, CMAs.

A. BIG MARIA TERRACES SCRMA

The Big Maria Terraces SCRMA is 4,700 acres and is included in Alternatives B, C, and the Proposed Plan. This proposed SCRMA is bounded by the existing 4,485-acre Big Marias ACEC to the south, the CRIT reservation to the east, the Palm Springs Field Office to the west, and the Lake Havasu Field Office to the north. This portion of the YFO on the west side of the Colorado River has a rare density of intaglios and other desert pavement features that extends across the terraces above the river floodplain. Together with the intaglio features present inside the existing Big Marias ACEC boundaries, 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.

B. CIBOLA VALLEY SCRMA

The Cibola Valley SCRMA is 4,700 acres and is included in Alternatives C, D, and the Proposed Plan. This proposed SCRMA is located on the east side of the Colorado River, in the vicinity of the Town of Cibola, Arizona. The proposed 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 sites in this proposed SCRMA require proactive management due to increased development and recreational use in this area.

C. LAGUNA MOUNTAINS SCRMA

The Laguna Mountains SCRMA is 2,700 acres and is included in Alternatives C, D, and the Proposed Plan. It 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 was highly used by indigenous peoples, and is covered primarily by 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 sites in this proposed SCRMA require proactive management due to increased development and recreational use in this area.

D. LIGURTA AREA SCRMA

The Ligurta Area SCRMA is 4,800 acres and is included in Alternatives C, D, and the Proposed Plan. This proposed 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 features in this area include rock features, dance patterns, many cleared areas in the desert pavement and a trail network. The cultural sites in this proposed SCRMA require proactive management due to the increasing amount of development and recreational use in this area.

E. LIMITROPHE SCRMA

The Limitrophe SCRMA is 1,400 acres and is included in Alternative C. This proposed SCRMA extends along the lower Colorado River from the Northerly International Boundary (1.1 miles north of Morelos Dam) downriver to the Southerly International Boundary with Mexico at San Luis, Arizona. This International Boundary area has been identified by certain Native American tribes as containing important natural and cultural resources with traditional use values. Native American tribes use this area for Tribal education, gathering, hunting and fishing; collection of mesquite wood for funerary and construction purposes; collection of willow for basket materials; and possibly collection of clay used for pottery making. This proposed SCRMA is internationally significant because it is a landscape of importance to Native Americans living on both sides of the border, in the U.S. and Mexico. It is a cultural landscape necessary for the continuation of traditional practices based on the Colorado River.

F. MITTRY LAKE SCRMA

The Mittry Lake SCRMA is 1,000 acres and is included in Alternatives C, D, and the Proposed Plan. This proposed SCRMA is located along the south and east sides of Mittry Lake, within the existing Mittry Lake CMA. This proposed SCRMA has some 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 sites in this proposed SCRMA require proactive management, due to their close proximity to intensive recreational use in the vicinity of Mittry Lake.

G. MUGGINS MOUNTAINS TERRACES SCRMA

The Muggins Mountains Terraces SCRMA is 4,300 acres and is included in Alternatives B, C, D, and the Proposed Plan. This proposed 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 was extensively used by indigenous peoples, with petroglyph boulders, cleared areas in the desert pavement, trail networks, lithic scatters, and rock alignments and other rock features in evidence 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. See Travel Management and Recreation Management sections for additional management prescriptions specific to this proposed SCRMA.

H. NORTH GILA MOUNTAINS SCRMA

The North Gila Mountains SCRMA is 1,100 acres and is included in Alternatives C, D, and the Proposed Plan. This proposed 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 density of desert pavement features, including intaglios, pebble mounds, cleared areas, rock rings, rock alignments, and an extensive trail network. The indigenous cultural sites in this proposed SCRMA require proactive management due to increased development and recreational use in this area.

I. PALO VERDE POINT AREA SCRMA

The Palo Verde Point Area SCRMA is 1,300 acres and is included in Alternatives B, C, D, and the Proposed Plan. This proposed SCRMA is located on the east side of the Palo Verde Mountains, in the vicinity of Palo Verde, California. This proposed 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 areas in the planning area. Consequently, the cultural resources in this proposed 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.

J. SEARS POINT MESAS SCRMA

The Sears Point Mesas SCRMA is 10,900 acres and is included in Alternative B. This proposed SCRMA surrounds the existing Sears Point ACEC, with its boundary generally following the Gila River floodplain and the volcanic landscape that is typical of the Sears Point area. This proposed SCRMA area contains extensive cultural sites that are similar to the features found within the existing 3,700-acre Sears Point ACEC boundaries, including petroglyph panels, traces of indigenous habitation such as extensive artifact scatters, and an established trail network.

K. SENATOR WASH NORTH SCRMA

The Senator Wash North SCRMA is 2,300 acres and is included in Alternatives C, D, and the Proposed Plan. This proposed 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 sites in this proposed SCRMA area require proactive management, due to their close proximity to intensive recreational use in the vicinity of the Senator Wash Reservoir.

L. WALTERS CAMP SCRMA

The Walters Camp SCRMA is 1,600 acres and is included in Alternative C and the Proposed Plan. This proposed 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 throughout the area, 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 important area (von Werlhof 2004). Proactive management is needed to protect the cultural resources in this proposed SCRMA from increased recreational use and OHV traffic.

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.

BLM manages paleontological resources principally under the following authorities: BLM Manual 8270—*Paleontological Resources Management*; BLM Handbook H-8270-1—*General Procedural Guidance for Paleontological Resources Management*, FLPMA of 1976; NEPA of 1969; Secretarial Order 3104; the Federal Cave Resources Protection Act of 1988; and other various laws and regulations.

All lands within the planning area would be classified as high, moderate, or low sensitivity for paleontological resources, based on their potential to contain vertebrate fossils or noteworthy occurrences of invertebrate or plant fossils. These classifications would follow the guidance outlined in BLM *Manual 8270* and BLM *Handbook H-8270-1*. Classifications would be based on future inventory of geological units and would be accomplished through adaptive management and plan maintenance.

Desired Future Conditions

- Protect and conserve significant paleontological resources as they are discovered on public lands.
- Manage paleontological resources in ways that prioritize research needs, facilitate educational and recreational needs, and protect important sites.

2.0 Description of Alternatives

- Develop specific objectives and management actions for fossil localities, when paleontological resources are discovered in the planning area.

Management Actions

- 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.
- Restrict the collection of all vertebrate fossils, and noteworthy invertebrate and plant fossils to legitimate scientific or educational uses in accordance with permitting procedures.
- Ensure that common invertebrate and plant fossils are available for recreational collecting.

Administrative Actions

- 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 would be screened against this map.
 - **Low Sensitivity Areas:** Assessment or mitigation for proposed land use authorizations would not be required except in very rare circumstances.
 - **Moderate Sensitivity Areas:** BLM-authorized surface-disturbing activities 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 would be considered.
 - **High Sensitivity Areas:** An assessment by a qualified paleontologist prior to authorizing land uses that could impact vertebrate fossils and/or uncommon invertebrate fossils would be required. A records search, inventory, monitoring, and/or mitigation would be required as appropriate before and/or during these actions.
- 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.
- Priority areas for inventory would 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.

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. 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. Adherence to air quality regulatory programs through coordination with other Federal and State agencies is a key to air quality management success.

Desired Future Conditions

- Maintain or improve air quality as established by the National Ambient Air Quality Standards and Arizona and California air quality standards.
- Identify desired outcomes and area-wide criteria or restrictions, in cooperation with the appropriate air quality regulatory agency, 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))
- Meet particulate matter up to 10 micrometers in size (PM₁₀) standards in the Yuma Non-attainment area.
- Maintain air quality within required standards through cooperative management of emissions with industry, the States of Arizona and California, and Federal agencies. YFO would 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

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

Administrative Actions

- Work closely with counties or States on the development or amendment of State implementation plans.
- Actively support ADEQ and the California Air Resources Board Imperial County Air Pollution Control District regulatory oversight of air resources in the planning area.
- 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.

2.17.2 WATER RESOURCE MANAGEMENT

Water resources in the planning area include both surface water and groundwater. Guidance for water resources management is given by BLM *Manual 7240* and in the *Land Health Standards and Guidelines* (43 CFR 4180). YFO works cooperatively with Reclamation, the USDOJ agency responsible for managing, developing, and protecting water and related resources in an environmentally and economically sound manner in the interest of the American public.

Surface waters in the planning area can be divided into watersheds, or portions of the landscape that collect runoff from the surface, concentrate it into channels, and conduct the resulting flow to a definable outlet. The planning area occurs within the Lower Colorado River Basin, which is further divided into smaller watersheds. Watersheds that make up the majority of the planning area include the lower Colorado River–Imperial Reservoir, lower Colorado River below Imperial Reservoir, lower Gila River below Painted Rock Dam (Local Drainage), Tyson Wash, Bouse Wash, and Yuma Desert Area watersheds. Water management applies to these watersheds, as well as the floodplains and riparian areas of the Colorado and Gila Rivers.

Groundwater within the planning area occurs primarily within alluvial basins between fault block mountain ranges. BLM has no direct authority over the groundwater (in basins not adjacent to the Colorado River). Rather, the groundwater resource is managed by the Arizona Department of Water Resources (ADWR). BLM works in cooperation with ADWR to develop the groundwater resource to provide water to BLM grazing lease holders, mineral operators, and to some recreational sites.

Portions of the Parker, Ranegras Plain, Lower Gila, Western Mexican Drainage basins, and the Harquahala Irrigation Non-expansion Area are within the boundary of the planning area.

Desired Future Conditions

General

- Ensure the physical presence and legal availability of surface water and groundwater on public lands.
- Ensure that those waters meet or exceed Federal, Arizona, and California water quality standards for specific uses.
- Ensure that 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

- Identify and protect surface waters from the standpoint of human health concerns, aquatic ecosystem health, or other public uses
- Preserve and enhance stream bank and channel condition.
- Identify area wide use restrictions or other protective measures to meet Federal, Tribal, State, and local water quality requirements.

Management Actions

- Maintain existing proper functioning conditions of watersheds by applying BMPs.
- Prevent or reduce water quality degradation through the application of specific mitigation measures.
- 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.
- 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. Designate management actions on public land within municipal watersheds to protect water quality and quantity.
- Analyze surface and ground water quality and quantity on a case-by-case basis.

Administrative Actions

- Provide water use reports periodically to Reclamation per agreement.

B. FLOODPLAIN MANAGEMENT

BLM is mandated by EO 11988-Floodplain Management to avoid development or occupancy on the 100-year floodplain wherever possible. The order also requires that BLM's standards and requirements for development in floodplains be consistent with the National Floodplain Insurance Program requirements administered by the Federal Emergency Management Agency. 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.

EO 11988 applies equally to all Federal land-managing agencies. BLM-Reclamation coordination on floodplain management is described in: a) DM 613 with respect to the lands bordering on the lower Colorado River, and b) in the *Reclamation/BLM Interagency Agreement* of 25 March 1983. BLM would also coordinate floodplain management to not conflict with the projects, obligations, and mission of the USIBWC.

Desired Future Conditions

- Restore and maintain desired plant communities and suitable wildlife habitat for migratory birds, waterfowl, reptiles, big-game mammals, and other desired species within riparian areas and floodplains.
- Maintain hydrologic function between watersheds and main channels of the Colorado and Gila rivers through proper floodplain management.
- Provide ample recreation opportunities on BLM-administered lands within the 100-year floodplain.

Management Actions

- Floodplains and riparian areas administered by BLM along the Colorado and Gila rivers would continue to be managed with priority consideration given to maintenance as wildlife habitat.
- No new agricultural leases would be authorized within the 100-year floodplain of the Colorado and Gila rivers.
- 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.
- Allow only those permanent new facilities that can be flood proofed within the 100-year floodplain.
- Existing permanent structures would be allowed to remain in the 100-year floodplain until they are inundated, their useful life is gone, or the present leases expire.
- BLM-administered lands within or adjacent to the Colorado River 100-year floodplain would remain in Federal management and not be made available for disposal.
- No grazing leases would be authorized within the 100-year floodplain of the Colorado or Gila rivers.

Administrative Actions

- Coordinate with Reclamation pursuant to DM 613 on management of BLM-administered lands within the Colorado River Floodplain.
- 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 USDOA NRCS *Soil Classification System*.

Aridisols are commonly found in dry environments that are low in organic matter and rich in deposited salts. Of the remaining 10 percent of the planning area, the largest area consists of Entisols or soils of recent development with no or poorly developed soil horizons. Less than one percent of the planning area consists of badlands, rock outcrops, and water.

The planning area also contains sensitive resources including biological soil crusts, desert pavement, and stabilized sand dunes.

- **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.

Desired Future Conditions

- Maintain or improve soil resource conditions throughout the planning area.
- Manage soils to maintain biological productivity and to minimize erosion.
- Meet Land Health Standard #1, as related to soils, and multiple use objectives per *Land Health Standards* (USDOI BLM 1997a).

Management Actions

- After completion of BLM-authorized surface disturbing activities, disturbed surfaces would be restored to a natural condition as far as possible.
- 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.
- Incorporate erosion and salinity control measures into projects where appropriate.

