

# **Chapter 2. Alternatives**

## **2.1. INTRODUCTION**

This chapter describes and compares alternatives for developing the Lower Sonoran and Sonoran Desert National Monument (SDNM) Draft Resource Management Plan and accompanying Draft Environmental Impact Statement (Draft RMP/EIS). The documents consist of five alternatives: a No-Action (or current management) Alternative and four action alternatives. The No-Action Alternative means that management of the affected public lands and resources would continue without change from the guidance provided by existing applicable land use plans (LUPs) and, in the case of SDNM, Presidential Proclamation 7397 and its associated Interim Guidance. The action alternatives present various combinations of public land uses and resource management practices that address issues identified during the scoping process. Each alternative varies in perspective and intensity of management, and describes a series of decisions and desired outcomes that collectively would direct future management for the Lower Sonoran and SDNM Decision Areas. Additionally, each alternative consists of a set of designations, land use allocations, allowable uses, and management actions needed for implementation of that alternative. All alternatives have been assessed for potential environmental impacts, which are summarized at the end of this chapter. A detailed discussion of the potential impacts is presented in Chapter 4, *Environmental Consequences* (p. 371).

The alternatives represent a reasonable range of management options identified in accordance with the National Environmental Policy Act (NEPA), other applicable laws, intergovernmental and interagency collaboration, and public participation. These inputs were used to derive the management purposes, missions, and goals for the Lower Sonoran and SDNM Draft RMP/EIS, described in Chapter 1, *Purpose & Need for the RMP* (p. 1). Consistency with these purposes, missions, and goals was a basic requirement for each alternative.

Once the purposes, missions, and goals were established, the intergovernmental/interagency planning team developed management alternatives that incorporated decisions for a number of resource or resource use categories. These are described below in Table 2.2, “Program Area Categories and Abbreviations” (p. 46)

The above information was presented, reviewed, and discussed at public workshops throughout the Lower Sonoran Planning Area. Public input from the workshops was carefully considered by the planning team and incorporated into the scope and content of the alternatives provided in this DEIS.

Each alternative portrays a different management focus, as defined by the desired outcomes and actions selected for each alternative. All alternatives meet the Bureau of Land Management’s (BLM’s) overarching principles of multiple use and sustained yield. All action alternatives provide a high degree of protection for SDNM resources, as required by Presidential Proclamation 7397.

## **2.2. TYPES OF BLM DECISIONS**

These plans include two types of BLM decisions: RMP and implementation. This document describes other administrative actions the BLM takes when managing public lands. These types of decisions and administrative actions are described below.

## **2.2.1. RESOURCE MANAGEMENT PLAN DECISIONS**

RMP decisions represent the goals and objectives for the Planning Area, and the actions needed to achieve them. These decisions guide future land management actions and subsequent site-specific implementation decisions.

### **2.2.1.1. Goals & Objectives**

LUPs must identify goals and objectives that direct the BLM actions to meet legal mandates, regulatory responsibilities, national policy, State Director guidance, and other resource or social needs. “Goals” are broad statements that define desired outcomes. “Objectives” define specific desired outcomes for a selected resource or use, and are considered necessary to achieve the overarching goal. Examples of objectives include maintaining or restoring palo verde-mixed cacti vegetation communities or direct public recreation use to areas that provide the appropriate resource setting, opportunity, and experience.

### **2.2.1.2. Management Actions and Allowable Uses**

Management actions and allowable uses describe actions the BLM or its partners will take. They guide how allowable uses of the public land will be managed to achieve the desired outcomes.

### **Special Designations**

Special designations include those designated by Congress for special protection, such as wilderness areas or national historic or scenic trails. Such designations are not LUP decisions; however, designation recommendations can be made to Congress at this level. Congress may then act on these recommendations at a later time. Administrative designations made by BLM are also considered special designations and can be decided in the LUP. These include designating areas of critical environmental concern (ACECs) or back country byways.

### **Land Use Allocations**

Land use allocations are LUP decisions that describe geographic areas for specific resources or uses, such as where grazing is authorized, specific areas to enhance wildlife habitat, target cultural management objectives or where off-highway vehicle (OHV) areas are available. Allocations have geographic boundaries, shown on maps provided in this document. Proposed resource management decisions are described under the alternatives.

## **2.2.2. IMPLEMENTATION DECISIONS**

Implementation decisions are management actions tied to a specific location, and are used to implement LUP decisions. Unlike RMP-level decisions, implementations are not subject to protest under the planning regulations. Implementation decisions are generally appealable to the Office of Hearings and Appeals under 43 CFR 4.410. These decisions constitute BLM’s final approval allowing on-the-ground actions to proceed. Further NEPA analysis is not required to begin implementation of these decisions. Most implementation decisions are developed following adoption of an RMP. A single land use planning/NEPA process, however, may be used to make both RMP-level and implementation decisions, when doing so is timely and has undergone

appropriate NEPA analysis. Activity-level decisions that are ready for implementation, in tandem with the development of the Lower Sonoran and SDNM RMP, include (1) route designation in the Monument for approved motorized and/or non-motorized public use (see Section 2.8.5, “Travel Management (TM)” (p. 180)); (2) livestock grazing decisions in the Monument based on the grazing compatibility analysis findings (which can be found in Appendix E, *Draft Compatibility Analysis: Livestock Grazing on the Sonoran Desert National Monument* (p. 1039)); and (3) target shooting decisions based on findings from analysis within the SDNM (Appendix G, *Sonoran Desert National Monument Recreational Target Shooting Analysis* (p. 1183)).

### **2.2.3. ADMINISTRATIVE ACTIONS**

Administrative actions are day-to-day activities conducted by BLM, which are often required by the Federal Land Policy and Management Act (FLPMA), but not requiring NEPA analysis or written decision by a responsible official to be accomplished. Examples of administrative actions include, but are not limited to: mapping, surveying, inventorying, monitoring, partnering, developing education materials, adjusting staffing, patrolling, and scientific research and studies.

## **2.3. SUMMARY OF THE ALTERNATIVES**

The range of management alternatives considered in this DRMP/DEIS are described in detail in ??? of this chapter. The following section summarizes the general scope and key highlights of each alternative.

### **2.3.1. NO ACTION ALTERNATIVE SUMMARY**

BLM lands within the Planning Area are currently managed under three separate resource-management plans and several amendments. The decisions from these plans have been extracted and are listed by year of approval. Because none of these current land use plans encompass the entire Planning Area, very few of the current decisions are being carried forward as common to all alternatives and are restated as new action alternatives where applicable. In addition, the interim management guidance required by Proclamation for the SDNM are being considered current management actions and those policy statements are included with the decisions. Alternative A, the No Action Alternative, consists of the current management actions for both Lower Sonoran and SDNM Decision Areas.

### **2.3.2. SUMMARY OF THE LOWER SONORAN DECISION AREA ALTERNATIVES**

Land management must address resources that are unevenly distributed across a landscape. As described in Section 2.3.3, “Summary of SDNM Alternatives” (p. ), the Lower Sonoran Decision Area public lands are divided into six relatively large geographic regions, or blocks, dispersed over a large region (see Map 1-3 and Table 1.3, “Land Use Planning Process” (p. 6)). Noteworthy as management factors, the wide distribution and geographic segregation represent a considerable variety of environments, land uses, public interests, and threats to natural and cultural resources. Some management issues are best addressed through RMP-level decisions applied to the entire Decision Area. Other management issues differ from place to place in character, value, and/or social or economic interest, and thus require more place-specific management techniques found

in implementation decisions. The RMP or implementation decisions must be sensitive to the geographically distinct characteristics of the Decision Area. As a result, the alternatives for the Lower Sonoran Decision Area include RMP-level decisions that would be applicable across the entire area.

### **No-Action Alternative A**

Selecting the No-Action Alternative for the Lower Sonoran Decision Area would continue current management without change to land or public use or resource protection management, and would not address issues that were unforeseen or nonexistent when the existing management plans were prepared.

Under Alternative A:

- Wildlife waters would continue to be developed and maintained in the current manner.
- No specific priority wildlife species or cultural resource provisions or allocation would be followed; however, management actions would be consistent with the long-term protection of priority species and cultural resources as required by law and policy.
- No management actions would be specific to wildlife movement corridors.
- The Fred J. Weiler Green Belt RCA would continue to be managed by the BLM, AGFD and USFWS as specified in cooperative agreements.
- The Coffeepot ACEC would be maintained and would be the only ACEC designation.
- No areas would be managed to protect wilderness characteristics.
- No Back Country Byways would be allocated.
- Four SRMA allocations would continue without management changes.
- The existing route system would be available for use. This alternative would include the least restrictions and also the least management of motorized use and access.
- Recreational use opportunities would be unchanged from current mix and distribution.
- Opportunities for developed and motorized, as well as primitive and non-motorized, recreation would continue.
- Ten 1-mile wide utility corridors would remain as currently designated.
- Grazing allotments would continue to be allocated as perennial, perennial-ephemeral or ephemeral, as appropriate to allotment-specific characteristics.

### **Action Alternative B**

The management decisions prescribed by Alternative B would identify the greatest extent of public land suitable for the widest potential array of uses, and emphasize opportunities for those uses. It generally emphasizes motorized and developed recreation; opportunities to visit remote settings and experience non-motorized, primitive recreation would be reduced from the current condition. As a result, this alternative would require the most intensive use management, as

well as “hands-on” resource stabilization and restoration measures, as compared to the other alternatives, in order to ensure desired outcomes would be achieved.

Under Action Alternative B:

- Cultural and heritage tourism and interpretation would be promoted in appropriate locations.
- No special cultural resource management areas (SCRMA) would be allocated.
- The Fred J. Weiler Green Belt Resource Conservation Area allocation would continue to be managed by the BLM, AGFD and USFWS as specified in cooperative agreements.
- Existing wildlife waters would be managed or redeveloped, and new ones would be built to sustain or enhance wildlife populations.
- No wildlife habitat areas (WHAs) would be allocated, and few special management actions would be applied for wildlife corridors.
- The Coffeepot ACEC would be maintained as the only ACEC and expanded to include additional potential wildlife habitat.
- No areas would be managed to protect wilderness characteristics.
- Visual and scenic resources would be managed to facilitate various public uses, including mineral development.
- No back country byways would be allocated.
- Seven SRMAs, including recreation management zones (RMZs) with targeted recreation objectives would be allocated to produce the most opportunity for recreational development, particularly motorized-based, day-use community access, dispersed use, and intensive recreational use areas would be developed.
- Routes would be designated as open year-round, open seasonally or closed year-round to motorized vehicle use in all areas where route inventories have been completed. This alternative would include more restrictions to motorized use than Alternative A, but would include the most managed and best maintained motorized network.
- Ten one-mile-wide, multiuse utility corridors would be designated.
- The least amount of land-use authorization (LUA) exclusion and avoidance areas, for any alternative, would be designated.
- Ephemeral grazing applications would continue to be considered, but perennial stocking rates would be reduced by approximately 40 percent.

### **Action Alternative C**

This alternative represents an attempt to balance resource protection with human use and influence by providing opportunities for a variety of uses, while placing an emphasis on resource protection and conservation. It proposes a mix of natural processes and “hands-on” techniques for resource stabilization and restoration, thus reducing the need for intensive use management to avoid or mitigate any adverse effects.

### Under Alternative C:

- Cultural and heritage tourism and interpretation would be promoted only when use is compatible with resource protection.
- Two SCRMAAs would be allocated to provide protection and management of cultural resources.
- Existing wildlife waters would be managed or redeveloped, and new ones would be built to sustain or enhance wildlife populations.
- The Fred J. Weiler Green Belt Resource Conservation Area allocation would continue to be managed by the BLM, AGFD and USFWS as specified in cooperative agreements.
- Four WHAs would be allocated to protect biological resources, and special management prescriptions would be applied to wildlife movement corridors.
- Two ACECs would be designated. The Coffeepot Batamote ACEC in the Ajo area would be expanded from the current Coffeepot ACEC to better align with the mountain range. The Cuerda de Lena ACEC south of Ajo would be designated for Sonoran Pronghorn.
- Wilderness characteristics would be protected on approximately 128,100 acres.
- The scenic and visual resource in high value areas would be protected, and any facilities developed in these areas would be built to be less noticeable, to the extent possible.
- Agua Caliente Road would be allocated as a Back Country Byway to provide sightseeing and recreational opportunities.
- Six SRMAAs with RMZs would be allocated to provide a diversity of recreational opportunities, and increased non-motorized recreation.
- A modest reduction in motor vehicle access, compared to the current condition, would occur by limiting selected routes in the existing system to seasonal use, and closing other routes to reduce system redundancy or protect resources.
- Nine 1-mile-wide, multiuse utility corridors would be designated (a portion of the El Paso Natural Gas Corridor from Ajo to the Tohono O’odham Indian Reservation would be excluded).
- Grazing allotments designated as perennial/ephemeral would be reclassified as perennial only, with no supplemental ephemeral grazing applications considered. This alternative does not apply to ephemeral-only allotments. Season of use adjustments on perennial allotments would be considered.

### **Action Alternative D**

This alternative would place the greatest emphasis on resource protection/conservation, and opportunities to visit remote settings and experience non-motorized, primitive recreation. It focuses on natural processes and other unobtrusive methods for resource stabilization and restoration, so the need for both intensive use management and “hands-on” resource measures would be reduced by the greatest extent among all alternatives.

Under Alternative D:

- Cultural and heritage tourism and scientific research would only be allowed when use is compatible with resource protection.
- No SCRMAAs would be allocated; they would be become ACECs.
- Existing wildlife waters would be managed or redeveloped, and new ones would be built to sustain or enhance wildlife populations.
- The Fred J. Weiler Green Belt Resource Conservation Area allocation would continue to be managed by the BLM, AGFD and USFWS as specified in cooperative agreements.
- There would be one WHA and four ACEC designations, containing more acres than any other alternative.
- ACECs would be closed to mineral entry and opportunities for mineral development would be reduced.
- Agua Caliente Road would be allocated as a back country byway to provide sightseeing and recreational opportunities.
- Three SRMAAs with RMZs would be allocated to provide a diversity of recreational opportunities, with increased non-motorized recreation.
- The largest number of acres managed to protect wilderness characteristics, for a total of 276,500, would be proposed.
- Scenic and visual resources across the area would be managed to maintain or improve scenic views.
- Recreational opportunities would focus on primitive and non-motorized recreation.
- Opportunities for developed and motorized-vehicle uses would be reduced, due to a smaller number of open vehicle routes.
- Seven 1-mile-wide, multiuse utility corridors would be designated (the fewest among all alternatives).
- All allotments currently open to grazing would become unavailable as permits expire.

### **Preferred Alternative E**

Alternative E is the BLM's preferred alternative for the Lower Sonoran Decision Area. It incorporates elements from each of the other alternatives, and offers a unique prescription for managing the Decision Area while, at the same time, providing long-term protection and resource conservation. Alternative E balances human use and influence with resource protection.

Under Alternative E:

- Cultural and heritage tourism and scientific research would only be allowed when use is compatible with resource protection.
- No SCRMAAs would be allocated, they would become ACECs.
- Existing wildlife waters would be managed or reconstructed, and new ones would be built to sustain or enhance wildlife populations.
- The Fred J. Weiler Green Belt RCA would continue to be managed by the BLM, AGFD and USFWS as specified in cooperative agreements.
- There would be one WHA, special management actions for protection of wildlife movement corridors would be applied, and three ACECs would be designated.
- Wilderness characteristics would be protected on approximately 55,400 acres.
- Agua Caliente Road would be allocated as a back country byway to provide sightseeing and recreational opportunities.
- Six SRMAAs with RMZs would be allocated to provide a diversity of recreational opportunities. Some would be allocated to provide motorized recreational opportunities, while others would provide a mix of recreation or undeveloped, self-directed recreational opportunities.
- Scenic and visual resources would be managed to maintain visual values in some areas, while accommodating appropriate development in higher use areas.
- A moderate reduction in motor vehicle access would occur as a result of route closures and seasonal limitations.
- Eight one-mile-wide multiuse, utility corridors would be designated (a portion of the El Paso Natural Gas Corridor from Ajo to the Tohono O’odham Indian Reservation would be excluded).
- Grazing allotments would be allocated as perennial, perennial-ephemeral, or ephemeral, as appropriate to allotment-specific characteristics. Season of use adjustments on perennial allotments would be considered.

### **2.3.3. SUMMARY OF SDNM ALTERNATIVES**

#### **2.3.3.1. No-Action Alternative A**

Selection of the No-Action Alternative for the Monument would continue current management under the existing LUPs, except as changed by Presidential Proclamation 7397, which established it and specified certain management provisions. This continues current public use and resource protection/conservation prescriptions without change. It neither sets desired outcomes for resource management or most uses, nor addresses new issues unforeseen or nonexistent when the current management plans were prepared.

Under Alternative A:

- Livestock grazing permits south of Interstate 8 (I-8) are terminated. Livestock grazing north of I-8 would continue if determined to be compatible with protecting Monument resources.