Administrative Actions

- Conduct a range-wide soil survey using USDOA NRCS standards to provide information on soil types, erosion risks, and soil vulnerability to disturbances.
- Coordinate with USDOA NRCS.
- Map all sensitive soil resources to facilitate protection of biological soil crusts, desert pavement, and stabilized sand dunes.
- Monitor effects to sensitive soils resulting from OHV use.
- Damage to sensitive soils from land use actions and multiple-use would be minimized and/or avoided 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. The land use authorization segment focuses on public demand requests for ROWs, permits, leases, and easements. Land tenure focuses on disposing of and acquiring lands or interests in lands.

The Lands and Realty program administers public lands within a framework of numerous laws. The most comprehensive of these is FLPMA. FLPMA enables BLM to accomplish a variety of

2.0 Description of Alternatives

lands actions, including but not limited to sales, withdrawals, acquisitions, exchanges, leases, permits, easements, and ROWs.

Other applicable laws and regulations are as follows:

- In 1988, FLPMA was amended by the Federal Land Exchange Facilitation Act (102 Stat. 1087). Federal Land Exchange Facilitation Act established uniform rules and regulations for appraisals, procedures, and guidelines for the resolution of appraisal disputes in the exchange process.
- Mineral Leasing Act of 1920 (30 U.S.C. 185) as amended: BLM issues ROWs for pipeline purposes for the transportation of oil, natural gas, synthetic liquid or gaseous fuels, or any refined product produced therefrom pursuant to Section 28 of the Mineral Leasing Act.
- R&PP Act of June 14, 1926 (43 U.S.C. 869 et seq.), as amended: This act is used as a significant tool primarily for providing land to fulfill the need for public services (including, but not limited to, parks, monuments, schools, community buildings, hospitals, sanitary landfills) due to community expansion.
- Airport and Airway Improvement Act of 1982 (49 U.S.C. 2215): This act provides for the conveyance of BLM-administered lands to public agencies for use as airports and airways.
- Federal Highway Acts: Various Federal Highway Acts codified in 23 U.S.C., Sections 17 and 317 were established to build, improve, and maintain the Federal interstate highway system. The current *Interagency Agreement* also applies to lands and realty management.
- Federal Land Transaction and Facilitation Act (114 Stat. 613; 43 U.S.C. 2301 et seq.) of July 25, 2000: This act amended FLPMA to allow retention by the BLM of receipts received from the sale of land or interests in land under Section 203 of FLPMA or conveyance of mineral interest under Section 209(b) of FLPMA provided a LUP was completed prior to July 25, 2000.
- Energy Policy Act of 2005 (42 U.S.C. 15801): Encourages energy efficiency and conservation, promotes alternative and renewable energy sources, reduces the U.S. dependence on foreign sources of energy, increases domestic production, modernizes the electricity grid, and encourages the expansion of nuclear energy.

A summary of proposed lands and realty Management Actions by alternative is presented in Table 2-30 below and Maps 2-13a through 2-13e.

Table 2-30
Lands and Realty Proposed Actions by Alternative

Lands Actions	Alternative				
	A	B	C	D	E
Disposal (acres)					
Total Acres	19,100	46,900	10,500	8,200	11,900
Acquisitions					
Lands would be acquired on a case-by-case basis.					
Withdrawal					
Wilderness (AZ/CA) (existing, by law)	167,800	167,800	167,800	167,800	167,800
Big Marias ACEC	2,900*	0	0	2,900*	2,900*
Dripping Springs ACEC	n/a	0	600	600	600
Sears Point ACEC	3,600**	3,600**	4,800	4,800	8,500
Total Acres	174,300	171,400	173,200	176,100	179,800
ROW Corridors					
El Paso Natural Gas	X	X	X		X
Gila Mountains East (ROW 6)		X	X		
Interstate 8		X	X	X	X
Interstate 10	X	X	X	X	X
Palo Verde-Devers	X	X	X	X	X
Palo Verde Mountains Reroute		X	X		X
Parker Blaisdell		X	X	X	X
San Diego Gas & Electric Interconnection	X	X	X		X
San Diego Gas & Electric to I-8				X	
South Muggins (ROW 3)		X	X		
Highway 95 California		X	X		X
Total Corridors	4	10	10	5	8
Total Miles	300	500	500	400	465
Communications Sites					
Airway Beacon	X	X			
Big Maria	X	X	X	X	X
Black Rock Hill		X	X	X	X
Cunningham	X	X	X	X	X
Guadalupe		X	X	X	X
Kofa		X			
Laguna Mountain (High Power)		X	X		X
Mohawk	X	X	X	X	X
Palo Verde Gap		X	X		X
Qwest		X	X		
Salome		X	X	X	X
Stone Cabin	X	X	X	X	X
Telegraph	X	X	X	X	X
Total Sites	6	13	11	8	10
Renewable Energy					
Proposed on a case-by-case basis to meet public demand.					

*BLM would propose to withdraw 2,900 acres in the Big Marias ACEC should Reclamation revoke their existing withdrawal for the area.

**In 1996, Public Land Order 7212 identified 3,600 acres for withdrawal as the Gila River Cultural ACEC. The Public Land Order immediately withdrew approximately 1,700 acres of Federal lands. An additional 1,900 acres of non-Federal lands, within the designated boundary of the ACEC, if acquired by the U.S., would also be by Public Land Order 7212. Through the acquisition of non-Federal lands since 1996, there are currently 2,400 acres of withdrawn BLM lands within the existing Gila River Cultural ACEC.

2.18.1 LAND USE AUTHORIZATIONS

YFO would strive to increase and diversify our nation's sources of both traditional and alternative energy resources, improve our energy transportation network, and ensure sound environmental management in accordance with the President's National Energy Policy. All land use authorizations would adhere to Desired Future Conditions and Management Actions made under other resource management programs in this chapter.

A. WITHDRAWAL

Withdrawal means withholding an area of Federal land from settlement, sale, location, or entry under some or all of the general land laws for the purpose of limiting activities under those laws in order to maintain other public values in the area or reserving the area for a particular public purpose or program; or transferring jurisdiction over an area of Federal land, other than property governed by the Federal Property and Administrative Services Act (40 U.S.C. 472), from one department, bureau, or agency to another department, bureau, or agency (43 CFR 2300). Section 204 of FLPMA authorizes the Secretary of the Interior (delegated to the Director of BLM) to make, modify, extend, or revoke withdrawals but only in accordance with the provisions and limitations of Section 204.

Within the planning area there are existing withdrawn lands 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 (see Appendix 2-G). When withdrawn lands are returned to the public domain, YFO would manage them in accordance with the approved LUP decisions for surrounding or adjacent BLM-administered lands.

Lands within Congressionally Designated Wilderness Areas are also withdrawn from all forms of appropriation under the mining laws and from disposition under mineral leasing laws. Prior existing claims or leases with valid existing rights may be developed, though mineral development within wilderness is rare. Within the planning area, 167,800 acres have been withdrawn according to the Wilderness Act of 1964, as amended.

Reclamation Withdrawn Lands

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. Reclamation withdrew these lands under authority of the Reclamation Act of June 17, 1902 (32 Stat. 388). This authority was repealed by Section 704(a) of FLPMA. "First form" withdrawals embrace lands which may be needed in the construction and maintenance of irrigation projects. The lands withdrawn under first form are removed from the operation of the mining laws and the general land laws. "Second form" withdrawals include lands which are believed to be susceptible to irrigation from a reclamation project. The lands withdrawn under second form are removed from the general land laws, but not the mining laws. Second form withdrawals sometimes allowed for specific land laws, i.e., homestead entry.

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). YFO would manage surface uses of Reclamation lands in accordance with the agreement and guidelines. In addition, Reclamation is obligated to comply with requirements of NEPA, NHPA, ESA, and other applicable EOs, laws, and regulations in planning and implementing site-specific actions on Reclamation project withdrawn lands.

Current and Proposed Withdrawn Lands

BLM-administered lands currently withdrawn and proposed for withdrawal are shown on Table 2-31 and Maps 2-13a through 2-13e. This includes existing Wilderness of 167,800 acres. Other Federal agency withdrawals are listed in Appendix 2-G.

Desired Future Conditions

- Minimize the amount of land withdrawn and, where applicable, revoke existing withdrawals, if the land is no longer needed for the original purpose of the withdrawal.

Management Actions

- Under Alternative A, continue existing withdrawals including the existing 167,800 acres of Congressionally Designated Wilderness Areas, Big Marias ACEC (2,900 acres), and Sears Point ACEC (3,600 acres), totaling 174,300 acres.
- Under Alternative B, withdrawals include the existing 167,800 acres of Congressionally Designated Wilderness Areas and Sears Point ACEC (3,600 acres), totaling 171,400 acres.
- Under Alternative C, withdrawals include the existing 167,800 acres of Congressionally Designated Wilderness Areas, Dripping Springs ACEC (600 acres), and Sears Point ACEC (4,800 acres), totaling 173,200 acres.
- Under Alternative D, withdrawals include the existing 167,800 acres of Congressionally Designated Wilderness Areas, Big Marias ACEC (2,900 acres), Dripping Springs ACEC (600 acres), and Sears Point ACEC (4,800 acres), totaling 176,100 acres.
- Under the Proposed Plan, withdrawals include the existing 167,800 acres of Congressionally Designated Wilderness Areas, Big Marias ACEC (2,900 acres), Dripping Springs ACEC (600 acres), and Sears Point ACEC (8,500 acres), totaling 179,800 acres.
- In the event that Reclamation relinquishes their second form withdrawal in the Big Marias ACEC, YFO would propose to withdraw 2,900 acres of the ACEC from mineral entry under Alternatives A, D, and the Proposed Plan. The withdrawal would be delineated in a way that does not affect access and use of existing facilities, including mineral material quarries.
- Under all alternatives, continue implementing Public Land Order 7212 by withdrawing additional lands that return to public ownership within the original 1988 Sears Point ACEC boundary.
- Under Alternatives C and D, propose withdrawing an additional 1,200 acres of Federal land within the Sears Point ACEC.
- Under the Proposed Plan, propose withdrawing an additional 4,900 acres of Federal land within the Sears Point ACEC.

- Under Alternatives C, D, and the Proposed Plan, propose withdrawing 600 acres of Federal land within the Dripping Springs ACEC.
- Recommend SCRMAAs to be withdrawn from mineral entry, should Reclamation relinquish their existing withdrawal.
- 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.

Administrative Actions

- Use the appropriate tool for protection of designated ACECs, which could include withdrawal.
- On Federal lands where appropriate, follow the floodplain management practices consistent with EO 11988, Floodplain Management.

B. LEASES/PERMITS/EASEMENTS

Section 302 of FLPMA states "...regulate through easements permits, leases, licenses, published rules, or other instruments as the Secretary deems appropriate, the use, occupancy, and development of the public lands...."

Leases, permits, or easements would be considered and issued under applicable laws and regulations pursuant to regulations found at 43 CFR 2900. Issuance of leases, permits, or easements is a discretionary action. These authorizations may include but are not limited to the following:

- Airport leases
- Recreation and public purposes leases
- 2920 leases, permits, or easements (agricultural leases/permits, film permits, apiary permits, concession leases, etc.)

Public land is subject to application for community expansion needs under a wide variety of public land laws. Community expansion needs would continue to be handled on a case-by-case basis in accordance with the appropriate authority. YFO would authorize the use of Federal lands for community expansion needs including, but not limited to, airports, parks, hospitals, and community centers pursuant to applicable laws and regulations. Appendix 2-H is a guide to stipulations for typical land use authorizations.

Desired Future Conditions

- Meet public demand for leases, permits, and easements.
- Meet community expansion needs.
- Existing residential leasing would be phased out.

Management Actions

- Use R&PP Act leases to meet the needs for community expansion.
- Restrict occupancy within concession sites to 150 days in a calendar year.
- Any authorization determined to be in noncompliance with the terms and conditions would be subject to termination.
- Phase out existing cabin site and residential permits, and remove improvements associated with such permits.
- Prohibit assignment or transfer of cabin site permits.
- Phase out exclusive use of individual sites within concession leases.
- Do not authorize concession leases that allow exclusive use.

Administrative Actions

- Monitor existing and future authorizations for compliance with the terms and conditions of the authorization.

1. Agricultural Leases

YFO would continue to authorize agricultural leases on a case-by-case basis on public lands where appropriate. The transfer or reassignment of agricultural leases would be subject to prior review and approval by BLM. YFO would develop agricultural lease stipulations restricting crop types for purposes of law enforcement and public safety.

Currently, 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

- Convert lands currently authorized for agricultural purposes that are not renewed to uses that benefit other programs carried out by the YFO, such as development for recreational use or restoration of wildlife habitat.

Management Actions

- Continue to authorize agricultural leases on a case-by-case basis.
- No new agricultural leases would be authorized within the 100-year floodplain of the Colorado and Gila rivers.