- Motorized or mechanical vehicle use, off road, would be prohibited, except for emergency or authorized purposes.
- The Monument is withdrawn from sale, new mining claims, mineral or geothermal leasing or other forms of appropriation.
- The Vekol Valley Grasslands ACEC would be maintained, even though provisions of the Proclamation satisfy the ACEC's objectives
- Three 1-mile-wide, utility corridors would be maintained.

### **2.3.3.2. Action Alternative B**

The management decisions in Alternative B generally identify the areas of the Monument that would be most suitable for the widest potential uses, and emphasize opportunities for those uses. It sets desired outcomes and allocations for resources discussed in the Proclamation, including natural, cultural, and visual, while providing appropriate human use/influence and an array of visitor experiences and opportunities. It focuses on "hands-on" techniques for ecosystem restoration, resource management, and scientific research, and likely requires more intensive use management to avoid or mitigate any adverse effects.

Under Alternative B:

- Existing wildlife waters would be managed or redeveloped, and new ones would be built to sustain or enhance wildlife populations.
- No WHAs would be allocated, but management prescriptions would be applied to protect Monument objects.
- Cultural and heritage tourism and interpretation would be promoted in appropriate locations, as long as resources and Monument objects are protected.
- No areas would be managed to protect wilderness characteristics.
- Grazing allotments north of I-8 would be allocated as perennial grazing with an approximate 40 percent reduction in AUMs. Applications for ephemeral grazing would be considered. Monument objects found to be incompatible with livestock grazing would be fenced off to prevent impacts from livestock grazing.
- The entire Monument would be allocated as an SRMA with two RMZs to provide appropriate developed and non-developed recreational opportunities, as long as resources and Monument objects are protected.
- The route system would be slightly reduced, but motorized opportunities would continue to be available along with non-motorized recreation being provided.
- Three one-mile-wide, multiuse utility corridors would be maintained.

### **2.3.3.3. Action Alternative C**

The management decisions in this alternative generally represent an attempt to balance resource protection and human use and influence. As in Alternative B, it sets desired outcomes and

allocations for the resources discussed in the Monument's proclamation, including natural, cultural, and visual. It proposes a moderate amount of open roads and trails and a mix of recreational opportunities. It proposes a mix of natural processes and "hands-on" techniques for ecosystem restoration, resource management, and scientific research, and would likely reduce the need for intensive use management to avoid or mitigate any adverse effects.

Under Alternative C:

- Existing wildlife waters would be managed or redeveloped, and new ones would be built to sustain or enhance wildlife populations.
- No WHAs would be allocated, but management prescriptions would be applied to protect Monument objects.
- Cultural and heritage tourism and interpretation would be allowed, when such use is compatible with resource protection and Monument objects. A priority would be placed on scientific research.
- The Lower Gila Historic Trail SCRMA would be allocated to protect a number of historic trails.
- Certain areas, primarily in the Sand Tank Mountains, would be managed to protect wilderness characteristics for a total of 112,200 acres.
- Grazing allotments north of I-8 would be allocated as perennial grazing only, with no ephemeral grazing. Monument objects found to be incompatible with livestock grazing would be fenced off to prevent impacts from livestock grazing.
- One SRMA with two RMZs would be allocated to provide appropriate developed and non-developed recreational opportunities, as long as resources and Monument objects are protected.
- A diversity of recreational opportunities would be provided, with increased non-motorized recreation. Certain uses, such as recreational target shooting and wood collecting for campfires, would be limited, compared to current conditions.
- A modest reduction in motor vehicle access, compared to current conditions, would occur by limiting selected routes in the existing system to seasonal use and, closing other routes, to reduce system redundancy or protect resources.
- Two half-mile wide, multiuse utility corridors (where only underground utilities would be allowed) would be allocated.
- Highway 238 would be allocated as a Scenic Byway.

#### **2.3.3.4. Action Alternative D**

Alternative D places the greatest emphasis on minimal human use/influence and maintenance of primitive landscapes. It focuses on natural processes and other unobtrusive methods for ecosystem restoration, resource management, and scientific research, while emphasizing resource protection/conservation. As in the other alternatives, it sets desired outcomes and allocations for Monument resources discussed in the Proclamation, including natural, cultural, and visual,

while allowing a lower level of human use. The need for both intensive use management and “hands-on” resource stabilization and restoration measures would be reduced by the greatest degree under Alternative D.

Under Alternative D:

- Existing wildlife waters would be managed or redeveloped, and new ones would be built to sustain or enhance wildlife populations.
- Passive restoration would be used, and management implemented through limiting human access and development.
- No WHAs would be allocated, but management prescriptions would be applied to protect Monument objects.
- Cultural and heritage tourism and scientific research would be allowed only when such use is compatible with resource protection.
- The largest number of acres (153,000) would be managed to protect wilderness characteristics.
- Allotments currently open to grazing would become unavailable as permits expire.
- One SRMA with one RMZ would be allocated to provide appropriate developed and non-developed recreational opportunities.
- Recreational opportunities would focus on primitive and non-motorized recreation. Certain uses, such as recreational shooting, paintball, and wood collection for campfires, would not be allowed.
- All-terrain vehicles, motorcycles, and vehicles weighing less than 1,800 pounds would be prohibited on the Monument. A smaller number of vehicle routes would remain open for public use.
- No multiuse utility corridors would be designated and new LUAs would not be allowed.
- Highway 238 and Interstate 8 would be allocated as Scenic Byways.

### **2.3.3.5. Preferred Alternative E**

Alternative E is BLM’s preferred alternative for the SDNM Decision Area. This incorporates elements from each of the other alternatives, offering a unique prescription for managing public use of the Monument while, at the same time, providing long-term protection and conservation of resources. It balances human use and influence with resource protection. The need for both intensive use management and “hands-on” resource stabilization and restoration measures would be reduced by an intermediate degree.

Under Alternative E:

- New wildlife waters would be built when needed to maintain or enhance wildlife resources.
- Passive restoration would be used, and management implemented through limiting human access and development.

- No WHAs would be allocated, but management prescriptions would be applied to protect Monument objects.
- Cultural and heritage tourism and interpretation, as well as scientific research, would be allowed when use is compatible with resource protection.
- The Lower Gila Historic Trail SCRMA would be allocated to protect a number of historic trails.
- Certain areas in the Sand Tank Mountains area would be managed to protect wilderness characteristics for a total of 110,900 acres.
- Grazing allotments north of I-8 would be allocated as perennial, perennial-ephemeral, or ephemeral, as appropriate to allotment-specific characteristics. Monument objects found to be incompatible with livestock grazing would be fenced off to prevent impacts from livestock grazing. Additionally, the portion of Conley Allotment within SDNM boundaries would become unavailable for livestock use. Grazing use across the Monument would be adjusted as needed, in accordance with grazing regulations, and in response to the grazing determinations required by the Proclamation.
- One SRMA with two RMZs would be allocated to provide appropriate developed and non-developed recreational opportunities.
- A diversity of recreational opportunities would be provided, with increased non-motorized recreation. Certain uses, such as recreational target shooting, paintball, and wood collecting for campfires likely to cause resource damage, would not be allowed.
- A modest reduction in motor vehicle access similar to Alternative C would occur by limiting selected routes in the existing system to seasonal use and closing other routes to reduce system redundancy or protect resources and Monument objects.
- No multiuse utility corridors would be designated and new LUAs would not be allowed.
- Highway 238 and I-8 would be allocated as scenic byways.

## **2.4. ALTERNATIVES CONSIDERED BUT NOT FURTHER ANALYZED**

This section briefly describes alternatives considered but not incorporated into an alternative for further analysis in this DEIS. The management actions considered were recommended by members of the public either during scoping or in the alternatives' development workshops, or by resource specialists. The management actions are described below, along with the rationale for excluding them from further consideration.

### **2.4.1. Public Safety**

There was a recommendation to prohibit the carrying of weapons. By law, U.S. citizens may carry weapons on or through public lands for a number of legitimate purposes including, but not necessarily limited to, hunting and self-protection. Alternatives for managing recreational

target shooting activities are being considered in this Draft RMP for public safety and resource protection purposes, but a prohibition against the possession of firearms is not being pursued.

## **2.4.2. Travel Management**

### **Driving in Washes**

A proposal was submitted that driving in washes be allowed in all washes large enough to accommodate a four wheel-drive vehicle as a long-standing, traditional use. This alternative was not carried forward into an action alternative because allowing vehicular travel in washes not specifically designated as a BLM asset, such as a primitive road, would force drivers to determine whether or not the wash was open for travel. Such ambiguity could lead to situations of unlawful driving and resource damage. The travel route inventory conducted by the BLM since 2000 includes routes in washes.

In addition, authorizing unlimited driving in washes, at the driver's discretion, would essentially open hundreds of miles of wash system to ATVs or four-wheel drives, as this action would include currently traveled washes as well as untraveled washes. This type of travel is inconsistent with Presidential Proclamation 7397, which expressly prohibits, with the exception of emergency or authorized administrative use, all motorized and mechanized vehicle use "off road" in the Monument. Furthermore, washes throughout the Lower Sonoran Planning Area contribute substantially to sustaining healthy, diverse, and productive ecosystems and cultural landscapes. Due to potentially adverse resource impacts on wildlife habitat, soils, and vegetation, unlimited driving in washes is inconsistent with the resource protection and management goals established for both the Lower Sonoran and SDNM Decision Areas. Vehicle travel in certain washes would be considered during the route evaluation process for the Lower Sonoran Decision Area as part of the comprehensive travel management plans.

## **2.4.3. Land Tenure**

### **Land Disposal**

The recommendation was to identify Federal lands bordering the Gila River Indian Reservation in the Estrella Mountains for disposal. While there are lands that border the Reservation analyzed in detail for disposal among the alternatives, those lands situated in the Sierra Estrella Wilderness and within the Juan Bautista National Trail boundaries cannot be disposed of. They are congressionally protected and designated under the Wilderness Act of 1964 and National Trails System Act of 1968.

## **2.4.4. Livestock Grazing**

For livestock grazing allotments within the Lower Sonoran Decision Area, an alternative was considered regarding the potential conversion of all, or some, perennial and perennial/ephemeral livestock grazing allotments to strictly ephemeral use only. This alternative was not evaluated further as these decisions would be determined on an individual allotment basis based on monitoring findings and through a land health evaluation process which were not conducted for this plan.

## **2.5. MANAGEMENT COMMON TO ALL ALTERNATIVES**

### **2.5.1. EXISTING MANAGEMENT DECISIONS AND DECISIONS TO BE CARRIED FORWARD**

Management actions and decisions that apply to all alternatives include those related to the Arizona Land Health Standards and actions and decisions from previous RMPs or amendments that are determined to be valid and are carried forward under the revised plan. However, the public lands within this Planning Area are currently managed under three separate RMPs and several amendments (refer to Map 1-2 for the geographic areas that each of these plans encompass). Therefore, many of the existing decisions only cover portions of the Planning Area, not the entire Planning Area.

Existing management decisions come from the following RMPs or RMP Amendments that overlay the Planning Area (in chronological order):

- Lower Gila North Management Framework Plan (MFP) (1983)
- Phoenix Resource Management Plan (RMP) (1989)
- Lower Gila South RMP (1988)
- Lower Gila South RMP (Goldwater Amendment) (1990)
- Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (1997)
- Statewide Amendment for Fire, Fuels, and Air Quality (2003)
- Cameron Allotment Amendment (2004)
- Amendment to the Lower Gila North MFP and Lower Gila South RMP (2005)

In addition to the LUPs above, several programmatic environmental impact statements (EISs) are also adopted and incorporated into this plan where applicable. These are the following:

- Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States Programmatic EIS (2007) and Vegetation Treatments on BLM Lands in 17 Western States Programmatic Environmental Report (2007)
- Programmatic Environmental Impact Statement, Designation of Energy Corridors on Federal Land in the 11 Western States (2009)

### **2.5.2. Wilderness**

The Planning Area includes six Wilderness Areas designated by the *Arizona Desert Wilderness Act of 1990*. These areas total 249,450 acres: 91,750 acres in the Lower Sonoran Decision Area and 157,700 acres in the SDNM Decision Area and are identified in Table 2.1, “Wilderness Areas of the Lower Sonoran and SDNM Decision Areas” (p. 43).

**Table 2.1. Wilderness Areas of the Lower Sonoran and SDNM Decision Areas**

Wilderness	Size (Acres)
<b>Lower Sonoran</b>	
Sierra Estrella	14,400
Signal Mountain	13,350
Woolsey Peak	64,000
<b>SDNM</b>	
North Maricopa Mountains	63,200
South Maricopa Mountains	60,100
Table Top	34,400
<b>Total</b>	<b>249,450</b>

BLM management policy directs that each BLM wilderness area have a management plan (BLM Manual 8560). Management guidance is provided under the Maricopa Complex Wilderness Management Plan (BLM 1996; for the North Maricopa Mountains, Sierra Estrella, South Maricopa Mountains, and Table Top Wildernesses) and the Woolsey Peak Wilderness and Signal Mountain Wilderness Management Plan (BLM 2003) and there are no proposals in this RMP changing any decisions contained in these management plans.

As stated in Chapter 1, *Purpose & Need for the RMP* (p. 1), only Congress has the authority to designate wilderness and wilderness study areas so no new areas will be proposed in this plan. However lands with wilderness characteristics can be managed by the BLM to protect those characteristics and are discussed throughout the chapters within this document.

### **2.5.3. ARIZONA LAND HEALTH STANDARDS**

The Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (Standards and Guidelines, or S&Gs) were developed, pursuant to 43 CFR 4180, through a collaborative process involving BLM staff and the Arizona BLM Resource Advisory Council, and approved by the Secretary of the Interior in April 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 S&Gs became Arizona BLM policy, guiding the planning for and management of BLM public lands. Arizona Standards and Guidelines, therefore, have been incorporated into this DRMP/EIS. The Standards for Rangeland Health describe the conditions necessary to encourage proper functioning of ecological processes, and are adopted as Land Health Standards. In managing and implementing all resource programs, the BLM must consider the Land Health Standards and they are identified below.

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 Draft RMP/EIS in Section 2.8.2, "Livestock Grazing (GR)" (p. 137) and may be found in Appendix L, *Guidelines for Grazing Administration* (p. 1253).

Listed below are the standards that describe the conditions needed to encourage proper functioning of ecological processes.

### **2.5.3.1. Standard One: 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 One**

Soil conditions support the proper functioning of hydrologic, energy, and nutrient cycles. Many factors interact to maintain stable soils and healthy soil conditions, including suitable amounts of vegetation cover, litter, and soil porosity and organic matter. When soils and ecological sites function properly, rates of soil loss and infiltration are consistent with the site's potential.

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 are minimal or diminishing for the ecological site as determined by monitoring over an established period of time.

As indicated by:

- Ground cover,
- Litter,
- Live vegetation (e.g., grass, shrubs, trees) amount and type,
- Rock,
- Signs of erosion,
- Flow pattern,
- Gullies, and
- Rills and plant pedestaling.

Exceptions and exemptions (where applicable):

- None

### **2.5.3.2. Standard Two: Riparian-Wetland Sites**

Riparian-wetland areas are in proper functioning condition.

#### **Criteria for Meeting Standard Two**

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 the stream energy of high-water flows.

Riparian-wetland functioning condition assessments are based on examination of hydrologic, vegetation, soil and erosion-deposition factors. The BLM has developed a standard checklist to address these factors and make functional assessments. Riparian-wetland areas are functioning properly as shown by the results of applying the appropriate checklist.

The checklist for riparian areas is in Technical Reference 1737-9, Process for Assessing Proper Functioning Condition (BLM 1993d). The checklist for wetlands is in Technical Reference 1737-11, Process for Assessing Proper Functioning Condition for Lentic Riparian-Wetland Areas (BLM 1994c).

As indicated by:

- Gradient,
- Width/depth ratio,
- Channel roughness and sinuosity of stream channel,
- Bank stabilization,
- Reduced erosion,
- Captured sediment,
- Ground water recharge, and
- Dissipation of energy by vegetation.

Exceptions and exemptions (where applicable):

- Dirt tanks, wells, and other water facilities built or placed at a location to provide water for livestock or wildlife and not determined through local planning to provide for riparian or wetland habitat are exempt.
- Water impoundments permitted for construction, mining, or other similar activities are exempt.

### **2.5.3.3. Standard Three: Desired Future Conditions**

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

#### **Criteria for Meeting Standard Three**

Upland and riparian-wetland plant communities meet Desired Plant Community (DCP) 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 (TGA); FLPMA; Endangered Species Act (ESA); Clean Water Act (CWA); and other laws, regulations, and policies.

Additionally, DPC objectives will be developed to assure that soil conditions and ecosystem function described in Standards 1 and 2 are met. These objectives detail a site-specific plant community, which when obtained, will assure rangeland health; State water quality standards; and

habitat for endangered, threatened, and sensitive species. Thus, DPC objectives will be used as an indicator of ecosystem function and rangeland health.