Administrative Actions

- The transfer or reassignment of agricultural leases would be subject to review and approval by YFO.
- The issuance of agricultural leases would be contingent on the lessee providing proof of a legal source of water and legal water rights under State water law.

2. Concession Leases

BLM issues concession leases pursuant to FLPMA and in accordance with 43 CFR 2920. 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.

Concession leases are considered when necessary to provide developed commercial recreation opportunities in appropriate settings when and where it would not be feasible for BLM or other government agencies to do so. These leases authorize the construction and/or implementation of long-term facilities and services that would require a substantial financial investment by private business or other non-governmental entities.

Desired Future Condition

- Ensure that 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

- Concessions would be managed in accordance with its authorized concession lease including quarterly inspections for compliance with the terms and conditions of the leases.
- Hidden Shores RV Village and Walters Camp would continue to be managed as concessions in accordance with their leases under Alternatives A through the Proposed Plan.
- Restrict occupancy within concessions to no more than 150 days in a calendar year.
- Concession leases found in non-compliance with the terms and conditions of the authorization would be subject to termination.

Administrative Actions

- Monitor concession leases to ensure compliance with the terms and conditions of the authorization.

C. RIGHTS-OF-WAY

The BLM issues authorizations on public lands to qualified individuals, businesses, and government entities pursuant to FLPMA or the Mineral Leasing Act. Title V of FLPMA, as amended, states that BLM is authorized to grant, issue, or renew ROWs over, upon, under or through lands for various uses. The types of uses that would be authorized by ROWs issued pursuant to FLPMA would 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 would 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 therefrom.

User-initiated proposals or applications generate most of the present ROW activity. Inquiries and proposals are received from Federal, State, and local governments and from private individuals and companies interested in acquiring access across or locating facilities on public land. Where applicable, YFO would evaluate these applications for location within approved corridors. YFO would continue to handle proposals on a case-by-case basis and in accordance with decisions established in the RMP.

In order to minimize adverse environmental impacts and the proliferation of separate ROWs, the utilization of ROW Corridors would be required to the extent practical, and each ROW or permit shall reserve to BLM the right to grant additional ROWs or permits for compatible uses on or adjacent to existing ROWs.

Desired Future Condition

- Meet public demand for ROWs on a case-by-case basis.

Management Actions

- Locate new major ROWs in designated corridors, unless an evaluation of the project demonstrates location outside of a designated corridor is the only practicable alternative.
- Avoid special designation areas and environmentally sensitive areas such as SCRMA and WHAs to the maximum extent possible. Appropriate mitigation would be required when avoidance is not possible.
- Any authorization determined to be in noncompliance with the terms and conditions would be subject to termination.
- All ROWs would meet VRM objectives.

Administrative Actions

- Process applications for ROWs in accordance with all applicable laws, regulations, and policies. Applications must be in conformance with the approved LUP.
- Monitor ROWs for compliance with existing laws and regulations in conformance with their authorization.
- Monitor existing and future authorizations for compliance with the terms and conditions of the authorization.
- 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

The range of alternatives in the PRMP/FEIS is required to meet the needs identified in the *Draft West-wide Energy Corridor Programmatic EIS*, to be consistent with the information in the 1992 Western Utility Group's *Western Regional Corridor Study*, and to attempt to meet the local

needs for ROW developments in the planning area. See Table 2-30 and Maps 2-13a through 2-13e for ROW Corridors by alternative.

Desired Future Conditions

- Consolidate major ROWs within approved corridors to minimize resource impacts.
- Designated corridors would be the preferred location for major ROWs.
- Align established corridors with adjacent BLM field office corridors in California and Arizona.

Management Actions

- Under Alternative A, continue ROW Corridor designations including Interstate 10, Palo Verde-Devers, El Paso Natural Gas, and San Diego Gas & Electric Interconnection, totaling four corridors over 300 miles.
- Under Alternative B and C, designate the El Paso Natural Gas, Gila Mountains East (ROW 6), Interstate 8, Interstate 10, Palo Verde-Devers, Palo Verde Mountains Reroute, Parker Blaisdell, San Diego Gas and Electric Interconnection, South Muggins (ROW 3), and Highway 95 California ROW Corridors, totaling 10 corridors over 500 miles.
- Under Alternative D, designate the Interstate 8, Interstate 10, Palo Verde-Devers, Parker Blaisdell, and San Diego Gas & Electric to I-8 ROW Corridors, totaling five corridors totaling 400 miles.
- Under the Proposed Plan, 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.
- All designated major ROW Corridors would be one mile in width.
- To the extent possible, locate new ROWs within or parallel to existing ROWs or ROW Corridors to minimize resource impacts.
- Locate new major utility facilities in designated ROW Corridors, unless an evaluation for the proposed project shows that the location outside of the designated corridor is the only practicable route.
- New utility facilities within ROW Corridors would avoid impacts to natural and cultural resources within ACECs and SCRMA to the greatest extent possible. If impacts could not be avoided, mitigation would be required.

Administrative Actions

- Corridor designations would be consistent with the *Western-wide Energy Corridor Programmatic EIS*.

2. Communications Sites

Communications sites are generally limited by YFO to designated areas with existing facilities on mountain peaks. 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.

There are 11 existing communications sites in the planning area, six of which are currently designated as shown in Alternative A. The number of communications sites varies by alternative as follows: Alternative B proposes 13 sites; Alternative C proposes 11 sites; Alternative D proposes eight sites; and the Proposed Plan proposes 10 sites. A high-power communications site is proposed in Alternatives B, C, and the Proposed Plan. There are three communications sites proposed in Alternatives B, C, and the Proposed Plan that are existing but not designated in Alternative A (Black Rock Hill, Guadalupe Mountain, and Salome). A fourth site (Kofa) is considered in Alternative B and proposed for termination in all other alternatives. A summary of communications sites by alternative is presented in Table 2-30 and Maps 2-13a through 2-13e.

Desired Future Conditions

- Consolidate single facility sites into more efficient communications facilities through site management plans.
- Meet public demand for high-power facilities by establishing a high-power communications site.

Management Actions

- Terminate the Kofa and Airway Beacon communications sites in Alternatives C, D, and the Proposed Plan.
- Propose to designate the Qwest site under Alternatives B and C.
- Propose to designate the Laguna Mountains site (high-power site) under Alternatives B, C, and the Proposed Plan.
- Establish a communications site along the California State Highway 78 route which would be the Palo Verde Gap Low Power Communications Site in Alternatives B, C, and the Proposed Plan.
- Applications for new communication use facilities outside designated communications sites would be considered on a case-by-case basis. Co-location and subleasing would be emphasized under all alternatives.
- New designated communications sites would have site management plans completed prior to authorizing new facilities and/or uses at the site.
- Non-designated communications sites may require communications site plans prior to authorization as determined by the BLM authorized officer.

3. Renewable Energy

The potential for renewable energy in the planning area is based on environmental, physical, and economic criteria, in conjunction with policy directives. BLM's general policy is to facilitate environmentally responsible commercial development of solar energy projects on public lands and use solar energy systems on BLM facilities where feasible.

The Energy Policy Act of 2005 was established to encourage energy efficiency and conservation, promote alternative and renewable energy sources, reduce the U.S. dependence on foreign sources of energy, increase domestic production, modernize the electricity grid, and encourage the expansion of nuclear energy. BLM, as the manager of more public land than any other Federal agency, plays a key role in implementing the Energy Policy Act of 2005. Some of the BLM actions that are affected by the Energy Policy Act of 2005 are wind energy, geothermal, hydropower, oil and gas leasing, and split-estate Federal oil and gas leasing.

Regulations applicable to solar arrays on public lands in the planning area include FLPMA and 43 CFR 2800. Solar technologies use the sun's energy to provide heat, light, hot water, electricity, and even cooling for homes, businesses, and industry. Types of solar technology include photovoltaic (solar cell) systems, concentrating solar systems, passive solar heating and daylighting, solar hot water, and solar process heat and space cooling.

Regulations applicable to wind energy development on public lands in the planning area include FLPMA, 43 CFR 2800, and other applicable laws, regulations, and policies. As stated in EO 13212, the Energy Project Streamlining process requires expediting production, transportation, and conservation of energy. The *Final Programmatic EIS on Wind Energy Development on BLM-administered Lands in the Western United States* (USDOI BLM 2005b) was completed by BLM in June 2005. The *Programmatic EIS* identified four small areas of high potential within the planning area. Current requirements for processing applications for wind energy site testing and monitoring, and commercial wind energy development projects are set forth in current BLM policy guidance.

Desired Future Conditions

- Provide for the production and distribution of renewable energy.
- Encourage the use of public lands for production of renewable energy.
- Authorize the growth, production, or conversion of biomass materials to energy products on a case-by-case basis, pursuant to applicable laws, regulations, and policies and in accordance with the approved LUP.

Management Actions

- Surface occupancy of renewable energy facilities would not be placed in special designation areas or SCRMAAs.
- Solar or wind generating facilities would not be allowed in VRM Classes I and II.
- Wind generating facilities would not be allowed under military training routes.

Administrative Actions

- Process applications for commercial renewable energy facilities as ROWs or lease authorizations on a case-by-case basis.
- 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. There are two kinds of trespass, willful and non-willful. Willful trespass is voluntary or conscious trespass and includes trespass committed with criminal or malicious intent. Non-willful trespass is trespass committed by mistake or inadvertence (43 CFR 2800, 2900, 9200). Samples of trespass include but are not limited to illegal dump sites, unauthorized construction of facilities, structures, roads, and residential and agricultural use. The YFO was historically established to resolve numerous trespasses along the lower Colorado River.

Desired Future Conditions

- Eliminate the unauthorized use of public lands.

Management Actions

- 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

- Monitor public lands for the occurrence of trespass.
- 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.
- 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.) On March 3, 1879, Congress established the United States Geological Service under the Department of the Interior, who was responsible for classifying public lands and examining the geologic structure and mineral resources and products of those lands. In 1934, under Section 7 of the Taylor Grazing Act, the Secretary of the Interior was given authority to withdraw all vacant, unreserved, and

unappropriated public land from settlement, location, sale, or entry pending classification as to the most useful purpose. Therefore, all public lands are subject to classification prior to final disposition. Section 202 of FLPMA allows the BLM to utilize the land use planning process to reclassify lands as appropriate.

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 would be applied throughout the planning area.

Desired Future Conditions

- Ensure proper classification of public lands.

Management Actions

- Reclassify public lands appropriately for all proposed dispositions.

Administrative Actions

- When lands are proposed for disposition, ensure that the lands are classified appropriately.

B. DISPOSAL

All land disposal actions are discretionary with emphasis on the evaluation of whether such lands are (1) manageable, (2) needed for any particular Federal purpose, or (3) better suited to serving the public. Sales and exchanges are used for disposal in order to assure an optimum final land ownership pattern and provide better overall land management. The types of sales include direct, competitive, and modified-competitive. Disposal of lands would be made on a case-by-case basis and would be accomplished by the most appropriate disposal authority. Lands not designated for disposal in this LUP would require an amendment and would have to meet the disposal criteria of the applicable laws and regulations. BLM could dispose of withdrawn lands with the concurrence of the withdrawing agency.

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 would be retained, unless specifically identified for disposal.

There are two distinct disposal methods outlined in FLPMA, these are sale and exchange.

- Land disposal by public sale is addressed in Section 203 of FLPMA. This section contains three criteria to apply in identifying public lands suitable for disposal by public sale. The criteria are that a) the tract of public land is difficult and uneconomical to manage as part of the public lands and is not suitable for management by another Federal department or agency, b) the land is no longer required for a specific purpose, or c) disposal would serve important public objectives.

- The criteria for determining which public lands or interests therein are available for disposal by exchange are covered in Section 206 of FLPMA. These criteria require BLM to consider 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. For an exchange to take place, FLPMA requires that the values and public objectives of the non-Federal lands or interests to be acquired are greater than or equal to the values and public objectives of the lands or interests to leave Federal ownership.

The BLM may also dispose of lands under the following four authorities:

- **Desert Land Entry Act of 1877.** No lands have been identified as meeting the criteria for entry under this authority; therefore, none are available for disposal.
- **Indian Allotment Act of 1887.** No lands have been identified as meeting the criteria for entry under this authority; therefore, none are available for disposal.
- **The Act of June 14, 1926 (R&PP)**
 - The 1954 Revision of the R&PP Act. This authorizes the lease and/or conveyance of BLM-administered lands for recreational or public purposes to State and local governments and to qualified nonprofit organizations under specified conditions at less than the fair market value.
 - The 1988 Amendment to the R&PP Act. Section 3 of the R&PP, as amended, authorizes conveyance of public lands for the purpose of solid waste disposal or for any other purpose which may result in or include the disposal, placement, or release of any hazardous substance, with special provisions relating to reversion of such lands to the U.S.
- **The Airport and Airway Improvement Act of 1982.** This act provides for the conveyance of BLM-administered lands to public agencies for use as airports and airways.