As indicated by:

- Composition,
- Structure, and
- Distribution.

Exceptions and exemptions (where applicable):

- Ecological sites or stream reaches on which a change in existing vegetation is physically, biologically, or economically impractical are exempt

## **2.6. ALTERNATIVES**

Detailed alternatives' descriptions for the Lower Sonoran and SDNM Decision Areas are presented by program area and include:

- A brief introduction about the program area.
- Existing Management Decisions (Alternative A), split between five of the existing LUPs.
- Alternative Allocation Tables (if the program area has any land use allocations).
- Action Alternative (Alternatives B, C, D, and E) Management Action Tables.

Within the Action Alternative Management Action Tables, abbreviations are used to note which Decision Area and alternative applies to an individual action. Abbreviations are also used for the program areas themselves. Program area abbreviations appear before each decision number. The abbreviations used in this chapter are outlined below in Table 2.2, “ Program Area Categories and Abbreviations” (p. 46).

**Table 2.2. Program Area Categories and Abbreviations**

<b>Planning Decision Areas</b>	
Lower Sonoran	LS
Sonoran Desert National Monument	SDNM
<b>Resource Program Areas</b>	
Air Quality	AQ
Cave Resources	CR
Cultural and Heritage Resources	CH
Paleontological Resources	PL
Priority Wildlife and Habitat Management	PW
Soil Resources	SR
Vegetation	VG
Visual Resources	VR
Water Resources	WR
Wild Horse & Burro Management	HB
Wilderness Characteristics	WC
Wildland Fire Management	WF
<b>Resource Use Program Areas</b>	
Lands and Realty	LR

Livestock Grazing	GR
Minerals Management	MM
Recreation Management	RM
Travel Management	TM
<b>Special Designations</b>	
Special Designations	SD
<b>Social and Economic Concerns</b>	
Hazardous Materials & Public Safety	PS

### **2.6.1. STANDARD OPERATING PROCEDURES & BEST MANAGEMENT PRACTICES**

Review of the alternatives must always consider that, despite the goals, objectives, and management actions prescribed, the BLM functions using a set of standard operating procedures (SOP) and best management practices (BMP) that guide day-to-day operations and business practices. Every alternative should be reviewed within the context of the way the BLM conducts business. The SOPs and BMPs are the combined product of procedures developed to comply with laws, regulations, policies, and other guidance and are often institutionalized in manuals and handbooks. The SOPs and BMPs are described in detail (although not all inclusive) by program in Appendix H, *Best Management Practices & Standard Operating Procedures* (p. 1211).

## 2.7. RESOURCES

### 2.7.1. AIR QUALITY

The Environmental Protection Agency (EPA) has delegated rulemaking pertaining to air quality and achieving attainment of air quality standards to states, which further delegate authority to counties through state implementation plans. Activities on BLM lands contribute a very small share of target pollutants in central Arizona. However, within air pollution nonattainment areas in the vicinity of Phoenix, rules made by Maricopa County apply to BLM lands. BLM activities that emit target pollutants in nonattainment areas need to be managed so that they do not contribute to standards violations. The primary target pollutant emitted by activities on BLM lands is particulate matter up to 10 microns (PM<sub>10</sub>). The goals, objectives, and management actions below are intended to assure that activities on BLM land comply with the appropriate rules.

#### 2.7.1.1. Existing Management Decisions, Alternative A (No Action) Air Quality.

##### *Lower Gila South Resource Management Plan — Goldwater Amendment (1990)*

[Applies to the three relinquished Sentinel Plain, Sand Tank Mountains, and Ajo Airport parcels]:

- Control excessive fugitive dust at Bureau of Land Management (BLM)-permitted construction sites and recreation activity areas (WS-12).
- Monitor air quality trends (WS-13).

#### 2.7.1.2. Action Alternatives for Air Quality (AQ)

##### Management Actions and Allowable Uses

<b>Goal 1: Protect, maintain, and improve the quality of air resources associated with authorized uses and activities on public lands.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1:</b> Maintain existing air quality and air quality-related values (e.g., visibility) by ensuring that authorized uses on public lands comply with and support Federal, State, and local laws and regulations for protecting air quality.						
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>AQ-1.1.1:</b> State and local agencies and adjacent land managers would be consulted to address emissions that affect public lands.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>AQ-1.1.2:</b> Appropriate management techniques and practices would be applied to all authorized surface-disturbing projects and activities as needed to ensure compliance with standards.
<b>Objective 1.2:</b> Apply mitigation measures for uses and activities within and near adjoining communities, wilderness areas, and large particulate-matter (PM) <sub>10</sub> (i.e., dust) non-attainment and maintenance areas, especially as they pertain to unpaved roads that traverse public lands.						

<b>Goal 1: Protect, maintain, and improve the quality of air resources associated with authorized uses and activities on public lands.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>AQ-1.2.1:</b> Excessive fugitive-dust generation from unpaved roads, construction sites, recreation activity areas, and other areas would be managed to ensure emissions do not exceed air-quality standards, particularly those more rigid requirements in non-attainment areas.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>AQ-1.2.2:</b> Fugitive-dust emissions from unpaved roads would be mitigated through appropriate control methods, including, but not limited to:</p> <ul style="list-style-type: none"> <li>● Lowering speed limits by creating obstacles such as speed bumps;</li> <li>● Using fugitive-dust control measures such as dust suppressants, gravel, or pavement;</li> <li>● Installing cattle guards where unpaved roads meet paved roads;</li> <li>● Reducing vehicle-use intensity or duration, reducing route density, or re-routing travel routes to more stable soils;</li> <li>● Limiting the vehicle type on roads or in areas that are susceptible to excessive dust due to unstable soils;</li> <li>● Closing high-use areas during high-pollution days;</li> <li>● Closing areas that frequently exceed PM<sub>10</sub> standards to non-compliant recreation and other projects until mitigation measures are implemented.</li> <li>● Implementing temporary, seasonal, or permanent route closures when other methods are unsuccessful at controlling fugitive dust that exceeds regulatory limits.</li> </ul>

**Administrative Actions**

- Participate in the Interagency Smoke Program and other programs related to air quality.
- Participate and comment on proposed projects identified as requiring Prevention of Significant Deterioration/New Source Review permits for their effects on air quality and affected resources within 100 kilometers of wilderness areas. Request that location-specific pre-application monitoring be conducted to support the permit review process when appropriate.
- Review projects requiring non-major permits within 10 km of wilderness areas to determine their effects on air quality and affected resources, and provide comments to the appropriate regulatory agency.
- Participate in the public workshops and provide comments on the Maricopa County or other proposed air quality rule changes.
- Work with adjoining land managers and users to mitigate air quality effects on public lands.
- Coordinate with county or municipal authorities to encourage control of fugitive dust emissions from unpaved roads that affect attainment of air quality standards

- Work with Federal, state, and local agencies to monitor air quality on public lands, particularly in wilderness and other special areas. Air-quality monitoring should include visibility, ozone, acid deposition or other relevant air-quality indicators.
- Work with Federal, state, and local agencies to gather meteorological data, including installing meteorological stations on the public lands, as needed and appropriate.
- Encourage research of air quality-related issues.
- Address air-quality impacts when planning and executing prescribed burns to comply with Federal and state air quality standards and adhere to Article 15 of the Arizona Administrative Code and State Implementation Plan provisions.

#### **Specific to the SDNM Decision Area.**

- Review projects requiring non-major permits within 10 km of the SDNM to determine their effects on air quality and affected resources and provide comments to the appropriate regulatory agency.
- Work with adjoining land managers and users and county or municipal authorities to mitigate air quality effects on the SDNM. Make control of fugitive dust emissions from unpaved roads, construction sites, or other activity areas within 10 kilometers of SDNM a priority of this effort.
- Coordinate with county or municipal authorities to encourage control of fugitive dust emissions from unpaved roads that affect attainment of air quality standards in the SDNM.
- Increase public awareness and appreciation of air-quality resources and visibility through interpretative displays as part of the public outreach program and visitor facilities planning for SDNM.
- Work with Federal, State, and local agencies to monitor air quality in the SDNM. Air-quality monitoring should include visibility, ozone, acid deposition, or other relevant air quality indicators.
- Promote the study of air quality conditions in the SDNM, including the effects of ozone, acid deposition and other related pollutants on plants and the supporting ecosystems. Cooperate and promote such activity with academic institutions and other interested parties.

## 2.7.2. CAVE RESOURCES

Although no caves have been identified in the Decision Area, there may be undocumented caves located in geologically suitable rock units. Any newly discovered caves would be evaluated for scientific, educational, biological, and recreational value.

The Planning Area contains Paleozoic sedimentary deposits and Tertiary volcanic rocks that are known to contain caves elsewhere in Arizona. While Paleozoic limestone occurs in the Sand Tank Mountains, no caves or karst resources are known to exist. The Sentinel Plain area contains two lava tubes. Small rock overhangs and shallow openings are present in some rock units of the lava tubes; however, by definition these do not qualify as caves. The definition of a cave requires that its depth exceed its width.

BLM Manual 8380, Cave and Karst Resources Management, provides guidance and direction for the management of cave and karst resources on BLM-administered lands, including aquifers and their surface water and groundwater-drainage areas.

### 2.7.2.1. Existing Management Decisions, Alternative A (No Action) For Cave Resources

No existing management decisions exist for caves and cave resources.

### 2.7.2.2. Action Alternatives for Cave Resources Management (CR)

#### Management Actions and Allowable Uses

<b>Goal 1: Protect and conserve caves and karst resources as they are discovered on the public lands.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1:</b> Manage caves and karst resources to maintain or enhance their physical integrity and scientific interest.						
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>CR-1.1.1:</b> Evaluate and inventory caves and karst resources, as they are discovered, to determine if the cave contains significant cultural, scientific, biological, geological, hydrological, educational, or recreational values.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>CR-1.1.2:</b> Protect and manage significant caves and karst resources for cultural, scientific, biological, geological, hydrological, educational, and recreational values.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>CR-1.1.3:</b> Public access to all caves within this Decision Area will be by permit only unless public entry is signed as open. Federal, State and local government employees operating within the scope of their authorizations would be exempt from permit issuance.

### **2.7.3. CULTURAL & HERITAGE RESOURCES**

Cultural and heritage resources are the physical and traditional remnants of thousands of years of human occupation and use of the land and its resources. Cultural resource sites date to both prehistoric and historic time periods, up to the mid-twentieth century. Sites may contain tools or other artifacts; features, such as rock art or structural remains; and other items, such as charcoal, bone, and plant remains. Sites vary in size and occur in a variety of locations and environmental zones. Individual sites may even exhibit evidence of use and occupations dating to various periods. The BLM strives to protect the informational, heritage, and interpretive values of archaeological and heritage sites. Cultural resources also include places of traditional importance to Native Americans.

Cultural and heritage sites are recognized as fragile and irreplaceable resources with potential public and scientific uses. Allocation to one of five use categories is prescribed in BLM Manual 8100 can include:

- Scientific use,
- Conservation for future use,
- Traditional use,
- Public use, or
- Experimental use.

Some sites may be allocated to two (or more) categories simultaneously. Some categories are mutually exclusive. In order to manage a diversity of cultural sites, allocations to these categories are necessary. Re-allocation is possible based on changing management and physical scenarios and does not require a resource management plan amendment (see Appendix I, *Cultural Use Allocations* (p. 1231) for more information on site allocations).

Management of sites on a regional or landscape level can be achieved by allocating an area as a Special Cultural Resource Management Area (SCRMA). This is an area containing cultural resources (archaeological sites, historic sites or places of traditional cultural importance) that are particularly important for public use, scientific use, traditional use or other uses as defined in BLM Manual 8110.4. Management prescriptions for these areas should reflect and support the primary values for which the areas are allocated. For example, management prescriptions for a SCRMA allocated primarily for public use should focus on developing and interpreting sites for public visitation, including heritage tourism. Management prescriptions for a special area allocated primarily for scientific use should focus on protecting sites for study, supporting field schools and other research efforts. Management prescriptions for a special area allocated primarily for traditional use should seek to accommodate the traditional cultural practices of Indian tribes or other cultural groups that ascribe religious or other heritage values to the area.

Management prescriptions for a special area allocated primarily to protect scarce sites of singular importance that should not be subjected to invasive studies or other uses that would threaten their present condition should focus on conserving sites for the future. Management prescriptions for a single SCRMA can focus on more than one type of use, just as a single cultural property can be allocated to more than one of the use categories described in Manual 8110.4. For example, a special area might contain a set of cultural properties that, linked together and interpreted as a

group, would make a good auto tour route for heritage tourism. At the same time, the area might contain several cultural properties of unusual historic importance that should be segregated from land or resources uses that might impair their present condition or setting. While both kinds of properties should receive management emphasis, they can be subsumed within a single land use allocation with management prescriptions tailored to support public visitation of the sites along the auto tour route, and protection for the sites that warrant segregation.

The primary purpose of this land use allocation is to differentiate some portions of a Planning Area from others in terms of cultural resource values. The allocation can denote priority for the expenditure of time and funds or the need for special protection to achieve management objectives. However, highlighting a geographic area for its special cultural resource values does not diminish the importance of cultural resources in other areas. Cultural resources on lands not included within special areas still need to be managed for the values they contain and opportunities they afford.

The regulatory framework under which cultural and heritage resources are managed include a list of laws, regulations, and Executive Orders. The most important laws are the National Historic Preservation Act (NHPA), Archaeological Resources Protection Act (ARPA), National Trails System Act, American Indian Religious Freedom Act (AIRFA), Antiquities Act of 1906, Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), National Environmental Policy Act of 1969 (NEPA), Federal Land Policy and Management Act of 1976 (FLPMA), Historic Sites Act of 1935, Reservoir Salvage Act of 1960 as amended by the Archaeological and Historic Preservation Act of 1974, and the Archaeological and Historic Preservation Act.

### ***Sonoran Desert National Monument***

The purpose of the SDNM designation according to Presidential Proclamation 7397 is to protect the “objects” of the Monument. Some cultural and historic objects were listed individually and some were inferred. The objects include the natural historic landscape settings of a 23-mile corridor segment of the Juan Bautista de Anza National Historic Trail (Anza NHT) corridor, and the Butterfield Overland Stage Route and the Mormon Battalion Trail located within the same 23-mile corridor. The other named objects include rock art, lithic quarries, historic and prehistoric structures, prehistoric routes, objects of historic or scientific interest, significant archaeological and historic sites, large prehistoric villages, permanent habitation sites, protohistoric villages, Vekol Wash and other prehistoric travel and trade corridors.

The cultural and heritage resources located on the Monument are a far more diverse collection than this list of object names. Less than three percent of the Monument has been inventoried. As the inventory grows, a greater understanding of these resources and their relationship with each other will be discovered and documented. Protection of these resources as Monument objects will ensure their survival into the future.

#### **2.7.3.1. Existing Management Decisions, Alternatives A (No Action) For Cultural & Heritage Resources**

The following decisions are extracted from the existing land use plans and amendments and are listed in chronological order. Because none of these current land use plans encompass the entire Planning Area, very few of these decisions are being carried forward as common to all alternatives and are restated as new action alternatives where applicable.

### ***Lower Gila North Management Framework Plan (1983)***

- Allocate cultural resources identified through inventory for scientific uses. (CL-01 and 02).
- Reduce or eliminate indirect impacts of land uses on cultural resources as identified through study plots. (CL-03).
- Conserve a representative sample of site types in the Planning Area for future use (CL-04).
- Provide immediate and long-term in-place preservation and protection of selected cultural resources that are threatened or deteriorating (CL-05).

### ***Lower Gila South Resource Management Plan (Goldwater Amendment — 1990)***

(Applicable to the three relinquished BGR parcels)

- Provide special protection for significant cultural sites that are being impacted or threatened by the public. For sites being impacted or threatened by the military, a different process will be followed. The BLM will be available to the military at all times as a consultant. (CL-3).
- Minimize impacts on cultural resources by avoiding cultural property locations whenever feasible and using previously disturbed areas as the preferred locations for ground-disturbing activities when practical. (CL-4).

### ***Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (1997)***

- S&G Guideline 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 (CL-9).

## **2.7.3.2. Action Alternatives for Cultural & Heritage Resources (CL)**

### **Program Goals**

- **Goal 1:** Identify, preserve, and protect important cultural resources and Monument Objects. Ensure they are available for appropriate uses by present and future generations.
- **Goal 2:** Reduce threats, reduce or prevent damage, and resolve potential conflicts from naturally occurring or unauthorized human-caused damage or deteriorations.
- **Goal 3:** Manage assemblages of sites within the Decision Areas as cultural landscapes.

### **Land Use Allocation Summary Tables**

**Table 2.3. Proposed Site Use Allocations by Alternative**

Allocation by Decision Area	Alternatives (BLM acres)				
	A	B	C	D	E

Lower Sonoran					
Painted Rock Petroglyph Site – Public and Scientific Use		200	200	200	200
Butterfield West – Public and Scientific Use		10	10		10
Sundad – Public and Scientific Use		73	73		73
Butterfield West – Scientific Use				10	
Sundad – Scientific Use				73	
SDNM					
Bighorn Station – Public and Scientific Use		<5	<5		<5
Christmas Camp – Public and Scientific Use		<5	<5		<5
Happy Camp (Desert Station) – Public and Scientific Use		<5	<5		<5
Selected segments of Butterfield Overland Stage Route (Butterfield Pass) – Public and Scientific Use		3,600	3,600		3,600
Bighorn Station – Scientific Use				<5	
Segments of Butterfield Overland Stage Route – Conservation for Public Use				3,600	
Christmas Camp – Scientific Use				<5	
Happy Camp (Desert Station) – Scientific Use				<5	

**Table 2.4. Proposed Cultural and Historic Resources Land Use Allocations (SCRMA)**

Allocation by Decision Area	Alternatives (BLM acres)				
	A	B	C	D	E
Lower Sonoran					
Saddle Mountain SCRMA			48,500	ACEC	ACEC
Lower Gila Terraces and Historic Trails SCRMA			79,100	ACEC	ACEC
SDNM					
Sonoran Desert Historic Trails SCRMA			16,200		16,200

## Management Actions and Allowable Uses

<b>Goal 1: Identify, preserve, and protect important cultural resources and Monument Objects. Ensure they are available for appropriate uses by present and future generations.</b>						
Applicable Decision Area		Applicable Alternative			Management Actions and Allowable Uses	
LS	SDNM	B	C	D		
<b>Objective 1.1:</b> Allocate known and evaluated cultural resource sites to one of five use categories: (1) scientific use, (2) conservation for future use, (3) traditional use, (4) public use or (5) experimental use, or classify as “discharged from management.” Newly discovered and recorded sites would be evaluated and allocated within one year. (Use categories and criteria to determine categories are described in Appendix I, <i>Cultural Use Allocations</i> (p. 1231)).						
Site Use Allocations						
LS		B	C	D	E	<b>CL-1.1.1:</b> Painted Rock Petroglyph Site would remain a public and scientific use site for heritage tourism and interpretation purposes. The site would continue to be managed for interpretation and education uses according to the existing project and business plans (Maps 2-1b, 2-1c, 2-1d and 2-1e.)
LS		B	C	D	E	<b>CL-1.1.2:</b> Retain public lands and acquire available state and private lands and/or easements to assure long term use, protection and access to important cultural sites that occupy a particular and definitive role in the cultural landscape or are of particular importance to local Native American tribes. Emphasize lands located within allocated use site categories and SCRMA.
LS		B	C	D	E	<b>CL-1.1.3:</b> All cultural sites allocated to the public use category as identified in Appendix I, <i>Cultural Use Allocations</i> (p. 1231) would be closed to locatable mineral exploration and development, and mineral material disposals (saleables). Public lands would be recommended for withdrawal.

<b>Goal 1: Identify, preserve, and protect important cultural resources and Monument Objects. Ensure they are available for appropriate uses by present and future generations.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>			<b>Management Actions and Allowable Uses</b>	
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>		
LS		B	C	D	E	CL-1.1.4: Public use sites would remain open to all leasable minerals, but any lease or energy LUA would contain a no surface occupancy stipulation.
LS		B	C	D	E	CL-1.1.5: Public use sites would be exclusion areas for utility scale energy development and multiuse corridor LUAs. They would be avoidance areas for minor linear and nonlinear LUAs and mitigated to be consistent with management objectives.
LS	SDNM	B	C		E	CL-1.1.6: Sundad, Butterfield West (selected segment of the Butterfield Overland Stage Route west of the Painted Rock Site), Anza-Butterfield Interpretive Trail (a high potential segment of the Juan Bautista de Anza NHT and Butterfield Overland Stage Route within the SDNM), Happy Camp, Christmas Camp and Bighorn Station would be allocated as public and scientific use sites.  Management prescriptions for public use sites would follow those set forth in the applicable special designation sections of the RMP when more restrictive. Inventory, recordation, documentation, and preparation of all sites for increased public visitation must be accomplished prior to implementing interpretive developments. Sundad would only be developed if critical safety issues are addressed. Big Horn Station would only be developed if stabilization measures are taken, critical safety issues are addressed and legal access is obtained. (Maps 2-1b, 2-1c and 2-1e.)
LS	SDNM			D		CL-1.1.7: Sundad, Butterfield, Anza-Butterfield Interpretive, Happy Camp, Christmas Camp and Bighorn Station sites would be allocated as scientific use sites only. Sites would not be used for tourism or interpretive development (Map 2-1d). Management prescriptions for these areas would follow those set forth in the applicable special designation sections of the RMP where more restrictive.
LS	SDNM	B	C	D	E	CL-1.1.8: Motorized vehicle use would be allowed on the Anza-Butterfield Interpretive Trail high potential segment providing Monument Objects are protected.
	SDNM			D		CL-1.1.9: The Anza-Butterfield Interpretive Trail high potential segment would be limited to non-motorized uses.
	SDNM	B	C		E	CL-1.1.10: Camping within 100 feet of centerline along the Anza-Butterfield Interpretive Trail high potential segment would be limited to designated campsites as determined in activity level planning.
	SDNM			D		CL-1.1.11: No camping (motorized or non-motorized) would be allowed along the Anza-Butterfield Interpretive Trail high potential segment.
<b>Objective 1.2: Encourage appropriate scientific use of cultural resources.</b>						
LS	SDNM	B	C		E	CL-1.2.1 Provide opportunities for scientific research and inventory at selected sites, including excavation by qualified researchers.
LS	SDNM			D		CL-1.2.2 Opportunities would be provided for scientific research and inventory at selected sites by qualified researchers if designed to have a minor or negligible impact to cultural resources.
<b>Objective 1.3: Allocate cultural and historical features as Special Cultural Resource Management Areas (SCRMA) to protect the features, visual settings and enhance visitor experience.</b>						
<b>Common To All SCRMA</b>						
LS	SDNM		C			CL-1.3.1: The Saddle Mountain, the Lower Gila Terraces and Historic Trails, and the Sonoran Desert Historic Trails SCRMA would be designated on selected public lands as presented in Table 2.4, "Proposed Cultural and Historic Resources Land Use Allocations (SCRMA)" (p. 55) and as shown on Map 2-1c. (The Sonoran Desert Historic Trails SCRMA is the only SCRMA designated in Alternative E).

<b>Goal 1: Identify, preserve, and protect important cultural resources and Monument Objects. Ensure they are available for appropriate uses by present and future generations.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
LS	SDNM		C			<b>CL-1.3.2:</b> Motorized vehicle routes would be closed, limited or mitigated as needed to protect the cultural resources during the route designation process or when conflicts with cultural resources are identified.
LS	SDNM		C			<b>CL-1.3.3:</b> Heritage tourism would be allowed only if compatible with protection measures as described in BLM Manual 8140.
LS	SDNM		C			<b>CL-1.3.4:</b> Inventory and evaluations on cultural resources in SCRMA's would be increased and emphasized.
LS	SDNM		C			<b>CL-1.3.5:</b> Sites allocated to Public Use may be developed for interpretation and environmental education.
LS			C			<b>CL-1.3.6</b> The Saddle Mountain and portions of the Lower Gila River and Historic Trails SCRMA's located outside the SDNM would be open to locatable minerals but closed to mineral material disposals (saleables).
LS			C			<b>CL-1.3.7:</b> All LUAs would be avoided, mitigated, and otherwise managed, within the Saddle Mountain and portions of the Lower Gila Terraces and Historic Trails SCRMA located outside the SDNM to be consistent with management objectives.
<b>The Gila River Terraces and Lower Gila Historic Trails SCRMA</b>						
LS			C			<b>CL-1.3.8:</b> Portions of the Lower Gila Terraces and Historic Trails SCRMA located outside the SDNM would remain open to all leasable minerals but any mining lease, would contain a No Surface Occupancy stipulation.
LS			C			<b>CL-1.3.9:</b> Treatments of invasive species would be allowed within the SCRMA's if they can be designed to have a minor or negligible impact to cultural resources.
LS			C			<b>CL-1.3.10:</b> Vegetation would be rehabilitated and restored in priority areas consistent with cultural landscape, viewshed and cultural resource integrity.

<b>Goal 2: Reduce threats, reduce or prevent damage, and resolve potential conflicts from naturally occurring or unauthorized human-caused damage or deterioration.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 2.1:</b> Impacts by erosion, natural processes, or those due to vandalism visitation, vehicle traffic or other unauthorized human activity would be reduced.						
LS	SDNM	B	C	D	E	<b>CL-2.1.1</b> Potential conflicts from other resource uses would be minimized, reduced or unauthorized by complying with Section 106 of the National Historic Preservation Act, and using mitigation or avoidance strategies as prescribed by law, regulation and the BLM Cultural Resources 8100 Manual.
LS	SDNM	B	C	D	E	<b>CL-2.1.2:</b> Sites suffering damage or deterioration resulting from natural or human causes would be restored, stabilized, or mitigated.
LS	SDNM	B	C	D	E	<b>CL-2.1.3</b> Sites and Monument objects would be protected from degradation due to erosion and other natural processes by using a wide variety of techniques and tools, such as wash bank stabilization, rip rap and vegetation restoration.
LS	SDNM	B	C	D	E	<b>CL-2.1.4</b> Sites and Monument Objects damaged by vandalism, excessive visitation, vehicle traffic, or other causes, would be protected and stabilized by implementing protection measures as described in BLM Manual 8140.

<b>Goal 2: Reduce threats, reduce or prevent damage, and resolve potential conflicts from naturally occurring or unauthorized human-caused damage or deterioration.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
LS	SDNM	B	C	D	E	CL-2.1.5: Special recreation permit holders would be required to provide archaeological site etiquette and resource conservation information to all participants, employees and volunteers associated with permitted activities.
LS	SDNM	B	C	D	E	CL-2.1.6: The number of visitors at cultural or historic sites would be limited to 25 people at the site, at any one time, to emphasize resource protection. Some sites may require further limitations to protect the resource. Casual use or group limits for SRPs may be higher on a case-by-case basis if determined to be acceptable in site specific evaluations and the activity/action can be designed to have a minor or negligible impact to cultural resources.

<b>Goal 3: Manage assemblages of sites within the Decision Areas as cultural landscapes.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 3.1:</b> Distinct cultural landscapes would be described and mapped as defined by human use of the environment to protect the physical integrity, enhance visitor experience, and maintain or enhance visual settings. <i>Cultural landscapes are a new and holistic land use concept that attempts to understand human interaction with each other and their environment through time on a landscape scale.</i>						
LS	SDNM	B	C	D	E	CL-3.3.1: The age, function and interrelationship of sites attributed to historic indigenous populations in different environmental settings would be identified when possible.
LS	SDNM	B	C	D	E	CL-3.3.2: Cumulative impacts to the cultural landscape as well as impacts to individual sites would be analyzed as part of the project assessment when projects are proposed.

## Administrative Actions

### SHPO/NHPA.

- Continue to regularly communicate with the State Historic Preservation Office to share information and obtain technical advice on issues relating to compliance with Sections 106 and 110 of the NHPA, in accordance with the Arizona State Protocol.
- Focus proactive (Section 110) inventories on areas defined as Special Cultural Resource Management Areas, ACECs, and areas along historic trail routes.

### Tribal Consultation and Concerns.

- Continue to consult with the Gila River Indian Community, the Ak-Chin Indian Community, the Salt River Pima-Maricopa Indian Community, the Tohono O’odham Nation, the Hopi Tribe, the Yavapai Prescott Indian Tribe, Fort Yuma – Quechan Tribe, and other interested Indian tribes to identify places of traditional importance and associated access needs. Develop measures for management and protection of such places that may be identified by tribes during the life of the approved RMP.
- Identify sacred areas in consultation with Indian tribes and, where practicable, limit land uses to those that do not conflict with ascribed values.
- Honor tribal requests to protect the confidentiality of sensitive information to the extent permitted by law.

- Provide opportunities for participation by Indian tribes in research and interpretation.
- Specific management prescriptions for sites allocated to the Traditional Use category will be developed in consultation with the Indian tribes to which they are culturally important.
- Restrict public information about the locations of sites that are not allocated to public use as allowed by law and regulation.

### **Research Opportunities.**

- Complete documentary research and oral histories to gain a better understanding of cultural resources from homesteading, mining, ranching, and other historical period activities.
- Establish collaborative research partnerships with academic institutions, tribes, professional and nonprofit organizations, vocational organizations, and other entities for an orderly process of cultural research, recordation, and education.
- Work with researchers, tribes, interested members of the public, contractors, local communities, and published materials to define specific cultural landscapes. Work with tribal groups and individuals to define temporal, functional, and inter-relationships of sites within certain landscape settings.
- Provide opportunities for training and participation in site documentation, research, protection, and education projects by tribal members, students, and volunteers. Ensure adequate professional oversight of work conducted by tribal members, students, and volunteers.

### **Interpretation and Education.**

- Map and document sites before interpretive development for public use, as needed, to preserve archeological data, plan for interpretive data, and provide a baseline condition assessment for monitoring changes resulting from visitor use.
- Complete interpretive plans for public use sites selected for interpretive development.
- Develop interpretive materials and facilities for selected sites. Provide educational opportunities to the public, including resource protection and appreciation, education, and stewardship
- Continue to participate in Arizona Archaeology Awareness Month events and other educational outreach programs to highlight the values of cultural heritage resources and the need to protect these resources.
- Provide opportunities for tribal and interested public participation in interpretation.

### **Monitoring.**

- Continue to work with and support the Arizona Site Steward Program.
- Develop a monitoring scheme to evaluate the condition of cultural resources.
- Implement procedures for systematic monitoring of all sites developed or authorized for public visitation.

### **Planning.**

- The BLM will develop Cultural Resource Project Plans for protection or interpretation projects that require precise descriptions of implementation procedures, workforce, scheduling, equipment, and supplies. Project planning will be implemented following guidance in BLM's Manual 8130, Planning for Uses of Cultural Resources.

**Special Programs/Cultural Landscapes.**

- Work with researchers, tribes, concerned members of the public, contractors, local communities, and other stakeholders to make use of previously published materials to define certain cultural landscapes.
- Develop a strategy to identify, assess, and monitor the view sheds along the historic trail corridor and other important cultural landscapes on the SDNM and within ACECs. Use Geographical Information System (GIS) technology to create view shed studies and collect information for the monitoring program.

## 2.7.4. PALEONTOLOGICAL RESOURCES (PL)

Paleontological resources constitute a fragile and non-renewable scientific record of the history of life on Earth. Once damaged, destroyed, or improperly collected, their scientific and educational value may be lost forever. In addition to their scientific, educational, and recreational values, paleontological resources can be used to understand the relationships between the biological and geological components of ecosystems over long periods of time. The BLM strives to manage paleontological resources for their scientific, educational, and recreational values, and to mitigate adverse impacts to them. On the SDNM, paleontological resources are considered objects of the Monument, implied by the statement “other objects of historic or scientific interest that are situated upon the ... National Monuments.” (Proclamation 7397).

Historic trends have shown that very few geologic units in the Planning Area contain paleontological material. This is due primarily to the lack of sedimentary formations in this part of Arizona. It should be noted, however, that very little of the Planning Area was inventoried for paleontological remains or the geologic units that tend to carry them.

The Paleontology Program Manual and Handbook, BLM Manual 8270 and H-8270-1, provide guidelines for implementing the Paleontological Resource Management Program.

### 2.7.4.1. Existing Management Decisions, Alternative A (No Action) for Paleontological Resources

#### *SDNM Current Management Guidance (2002):*

The collection of any objects, including vegetation, paleontological resources, or rock specimens, should not be permitted, except where intended for legitimate scientific uses for which documentation is provided to the satisfaction of the responsible management official. Scientific, archaeological, and historical investigations that increase our understanding of the Monument’s resources are important, but surface disturbance should be avoided.

### 2.7.4.2. Action Alternatives for Paleontological Resources (PL)

#### Management Actions and Allowable Uses

<b>Goal 1: Protect and manage vertebrate or noteworthy occurrences of invertebrate or plant fossils discovered on public lands for scientific, educational, or recreational values as they are discovered.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1: Manage paleontological resources to maintain or enhance their physical integrity and scientific interest while avoiding all surface-disturbing activities that would damage significant or noteworthy occurrences of paleontological materials.</b>						
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>PL-1.1.1:</b> Collection of all vertebrate fossils would be prohibited without written authorization from a BLM authorized officer in accordance with BLM Handbook H-8270-1. Invertebrate or plant fossils would be restricted on a case-by-case basis if they are determined to be noteworthy, of legitimate scientific or educational use, or if the resource cannot be protected on site.
	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>PL-1.1.2:</b> Collection of paleontological resources for personal use would be prohibited except where intended for legitimate scientific uses and for which written authorization is obtained from the BLM authorized officer.