In general, under all land ownership adjustments, BLM would honor valid existing rights, and other encumbrances connected with the parcel. Proposed disposal acreages are generally isolated parcels and vary by alternative as follows: 19,100 acres under Alternative A; 46,900 acres under Alternative B; 10,500 acres under Alternative C; 8,200 acres under Alternative D; and 11,900 acres under the Proposed Plan (Appendix 2-I).

Desired Future Conditions

- When disposing by sale, the preferred method would be competitive or modified-competitive.
- Eliminate split-estate by disposing of either the surface or subsurface rights, if disposal of the rights would be in the public interest.
- Ensure no net loss of Federal ownership along the lower Colorado River.

Management Actions

- Lands could be disposed of if they meet FLPMA criteria and are designated by a LUP or LUP amendment.
- BLM follows three criteria for land disposals regarding threatened and endangered species:
 - BLM would not transfer out of Federal ownership designated or proposed critical habitat for a listed or proposed threatened or endangered species.
 - BLM would not transfer out of Federal ownership lands supporting listed or proposed threatened or endangered species if such transfer would be inconsistent with recovery needs and objectives or would likely affect the recovery of the listed or proposed species.
 - BLM would not transfer out of Federal ownership lands supporting Federal candidate species if such action would contribute to the need to list the species as threatened or endangered.

Exceptions to the above could occur if the recipient of the lands would 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 would still be achieved and ensured.

Administrative Actions

- Disposal requests from the public would be considered on a case-by-case basis.
- 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

- Achieve split-estate consolidation pursuant to Sections 205 and 206 of FLPMA.
- Any lands acquired by the BLM would include both the surface and mineral estate when possible and would be managed in accordance with the approved LUP decisions for the surrounding area.

Management Actions

- Manage all acquired lands in accordance with the approved LUP decisions for surrounding or adjacent BLM-administered lands.
- Lands to be acquired must either:
 - Facilitate access to public lands and resources,
 - Maintain or enhance public uses and values,
 - Facilitate implementation of this RMP/EIS,

- 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.

Administrative Actions

- 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 would be available for orderly and efficient development of mineral resources. Leases and sales of mineral materials are discretionary actions.

Identified mineral resources are classified according to the BLM's system as described in *Manual 3031* and *Manual 3060*. Minerals management regulations are located in 43 CFR 3000. A mineral resource potential report was prepared for the planning area (USDO I BLM 2005c).

YFO would allow exploration and development of all mineral resources including those on split estate. Exploration and development would be conducted in accordance with applicable laws, regulations, and policies, and in conformance with the approved LUP. Restrictions and stipulations would be applied on a case-by-case basis.

Mineral resources are categorized as follows:

Leasable Minerals. These 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).

Locatable Minerals. These include metallic minerals such as gold, silver, copper, lead, zinc, and uranium; and non-metallic minerals such as allunitite, asbestos, barite, gypsum, and mica; and uncommon varieties of stone (43 CFR 3800).

Salable Minerals. These minerals include construction materials such as sand, gravel, cinders, decorative rock, and building stone (43 CFR 3600).

2.19.1 LEASABLE MINERALS

Laws and regulations applicable to Federal leasing in the planning area include:

- Mineral Leasing Act of 1920 as amended and supplemented
- Acquired Lands Mineral Leasing Act of 1947

2.0 Description of Alternatives

- Mining and Minerals Policy Act of 1970
- Federal Onshore Oil and Gas Leasing Reform Act of 1987
- Geothermal Steam Act of 1970
- 43 CFR 3100 (Oil and Gas Leasing) and 43 CFR 3200 (Geothermal Resource Leasing)

Policy/guidance specific to BLM include:

- BLM Manual Series 3100—*Onshore Oil and Gas Leasing*, including all associated Handbooks, Instruction Memoranda, and Orders

A determination that lands are available for leasing represents a commitment to allow surface use under standard terms and conditions unless stipulations constraining development are attached to leases. When applying leasing restrictions, the least restrictive constraint to meet the resource protection objective would be used.

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 would be done in accordance with Federal law, regulations and policy guidance. The surface owner would be notified prior to lease and given the opportunity to comment.

Desired Future Conditions

- Ensure that public lands are available for mineral leasing in accordance with existing leasing laws unless precluded from leasing by other laws or regulations.
- Prevent unnecessary or undue degradation of public lands by operations authorized by the leasing law.
- Ensure that all public lands are subject to application for mineral leasing, unless specifically withdrawn.
- Continue to base site-specific decisions regarding lease issuance and the attachment of appropriate stipulations on existing laws, regulations, and policies, and in conformance with the approved LUP.

Management Actions

- 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.
- Should activity cease on a mining claim, wells would become government property and the determination of whether or not the wells are capped would be made by BLM.
- When BLM manages the subsurface estate only, BLM would consult with the surface owner prior to issuing a contract or permit.
- No surface occupancy for oil and gas leases would be applied within the Colorado and Gila River Riparian WHA and the Desert Mountains WHA where AGFD has identified sensitive desert bighorn sheep habitat.

Administrative Actions

- Continue to administer exploration and development in the planning area in accordance with surface and mineral management regulations.

2.19.2 LOCATABLE MINERALS

Laws and regulations applicable to mining claims on public lands in the planning area include:

- General Mining Law of 1872, as amended
- FLPMA
- 43 CFR 3700 – Multiple Use; Mining
- 43 CFR 3800 – Mining Claims under the General Mining Laws

Policy/guidance specific to the BLM include:

- BLM Manual 3800—*Mining Claims under the General Mining Laws*
- BLM Handbook H-3042-1—*Solid Minerals Reclamation Handbook*

Regulations contained in 43 CFR 3715 and 43 CFR 3809 provide for the management of surface disturbance associated with mineral exploration and development, including mining claim use and occupancy. Occupancies would meet the requirements and standard stipulations contained in the BLM *Arizona Programmatic Environmental Assessment for Mining Claim Use and Occupancy* (USDOI BLM 1997b).

Locatable Mineral Potential

- Within the planning area, 290,500 acres have moderate potential and 268,100 acres 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 (USDOI BLM 2005c).

Desired Future Conditions

- Ensure that public lands are available for exploration, location, and development of mining claims in accordance with existing mining laws unless withdrawn or segregated from entry.
- Prevent unnecessary or undue degradation of public lands by operations authorized by the mining laws.

Management Actions Common to All

- 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.

2.0 Description of Alternatives

- Require notices when mechanized equipment is used for exploration or processing and cumulative disturbance is five acres or less.
- 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 would 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;
 - In lands or waters known to contain federally listed threatened or endangered species or in proposed or designated critical habitat.
- In withdrawn areas, a validity examination would be required at prior existing claims before submittal of a mining plan of operations to verify the valid discovery of a valuable mineral deposit.
- Require reclamation of all disturbances created by casual use mining.

Administrative Actions

- Continue to administer exploration and development in the planning area in accordance with current surface and mineral management regulations.
- Monitor public lands for the occurrence of unauthorized use.
- Inventory and monitor mines which provide habitat for bats.

2.19.3 SALABLE MINERALS

Laws and regulations applicable to salable minerals on public lands in the planning area include:

- Acquired Lands Mineral Leasing Act of 1947
- Mineral Materials Act of 1947 as amended
- FLPMA; and 43 CFR Part 3600
- Surface Resources Act of 1955
- BLM Handbook H-3042-1—*Solid Minerals Reclamation Handbook*
- BLM *Manual and Handbook 3600*

Removal of mineral materials from BLM-administered lands requires either a sales contract or a free use permit. Disposal of mineral materials is a discretionary action and would be authorized in accordance with appropriate laws, regulations, and policies, in conformance with the approved LUP.

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. In response to increased demand for mineral materials in the planning area, YFO has proposed several sites for community pits. Community pits would make mineral materials available in small quantities. The use of community pits would more readily satisfy public demand while restricting surface disturbance to a limited number of areas. Mineral material disposals would continue to be authorized in other locations in the planning area if appropriate.

All community pit proposals must have a site-specific environmental analysis completed prior to implementation, including NEPA, NHPA Section 106, and ESA Section 7 documentation. If the site-specific analysis reveals that the community pit would have an adverse or significant impact on resources, the footprint of the proposal may be moved 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 would not be implemented.

There are no designated community pits under Alternative A. Alternative B proposes six community pits for a total of 800 acres. Alternative C would propose three community pits for a total of 400 acres. Alternative D would propose one community pit for a total of 100 acres. There are five community pits proposed on 700 acres under the Proposed Plan. A summary of community pits by alternative is presented in Table 2-31 below and Maps 2-13a through 2-13e.

**Table 2-31
Community Pit Names and Sizes**

Pit Name	Max Pit Size/Max Volume	Alternative				
		A	B	C	D	E
Ehrenberg South	100 acres (~1,000,000 cubic yards)	X*	X	X	X	X
NE Quartzsite	100 acres (~1,000,000 cubic yards)		X	X		X
Dateland	200 acres (~1,000,000 cubic yards)		X	X		X
Brenda	100 acres (~1,000,000 cubic yards)		X			X
Telegraph	100 acres (~1,000,000 cubic yards)		X			
Hart	200 acres (~1,000,000 cubic yards)		X			X
Total Number		1	6	3	1	5
Total Acres		100	800	400	100	700

*Pending, NEPA analysis is in progress.

Desired Future Conditions

- Prevent unnecessary or undue degradation of public lands.
- Public lands would be available for disposal of mineral materials at the discretion of the authorized officer.
- Authorize mineral material operations on a case-by-case basis to facilitate infrastructure development.

Management Actions

- Conduct a site specific environmental analysis for the implementation of each community pit.

- Authorize no salable mineral material permits within: 1) Category I and II desert tortoise habitat, and 2) the Colorado and Gila River Riparian WHA.

Administrative Actions

- Coordinate with Reclamation to locate and preserve adequate mineral materials to accommodate project needs.
- Identify suitable locations for additional community pits where appropriate, based on future public need/demand.

2.20 PUBLIC HEALTH AND SAFETY MANAGEMENT

According to applicable Federal and State laws and regulations, 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 (UXO)
- International Boundary issues
- Hazardous materials

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

- Reduce or eliminate the risk to members of the public associated with abandoned mines.
- Inventory and prioritize abandoned mine sites for reclamation, closure, or use as wildlife habitat.

Management Action

- Reduce the public risk by implementing fencing, signs, and ultimately closure of abandoned mine openings.
- 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).
- For abandoned mines that are part of an NRHP-listed or eligible historic site, the BLM would resolve the public safety hazard in compliance with NHPA and other applicable laws.

Administrative Actions

- Cooperate with the appropriate Arizona and California State agencies to identify the location of abandoned mines and prospects.

2.20.2 UNEXPLODED ORDNANCE

Unexploded ordnance (UXO) consists of military materials used in tests and on training ranges. UXO may include but is not limited to bombs, mortars, artillery shells, rockets, submunitions and landmines.

Two sources of risk exist at UXO sites: (1) risks from explosions and (2) risks from munition constituents (materials originating from UXO or other munitions, including the chemical constituents that result from their breakdown) that have leached into soil and water. Within the planning area, UXOs on public lands are sometimes found as a result of military maneuvers, both historic and present.

The U.S. Army Corps of Engineers is responsible for investigating and mitigating environmental impacts related to past military use at these types of facilities.

Given the 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

- Promote public and/or environmental safety from UXO.

Management Actions

- Take appropriate measures to protect the public from known UXO locations on BLM-administered lands, such as signing, fencing, removal, and remediation.

Administrative Actions

- 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 UXO on BLM-administered lands.
- 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, rape, and random acts of violence including sporadic gunfire.

Desired Future Conditions

- Ensure borderlands are safe for public and agency use.

Management Actions

- Conduct and/or authorize vegetation treatments in selected locations to allow visibility and reduce cover for clandestine activity. Such treatments would be conducted in a way that considers impacts to Native American religious concerns.
- Require mitigation for vegetation treatments to offset impacts to riparian habitat and recreation values. Resolve public health and safety issues by clearing hazardous fuels along the International Boundary under the fire management program, where appropriate.
- Place signs regarding border safety, where appropriate.

Administrative Actions

- 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, and other sites.

Laws governing the management of these materials include the Comprehensive Environmental Recovery, Compensation and Liability Act (CERCLA), the Resource Conservation Recovery Act, other Federal laws and regulations, and State and local regulations. Mining and milling wastes are managed under CERCLA as potentially hazardous materials or hazardous waste.

Formerly used defense sites located on BLM-administered land may contain hazardous materials. These materials include but are not limited to asbestos, lead paint, and petroleum products. Formerly used defense sites are managed in cooperation with the U.S. Army Corps of Engineers.

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 hazardous materials. The materials could include aircraft fuel, burned materials, and possibly ordnance or munitions from the aircraft.

Desired Future Conditions

- Minimize the presence and potential impact to human health and the environment from hazardous materials.

Management Actions

- Remediate areas contaminated with hazardous materials in accordance with applicable laws and regulations.