<b>Goal 1: Protect and manage vertebrate or noteworthy occurrences of invertebrate or plant fossils discovered on public lands for scientific, educational, or recreational values as they are discovered.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1: Manage paleontological resources to maintain or enhance their physical integrity and scientific interest while avoiding all surface-disturbing activities that would damage significant or noteworthy occurrences of paleontological materials.</b>						
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>PL-1.1.3:</b> Standard discovery stipulations would be included in any permit approval that is likely to affect significant paleontological resources. Stipulations would require the user or operator to:</p> <ul style="list-style-type: none"> <li>● Suspend operations immediately upon discovery of paleontological resources that would disturb them,</li> <li>● Contact the authorized officer as soon as reasonably possible,</li> <li>● Bear the cost of required mitigation.</li> </ul>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>PL-1.1.4:</b> Upon notification of discovery by a permit user or operator, the BLM would:</p> <ul style="list-style-type: none"> <li>● Evaluate the discovery and inform the user/operator within 5 days,</li> <li>● Allow resumption of use/operations only after completion of mitigation.</li> </ul>

### Administrative Actions

- Geologic units would be assigned and entered into the Potential Fossil Yield Classification (PFYC) System (per Instruction Memorandum No. 2008-009) using geological maps and professional consideration. A separate class ranking would be assigned to each recognized geologic formation or member present at the surface in accordance with the guidelines provided in the IM.
- All assigned units entered into the PFYC System would be integrated onto a Geographical Information System (GIS)-based geologic map.

## **2.7.5. PRIORITY WILDLIFE SPECIES & HABITAT (PS)**

The BLM Land Use Planning Handbook (H-1601-1) requires the BLM to designate priority species and habitats, in addition to special status species, for fish or wildlife species recognized as significant for at least one factor such as density, diversity, size, public interest, remnant character, or age. Because priority wildlife species includes special status species, as well as the majority of other wildlife species in the Planning Area, this section also covers special status species in order to display in a single section all actions and desired outcomes for wildlife species.

The primary categories of priority species are listed below. For the complete list of priority wildlife species see Appendix J, *Wildlife & Plant Priority Species* (p. 1235).

- Special status species, including species listed as threatened or endangered, or those proposed for listing under the Endangered Species Act (ESA), and BLM sensitive species (BLM Manual 6840);
- Bats;
- Migratory birds, including birds of conservation concern;
- Raptors;
- Game species;
- Species for which there is a signed conservation agreement or strategy.

The BLM focuses most of its wildlife management efforts on priority species habitat. The general assumption is that if the habitat requirements for priority species are met, the habitat for most other wildlife species also is met. The BLM manages priority species in accordance with a variety of laws, regulations, policies, plans, manuals, and agreements. Priority species include fish and wildlife species requiring protective measures and management guidelines to ensure their perpetuation. Moreover, priority wildlife species includes State endangered, threatened, sensitive, and candidate species; animal aggregations considered vulnerable; and those species of recreational, commercial, or tribal importance that are vulnerable. The major sources of guidance the BLM uses to manage priority species are the Endangered Species Act of 1973; Migratory Bird Treaty Act of 1918; Executive Order 13186 (2001); Bald and Golden Eagle Act of 1940; FLPMA of 1976; BLM Manual 174, Introduction, Transplant, Augmentation and Reestablishment of Fish, Wildlife and Plants; BLM Manual 6840 Special Status Species Management (2008), Desert Tortoise Rangewide Plan (1990); and various Instructional Memoranda. See Chapter 3, *Affected Environment* (p. 251) and Appendix B, *Applicable Laws, Regulations, and Policies* (p. 1003) for a comprehensive list and descriptions.

Priority habitats are defined as fish and wildlife habitats requiring protective measures or management guidelines to ensure habitat availability. Priority habitats are limited in range and size; provide necessary components for threatened, endangered and special status species; connect two or more priority habitat areas; or are especially sensitive to disturbance and degradation. Priority habitats are large areas that encompass wildlife habitat areas (WHAs) and wildlife movement corridors. Connection between these habitat patches is important to provide wildlife the ability to move along elevation gradients and between habitat areas. As climate conditions change, wildlife must be able to adapt by expanding or contracting according to the needs of their lifecycles. Therefore, it is necessary to maintain corridors of undisturbed vegetation that connect

to other undisturbed habitat areas. Human population growth that results in the development of subdivisions, highways, and other infrastructure creates barriers to wildlife movement. In order to provide for wildlife movement, the BLM, in coordination with Arizona Game and Fish Department (AGFD), developed movement corridors where surface-disturbing activities must mitigate damage to habitat and maintain connectivity to other undisturbed areas. In this plan, WHAs are proposed in the various alternatives, and numerous wildlife movement corridors are identified in all action alternatives for the Lower Sonoran Field Office Decision Area.

Arizona's wildlife is one of its most precious resources. To protect wildlife and wildlife habitat, we have proposed allocations of WHAs with an emphasis on habitat management for priority species. This designation contains management prescriptions that are designed to enhance and protect wildlife habitats within the WHA. Also incorporated are wildlife movement corridors. These corridors are not an allocation; however, they would be managed to enhance opportunities for wildlife to traverse from one area to another with relative ease and security. Therefore, there is overlap in the designation of the WHAs and a number of the corridors. These overlaps facilitate management actions in both areas to ensure habitat availability for wildlife species, passage ways for wildlife species, and their continued persistence. WHAs and wildlife corridors are defined as follows:

**Wildlife Habitat Area:** A wildlife habitat area (WHA) is an area that offers feeding, roosting, breeding, nesting, and refuge areas for a variety of wildlife species native to an area. The WHAs proposed in the Planning Area are large areas with a multitude of different habitats and uses within their boundaries. Public lands compose the vast majority of each WHA, but they also may contain State and private land. The proposed WHA include recommendations to protect and enhance their areas for all wildlife species and would target priority species for management purposes while facilitating multiple uses. The proposed WHA consider both the quality and quantity of habitat when determining whether they will support local populations of wildlife.

**Wildlife Movement Corridors:** A wildlife movement corridor (WMC) is a continuous natural pathway that allows native wildlife species to move between habitats in relative security over short or great distances. The goal of identifying wildlife movement corridors is to maintain a belt of native vegetation between various habitats that is as nearly contiguous as possible while facilitating multiple uses. Corridors work best when they are composed of land that is sparsely developed and unfragmented. The land through which wildlife must pass when traveling between these habitats may, at times, consist of lands in private, State and public ownership. Corridors can and do encompass public roads, rights-of-way, trails, farmlands, OHV areas, and urban areas. Corridors with appropriate management actions facilitate movements of wildlife and aid in maintaining genetic diversity. Genetic diversity plays a very important role in the survival and adaptability of a species. Corridors also facilitate the ability for wildlife to expand and contract based on habitat availability and population cycles, allowing wildlife to travel from sub-par habitat types during drought, for example, to more suitable and sustainable habitat types. Adaptive management and best management practices would be used in WHAs and corridors to allow for multiple uses while preserving passage areas for wildlife. Numerous areas have been identified as movement corridors for wildlife and vary in size and shape depending on alternatives.

These areas contain characteristics necessary for wildlife to traverse their natural range securely and with relative ease. These corridors encompass topography ranging from mountainous terrain to desert flats and washes. While wildlife do not notice or use lines on a map, we as habitat managers must in some fashion delineate areas for management prescriptions. Therefore, the

areas delineated include prescriptions for habitat management, and protections are provided to assist wildlife in their quest to survive.

### **2.7.5.1. Existing Management Decisions, Alternative A (No Action) for Priority Wildlife Species & Habitat**

Decisions are listed in chronological order by plan. The following decisions are extracted from the existing land use plans and amendments and are listed in chronological order. Because none of these current land use plans encompass the entire Planning Area, very few of these decisions are being carried forward as common to all alternatives and are restated as new action alternatives where applicable.

*Please note that the majority of the decisions regarding the management of wildlife and desert tortoise were standard operating procedures or administrative actions and may be found in Appendix B, Applicable Laws, Regulations, and Policies (p. 1003) or at the end of this section.*

#### ***Lower Gila North Management Framework Plan (1983):***

- Provide wildlife safe access to year-round water at 150 livestock waters on public lands by 1987 and cooperate with allottees to develop similar considerations on private lands. (WL-1.1)
- Develop small and upland game waters in 11 areas by FY-87. (WL-1.2)
- Avoid subdividing bighorn sheep lambing areas with fencing and monitor livestock use of these key areas. Negotiate with range users to alleviate competition where documented. This will be done by change in season of use or by instituting a grazing system to rest lambing areas during critical lambing season (January through May). (WL-2.4)
- Decrease cattle densities in bighorn habitat to relieve competition between bighorn sheep and livestock for space, water, and browse. Graze domestic sheep as far from bighorn habitat as possible to decrease bighorn disease vectors. Management will begin by 1990. Implementation of this recommendation will be met through range management in the following allotments: Aguila (intensive), Ohaco, and Calhoun (non-intensive). Implementation of this recommendation will be met through habitat management plans for the remaining allotments or as a result of planning for Lower Gila South (Crowder Cattle Company-portion lying within LGN; K-Lazy-B-portions lying within LGN; Carter-Herrera; Muse portion lying within LGN; Clem-portion lying within LGN; and Orosco). Domestic sheep will graze as far from bighorn habitat as practicable. (WL-2.8)
- Cooperate with Arizona Game and Fish to acquire water rights to maintain or enhance spring habitats and riparian habitats in the planning unit. Specific sites will be determined in the Habitat Management Plan to achieve the goals stated in the plan. (WL-4.4)
- Within distribution of desert and Arizona night lizards (10,000 acres) and Sonoran Mountain king-snake (1,200 acres), utilize 43 CFR 3809 (Surface Mining Regulations) to minimize habitat disturbance during new road construction. Specify closing new roads as a provision in new mining plans of operation, when and where necessary, to prevent recreation disturbance to night lizard and king-snake habitat. (WL-5.2)

#### ***Phoenix Resource Management Plan (1989):***

- Maintain and improve habitat and viable wildlife populations. (VM-01)

***Lower Gila South Resource Management Plan (1989):***

- As a general practice, new roads will not be bladed for use in fence construction. Vehicles will travel overland or fences will be built by hand. (Not numbered)
- Before installing facilities, the BLM will conduct a site evaluation for State-protected animals and will develop mitigation to protect these species and their habitats. Such mitigation might include project relocation, redesign, or abandonment. (Not numbered)
- The BLM will continue to place wildlife escape ramps in water troughs and construct or maintain new wildlife waters in coordination with State and other Federal agencies. (Not numbered)
- Fences proposed in big game habitat will be designed to reduce adverse impacts to big game movement. Specifications in BLM Manual 1737 and in local BLM directives will be used. The BLM will consult with the AGFD on the design and location of new fences. (Not numbered)
- Where existing fences in big game habitat do not meet BLM specifications, they will be modified, according to BLM Manual 1737, when they are scheduled for replacement or major maintenance. (Not numbered)
- New livestock waters to be located within two miles of crucial tortoise habitat and/or crucial desert bighorn sheep habitat will be analyzed on a case-by-case basis to determine potential impacts. Significant impacts will be mitigated with appropriate stipulations on site selection. (Not numbered)
- All livestock waters will provide safe, usable water for wildlife. As funding and opportunities permit, existing facilities will be modified to make them safe wildlife use.

***Lower Gila South Resource Management Plan - Goldwater Amendment (1990):***

(Applies to the three relinquished Sentinel Plain, Sand Tank Mountains, and Ajo Airport parcels):

- Support continued Sonoran pronghorn monitoring and recovery efforts, including specific recovery efforts stipulated in the EMP. (Not numbered)
- Eliminate all trespass grazing by livestock, goats and burros and construct fences where trespass is a problem. (Not numbered)

***Vegetation Treatment of Public Lands in Thirteen Western States Final EIS (1991):***

- Projects that may affect areas of threatened or endangered species of plants or animals will be postponed or site design modified to protect the presence of these species. Section 7 Consultation (as required by the Endangered Species Act) with the appropriate office of the USFWS will be initiated. (Not numbered)

***Cameron Allotment Amendment to the Lower Gila South Resource Management Plan (2004):***

See Appendix K, *Conservation Measures from Fish and Wildlife Service Biological Opinions* (p. 1239) for the measures in their entirety including administrative actions.

### ***Lower Gila Resource Management Plan Amendment (2005):***

Objectives:

- Objective 1: Not relevant
- Objective 2: Complete and maintain a continuing inventory and monitoring program for tortoise populations and habitats to assist in making management decisions, including habitat categorization, on public lands. The BLM's desert tortoise inventory and monitoring handbook will contain the standards for inventory and monitoring in Arizona.
- Objective 3: Develop and maintain a monitoring program specifically for land-use activities that adversely affect tortoise habitats for use in analyzing and responding to the cumulative impacts of land-use decisions on tortoise habitats.
- Objective 4: Comply fully with the Endangered Species Act of 1973, as amended, as it relates to tortoise population and habitat management on public lands.
- Objective 5: Coordinate and cooperate with other Federal and State agencies and other publics concerning tortoise populations and habitat management.
- Objective 6: Conduct research and studies sufficient to develop and document the knowledge and techniques needed to ensure the viability of tortoise populations and habitats in perpetuity.
- Objective 7: Manage the public lands on a continuing basis to protect the scientific, ecological, and environmental quality of tortoise habitats consistent with the goals and objectives of the *Rangewide Plan*. This implies management, within BLM's capability, of an adequate number of healthy and vigorous tortoise populations of sufficient size and resilience to withstand the most severe environmental disturbances, and with appropriate sex and age ratios and recruitment rates to maintain viable populations in perpetuity.
- Objective 8: When the need is identified through the BLM planning system, acquire and/or consolidate, under BLM administration, management units with high tortoise habitat values. When public land tortoise habitat values will be affected by the issuance of a lease, permit, right-of-way, or other land use authorization, mitigate to minimize loss of those values.
- Objective 9: Ensure that off-highway-vehicle (OHV) use in desert tortoise habitats is consistent with the category goals, objectives, and management actions of the *Rangewide Plan* and the Strategy.
- Objective 10: Ensure that livestock use is consistent with the category goals, objectives, and management actions of the *Rangewide Plan* and the Strategy. This may include limiting, precluding, or deferring livestock use as documented in activity plans or other site-specific plans.
- Objective 11: Manage wild horses and burros in a manner consistent with the category goals, objectives, and management actions of the *Rangewide Plan* and the Strategy. This may include limiting or precluding wild horse and/or burro use.

- Objective 12: Manage other wildlife on the public lands consistent with the goals, objectives, and management actions of the *Rangewide Plan* and the Strategy.
- Objective 13: Cooperate as necessary with the Arizona Game and Fish Department and Animal and Plant Health Inspection Service-Animal Damage Control to control predators that are taking desert tortoises. This will be considered only where predation is interfering with attaining the goals and objectives of the *Rangewide Plan* or the Strategy.
- Objective 14: Manage the BLM's energy and minerals program in a manner consistent with the goals and objectives of the *Rangewide Plan* and the Strategy.

Management Decisions/Administrative Actions:

- Phoenix Field Office personnel will participate, when asked and when appropriate, in public events such as fairs and open houses with information and displays showing the management of public lands including desert tortoise habitat. (WL-1)
- The Phoenix Field Office will develop a public brochure on desert tortoise. (WL-2)
- Records of environmental assessments that contain stipulations pertaining to the desert tortoise will be maintained for the express purpose of tracking compliance and effectiveness of the stipulations. (WF-5)
- An annual summary of the environmental assessments of actions in desert tortoise habitats will be provided to the Arizona State Office. (WF-6)
- The Phoenix Field Office will comply with Section 2 of the Endangered Species Act and BLM policy for managing habitat of candidate species to ensure that the Sonoran population of the desert tortoise does not become threatened or endangered through BLM actions. (WL-7)
- The Phoenix Field Office will continue to work with, share information, and support to the extent possible the interests and work of other agencies and public entities concerning tortoise populations and habitat management. (WL-8)
- The Phoenix Field Office will forward tortoise-related research proposals received to the Desert Tortoise Management Oversight Group. (WL-9)
- Specific and quantifiable desert tortoise management objectives for categorized habitat will be included at the interdisciplinary planning level. (WL-10)
- Environmental decision documents for all actions occurring in desert tortoise habitat will address and include mitigation measures sufficient to offset, to the extent possible, any loss of tortoise habitat quantity or quality in category I, II, and III habitats. (WL-11)
- New land uses will be granted in category I, II, and III tortoise habitats only if no reasonable alternative exists. If no alternative exists, mitigation, including compensation, will be evaluated to meet the no net loss goal. (WL-12)
- Competitive OHV race courses are prohibited in category I desert tortoise habitat. (WL-13)
- Competitive OHV race courses will not be located in category II desert tortoise habitat unless no reasonable alternative site exists. If no reasonable alternative site exists, impacts will be fully mitigated. (WL-14)

- Competitive OHV race courses will be evaluated in category III desert tortoise habitat and impacts will be mitigated. (WL-15)
- Categorized desert tortoise habitat will be reviewed in relation to ongoing livestock use on public lands in the MFP and RMP planning areas; forage needs of desert tortoise and ecological site potential will be considered in determining and prioritizing the resolution of conflicts. (WL-16)
- In category I and II desert tortoise habitat, only those range improvements for livestock that do not conflict with desert tortoise habitat or populations will be allowed. (WL-17)
- New wildlife improvements will be allowed in category I and II desert tortoise habitats only if there is no conflict with desert tortoise habitat populations or habitat. (WL-18)
- Information on predation of desert tortoises will be collected as opportunities arise. (WL-19)
- BLM actions in desert tortoise habitats will be evaluated to assure that they do not encourage the proliferation or range expansion of predator populations. (WL-20)
- The Phoenix Field Office will use the BLM's discretionary authorities relating to leasable and saleable minerals to meet the desert tortoise habitat category goals and objectives. (WL-21)
- Boulder sale permits will be restricted to areas that will result in no net loss of tortoise habitat. (WL-22)
- The Arizona Game and Fish Department, in cooperation with the Phoenix Field Office, may use re-establishment and augmentation to assist desert bighorn sheep populations in reaching their natural potential. (WL-23)
- Re-establishment and augmentation of desert bighorn sheep populations will be done in areas where conflicts with other uses and resources do not occur, or where conflicts can be resolved. (WL-24)
- Final decisions on re-establishment and augmentation proposals will be considered on a case-by-case basis within the appropriate level of National Environmental Policy Act documentation that addresses conflicts and meets the requirement for public participation. (WL-25)

### **2.7.5.2. Action Alternatives for Priority Wildlife Species & Habitat Management (PS)**

#### **Program Goals**

The following goals have been developed to manage habitat for all wildlife with an emphasis on priority wildlife species habitats. These goals are intended to provide diverse and healthy habitat for the continued and future occupancy of species that are or were native to the area. Adapted management, best management practices and mitigation will be instituted where applicable. The associated objectives may be found in the management decisions section. The goals cover both Decision Areas unless otherwise indicated.

- **Goal 1:** Ensure habitat availability and diversity for priority wildliferesources within WHAs where priority species would receive primary focus when analyzing activities and projects.
- **Goal 2:** Maintain, protect, and make accessible roosts and contiguous foraging habitat for lesser long-nosed bats.
- **Goal 3:** Protect Sonoran pronghorn habitat and ensure that suitable habitat is available for future occupancy.
- **Goal 4:** Ensure the southwest willow flycatcher and yellow-billed cuckoo habitats are maintained and/or restored.
- **Goal 5:** Ensure that Yuma clapper rail habitats are maintained and/or improved.
- **Goal 6:** Ensure that the natural abundance and diversity of bat habitats are maintained and/or restored.
- **Goal 7:** Maintain or restore habitats to support cactus ferruginous pygmy owls foraging and nesting needs.
- **Goal 8:** Ensure that tortoise habitat provides sufficient forage and shelter for viable populations.
- **Goal 9:** Ensure that migratory bird habitats are maintained and/or restored.
- **Goal 10:** Ensure that raptor habitats are maintained and/or restored.
- **Goal 11:** Ensure that bighorn sheep, mule deer and other game species habitats are maintained and/or restored.
- **Goal 12:** Ensure wildlife movement corridors contain ample habitat to assist wildlife in moving from one area to another in a relatively safe manner.
- **Goal 13:** Ensure that priority wildlife habitats are maintained and/or restored.
- **Goal 14:** Ensure wildlife is provided safe, usable, year-round access to water.
- **Goal 15:** Ensure that undesirable non-native animal species do not occur in the Decision Areas or that their presence does not adversely affect ecological processes.

## **Land Use Allocations Summary**

The wildlife habitat areas (WHAs) proposed for designation are presented in Table 2.5, “Wildlife Habitat Areas by Alternative” (p. 70) below.

**Table 2.5. Wildlife Habitat Areas by Alternative**

WHA	Alternative (BLM Acres)				
	A	B	C	D	E
<b>Lower Sonoran</b>					
Batamote Mountains		0	62,900		0
Cuerda de Lena		0	58,500		0
Gila Bend Mountains		0	255,700	255,700	255,700
Saddle Mountain		0	48,800		0

SDNM	
Wildlife Habitat Areas	0

## Management Actions and Allowable Uses

<b>Goal 1 (Wildlife Habitat Area Management): Ensure habitat availability and diversity for priority wildlife resources is maintained and/or improving within WHAs, where priority species would receive primary focus when analyzing activities and projects.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 1.1: Designate WHAs to maintain and improve the continuity and productivity of habitats for priority wildlife species to support AGFD and USFWS wildlife population objectives. Manage suitable and occupied habitat for desert tortoise, mule deer, bighorn sheep, Sonoran pronghorn antelope, lesser-long-nosed bat, and cactus ferruginous pygmy-owl consistent with recovery plan and species' objectives.</b>						
<b>Common to all WHAs for Alternatives C through E</b>						
Note: Only the Gila Bend Mountains WHA is proposed in Alternatives D and E; Refer to Section 2.9.1, "Areas of Critical Environmental Concern (ACEC)" (p. 194) for actions affecting the other WHAs in D and E						
LS			C	D	E	<b>PS-1.1.1:</b> WHAs would be designated as described by alternative as presented in Table 2.5, "Wildlife Habitat Areas by Alternative" (p. 70).
LS			C	D	E	<b>PS-1.1.2:</b> All public lands would be retained, and available state trust lands and private parcels would be acquired to maintain habitat connectivity as funding or other opportunities permit.
LS			C	D	E	<b>PS-1.1.3:</b> Maintenance of utility corridors, including vegetation clearing, would be restricted to the existing authorized LUA corridor only.
LS			C	D	E	<b>PS-1.1.4:</b> Motorized vehicle use would be prohibited in washes that occupy, or are found to be occupied, cactus ferruginous pygmy-owls habitat from February 1 to September 15 to protect pygmy-owls during the breeding, nesting, and dispersal season. All other areas would be limited to existing or designated routes.
LS			C	D	E	<b>PS-1.1.5:</b> Routes that conflict with resource protection and management could be closed, limited by seasonal restrictions, or mitigated to prevent habitat degradation and fragmentation.
LS			C	D	E	<b>PS-1.1.6:</b> Through the route-designation process, route densities would be reduced and the designation of upland routes would be emphasized. Necessary use of access routes in washes would be allowed; however, these access routes may contain seasonal closures.
LS			C	D	E	<b>PS-1.1.7:</b> All new roads or highways crossing public land would be designed to facilitate movement of wildlife and would be mitigated to minimize disturbance.
LS			C	D	E	<b>PS-1.1.8:</b> Priority habitat areas would be maintained during road improvements (e.g., altering, upgrading, paving, and widening) and improvements must meet desert tortoise-protection standards. Mitigation may include at-grade wildlife crossings, wildlife under- or over passes, wildlife-appropriate fencing, speed limits, and other appropriate actions.
LS			C		E	<b>PS-1.1.9:</b> WHAs would be avoidance areas for utility-scale renewable energy development. Uses would be concentrated in less sensitive resource areas or in areas already disturbed. If no other options exist, activities must be mitigated and managed to ensure consistency with management objectives, with an emphasis to maintain wildlife habitat and movement connectivity within WHAs.

<b>Goal 1 (Wildlife Habitat Area Management): Ensure habitat availability and diversity for priority wildlife resources is maintained and/or improving within WHAs, where priority species would receive primary focus when analyzing activities and projects.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 1.1: Designate WHAs to maintain and improve the continuity and productivity of habitats for priority wildlife species to support AGFD and USFWS wildlife population objectives. Manage suitable and occupied habitat for desert tortoise, mule deer, bighorn sheep, Sonoran pronghorn antelope, lesser-long-nosed bat, and cactus ferruginous pygmy-owl consistent with recovery plan and species' objectives.</b>						
LS			C		E	<b>PS-1.1.10:</b> WHAs would be open for locatables, leasables and mineral materials actions. Activities must be mitigated and managed to ensure consistency with management objectives, with an emphasis to maintain wildlife habitat and movement connectivity within WHAs. Valid existing rights would be respected. Existing mineral material free use permits used as community pits would be allowed to continue and be reissued upon expiration.
LS			C			<b>PS-1.1.11:</b> The construction of routes would be allowed if consistent with natural resource objectives (habitat quality and quantity based on ecological site descriptions) and do not conflict with wildlife management objectives. Closed roads could be converted for use as non motorized trails if consistent with natural resource objectives.
<b>Specific to Cuerda de Lena WHA</b>						
Note: In Alternatives D and E, the area would be managed under the proposed Cuerda de Lena ACEC. Also see Section 2.7.5, "Priority Wildlife Species & Habitat (PS)" (p. 63) for actions related to Sonoran pronghorn.						
LS			C			<b>PS-1.1.12:</b> The WHA would be closed to the public for general recreational use during pronghorn fawning between March 15 and July 15 or as determined annually by the Sonoran pronghorn antelope recovery team. Minor non-linear LUAs would also be prohibited unless deemed necessary by the authorized officer. Federal, State and local government employees and BLM permit holders operating within the scope of their authorizations would be exempt from the closure.
LS			C			<b>PS-1.1.13:</b> Mineral material disposals would be prohibited in washes that are known, or found to contain, cactus ferruginous pygmy-owl habitat.
<b>Specific to Gila Bend Mountains WHA</b>						
LS					D	<b>PS-1.1.14:</b> The WHA would be an exclusion area for utility-scale renewable energy development and exploration.
LS					D	<b>PS-1.1.15:</b> The WHA would be closed to all locatable and leasable minerals exploration and development (including geothermal and sodium), and mineral material disposals. Public lands in the WHA would be recommended for withdrawal to all forms of mineral entry.
<b>Specific to Saddle Mountain WHA</b>						
Note: In Alternatives D and E, the area is managed under the proposed Saddle Mountain ACEC.						
LS			C			<b>PS-1.1.16:</b> Facilities, including those for recreational purposes, and construction of new roads, would be prohibited within ½ mile of known bat roosts and cliffs or other unique habitat features used by nesting raptors.

<b>Goal 2 (Lesser Long Nosed Bat): <i>Maintain, protect, and make accessible roosts and contiguous foraging habitat for lesser long-nosed bats.</i></b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 2.1: Protect known roosting habitat for lesser long-nosed bat on public land and maintain contiguous foraging habitat at its current range and distribution.</b>						
LS	SDNM	B	C	D	E	PS-2.1.1: Mitigation could occur for facility development, including those for recreation purposes, within 4 miles of known lesser long-nosed bat roosts as long as the action does not impact roost sites. In the event that mitigation is not sufficient, the development would be relocated at least 4 miles from roost sites.
LS	SDNM	B	B	D	E	PS-2.1.2: Activities with the potential to impact lesser long-nosed bats or their habitats would be evaluated on a case-by-case basis and impacts would be mitigated or avoided.
LS	SDNM	B	B	D	E	PS-2.1.3: Medium to high density columnar cactus habitat ( $\geq 30$ saguaro/acre) within 40 miles of known roost sites would be maintained and/or restored.
LS	SDNM	B	B	D	E	PS-2.1.4: Protect long-nosed bat forage plants-saguars and high concentrations of agaves-from modification by treatment activities (prescribed fire, vegetation treatments), to the greatest extent possible. Saguars and high concentrations of agaves would be excluded from treatments. Agave concentrations are contiguous stands or concentrations of more than 20 plants per acre.

<b>Goal 3 (Sonoran Pronghorn): <i>Protect and enhance Sonoran pronghorn habitat and ensure that suitable habitat is available for future occupancy based on recovery goals.</i></b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 3.1: Manage for no net loss of Sonoran pronghorn habitat. Protect the creosote-bursage, desert washes (xero-riparian), and palo verde mixed cacti communities which provide nutritious forage species that encourages fawn recruitment, provides thermal cover, enables predator avoidance, and provides for growth and survival. Protect areas that provide for chain-fruit cholla production.</b>						
LS		B	C	D	E	PS-3.1.1: Conservation measures as applied to the Sonoran pronghorn habitat recovery area would be adopted as identified in Appendix K, <i>Conservation Measures from Fish and Wildlife Service Biological Opinions</i> (p. 1239).
LS		B	C	D	E	PS-3.1.2: The pronghorn habitat area south of Ajo (see Maps 2-2a, 2-2b, 2-2c, 2-2d, and 2-2e) would be closed to the public for general recreational use during pronghorn fawning between March 15 and July 15 or as determined annually by the Sonoran pronghorn antelope recovery team. Minor non-linear LUAs would also be prohibited unless deemed necessary by the authorized officer. Federal, State and local government employees and BLM permit holders operating within the scope of their authorizations would be exempt from the closure.
LS		B	C	D	E	PS-3.1.3: Portions of both Decision Areas would be identified as potential reintroduction sites for an experimental/nonessential population of Sonoran pronghorn. (See Map 3-4).
LS		B	C	D	E	PS-3.1.4: Sonoran pronghorn experimental/nonessential populations would be managed to achieve recovery goals. Mitigation could be required for activities that may impede movements or otherwise disturb the species or habitat.

<b>Goal 3 (Sonoran Pronghorn): <i>Protect and enhance Sonoran pronghorn habitat and ensure that suitable habitat is available for future occupancy based on recovery goals.</i></b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 3.1:</b> Manage for no net loss of Sonoran pronghorn habitat. Protect the creosote-bursage, desert washes (xero-riparian), and palo verde mixed cacti communities which provide nutritious forage species that encourages fawn recruitment, provides thermal cover, enables predator avoidance, and provides for growth and survival. Protect areas that provide for chain-fruit cholla production.						
<b>Objective 3.2:</b> Manage habitat for future populations of experimental/nonessential Sonoran pronghorn within the SDNM.						
	SDNM	B	C	D	E	<b>PS-3.2.1:</b> Sonoran pronghorn observed within the SDNM area designated experimental/nonessential would be managed to achieve recovery goals. Mitigation would be required for activities that could impede movements or otherwise disturb the species or habitat.

<b>Goal 4 (Southwestern Willow Flycatcher and Yellow-billed Cuckoo): <i>Ensure that Southwestern willow flycatcher and yellow-billed cuckoo habitats are maintained and /or improving.</i></b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 4.1:</b> Protect, maintain, and restore southwestern willow flycatcher and yellow-billed cuckoo habitats and prevent actions that could harm individuals of the two listed species.						
LS		B	C	D	E	<b>PS-4.1.1:</b> Southwestern willow flycatcher and yellow-billed cuckoo habitats in the Fred J. Weiler Green Belt would be maintained and/or restored in coordination with USFWS and AGFD.
LS		B	C	D	E	<b>PS-4.1.2:</b> Recreation activities will only be allowed outside of ½ mile of occupied or found to be occupied habitat when birds may be present (breeding season of April 1 – September 30).
LS		B	C	D	E	<b>PS-4.1.3:</b> Vegetation treatment projects adjacent to occupied or found to be occupied habitat will only be conducted when willow flycatchers are not present (October 1 – March 31).
LS		B	C	D	E	<b>PS-4.1.4:</b> Avoid surface disturbing activities that would result in fragmentation or a reduction in habitat quality for both species.

<b>Goal 5 (Yuma Clapper Rail): <i>Ensure that Yuma clapper rail habitats are maintained and/or improving.</i></b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 5.1:</b> Maintain and protect riparian and wetland areas with potential or occupied habitats.						
LS		B	C	D	E	<b>PS-5.1.1:</b> Yuma clapper rail habitat would be maintained and/or restored by developing or engineering projects that would encourage native emergent vegetation.
LS		B	C	D	E	<b>PS-5.1.2:</b> Vegetation treatment projects in occupied, or found to be occupied, marsh habitat would only occur between September 1 and March 15 to avoid the Yuma clapper rail breeding and molting seasons.
LS		B	C	D	E	<b>PS-5.1.3:</b> Mechanical removal of overstory habitat ( <i>Tamarisk</i> ) would only occur September 1 to March 15, to avoid the Yuma clapper rail breeding and molting seasons.