Administrative Actions

- Perform public notification of potential health risks by means of notices, signs, and other forms of communication.
- Identify the presence of and characterize the types of hazardous materials present on BLM-administered lands.
- Coordinate with Federal and State agencies to remove and/or remediate hazardous materials as they are identified.
- Remediation within NRHP-listed or eligible cultural sites would be conducted in accordance with the NHPA.
- Implement soil testing and groundwater monitoring to define the lateral and vertical extent of impact from sites with hazardous materials contamination.
- Monitor the extent of impacts of sites containing hazardous materials, such as mining and milling wastes, to air, soil, and surface and groundwater.
- Coordinate to conduct “cleanup days” on illegal dumping sites, as time and staff availability permits.

2.21 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 would be appropriate for the YFO.

2.21.1 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 would further ensure that impacts to wilderness values are minimized.

In Wilderness Areas minimum impact suppression tactics would be applied and coordinated with Wilderness Area management objectives and guidelines when fire suppression actions are required (National Interagency Fire Center 2007).

2.21.2 VEGETATION TREATMENTS

The following chemical, mechanical, manual, biological, and fire treatment methods would be used to achieve vegetation management objectives in the planning area.

A. CHEMICAL TREATMENT

YFO would use EPA-approved herbicides in accordance with EPA's 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 the Arizona 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 would 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 ROD, as follows: Buffer zones would be used adjacent to dwellings, domestic water sources, agriculture land, streams, lakes and ponds. A minimum buffer zone of 100 feet wide would be provided for aerial application, 25 feet for vehicle application and 10 feet for hand application. Any deviations must be in accordance with the label for the herbicide. Herbicides would be 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 would be used.

YFO would work closely with the USFWS to ensure that herbicide applications would not affect listed or proposed, threatened, and endangered species on a project-level basis. If adverse effects are anticipated during informal consultation, YFO would formally consult on these projects. If USFWS develops herbicide guidance for particular species that improves protection beyond the current BLM design features, YFO would consider and incorporate that guidance as it consults with USFWS on a project-level basis. The chemicals can be applied by many different methods, and the selected technique depends on a number of variables. Some of these are (1) the treatment objective (removal or reduction); (2) the accessibility, topography, and size of the treatment area; (3) the characteristics of the target species and the desired vegetation; (4) the location of

sensitive areas in the immediate vicinity (potential environmental impacts); (5) the anticipated costs and equipment limitations; and (6) the meteorological and vegetative conditions of the treatment area at the time of treatment.

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 would be timed to have the least impact on non-target plants and animals consistent with the objectives of the vegetation management program.

The chemicals would be applied aurally 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 would 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 would be reduced to reduce injury to non-target species.

The size of areas that would be treated would vary from 10 feet in diameter to 100 acres, but, most such areas would vary from 10 feet in diameter to less than five acres. The normal area of treatment by helicopter would be less than 100 acres.

During aerial applications, nozzles to reduce drift would be used for all liquid applications. Liquid herbicides would not be applied when wind speeds exceed five miles per hour (mph), and granular herbicides would not be applied when wind speeds exceed 10 miles per hour. Herbicides would not be applied when conditions stated on the herbicide label cannot be met and when air turbulence significantly affects the desired spray pattern. Buffer zones (see Glossary) to protect water resources would be provided according to individual State regulations and guidelines and herbicide labels.

Vehicle-mounted sprayer (hand gun or boom) applications would be mainly used in open areas that are readily accessible by vehicle. The boom would be used only where feasible to treat concentrated weed infestations. The hand gun would be used for spot treatment of weeds and only up to the high water line near water bodies. Neither hand guns nor booms would be used in riparian areas where weeds are closely intermingled with shrubs and trees. Under both hand gun and boom methods, sprays would be applied in a manner that gives the best possible coverage with the least amount of drift, and only when wind velocity is below eight mph, except in riparian areas where treatment would be applied only at wind velocities below five mph. Boom sprayers would not be used within 25 feet of water bodies.

Hand applications could involve backpack spraying, hand wiping application, and cyclone broadcast spreading (granular formulations). Backpack sprayers are operated at low pressure and low volume and release herbicide through a single nozzle held from 0.5 to 2.5 feet above the ground when wind velocities do not exceed eight mph. Near water, wind velocities cannot

exceed five mph. Contact systemic herbicides (see Glossary), such as glyphosate, wiped on individual plants, would be used up to the existing high water line. Granular formulations would be applied through broadcast spreaders at about 3.5 feet above the ground and no closer than 10 feet from the high water line of streams and other water bodies.

Herbicide applications are scheduled and designed to minimize potential impacts on non-target plants and animals, while remaining consistent with the objective of the vegetation treatment program. The rates of application depend on the target species, presence, and condition of non-target vegetation, soil type, depth to the water table, presence of other water sources, and the requirements of the label.

In many circumstances, the herbicide chosen, time of treatment, and rate of application of the herbicide are different than the most ideal herbicide application for maximum control of the target plant species in order to minimize damage to the non-target plant species and to ensure minimum risk to human health and safety.

B. MECHANICAL 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 would 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 would become established on the site and not invasive species. The mechanical treatment and re-seeding should occur at a time to best control the undesirable vegetation and encourage the establishment of desirable vegetation. The best mechanical method for treating undesired plants in a particular location depends on the following factors:

- Characteristics of the undesired species present such as plant density, stem size, woodiness, brittleness, and re-sprouting ability
- Need for seedbed preparation, re-vegetation, and 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 would dry and become more hazardous than before the treatment. Herbaceous material is usually not a problem, because it would 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 would be required for at least a three-year period to attain satisfactory control and would 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 would 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 would cut plants above

ground level; pull, grub, or dig out plant root systems to prevent subsequent sprouting and re-growth; scalp at ground level or remove competing plants around desired vegetation; or place mulch around desired vegetation to limit the growth of competing vegetation. Hand tools such as the handsaw, axe, shovel, rake, machete, grubbing hoe, mattock (combination of axe and grubbing hoe), brush hook, and hand clippers are used in manual treatments. Axes, shovels, grubbing hoes, and mattocks can dig up and cut below the surface to remove the main root of plants such as prickly pear and mesquite that have roots that can quickly resprout in response to surface cutting or clearing. Workers also may use power tools such as chain saws and power brush saws.

Manual methods are highly labor intensive, requiring periodic retreatment, ranging from every three weeks during the growing season to annually, depending on the target species. These methods have been successful in controlling annuals and biennials, but are ineffective in controlling creeping perennials.

D. BIOLOGICAL TREATMENT

Biological methods of vegetation treatment could employ grazing by cattle, sheep or goats, but would not include the use of invertebrates or microorganisms. YFO would only use cattle, sheep, or goats when grazing, which would not adversely affect federally listed, proposed, or candidate species. The use of grazing as a biological control agent would 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 would control few plant species.

Biological control methods using cattle, sheep, or goats would avoid erosion hazard areas, areas of compactable soils, riparian areas susceptible to bank damage, and steep erodible slopes. Domestic sheep and goats would not be used within nine miles of bighorn sheep habitat, per AGFD.

Biological control methods using cattle, sheep, or goats would be applied to treat areas for short periods. When considering the use of grazing animals as an effective biological control measure, several factors would 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 would 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 would 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 would 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.

2.21.3 APPROPRIATE MANAGEMENT RESPONSE TO WILDLAND FIRES

The AMR concept represents a range of available management responses to wildland fires. The entire planning area would 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 would be identified in the fire management plans and would be based on objectives derived from the land use allocations; relative risk to resources, the public and fire fighters; potential complexity; and the ability to defend management boundaries. Any wildland fire can be aggressively suppressed, and any fire that occurs in an area designated for fire use can be managed for resource benefits if it meets the prescribed criteria from an approved fire management plan.

FIRE SUPPRESSION ACTIONS

- Suppression tactics would be utilized that limit damage or disturbance to the habitat and landscape. No heavy equipment would be used (such as dozers), unless approved by the Field Office Manager.
- Use of fire retardants or chemicals adjacent to waterways would be accomplished in accordance to the *Environmental Guidelines for Delivery of Retardant or Foam Near Waterways*, as specified in the most recent Standards for Fire and Fire Aviation Operations.
- All known cultural resources would be protected from disturbance.
- When suppression actions are required in Wilderness areas, minimum impact suppression tactics would be utilized and coordinated with Wilderness area management objectives and guidelines as specified in the most recent Standards for Fire and Fire Aviation Operations.
- When AMR allows as well as providing for fire fighter and public safety, land and resources management objectives, values at risk, weather, fuel conditions, threats and values to be

protected, and available resources, utilize minimum impact suppression tactics on lands managed to maintain wilderness characteristics.

- The general and species-specific Conservation Measures listed in Appendix 2-C would be implemented to the extent possible to minimize adverse effects to federally listed, proposed, or candidate species occurring within the planning area.
- For fire suppression activities, a protocol for consultation would be developed as a part of the Biological Opinion (BO). This programmatic consultation would contain conservation measures and prescriptions for use in fire suppression activities. Emergency consultation should only be needed in the future, if suppression actions fall outside of these prescriptions/measures. The BO would outline coordination needs for emergency response actions that may affect a federally listed/proposed species and/or critical habitat. The following protocol would apply: YFO would contact the appropriate USFWS biologist as soon as practical once a wildfire starts and a determination is made that a federally protected species and/or its habitat could be affected by the fire and/or fire suppression activities. USFWS would work with YFO during the emergency response to apply the appropriate Conservation Measures. When Conservation Measures cannot be applied during the suppression activities, YFO would, after the fact, need to consult on any suppression actions that may have affected the federally protected species or its habitat. If Conservation Measures are adhered to, YFO would report on the actions taken and effects to the species and its habitat following the fire, but no further consultation on that incident would be required.

2.21.4 WILDLIFE WATERS

Wildlife water developments would be constructed according to AGFD specifications (AGFD 2007).

2.21.5 SPECIES REINTRODUCTIONS AND TRANSPLANTS

Reintroductions and transplants are conducted pursuant to procedures in MS 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).

2.21.6 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, and
 - 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

1. 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

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- Mitigation measures designed to reduce adverse effects to tortoises; and
- 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; and
- 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

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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.

2. 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 (Aug 15 to Oct 7).

2.21.7 LIVESTOCK GRAZING ACTIVITIES

Desired plant community objectives would be quantified for each allotment through the rangeland monitoring and evaluation process. Ecological site descriptions available through the USDOA NRCS and other data would 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 would 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 would be used to set priorities. These studies would 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 would 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 would 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 would 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 would 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 would follow guidance provided in the BLM *Handbook on Fencing* No. 1741-1.

2.21.8 TYPICAL RANGE OF HABITAT IMPROVEMENTS

Following is a discussion of typical design features, construction practices, and implementation procedures for range or habitat improvements that could be constructed following approval of the RMP/ROD. The extent, location, and timing of such actions would 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 would be built to BLM manual specifications. Fences would normally be constructed to provide exterior allotment boundaries, divide allotments in pastures, protect streams, and control livestock. Most fences would 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 would be modified. Proposed fence lines would usually not be bladed or scraped. Gates or cattle guards would be installed where fences cross existing roads.

All new or reconstructed fences in big game habitat, including desert bighorn sheep habitat, would meet specifications in BLM Handbook 1741-1 or be designed to allow for the movement of big game, including desert bighorn sheep. YFO would consult with AGFD and CDFG on the design and location of new fences.

B. PIPELINES

Wherever possible, water pipelines would be buried. The trench would be excavated by a backhoe, ditch witch, or similar equipment. Plastic pipe would be placed in the trench and the excavated material would be used to backfill. Most pipelines would have water tanks spaced as needed to achieve proper livestock distribution.

C. RESERVOIRS

Stock pond sites would be selected based on available watershed and hydrologic information. All applicable State laws and regulations would be followed.

D. WELLS

Well sites would be selected based on geologic reports that predict the depth to reliable aquifers. All applicable State laws and regulations that apply to groundwater would 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.

2.21.9 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 would be determined on a case-by-case basis and dependent upon available funding. Wells would likely be redevelopment of an existing well. Water catchments would use current underground storage techniques currently employed by AGFD. Earth tanks would 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 can not 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 would 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 would 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 would be vaccinated, freeze branded, and available for adoption.

2.21.10 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 group events, vending operations, and commercial activities. Stipulations are typically established to protect natural and cultural resource values, public health and safety, and limit the displacement of existing recreational uses.

2.21.11 TRAVEL MANAGEMENT

The route evaluation criteria set forth in this PRMP/FEIS (see Section 2.12.2.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.

2.21.12 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 would 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 would 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 would help to further reduce the visual impacts of any development.

2.21.13 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.

2.21.14 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.

2.21.15 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 would be conducted in accordance with all applicable laws and regulations. Acquired lands would 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 would be conducted by an YFO staff member. A site visit would 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 would be required. YFO would 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 would 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 would 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 would require a plan of operations before mining can begin. Operations proposed for lands that are withdrawn from mineral entry would cause BLM to initiate a validity examination and would 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 would 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 would be considered on a case-by-case basis. Leases would be issued with necessary restrictions to protect resources. Stipulations to protect important surface values would 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 would be authorized in accordance with appropriate laws, regulations, and policies, in conformance with the approved LUP. Appropriate measures would be taken to protect the environment and minimize impacts to public health and safety.

2.21.16 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 would 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 would 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 would be completed. It is departmental policy to minimize potential liability of the Department of the interior 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 would be inspected to determine appropriate management for hazardous materials. Parties responsible for contamination would be identified and held liable for cleanup and resource damage costs, as prescribed by law.

C. ABANDONED MINE LANDS

YFO would 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 would 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 would 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 would 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.

D. UNEXPLODED ORDNANCE

The following actions would be appropriate with regard to the discovery of UXO.

- If UXO is discovered on public lands in the planning area, appropriate measures would immediately be taken to restrict access to the site.
- The appropriate military response unit would 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).

2.22 IMPLEMENTATION AND MONITORING

2.22.1 IMPLEMENTATION

LUP decisions become effective upon approval of the RMP. These decisions fall into two categories: Desired Future Conditions (goals and objectives), Management Actions (allowable uses and actions to achieve outcomes). 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 would require further environmental analysis. Decisions to implement these projects are subject to administrative review at the time when such decisions are made.

YFO would continue to involve and collaborate with the public during implementation of this plan. Opportunities to become involved in the plan implementation and monitoring would 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 the public lands.

2.22.2 ADAPTIVE MANAGEMENT

The adaptive management process is a flexible process that generally involves four phases: planning, implementation, monitoring, and evaluation. This RMP revision 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 would 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, as is being done with this plan. Periodic RMP amendments are expected to occur as resource conditions, resource values, or goals and objectives change. LUP 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 would not be crossed. Should those thresholds be reached adaptive management would 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 would 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, are monitored periodically to ensure decisions are valid. As for LUPs, if needed, these plans are changed using principles of adaptive management and limits of acceptable change.

2.22.3 ADMINISTRATIVE ACTIONS

Although BLM’s intent and commitment to accomplish Administrative Actions is generally addressed in RMP/EIS-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.

2.22.4 MONITORING AND EVALUATION

LUP 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 LUP 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 LUP 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.

2.23 COMPARISON OF IMPACTS BY ALTERNATIVE

Table 2-32, beginning on page 2-183, provides a summary of the impacts that would occur from implementing the No Action and four action alternatives. Chapter 4 provides a more detailed analysis of impacts.

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**Table 2-32
Comparison of Impacts by Alternative**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Special Designations – Wilderness Areas					
From All Management Actions Regardless of Resource	Eight congressionally designated Wilderness Areas totaling approximately 167,800 acres would continue to be managed according to the Wilderness Act of 1964 under all alternatives.				
Special Designations – National Historic Trails					
From Visual Resource Management	None identified.	VRM Class II allocations would protect 17 miles of NHT values.	VRM Class II allocations would protect 12 miles of NHT values.	VRM Classes I and II allocations would protect 12 miles of NHT values.	Same as Alternative C.
Special Designations – National Byways					
From Special Designations	None identified.	The Agua Caliente and the Gold Nugget Back Country Byways travel across the Sears Point ACEC and the Dripping Springs ACEC respectively, providing protection to Back Country Byway values.	Same as Alternative B.	None identified.	The Agua Caliente Back Country Byway travels across the Sears Point ACEC, providing protection to Back Country Byway values.
From Visual Resource Management	None identified.	VRM Class II allocations would protect 79 miles of Back Country Byway values.	Class II allocations would protect 11 miles of Back Country Byway values.	None identified.	VRM Class II allocations would protect portions of the Agua Caliente Back Country Byway.

**Table 2-32
Comparison of Impacts by Alternative
(cont.)**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Special Designations – ACECs					
From Special Designations	No Back Country Byways.	2.3 miles of the Agua Caliente Byway crosses the Sears Point ACEC, potentially resulting in adverse impacts to ACEC values.	Gold Nugget Byway crosses the Dripping Springs ACEC and 2.3 miles of the Agua Caliente Byway crosses the Sears Point ACEC, potentially resulting in adverse impacts to ACEC values.	No Back Country Byways located within ACECs.	2.3 miles of the Agua Caliente Byway crosses the Sears Point ACEC, potentially resulting in adverse impacts to ACEC values.
From Travel Management	None identified.	None identified.	600-acre Closed OHV Management Area at Dripping Springs would result in increased protection of ACEC values.	600-acre Closed OHV Management Area at Dripping Springs, 1,400-acre Closed OHV Management Area at Sears Point, and 56,600 acres of Closed OHV Management Areas in the Palomas Plain would result in increased protection of ACEC values.	400-acre Closed OHV Management Area at Dripping Springs and 1,400-acre Closed OHV Management Area at Sears Point would result in increased protection of ACEC values.
From Lands and Realty Management	None identified.	1,900 acres of ROW Corridors within the Big Marias ACEC would potentially result in adverse impacts to ACEC values.	Same as Alternative B.	10,300 acres of ROW Corridors proposed in the Palomas Plain ACEC and 1,900 acres in the Gila River Terraces and Trails ACEC, potentially resulting in adverse impacts to ACEC values.	Same as Alternative B.

Table 2-32
Comparison of Impacts by Alternative
(cont.)

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Special Designations – ACECs (cont.)					
From Mineral Resource Management	Protection of ACEC values on 6,500 acres withdrawn from mineral development.	Protection of ACEC values on 3,600 acres withdrawn from mineral development.	Protection of ACEC values on 5,400 acres withdrawn from mineral development.	Protection of ACEC values on 8,300 acres withdrawn from mineral development.	Protection of ACEC values on 12,000 acres withdrawn from mineral development.
From Wilderness Characteristics Management	None identified.	None identified.	None identified.	A majority of the 429,200-acre Palomas Plain ACEC proposal would overlap with lands identified to maintain wilderness characteristics, which would provide indirect benefits to the proposed ACEC's recognized values.	None identified.
Vegetation Resources					
From Special Designations	Betty's Kitchen NRT would remain at 0.5 mile, no additional impacts to vegetation resources are expected.	Betty's Kitchen NRT would be extended five miles (5.5 miles total). Construction of the extended trail would result in potential adverse impacts to vegetation resources.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.

**Table 2-32
Comparison of Impacts by Alternative
(cont.)**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Vegetation Resources (cont.)					
From Special Designations (cont.)	No Back Country Byways.	220 miles of Back Country Byways proposed in seven areas. Byways have the potential to cause losses of roadside vegetation if improvements are constructed.	76 miles of Back Country Byways proposed in four areas. Byways have the potential to cause losses of roadside vegetation if improvements are constructed.	Same as Alternative A.	21 miles of Back Country Byways proposed in two areas. Byways have the potential to cause losses of roadside vegetation if improvements are constructed.
	6,700 acres of ACECs resulting in protective measures to vegetative resources (beneficial impacts).	Same as Alternative A.	28,900 acres of ACECs resulting in protective measures to vegetative resources (beneficial impacts).	491,400 acres of ACECs resulting in protective measures to vegetative resources (beneficial impacts).	Same as Alternative C.
From Vegetation Resource Management	12,400-acre Fred J. Weiler Greenbelt resulting in protective measures to vegetative resources (beneficial impacts).	No proposed VHAs.	12,400 acres of VHAs resulting in protective measures to vegetative resources (beneficial impacts).	22,900 acres of VHAs resulting in protective measures to vegetative resources (beneficial impacts).	Same as Alternative D.
	134,700 acres closed to firewood collection.	142,800 acres closed to firewood collection.	179,300 acres closed to firewood collection.	1,318,000 acres closed to firewood collection.	153,000 acres closed to firewood collection.
From Wildland Fire Management	The Arizona Fire Land Use Plan Amendment decisions would be carried forward, which are common to all alternatives. Full suppression of wildland fires would be used to protect riparian areas and natural resources.				

**Table 2-32
Comparison of Impacts by Alternative
(cont.)**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Vegetation Resources (cont.)					
From Fish and Wildlife Management	539,500 acres of WHAs resulting in protective measures to vegetative resources (beneficial impacts).	1,545,800 acres of WHAs resulting in protective measures to vegetative resources (beneficial impacts) (exceeds planning area acres because proposed WHAs overlap).	1,605,200 acres of WHAs resulting in protective measures to vegetative (beneficial impacts) (exceeds planning area acres because proposed WHAs overlap).	900,400 acres of WHAs resulting in protective measures to vegetative resources (beneficial impacts).	1,526,200 acres of WHAs resulting in protective measures to vegetative resources (beneficial impacts) (exceeds planning area acres because proposed WHAs overlap).
From Recreation Management	Adaptive management would be used on a case-by-case basis to determine if the expansion or development of new recreation sites would be necessary to meet public demands or address user and resource conflicts. Additional impacts to terrestrial vegetation from new and expanded recreation sites would be considered and disclosed as required by NEPA during the development of subsequent recreation site activity plans. Recreation activities may result in the introduction and spread of non-native invasive species in both terrestrial and aquatic environments.			The expansion of existing recreation sites or the development of new recreation sites would not occur, resulting in no new impacts to vegetation resources from recreation management. The potential for recreational activities to introduce and spread non-native invasive species in both terrestrial and aquatic environments would still continue.	Same as Alternatives A, B, and C.

**Table 2-32
Comparison of Impacts by Alternative
(cont.)**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Vegetation Resources (cont.)					
From Travel Management	Adverse impacts to vegetation resources within 400 acres at the Ehrenberg Sandbowl Open OHV Management Area.	Adverse impacts to vegetation resources on 3,800 acres of Open OHV Management Areas.	Adverse impacts to vegetation resources on 2,400 acres of Open OHV Management Areas.	Same as Alternative A.	Same as Alternative A.
	OHV use and other trail-based activities can facilitate the dispersal and establishment of non-native invasive plant species.				
	Reduced impacts on 1,200 acres (non-wilderness) and 167,800 acres (Wilderness) of Closed OHV Management Areas.	Reduced impacts on 3,200 acres (non-wilderness) and 167,800 acres (Wilderness) of Closed OHV Management Areas.	Reduced impacts on 3,500 acres (non-wilderness) and 167,800 acres (Wilderness) of Closed OHV Management Areas.	Reduced impacts on 66,000 acres (non-wilderness) and 167,800 acres (Wilderness) of Closed OHV Management Areas.	Reduced impacts on 5,100 acres (non-wilderness) and 167,800 acres (Wilderness) of Closed OHV Management Areas.
From Lands and Realty Management	19,100 acres available for disposal, potentially adversely impacting vegetation resources.	46,900 acres would be available for disposal, potentially adversely impacting vegetation resources, including special status plants.	10,500 acres would be available for disposal, potentially adversely impacting vegetation resources, including special status plants.	8,200 acres available for disposal, potentially adversely impacting vegetation resources, but not disposing of blue sand lily habitat.	11,900 acres would be available for disposal, potentially adversely impacting vegetation resources, including special status plants.
	Adverse vegetation resource impacts on 300 miles of ROW Corridors and six communication sites.	Adverse vegetation resource impacts on 500 miles of ROW Corridors and 13 communication sites.	Adverse vegetation resource impacts on 500 miles of ROW Corridors and 11 communication sites.	Adverse vegetation resource impacts on 400 miles of ROW Corridors and eight communication sites.	Adverse vegetation resource impacts on 465 miles of ROW Corridors and 10 communication sites.

**Table 2-32
Comparison of Impacts by Alternative
(cont.)**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Vegetation Resources (cont.)					
From Mineral Resource Management	Adverse vegetation resource impacts on 100 acres of one community pit.	Adverse vegetation resource impacts on 800 acres of six community pits.	Adverse vegetation resource impacts on 400 acres of three community pits.	Adverse vegetation resource impacts on 100 acres of one community pit.	Adverse vegetation resource impacts on 700 acres of five community pits.
	Mineral entry withdrawals within 6,500 acres and 167,800 acres of Wilderness.	Mineral entry withdrawals within 3,600 acres and 167,800 acres of Wilderness.	Mineral entry withdrawals within 5,400 acres and 167,800 acres of Wilderness.	Mineral entry withdrawals within 8,300 acres and 167,800 acres of Wilderness.	Mineral entry withdrawals within 12,000 acres and 167,800 acres of Wilderness.
From Wilderness Characteristics Management	None identified.	Indirect beneficial impacts to vegetative resources may occur on 48,400 acres of lands identified to maintain wilderness characteristics.	Indirect beneficial impacts to vegetative resources may occur on 91,400 acres of lands identified to maintain wilderness characteristics.	Indirect beneficial impacts to vegetative resources may occur on 310,200 acres of lands identified to maintain wilderness characteristics.	Same as Alternative B.
Wildland Fire Management					
From Travel Management	Under all alternatives, motorized access for emergency purposes such as wildland fire fighting would not be limited by proposed Travel Management policies.				
Fish and Wildlife Management Including Special Status Species					
From Special Designations	Protection of wildlife habitat in 6,700 acres of ACECs.	Same as Alternative A.	Protection of wildlife habitat in 28,900 acres of ACECs.	Protection of wildlife habitat in 491,900 acres of ACECs.	Protection of wildlife habitat in 28,900 acres of ACECs.
	No Back Country Byways proposed.	Adverse impacts to wildlife habitat from 220 miles of Back Country Byways.	Adverse impacts to wildlife habitat from 76 miles of Back Country Byways.	No Back Country Byways proposed.	Adverse impacts to wildlife habitat from 21 miles of Back Country Byways.