<b>Goal 6 (Sonoran Desert Tortoise): <i>Ensure that tortoise habitat provides sufficient forage and shelter for a viable population.</i></b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<p><b>Objective 6.1:</b> Achieve the following objectives in desert tortoise habitat, as identified by habitat category:</p> <ul style="list-style-type: none"> <li>• Category I - Maintain stable, viable populations and protect existing tortoise habitat values and increase populations where possible.</li> <li>• Category II - Maintain stable, viable populations and halt further declines in tortoise habitat values.</li> <li>• Category III - Limit tortoise habitat and population declines to the extent possible through mitigation.</li> <li>• Retain natural shelter sites (boulders or caliche caves or similar features used by tortoises for sheltering) in Category I and II desert tortoise habitats, and</li> <li>• Maintain or restore a diverse mixture of forage species and adequate cover of vegetation for desert tortoise habitat as recommended by the 1988 Rangewide Plan (BLM 1988b).</li> </ul>						
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>PS-6.1.1:</b> Public lands currently allocated for management as Category I, II, and III Sonoran Desert tortoise habitat, as described in , would be managed according to the objectives listed above.</p> <p><b>Sonoran Desert Tortoise Habitat by Category</b></p> <ul style="list-style-type: none"> <li>• Category I: 24,800 (LSFO); 166,00 (SDNM)</li> <li>• Category II: 355,700 (LSFO); 124,700 (SDNM)</li> <li>• Category III: 65,300 (LSFO); 3,500 (SDNM)</li> </ul>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>PS-6.1.2:</b> Habitat-management categories and boundaries may be revised as new population information becomes available. The criteria that would be used in revising categories and boundaries are those in the 1988 Rangewide Plan (BLM 1988b).</p> <p>The criteria for Category I tortoise habitat areas are as follows:</p> <ul style="list-style-type: none"> <li>• Habitat areas are essential to the maintenance of large, viable populations;</li> <li>• Conflicts are resolvable;</li> <li>• Populations are medium- to high-density or low-density contiguous with medium- or high-density;</li> <li>• Populations are increasing, stable, or decreasing.</li> </ul> <p>The criteria for Category II tortoise habitat areas are as follows:</p> <ul style="list-style-type: none"> <li>• Habitat areas may be essential to maintenance of viable populations;</li> <li>• Most conflicts are resolvable;</li> <li>• Populations are medium- to high-density or low-density contiguous with medium- or high-density;</li> <li>• Populations are stable or decreasing.</li> </ul> <p>The criteria for Category III tortoise habitat areas are as follows:</p>

<b>Goal 6 (Sonoran Desert Tortoise): <i>Ensure that tortoise habitat provides sufficient forage and shelter for a viable population.</i></b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
						<ul style="list-style-type: none"> <li>• Habitat areas are not essential to maintenance of viable populations;</li> <li>• Most conflicts are not resolvable;</li> <li>• Populations are low- to medium-density and not contiguous with medium- or high-density;</li> <li>• Populations are stable or decreasing.</li> </ul>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>PS-6.1.3:</b> No net loss would occur in the quality or quantity of Category I and II desert tortoise habitat. Mitigation for adverse impacts would be permissible to achieve no net loss in quantity or quality of desert tortoise habitat in accordance with the Desert Tortoise Rangewide Plan and other applicable policy guidance.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>PS-6.1.4:</b> In Category I and II tortoise habitats, all motorized competitive speed races would be prohibited from March 31 through October 15. All other use requests during this time would be reviewed on a case-by-case basis and could be denied or adjusted to avoid conflict with tortoise activity and habitat. Mitigation for conflicts would be permissible to achieve no net loss in quantity or quality of desert tortoise habitat. Specific onsite inspections for tortoise habitat would occur at the time a notice or plan is processed. Development and uses must be compatible with wildlife objectives.
<b>LS</b>		<b>B</b>				<b>PS-6.1.5:</b> Category I, II and III tortoise habitat would be open to all uses and activities but actions would be mitigated in accordance with applicable policies and guidance, and managed to ensure consistency with management objectives with an emphasis to maintain habitat.
<b>LS</b>			<b>C</b>		<b>E</b>	<b>PS-6.1.6:</b> Surface disturbing activities, including utility-scale renewable energy development and exploration, would be avoided in Category I and II habitat to the extent practicable. Category III habitat would be available on a case by case basis. Uses would be concentrated in less sensitive resource areas or in areas already disturbed. If no other options exist, activities must be mitigated in accordance with the Desert Tortoise Rangewide Plan and other applicable policy guidance.
<b>LS</b>			<b>C</b>			<b>PS-6.1.7:</b> Category I and II tortoise habitat would be open to mineral material disposals on a case by case basis. Uses must be mitigated in accordance with applicable policies and guidance, and managed to ensure consistency with management objectives with an emphasis to maintain habitat. Uses would be concentrated in less sensitive resource areas or in areas already developed or disturbed. Specific onsite inspections for tortoise habitat would occur at the time a notice or plan is processed.
<b>LS</b>			<b>C</b>			<b>PS-6.1.8:</b> Category III tortoise habitat would be open to all non-renewable leasable minerals actions, and mineral material disposals, on a case-by-case basis with mitigation. Specific onsite inspections for tortoise habitat would occur at the time a notice or plan is processed. Stipulations would be applied to prevent habitat fragmentation, to the extent practicable, between Category I and II habitat.
<b>LS</b>				<b>D</b>		<b>PS-6.1.9:</b> Surface disturbing activities would be excluded in Category I, II and III tortoise habitat, including utility-scale renewable energy development and exploration. Uses would be concentrated in less sensitive resource areas or in areas already disturbed.

<b>Goal 6 (Sonoran Desert Tortoise): <i>Ensure that tortoise habitat provides sufficient forage and shelter for a viable population.</i></b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>			<b>Management Actions and Allowable Uses</b>	
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>		
LS				D		<b>PS-6.1.10:</b> Category I, II and III tortoise habitat would be closed to all locatable and non-renewable leasable minerals exploration and development (including geothermal and sodium), and mineral material disposals. Public lands in the habitats would be recommended for withdrawal to all forms of mineral entry.
LS					E	<b>PS-6.1.11:</b> Surface disturbing activities, including utility-scale renewable energy leasing and exploration would be avoided in Category I and II tortoise habitat. Uses would be concentrated in less sensitive resource areas or in areas already disturbed. If no other options exist, activities must be mitigated in accordance with the Desert Tortoise Rangewide Plan and other applicable policy guidance.
LS					E	<b>PS-6.1.12:</b> Surface disturbing activities within Category III tortoise habitat would be authorized on a case-by-case basis. Uses must be mitigated in accordance with applicable policies and guidance, and managed to ensure consistency with management objectives with an emphasis to maintain habitat. Uses would be concentrated in less sensitive resource areas or in areas already developed or disturbed. Specific onsite inspections for tortoise habitat would occur at the time a notice or plan is processed.
LS					E	<b>PS-6.1.13:</b> Category I and II tortoise habitat would be open to all non-renewable leasable minerals actions (including geothermal and sodium) on a case by case basis. Uses must be mitigated in accordance with applicable policies and guidance, and managed to ensure consistency with management objectives with an emphasis to maintain habitat.
LS					E	<b>PS-6.1.14:</b> Category I and II desert tortoise habitat would be open to mineral material disposals on a case by case basis in accordance with applicable policies and guidance, and if managed to ensure consistency with management objectives with an emphasis to maintain habitat.

<b>Goal 7 (Cactus Ferruginous Pygmy Owls): <i>Maintain or restore habitats to support cactus ferruginous pygmy owls.</i></b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>			<b>Management Actions and Allowable Uses</b>	
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>		
<b>Objective 7.1:</b> Protect cactus ferruginous pygmy-owls from disturbance during the breeding and nesting seasons. Maintain or improve a complex, multi-layered vegetative structure provided by perennial plants within the range of the cactus ferruginous pygmy-owl. Structure should consist of approximately 30 percent each of grasses and forbs, shrubs, and trees as dictated by site conditions. Maintain current or improve interconnected habitat patches of sufficient quality (diversity, density, and structure) and quantity (≥ 3 acres) to support cactus ferruginous pygmy-owls. Maintain sufficient vegetation between patches to allow for dispersal.						
LS	SDNM	B	C	D	E	<b>PS-7.1.1:</b> Activities would be managed to protect, maintain, or improve occupied, or found to be occupied, cactus ferruginous pygmy-owl habitat.
LS	SDNM	B	C		E	<b>PS-7.1.2:</b> Surface disturbing activities would be avoided within ½ mile of a known active cactus ferruginous pygmy-owl nest site from February 1 through July 31. All actions would be mitigated and managed to ensure consistency with management objectives, with an emphasis to maintain available habitat. Development planned to occur within 330 feet of any known or found to be occupied CFPO nest site would be evaluated on a site-specific basis, but significant modification of habitat within these areas should be avoided year round. Uses would be concentrated in less sensitive resource areas or in areas already disturbed.

<b>Goal 7 (Cactus Ferruginous Pygmy Owls): <i>Maintain or restore habitats to support cactus ferruginous pygmy owls.</i></b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
LS	SDNM		C		E	<b>PS-7.1.3:</b> Motorized use within washes that are known to be occupied, or found to be occupied cactus ferruginous pygmy-owl habitat would be prohibited from February 1 to July 31 to protect pygmy-owls during their breeding, nesting, and dispersal season. Exceptions to the prohibitions would be authorized only for personnel engaged in constructing, maintaining, or repairing facilities; conducting research or surveys; or for authorized law-enforcement or fire-suppression emergencies.
LS	SDNM			D		<b>PS-7.1.4:</b> Surface disturbing activities would be excluded within ½ mile of known active cactus ferruginous pygmy-owl nest site from February 1 through July 31.
LS	SDNM			D		<b>PS-7.1.5:</b> Motorized use within known to be occupied, or found to be occupied, cactus ferruginous pygmy-owl habitat would be prohibited from February 1 to July 31 to protect pygmy-owls during their breeding, nesting, and dispersal season. Exceptions to the prohibitions would be authorized only for personnel engaged in constructing, maintaining, or repairing facilities; conducting research or surveys; or for authorized law-enforcement or fire-suppression emergencies.

<b>Goal 8 (General Bats): <i>Ensure that the natural abundance and diversity of bat habitats are stable or increasing.</i></b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 8.1: Protect bat roosts associated with natural caves and abandoned mine features that are necessary to provide roosting locations for existing bat populations and opportunities for expansion.</b>						
LS	SDNM	B	C	D	E	<b>PS-8.1.1:</b> In cooperation with AGFD, the protection of important bat roosts would be ensured and mitigation measures would be used to resolve potential resource conflicts.
LS	SDNM	B	C	D	E	<b>PS-8.1.2:</b> New water developments would be configured to allow for safe use by bats.
LS	SDNM	B	C	D	E	<b>PS-8.1.3:</b> Hazardous mine features occupied by bats would be remediated by installing bat gates or, if other roosts are readily available, by backfilling.

<b>Goal 9 (Migratory Birds): <i>Ensure that migratory bird habitats are maintained and/or improving to meet the needs of migratory birds in general.</i></b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 9.1: Avoid take of migratory birds (adults, nests, eggs, and chicks) to comply with the Migratory Bird Treaty Act and Executive Order 13186.</b>						
LS	SDNM	B	C	D	E	<b>PS-9.1.1:</b> Applications for activities on public lands would evaluate the effects of the BLM's actions on migratory birds during the NEPA process, if any, and identify where take reasonably attributable to agency actions may have a measurable negative effect on migratory bird populations, focusing first on species of concern, priority habitats, and key risk factors. In such situations, the BLM will implement approaches lessening such take.
LS		B	C	D	E	<b>PS-9.1.2:</b> Burrowing owl artificial habitats would be developed to facilitate introduction/transplant of owls in suitable locations.

<b>Goal 10 (Raptor Habitats): <i>Ensure that raptor habitats are maintained and/or improving to meet the needs of raptors in general.</i></b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	

<b>Objective 10.1:</b> Manage activities that could reduce raptor nest production.						
LS	SDNM	B	C	D	E	<b>PS-10.1.1:</b> Authorized developments, uses, and activities within ¼ mile of known occupied raptor nests would be avoided, relocated, or seasonally limited.
LS	SDNM	B	C	D	E	<b>PS-10.1.2:</b> Authorized developments, uses, and activities <b>within</b> ½ mile of communal raptor nesting areas would be avoided.
LS		B	C	D	E	<b>PS-10.1.3:</b> Surface disturbing activities would be evaluated on a case-by-case basis within active eagle nest territories to comply with BGEPA of 1940.

**Goal 11 (Bighorn Sheep/Big Game):** *Ensure that bighorn sheep, and other big game, habitats are maintained and/or improving.*

Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 11.1:</b> Provide water for bighorn sheep and protect them from communicable diseases.						
LS	SDNM	B	C	D	E	<b>PS-11.1.1:</b> Additional waters may be installed in high elevations of bighorn sheep habitat to improve habitat suitability.
LS		B	C	D	E	<b>PS-11.1.2:</b> Domestic sheep use would be prohibited on all allotments within 9 miles of bighorn sheep habitat.
	SDNM	B				<b>PS-11.1.3:</b> Domestic goats or sheep would not be permitted within nine miles of suitable bighorn sheep habitat or within allotments that contain suitable bighorn sheep habitat.
	SDNM		C	D	E	<b>PS-11.1.4:</b> Domestic sheep grazing would be prohibited within the Monument.

**Goal 12 (Wildlife Movement Corridors):** *Ensure wildlife movement corridors contain ample habitat to assist wildlife in moving from one area to another in a relatively safe manner.*

Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 12.1:</b> Manage wildlife movement corridors in a manner that would assist wildlife in safe passage from one area to another.						
<b>Specific to Wildlife Movement Corridors (WMCs)</b>						
LS	SDNM	B	C	D	E	<b>PS-12.1.1:</b> All new roads where average speeds may be greater than 45 miles per hour, or highways crossing public land, would be designed to facilitate movement of wildlife to reduce mortality of wildlife from vehicle collisions.
LS	SDNM	B	C	D	E	<b>PS-12.1.2:</b> Maintenance or expansion of existing roads would incorporate measures to maintain or restore wildlife habitat connectivity and would incorporate, where appropriate, wildlife underpasses or overpasses.
LS	SDNM	B	C	D	E	<b>PS-12.1.3:</b> Routes would be subject to seasonal closures if conflicts with wildlife cannot be mitigated.
LS	SDNM	B	C	D	E	<b>PS-12.1.4:</b> New surface disturbance within 100 meters of the edge of large washes located in the desert washes vegetative community (those depicted on USGS 1:24,000 maps) would be mitigated as needed to protect the integrity of washes as corridors.
LS	SDNM	B	C	D	E	<b>PS-12.1.5:</b> Road density would be limited to 3 miles of road per section or less within the wildlife movement corridors in accordance with the Habitat Guidelines for Mule Deer (Mule Deer Working Group 2006).
LS	SDNM	B	C	D	E	<b>PS-12.1.6:</b> Treatments of invasive plant species would be allowed.
LS		B	C			<b>PS-12.1.7:</b> WMCs would be open to all locatable and leasable minerals exploration and development (including geothermal and sodium) and mineral material disposals with the exception of seasonal restrictions in Sonoran pronghorn habitat for leasables and mineral material disposals (See 1.1.13). All activities would be managed through existing regulations. Mitigation, terms and conditions would be applied as necessary to retain or improve habitat.

<b>Goal 12 (Wildlife Movement Corridors): Ensure wildlife movement corridors contain ample habitat to assist wildlife in moving from one area to another in a relatively safe manner.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 12.1: Manage wildlife movement corridors in a manner that would assist wildlife in safe passage from one area to another.</b>						
LS			C		E	<b>PS-12.1.8:</b> Surface-disturbing activities would be evaluated on a case-by-case basis, including large scale renewable energy developments. Uses would be concentrated in less sensitive resource areas or in areas already disturbed. If no other options are available, actions must be mitigated and managed to ensure consistency with management objectives, with an emphasis to maintain wildlife habitat continuity and movement connectivity. If impacts to wildlife cannot be mitigated, the action would be denied.
LS				D		<b>PS-12.1.9:</b> WMCs would be exclusion areas for utility-scale renewable energy development and exploration.
LS				D		<b>PS-12.1.10:</b> WMCs would be closed to all locatable and leasable minerals exploration and development (including geothermal and sodium), and mineral material disposals. Public lands located within the corridors would be recommended for withdrawal.
LS					E	<b>PS-12.1.11:</b> WMCs would be open to all locatable minerals. Exploration and development would be managed through existing regulations. Mitigation, terms and conditions would be applied as necessary to retain or improve habitat.
LS					E	<b>PS-12.1.12:</b> WMCs would be open to all non-renewable leasable minerals actions, including geothermal and sodium, but would be mitigated to allow available habitat no less than 200 meters wide as a corridor to facilitate wildlife movement.
LS					E	<b>PS-12.1.13:</b> WMCs would be open to mineral material sales on a case-by-case basis. Preference would be to place the surface disturbance outside of the WMC but if an area within the WMC is unavoidable, mitigation to improve or enhance the habitat would occur. Development and uses must be compatible with wildlife objectives and not detrimental to wildlife or its habitat. If impacts cannot be mitigated, the action would be denied.