**Table 2-32
Comparison of Impacts by Alternative
(cont.)**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed plan)
Fish and Wildlife Management Including Special Status Species (cont.)					
From Special Designations cont.	No impacts identified from NRT.	Impacts to riparian habitat and disturbance of wildlife from construction and use of a five-mile extension of the Betty's Kitchen NRT.	None identified.	None identified.	None identified.
From Travel Management	No impact to Sonoran desert tortoise habitat.	Adverse impacts to wildlife habitat from 1,800 acres of Open OHV Management Areas within WHAs and 650 acres within Category III Sonoran desert tortoise habitat.	Adverse impacts to wildlife habitat from 1,700 acres of Open OHV Management Areas within WHAs and 600 acres within Category III Sonoran desert tortoise habitat.	No impact to Sonoran desert tortoise habitat.	No impact to Sonoran desert tortoise habitat.
From Lands and Realty Management	No impacts from disposals identified.	Reduced habitat restoration opportunities for SWFL and yellow-billed cuckoo from disposal of leased land near the Colorado River.	None identified.	None identified.	Reduced habitat restoration opportunities for SWFL and yellow-billed cuckoo from disposal of leased land near the Colorado River.
	No impacts from disposals identified.	Disposal of 320 acres of Category III desert tortoise habitat.	Disposal of less than one acre of Category III desert tortoise habitat.	None identified.	Same as Alternative C.

**Table 2-32
Comparison of Impacts by Alternative
(cont.)**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed plan)
Fish and Wildlife Management Including Special Status Species (cont.)					
From Fish and Wildlife Management	None identified.	Beneficial impacts within 704,800 acres of the proposed Palomas Plain WHA.	Beneficial impacts to sand dune habitat in 59,400 acres of the proposed Dunes WHA.	Beneficial impacts to sand dune habitat in 59,400 acres of the proposed Dunes WHA and within 704,800 acres of the proposed Palomas Plain WHA.	Beneficial impacts to sand dune habitat in 57,500 acres in the proposed Dunes WHA and within 627,700 acres of the proposed Palomas Plain WHA.
From Wilderness Characteristics Management	None identified.	Indirect beneficial impacts to wildlife habitat may occur on 48,400 acres of lands identified to maintain wilderness characteristics.	Indirect beneficial impacts to wildlife habitat may occur on 91,400 acres of lands identified to maintain wilderness characteristics.	Indirect beneficial impacts to wildlife habitat may occur on 301,200 acres of lands identified to maintain wilderness characteristics.	Same as Alternative B.
Wild Horse and Burro Management					
From Wild Horse and Burro Management	HMAs not specifically addressed in previous plans.	Cibola-Trigo HMA allocations would reduce the number of nuisance animals. Herds would no longer be located on the east side of Highway 95. AML ₂ would remain at 165 burros and 150 horses. Impacts to wild horse and burro habitat may occur from reductions or other changes in HMA allocations. HMA allocations may impact individuals or populations, when allocation changes result in removal (adoption or relocation) of wild horses and burros.			
Visual Resource Management					
From All Management Actions Regardless of Resource	Impacts to the landscapes of the public lands are disclosed through the identification of proposed projects' anticipated contrasts to the landscape's existing form, line, texture, and color. Implementation of this RMP and any subsequent actions tied to this RMP would seek to comply with the identified visual resource class objectives through design or mitigation.				

**Table 2-32
Comparison of Impacts by Alternative
(cont.)**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Wilderness Characteristics					
From Special Designations	None identified.	None identified.	None identified.	Most of the proposed lands with wilderness characteristics would overlap with the proposed Palomas Plain ACEC, providing protective measures for these lands.	None identified.
From Vegetation Resources Management	None identified.	None identified.	None identified.	More parcels of land with wilderness characteristics contain non-native invasive species. Treatment of these species could negatively affect the experiences found in lands identified to maintain wilderness characteristics.	None identified.
From Fish and Wildlife Management	None identified.	The proposed Palomas Plain WHA would overlap with lands with wilderness characteristics in this alternative, benefiting lands with wilderness characteristics.	Same as Alternative B.	None identified.	Same as Alternative B.

Table 2-32
Comparison of Impacts by Alternative
(cont.)

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Wilderness Characteristics (cont.)					
From Fish and Wildlife Management (cont.)	None identified.	None identified.	The potential impacts to naturalness, solitude, and primitive and unconfined recreation from seasonal hunting and wildlife habitat improvement projects would likely be more common than under Alternatives B or the Proposed Plan.	The potential impacts to naturalness, solitude, and primitive and unconfined recreation from seasonal hunting and wildlife habitat improvement projects would likely be the most common under this alternative.	None identified.
From Travel Management	None identified.	Potential impacts to experience solitude from 0.400 miles of road per square mile in lands with wilderness characteristics.	Potential impacts to experience solitude from 0.563 miles of road per square mile in lands with wilderness characteristics.	Potential impacts to experience solitude from 1.002 miles of road per square mile in lands with wilderness characteristics.	Potential impacts to experience solitude from 0.400 miles of road per square mile in lands with wilderness characteristics.
From Lands and Realty Management	None identified.	None identified.	None identified.	Affected by 3,600 acres of proposed ROW Corridors north of the Town of Quartzsite.	None identified.

**Table 2-32
Comparison of Impacts by Alternative
(cont.)**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Wilderness Characteristics (cont.)					
From Mineral Resource Management	None identified.	None identified.	The potential impacts to naturalness, solitude, and primitive and unconfined recreation from mining and mineral leasing activities would be more common than under Alternatives B or the Proposed Plan.	The potential impacts to naturalness, solitude, and primitive and unconfined recreation from mining and mineral leasing activities would be the most prevalent under Alternative D.	None identified.
Cultural Resources					
From Special Designations	Enhanced protection of cultural sites within 6,700 acres of ACECs.	Same as Alternative A.	Enhanced protection of cultural sites within 28,900 acres of ACECs.	Enhanced protection of cultural sites within 491,900 acres of ACECs.	Same as Alternative C.
	No Back Country Byways.	Potential impacts to cultural sites from 220 miles of Back Country Byways.	Potential impacts to cultural sites from 76 miles of Back Country Byways and 64 miles of the Highway 95 Scenic Byway.	None identified.	Potential impacts to cultural sites from 21 miles of Back Country Byways and 64 miles of the Highway 95 Scenic Byway.
From Livestock Grazing Management	Potential impacts to cultural resources within 1,005,800 acres available to livestock grazing.	Potential impacts to cultural resources within 680,900 acres available to livestock grazing.	Potential impacts to cultural resources within 428,300 acres available to livestock grazing.	None identified.	Same as Alternative C.
From Recreation Management	None identified.	Alternatives B, C, D, and the Proposed Plan would designate SRMAs and RMZs to identify and enhance targeted recreational opportunities and experiences.			

Table 2-32
Comparison of Impacts by Alternative
(cont.)

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Cultural Resources (cont.)					
From Travel Management	None identified.	Potential impacts to cultural sites on 3,800 acres of Open OHV Management Areas.	Potential impacts to cultural sites on 2,400 acres of Open OHV Management Areas.	None identified.	None identified.
	Reduced impacts on 1,200 acres (non-wilderness) and 167,800 acres (Wilderness) of Closed OHV Management Areas.	Reduced impacts on 3,200 acres (non-wilderness) and 167,800 acres (Wilderness) of Closed OHV Management Areas.	Reduced impacts on 3,500 acres (non-wilderness) and 167,800 acres (Wilderness) of Closed OHV Management Areas.	Reduced impacts on 66,000 acres (non-wilderness) and 167,800 acres (Wilderness) of Closed OHV Management Areas.	Reduced impacts on 5,100 acres (non-wilderness) and 167,800 acres (Wilderness) of Closed OHV Management Areas.
From Visual Resource Management	Protection of cultural sites within 183,000 acres of VRM Class I and II areas.	Protection of cultural sites within 709,600 acres of VRM Class I and II areas.	Protection of cultural sites within 782,900 acres of VRM Class I and II areas.	Protection of cultural sites within 817,200 acres of VRM Class I and II areas.	Protection of cultural sites within 786,400 acres of VRM Class I and II areas.
From Lands and Realty Management	Protection of cultural sites within 6,500 acres of withdrawn lands (plus 167,800 acres within Wilderness).	Protection of cultural sites within 3,600 acres of withdrawn lands (plus 167,800 acres within Wilderness).	Protection of cultural sites within 5,400 acres of withdrawn lands (plus 167,800 acres within Wilderness).	Protection of cultural sites within 8,300 acres of withdrawn lands (plus 167,800 acres within Wilderness).	Protection of cultural sites within 12,000 acres of withdrawn lands (plus 167,800 acres within Wilderness).
	None identified.	ROW Corridors cross three SCRMA's.	ROW Corridors cross seven SCRMA's.	Same as Alternative B	ROW Corridors cross six SCRMA's.

**Table 2-32
Comparison of Impacts by Alternative
(cont.)**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Cultural Resources (cont.)					
From Lands and Realty Management (cont.)	None identified.	Potential impacts to cultural sites at seven additional communication sites.	Potential impacts to cultural sites at five additional communication sites.	Potential impacts to cultural sites at two additional communication sites.	Potential impacts to cultural sites at four additional communication sites.
From Mineral Resources Management	Potential adverse impacts on 100 acres identified for community pits.	Potential adverse impacts on 800 acres identified for community pits.	Potential adverse impacts on 400 acres identified for community pits.	Same as Alternative A.	Potential adverse impacts on 700 acres identified for community pits.
	Beneficial impacts from 3,700 acres proposed for withdrawal from mineral entry in ACECs.	Same as Alternative A.	Beneficial impacts from 5,400 acres proposed for withdrawal from mineral entry in ACECs.	Same as Alternative C.	Beneficial impacts from 9,100 acres proposed for withdrawal from mineral entry in ACECs.
From Wilderness Characteristics Management	None identified.	Indirect beneficial impacts to cultural resource values may occur on 48,400 acres of lands identified to maintain wilderness characteristics.	Indirect beneficial impacts to cultural resource values may occur on 91,400 acres of lands identified to maintain wilderness characteristics.	Indirect beneficial impacts to cultural resource values may occur on 301,200 acres of lands identified to maintain wilderness characteristics.	Same as Alternative B.
Paleontological Resources					
From Special Designations	None identified.	Potential impacts from 5.0 mile extension of Betty's Kitchen NRT and 220 miles of Back Country Byways.	Potential impacts from 76 miles of Back Country Byways.	None identified.	Potential impacts from 21 miles of Back Country Byways.
	Reduced impacts in 6,700 acres designated as ACECs	Same as Alternative A.	Reduced impacts in 28,900 acres designated as ACECs.	Reduced impacts in 491,900 acres designated as ACECs.	Same as Alternative C.

Table 2-32
Comparison of Impacts by Alternative
(cont.)

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Paleontological Resources (cont.)					
From Visual Resource Management	Potential adverse impacts in designated VRM classes III and IV (1,135,000 acres). Reduced impacts on 15,200 acres of VRM Class II.	Potential adverse impacts in designated VRM classes III and IV (608,400 acres). Reduced impacts on 541,800 acres of VRM Class II.	Potential adverse impacts in designated VRM classes III and IV (589,100 acres). Reduced impacts on 561,100 acres of VRM Class II.	Potential adverse impacts in designated VRM classes III and IV (500,800 acres). Reduced impacts on 624,800 acres of VRM Class II.	Potential adverse impacts in designated VRM classes III and IV (535,100 acres). Reduced impacts on 618,600 acres of VRM Class II.
From Travel Management	Potential impacts within the 400-acre Ehrenberg Sandbowl Open OHV Management Area	Potential impacts within 3,800 acres of Open OHV Management Areas.	Potential impacts within 2,400 acres of Open OHV Management Areas.	Same as Alternative A.	Same as Alternative A.
	Reduced impacts on 1,200 acres (non-wilderness) and 167,800 acres (Wilderness) of Closed OHV Management Areas.	Reduced impacts on 3,200 acres (non-wilderness) and 167,800 acres (Wilderness) of Closed OHV Management Areas.	Reduced impacts on 3,500 acres (non-wilderness) and 167,800 acres (Wilderness) of Closed OHV Management Areas.	Reduced impacts on 66,000 acres (non-wilderness) and 167,800 acres (Wilderness) of Closed OHV Management Areas.	Reduced impacts on 5,100 acres (non-wilderness) and 167,800 acres (Wilderness) of Closed OHV Management Areas.
From Lands and Realty Management	Potential impacts within 74,600 acres of ROW Corridors and 200 acres of communication sites.	Potential impacts within 129,900 acres of ROW Corridors and 300 acres of communication sites.	Potential impacts within 129,900 acres of ROW Corridors and 300 acres of communication sites.	Potential impacts within 91,300 acres of ROW Corridors and 200 acres of communication sites.	Potential impacts within 121,700 acres of ROW Corridors and 300 acres of communication sites.
From Mineral Resource Management	Protection of resources within 6,500 acres of withdrawn lands plus 167,800 acres within Wilderness.	Protection of resources within 3,600 acres of withdrawn lands plus 167,800 acres within Wilderness.	Protection of resources within 5,400 acres of withdrawn lands plus 167,800 acres within Wilderness.	Protection of resources within 8,300 acres of withdrawn lands plus 167,800 acres within Wilderness.	Protection of resources within 12,000 acres of withdrawn lands plus 167,800 acres within Wilderness.

2.0 Description of Alternatives

**Table 2-32
Comparison of Impacts by Alternative
(cont.)**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Air					
From Travel Management	Continue existing 400-acre Ehrenberg Sandbowl Open OHV Management Area, which is outside of the PM ₁₀ non-attainment area.	3,800 acres of proposed Open OHV Management Areas. 1,900-acre Blaisdell Open OHV Management Area within the PM ₁₀ non-attainment area; Expanded Ehrenberg Sandbowl (800 acres) and Martinez Lake (1,100 acres) Open OHV Management Areas outside of the PM ₁₀ non-attainment area.	2,400 acres of proposed Open OHV Management Areas. 1,300-acre Blaisdell Open OHV Management Area within the PM ₁₀ non-attainment area; Expanded Ehrenberg Sandbowl (800 acres) and Martinez Lake (300 acres) Open OHV Management Areas outside of the PM ₁₀ non-attainment area.	Same as Alternative A.	Same as Alternative A.
Water					
From All Management Actions Regardless of Resource	Differences in impacts to water resources between alternatives vary according to the acreages open to mineral development, agricultural leasing, and grazing. However, the anticipated differences between the alternatives would be insignificant and minimal overall.				
Soil					
From Special Designations	None identified.	Soil disturbance from 5.0 mile extension of Betty's Kitchen NRT and 220 miles of Back Country Byways.	Soil disturbance from 76 miles of Back Country Byways.	Same as Alternative A.	Soil disturbance from 21 miles of Back Country Byways.
	Reduced impacts in 6,700 acres designated as ACECs.	Same as Alternative A.	Reduced impacts in 28,900 acres designated as ACECs.	Reduced impacts in 491,400 acres designated as ACECs.	Same as Alternative C.

Table 2-32
Comparison of Impacts by Alternative
(cont.)

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Soil (cont.)					
From Visual Resource Management	Potential adverse impacts to soils in designated VRM classes III and IV (1,135,000 acres).	Potential adverse impacts to soils in designated VRM classes III and IV (608,400 acres).	Potential adverse impacts to soils in designated VRM classes III and IV (589,100 acres).	Potential adverse impacts to soils in designated VRM classes III and IV (500,800 acres).	Potential adverse impacts to soils in designated VRM classes III and IV (535,100 acres).
From Travel Management	Loss of soil productivity on Open OHV allocation at the 400-acre Ehrenberg Sandbowl.	Loss of soil productivity on 3,800 acres of Open OHV Management Areas.	Loss of soil productivity on 2,400 acres of Open OHV Management Areas.	Same as Alternative A.	Same as Alternative A.
	Reduced soil impacts within 1,200 acres of Closed OHV Management Areas plus existing protection of soil resources within 167,800 acres of Wilderness.	Reduced soil impacts within 3,200 acres of Closed OHV Management Areas plus existing protection of soil resources within 167,800 acres of Wilderness.	Reduced soil impacts within 3,500 acres of Closed OHV Management Areas plus existing protection of soil resources within 167,800 acres of Wilderness.	Reduced soil impacts within 66,000 acres of Closed OHV Management Areas plus existing protection of soil resources within 167,800 acres of Wilderness.	Reduced soil impacts within 5,100 acres of Closed OHV Management Areas plus existing protection of soil resources within 167,800 acres of Wilderness..
From Travel Management (cont.)	Motorized travel throughout most of the planning area would continue to be limited to existing routes. It is possible that there are additional existing routes which have not been identified on the proposed YFO route inventory, and there-fore, a slightly higher acreage of soil resources would continue to be impacted under Alternative A.	Motorized travel throughout most of the planning area would be limited to existing inventoried routes until the YFO Travel Management Network has been established. After the YFO Travel Management Network has been established, OHV use would be limited to <i>designated</i> routes only.			

**Table 2-32
Comparison of Impacts by Alternative
(cont.)**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Soil (cont.)					
From Lands and Realty Management	Adverse soil impacts on 74,600 acres of ROW Corridors and 200 acres on six communication sites.	Adverse soil impacts on 129,900 acres of ROW corridors and 300 acres on 13 communication sites.	Adverse soil impacts on 129,900 acres of ROW Corridors and 300 acres on 11 communication sites.	Adverse soil impacts on 91,300 acres of ROW Corridors and 200 acres on eight communication sites.	Adverse soil impacts on 121,700 acres of ROW Corridors and 10 communication sites.
From Mineral Resource Management	Protection of soils on 6,500 acres non-wilderness plus 167,800 acres within Wilderness withdrawn from mineral development.	Protection of soils on 3,600 acres non-wilderness plus 167,800 acres within Wilderness withdrawn from mineral development.	Protection of soils on 5,400 acres non-wilderness plus 167,800 acres within Wilderness withdrawn from mineral development.	Protection of soils on 8,300 acres non-wilderness plus 167,800 acres within Wilderness withdrawn from mineral development.	Protection of soils on 12,000 acres non-wilderness plus 167,800 acres within Wilderness withdrawn from mineral development.
Public Health and Safety					
From Special Designations	None identified.	None identified.	None identified.	The proposed 4,500-acre Limitrophe ACEC designation could benefit proper management of the area and address public health and safety concerns.	None identified.
From Coordinated Management Areas	None identified.	The Limitrophe would be identified as a 4,500 acre Coordinated Management Area, which would emphasize addressing existing public health and safety issues.	None identified.	None identified.	Same as Alternative B.

**Table 2-32
Comparison of Impacts by Alternative
(cont.)**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Public Health and Safety (cont.)					
From Wild Horse and Burro Management	None identified.	Moving the HMA west of Highway 95 in Alternatives B, C, D, and the Proposed Plan would benefit public health and safety by reducing the risk of vehicles striking horses and burros crossing the highway.			
Social and Economic Conditions					
From Livestock Grazing Management	No changes to social conditions are expected to occur.	Same as Alternative A.	12 of the 16 allotments would no longer be available for grazing. The social impact to ranchers would be minimal because these allotments have not been grazed for many years. The five allotments that are actively grazed would remain available.	16 allotments would no longer be available for grazing, which would have adverse social impacts to ranchers using these areas. These impacts would be more adverse than Alternative C, because five of the 17 allotments are actively grazed.	Same as Alternative C.
	No changes to allotments would occur and no changes to economic conditions would be expected to occur.	Economic impacts would be the same as Alternative A.	428,170 acres currently grazed would not be affected. No significant changes in grazing fee revenues would be anticipated. Therefore, there would likely be no noticeable economic changes.	Adverse economic impacts would likely occur because revenues would no longer be generated by livestock grazing fees, and employment and personal income would be lost on a local level.	Economic impacts would be the same as Alternative C.

**Table 2-32
Comparison of Impacts by Alternative
(cont.)**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Social and Economic Conditions (cont.)					
From Recreation Management	No significant changes to social conditions would be expected to occur.	Beneficial social impacts would likely occur to visitors interested in developed and motorized recreational opportunities. Visitors seeking remote settings and more primitive recreation may experience adverse impacts due to conflicts with developed and motorized uses.	Social impacts under Alternative C would be similar to those addressed under Alternative B; however, impacts would be balanced between visitors seeking developed and motorized uses and those seeking more remote and primitive uses.	Visitors seeking remote, primitive, and non-motorized types of recreation would experience beneficial impacts. Adverse social impacts may occur to those visitors seeking an increase in recreational facility development and motorized access.	Social impacts would be the same as Alternative C.
	No significant changes to economic conditions would be expected to occur.	Beneficial economic impacts would likely result from an increase in visitors due to an emphasis on developed and motorized recreation.	Beneficial economic impacts would likely result from emphasizing a balance of multiple uses on public lands.	Economic impacts would be the same as Alternative A.	Economic impacts would be the same as Alternative C.

Table 2-32
Comparison of Impacts by Alternative
(cont.)

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Social and Economic Conditions (cont.)					
From Travel Management	OHV Management Areas: 400 acres Open, 169,000 acres Closed, and 1,148,600 acres Limited. Beneficial social impacts may occur from the continued availability of Open and Limited OHV Management Areas. Adverse social impacts would occur from increased recreational use of routes under current policies and practices.	OHV Management Areas: 3,800 acres Open, 171,000 acres Closed, and 1,143,200 acres Limited. Beneficial social impacts would likely occur to those public users interested in OHV recreation. Adverse social impacts would likely be minimal, as access for both motorized and non-motorized uses would continue throughout the planning area.	OHV Management Areas: 2,400 acres Open, 171,300 acres Closed, and 1,144,300 acres Limited. Social impacts would be similar to those discussed under Alternative B.	OHV Management Areas: 400 acres Open, 233,800 acres Closed, and 1,083,800 acres Limited. Social impacts would be similar to those discussed under Alternative A.	OHV Management Areas: 400 acres Open, 172,900 acres Closed, and 1,144,700 acres Limited. Social impacts would be similar to those discussed under Alternative B.
	No significant changes to economic conditions would be expected to occur.	Economic conditions would likely experience a slight increase due to potential increases in OHV users.	Economic impacts would be similar to those discussed under Alternative B.	Economic impacts would be similar to those discussed under Alternative A.	Economic impacts would be similar to those discussed under Alternative A.
From Lands and Realty Management	74,600 acres of ROW Corridors and 200 acres on six communication sites.	129,900 acres of ROW Corridors and 300 acres on 13 communication sites.	129,900 acres of ROW Corridors and 300 acres on 11 communication sites.	91,300 acres of ROW Corridors and 200 acres on eight communication sites.	121,700 acres of ROW Corridors and 10 communication sites.

**Table 2-32
Comparison of Impacts by Alternative
(cont.)**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Social and Economic Conditions (cont.)					
From Lands and Realty Management (cont.)	Leases, permits, and easements would continue to be authorized on a case-by-case basis. No significant changes to social conditions would be expected to occur.	May adversely impact the public's perception of the recreational experience, particularly those that enjoy solitude and primitive areas due to an increase in motorized use and diminished scenic quality. Beneficial impacts would likely occur due to an increase in utility availability to the public and improved communication capabilities.	Impacts would be similar to those discussed under Alternative B, with the exception that this alternative proposes significantly less land available for disposal, therefore reducing potential adverse impacts to public land users.	Impacts would be similar to those discussed under Alternative A.	Impacts would be similar to those discussed under Alternative C.
	19,100 acres available for disposal.	46,900 acres available for disposal. Adverse impacts to social conditions may occur due to the increase in public land disposals as these lands may no longer be available for public use.	10,500 acres available for disposal.	8,200 acres available for disposal.	11,900 acres available for disposal.

**Table 2-32
Comparison of Impacts by Alternative
(cont.)**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Social and Economic Conditions (cont.)					
From Lands and Realty Management (cont.)	No significant changes to economic conditions would be expected to occur.	Economic impacts would be primarily beneficial due to an increase in ROW corridors and communications sites that would result in an increase in BLM revenues as well as an increase in employment related to construction and maintenance of corridors and sites in the planning area	Economic impacts would be similar to those discussed under Alternative B.	Economic impacts would be similar to those discussed under Alternative A.	Economic impacts would be similar to those discussed under Alternative B.
From Mineral Resource Management	Mineral resources on 100 acres managed for Salable Minerals in one community pit may result in adverse social impacts from increased demand of mineral resources as the planning area communities grow. This alternative may not meet public demand for mineral resources as the planning area grows.	Mineral resources on 800 acres managed for Salable Minerals in six community pits may result in beneficial social impacts from the continued and expanded availability of mineral resources to the community.	Mineral resources on 400 acres managed for Salable Minerals in three community pits may result in beneficial and adverse social impacts similar to those discussed for Alternatives B and E, but at a lesser scale.	Same as Alternative A.	Mineral resources on 700 acres managed for Salable Minerals in five community pits may result in beneficial social impacts from the continued and expanded availability of mineral resources to the community.

**Table 2-32
Comparison of Impacts by Alternative
(cont.)**

Environmental Element	Alternative A (No Action)	Alternative B	Alternative C	Alternative D	Alternative E (Proposed Plan)
Social and Economic Conditions (cont.)					
From Mineral Resource Management (cont.)	Economic conditions would remain relatively the same with regard to mineral resource management as no significant changes in resource availability would occur.	Beneficial economic impacts would occur regarding revenue, employment, personal income, and county tax bases because of expanded availability of mineral resources.	Beneficial economic impacts similar to those discussed for Alternatives B and E, but at a lesser scale.	Economic impacts would be the same as Alternative A.	Economic impacts would be the same as Alternative B.