<b>Goal 13 (Priority Species Management Guidance): Ensure that priority wildlife habitats are maintained and/or improved.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 13.1: Ensure that habitats for priority species are maintained and/or improving to meet the needs of wildlife in general.</b>						
LS	SDNM	B	C	D	E	<b>PS-13.1.1:</b> Reintroductions, transplants, and supplemental stockings of native priority wildlife populations (as defined in BLM Manual 1745 or subsequent guidance) could occur in their current or historic range with collaboration between the AGFD and USFWS.
LS	SDNM	B	C	D	E	<b>PS-13.1.2:</b> The release of rehabilitated or displaced wildlife on public lands would be allowed, which could involve constructing artificial habitats where appropriate, for species that are compatible with other resource-management and use objectives.

<b>Goal 13 (Priority Species Management Guidance): <i>Ensure that priority wildlife habitats are maintained and/or improved.</i></b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>PS-13.1.3:</b> Acquisitions of non-Federal lands and disposals of Federal land that have, or potentially have, priority species or habitats would include the potential to:</p> <ul style="list-style-type: none"> <li>• Enhance the conservation and management of threatened, endangered or special status species habitat, riparian habitat, desert tortoise habitat, key big game habitat;</li> <li>• Improve the overall manageability of wildlife habitat;</li> <li>• Improve habitat connectivity in and around the WHA and wildlife movement corridors.</li> </ul> <p>The BLM would not transfer (dispose of) from Federal ownership the following:</p> <ul style="list-style-type: none"> <li>• Designated or proposed critical habitat for a listed or proposed threatened, endangered or special status species;</li> <li>• Lands supporting listed or proposed threatened or endangered species if such transfer would be inconsistent with recovery needs and objectives or conservation measures or would likely affect the recovery of the listed or proposed species, and lands supporting Federal candidate species if such action would contribute to the need to list the species as threatened or endangered.</li> </ul> <p>Retain Category I and II tortoise habitat unless it is in the general public interest to dispose of them, and losses in habitat quality and quantity can be mitigated.</p> <p>Exceptions to the above could occur if:</p> <ul style="list-style-type: none"> <li>• The recipient of the lands agrees to protect the species or critical habitat under the ESA, such as disposal to a non-Federal governmental agency or private organization;</li> <li>• If conservation of the habitat would still be achieved and ensured; or</li> <li>• In a land exchange if a net gain in the value of species habitat or protection is achieved.</li> </ul>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>PS-13.1.4:</b> Treatments of invasive species would be allowed to benefit visual resources or wildlife habitat unless otherwise restricted.</p>

<b>Goal 14 (Wildlife Waters): <i>Provide wildlife with safe, usable, year-round access to water.</i></b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<p><b>Objective 14.1:</b> Increase, improve or maintain the density and distribution of wildlife waters on public lands throughout the Planning Area to sustain and enhance wildlife populations across their range.</p>						

LS	SDNM	B	C	D	E	PS-14.1.1: Maintain and re-develop existing and develop additional wildlife waters in cooperation with AGFD. Increase the density and/or restore the distribution of wildlife waters throughout the Planning Area to sustain and enhance native wildlife populations across their range. All existing wildlife waters would be maintained or improved as needed to maintain the presence of perennial water for native wildlife. New wildlife waters would be built when needed to maintain, restore, or enhance native wildlife population numbers or distributions.
LS	SDNM	B	C	D	E	PS-14.1.2: In the event that range water developments are no longer needed for livestock use, the BLM would take over maintenance of such water sources. If the BLM deems some water developments are not viable for wildlife distribution some water sources would be removed in cooperation with the AGFD.

<b>Goal 15 (Non-Native Invasive Animal Species Guidance):</b> <i>Ensure that undesirable non-native animal species do not occur in the Decision Areas or that their presence does not adversely affect ecological processes.</i>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>			<b>Management Actions and Allowable Uses</b>	
LS	SDNM	B	C	D		
<b>Objective 15.1:</b> Limit the distribution and abundance of invasive animal species to current levels. Reduce the impact of invasive species on native ecosystems from current levels.						
LS	SDNM	B	C	D	E	PS-15.1.1: Non-native, invasive animal species would not be allowed except for biological controls for which peer-reviewed scientific literature states that the introduced species would have no detrimental effects to any native wildlife or plant species in the Planning Area.

### Administrative Actions:

- Work in partnership with AGFD to manage wildlife and wildlife habitat to achieve AGFD's wildlife population goals. Cooperatively develop HMPs to meet Sikes Act requirements and address site-specific habitat management objectives consistent with other natural resource objectives. Wildlife management activities administered by AGFD include, but are not limited to surveys, telemetry, transplants, water management, vegetation restoration and enhancement, invasive species control, research, law enforcement activities, setting and administering hunting permits, and other wildlife or habitat management projects as identified in the Master Memorandum of Understanding (MOU) between the Arizona Game and Fish Commission and the BLM.
- Work in partnership with AGFD to manage wildlife and wildlife habitat to achieve AGFD's wildlife population goals and other activities as identified in the Master MOU between AGFD and the BLM.
- Work with other land owners within wildlife movement corridors to maintain or improve vegetative connectivity and prevent actions that would obstruct the movement of wildlife through the areas.
- Emphasize maintaining and restoring ecological connectivity through land acquisition, partnerships with local landowners, and vegetation resources. If opportunities for wildlife movement cannot be adequately maintained, then mitigation to maintain isolated wildlife populations will be adopted.
- Eliminate trespass grazing by cattle, sheep, goats, burros, and other non-native animals and construct wildlife-passable fences where trespass is a problem.

- Livestock waters will provide safe, usable water for wildlife, where possible. As funding and opportunities permit, existing facilities will be modified for safe wildlife use. The above ground height of livestock troughs and tanks will not exceed 20 inches. The BLM will install wildlife escape ladders in each facility and provide ramps for small bird and mammal access. Storage tanks will be configured to reduce evaporation and prevent wildlife from drowning.

### **Threatened and Endangered Species:**

- The BLM will initiate formal Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) on all actions that may affect Federal listed threatened and endangered species or critical habitat as required by the Endangered Species Act of 1973 as amended.
- The ESA of 1973, as amended, provides for the protection of T&E and proposed T&E species of plants and animals. Specifications of the ESA pertain to both the Lower Sonoran and SDNM Decision Areas. BLM Manual 6840 prescribes conservation measures (outlined in Appendix K, *Conservation Measures from Fish and Wildlife Service Biological Opinions* (p. 1239)) for T&E species, including conservation measures for fire management activities and species-specific conservation measures. To a large extent, these measures have been built in to the RMP alternatives evaluated in this DEIS.
- Monitor existing populations and inventory for additional populations of threatened and endangered species.

### **Priority Wildlife Species:**

- Maintain and develop a proactive public education program on the desert tortoise and its habitat requirements, including participation in public events with tortoise habitat information.
- Continue to work with and support other agencies and public entities in desert tortoise conservation.
- Coordinate invasive animal species control and education efforts with AGFD.
- Follow management prescriptions for livestock grazing allotments in the Woolsey Peak and Signal Mountain wilderness areas as provided in the wilderness management plans or, if different, as described in S&G evaluations.
- Design fences to reduce adverse impacts to wildlife movement. Specifications in BLM Manual 1741 and in local BLM directives will be used. The BLM will consult with AGFD on the design and location of new fences. Where existing fences in wildlife habitat do not meet BLM specifications, they will be modified according to BLM Manual 1741 when they are scheduled for replacement or major maintenance. Special consideration will be given to placement, type, and installation of fences in Category I and II desert tortoise habitat to facilitate desert tortoise movement, dispersal, and protection. Before installing facilities, the BLM will conduct a site evaluation for special status and state-protected animals and will develop mitigation to protect these species and their habitats. Such mitigation might include project relocation, redesign, and abandonment.
- Inventory for federally listed, proposed, and candidate species. Implement monitoring programs on known populations of listed, proposed, and candidate, species and other special status species (as defined in BLM Manual 6840) to document population levels and status.

Where monitoring finds threats to these populations, actions will be taken to protect the species and their habitats.

- Standardize desert tortoise management throughout its habitat. Management would be consistent with the following documents:
  - Desert Tortoise Habitat Management on Public Lands: A Range wide Plan (BLM 1988b).
  - Strategy for Desert Tortoise Habitat Management on Public Lands in Arizona, Instruction Memorandum No. AZ-91-16 (BLM 1990a)
  - Strategy for Desert Tortoise Habitat Management on Public Lands in Arizona: New Guidance on Compensation for the Desert Tortoise, Instruction Memorandum No. AZ-92-46 (BLM 1992)
  - Instructional Memorandum No. 94-018 Ephemeral Grazing Policy in Desert Tortoise Habitat Supplemental Guidance for Desert Tortoise Compensation, Instruction Memorandum No. AZ-99-008 (BLM 1999).
- Desert Tortoise Mitigation Policy, Instruction Memorandum No. AZ-2009-010 (BLM 2009)
- Establish additional desert tortoise study plot(s) or other monitoring methods, as necessary. Read plots at 5-year intervals, or as necessary, and as funding permits.

## **2.7.6. SOIL RESOURCES (SL)**

Soil resources are fundamental to all other resources and resource uses. Guidance for management of soil resources is published in BLM Manual 7100. Primary authority for management includes the Taylor Grazing Act, the Public Rangelands Improvement Act, and FLPMA, which address use of Federal rangelands, including assessment, conservation, and improvement of soil resources. The Clean Water Act indirectly affects soil management by controlling the release of nonpoint-source pollution such as sedimentation caused by erosion. The BLM's Phoenix District Office uses surveys developed by the U.S. Department of Agriculture's National Resources Conservation Service (NRCS), as well as on-site assessments, when possible, to determine soil types and characteristics when assessing management actions.

Soil conditions are monitored and assessed through land health assessments. Impacts to soils are analyzed during the development of EISs or EAs for projects and use authorizations. The soil program works to reduce impacts to soil and associated vegetation resources through allocation of uses such as transportation and grazing, and through mitigation of project impacts. The soil program also works with other programs to implement restoration projects.

### **2.7.6.1. Existing Management Decisions (Alternative A - No Action) Soil Resources**

The following decisions are extracted from the existing land use plans and amendments and are listed in chronological order. Because none of these current land use plans encompass the entire Planning Area, very few of these decisions are being carried forward as common to all alternatives and are restated as new action alternatives where applicable.

#### ***Lower Gila South Resource Management Plan (1989):***

- Install gully plugs, waterbars, and other erosion structures to prevent excessive erosion on existing roads in Vekol Valley ACEC (WS-18).
- During construction of all rangeland developments, surface disturbance will be minimized. After construction, disturbed surfaces will be restored to a natural condition to the extent practicable (WS-19).
- Repair and maintain the existing watershed dike system and associated watershed fence (WS-21).

#### ***Phoenix Resource Management Plan (1989)::***

- Maintain and improve soil cover and productivity through erosion-prevention measures and land treatments (WS-03).
- Salinity control measures will be incorporated into erosion-prevention strategies and rehabilitation treatments (WS-04).

#### ***Lower Gila South Resource Management Plan - Goldwater Amendment (1990): :***

[Applies to the three relinquished BGR parcels]

- Restrict the operation of motorized vehicles and heavy equipment to established roadways and previously impacted areas except when the use relates to a specific permitted project (WS-8).
- Assess, as part of site appraisals for the National Environmental Policy Act (NEPA), the vulnerability of soils to disruption and subsequent wind and water erosion (WS-9).
- Use the following techniques to minimize soil disturbance and conserve soil resources on previously unimpacted sites:
  - Gain access to the site, where possible, by using existing roads and trails.
  - Use equipment, where possible, that creates the least amount of soil disturbance.
  - Return disturbed areas to as close to pre-disturbed conditions as possible.
  - Minimize activities where it is known that soils are unstable and subject to wind erosion.

***Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (1997)::***

- Guideline 1-1: Management activities will maintain or promote ground cover that provides for infiltration, permeability, soil moisture storage, and soil stability appropriate for the ecological sites within management units. The ground cover should maintain soil organisms, 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.
- Guideline 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.

**2.7.6.2. Action Alternatives for Soil Resources (SL)**

**Program Goals**

- **Goal 1:** Ensure watersheds are functioning appropriately and are consistent with Land Health Standards. Characteristics of a properly functioning watershed include channels that are stable and in balance with the landscape; erosion and sediment deposition appropriate for the ecological site; infiltration of surface water in soils sufficient to support desired future conditions (DFCs) and minimize erosion from runoff; and flood frequencies, durations, and magnitudes appropriate for the landscape.
- **Goal 2:** Maintain or improve sensitive soils to avoid accelerated erosion rates.

**Management Actions and Allowable Uses**

<b>Goal 1 (Watershed):</b> <i>Ensure watersheds are functioning appropriately and are consistent with Land Health Standards. Characteristics of a properly functioning watershed include channels that are stable and in balance with the landscape; erosion and sediment deposition appropriate for the ecological site; infiltration of surface water in soils sufficient to support desired future conditions (DFC) and minimize erosion from runoff; and flood frequencies, durations, and magnitudes appropriate for the landscape.</i>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 1.1:</b> Maintain or restore upland, channel, and riparian components of watersheds that help stabilize or improve watershed conditions. Major indicators of watershed health include maintaining total cover (vegetation and litter) consistent with desired future conditions, riparian areas in proper function condition, and erosion and sedimentation rates appropriate to the ecological site.						
LS	SDNM	B	C	D	E	SL-1.1.1: Priorities for restoration would be established for disturbed areas. Priorities would be based the potential for soil erosion and loss, damage to cultural or ecologically sensitive sites, and effects on water quality and quantity.
LS	SDNM	B	C	D	E	SL-1.1.2: Degraded sites would be stabilized and restored to slow or stop accelerated soil erosion and sedimentation and limit erosion to the natural rate for the ecological site.
LS	SDNM	B	C	D	E	SL-1.1.3: Benefits and risks of retaining the Vekol Valley spreader dike system would be evaluated along with benefits and risks of retaining or implementing vehicle closures in areas with eroded or otherwise degraded roads and trails.
LS	SDNM	B	C	D	E	SL-1.1.4: Soil erosion at cultural and ecologically sensitive sites would be evaluated. Soil erosion or degradation at these sites would be mitigated.
	SDNM	B	C	D	E	SL-1.1.5: Any management-caused soil erosion or degradation of the protected objects of the SDNM would be mitigated and restored to the extent possible.
LS	SDNM	B	C	D	E	SL-1.1.6: New or redeveloped facilities not related to water management would be constructed: <ul style="list-style-type: none"> <li>• Outside riparian areas and the 100-year floodplain of washes or water ways,</li> <li>• In a manner that avoids changing natural water flow or watershed dynamics, and consistent with other resource and public-safety goals.</li> <li>• Existing facilities could be relocated or modified if they are significantly affecting watershed or floodplain function. Where water-management facilities are necessary, the BLM would pursue options that minimize changes to natural water flow and watershed dynamics. Any activities in the 100-year floodplain would be planned for compliance with any county or Federal floodplain regulations.</li> </ul>

<b>Goal 2 (Soils):</b> <i>Maintain or improve sensitive soils to avoid accelerated erosion rates.</i>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Actions
LS	SDNM	B	C	D	E	
<b>Objective 2.1:</b> Disturbance of sensitive soil surfaces, including those classified as highly susceptible to wind and water erosion and those with protective desert pavement or well-developed cryptogamic crust will be avoided. If disturbance occurs, damage will be mitigated.						
LS	SDNM	B	C	D	E	SL-2.1.1: Developments and ground disturbing activities would be located away from areas of significant desert pavement, cryptogamic crust, and other sensitive or fragile soils that are vulnerable to disruption or have high wind or water erosion potential unless project goals cannot be met in another location. Where facilities or projects cannot be relocated, mitigation measures would be taken, including application of ground cover, to minimize erosion.
LS		B	C	D	E	SL-2.1.2: The density of roads and trails would be reduced during route designation within areas known to have sensitive soils. Closed roads would be rehabilitated. Roads left open would be treated to mitigate wind and water erosion.

LS	SDNM	B	C	D	E	SL-2.1.3: Motorized vehicle use would be limited to designated roads, primitive roads and trails. Specific designations would occur within this plan for the SDNM. LSFO routes would be designated within 5 years of RMP completion. Vehicle travel in LSFO would be restricted to inventoried routes only for the interim.
LS		B	C	D	E	SL-2.1.4: Vehicle parking and camping would be limited to 100 feet from the road centerline or designated sites in areas determined to have sensitive soils. Designated sites in such locations would be inventoried, mapped and signed. If monitoring results show effects that exceed limits of acceptable change, motorized vehicles will not be allowed to pull off a designated route 100 feet either side of centerline.
	SDNM	B	C	D	E	SL-2.1.5: Vehicle parking and camping would be limited to 25 feet from the road centerline or designated sites in areas determined to have sensitive soils. Designated sites in such locations would be inventoried, mapped and signed. If monitoring results show effects that exceed limits of acceptable change, motorized vehicles will not be allowed to pull off a designated route 25 feet either side of centerline.
	SDNM	B	C	D	E	SL-2.1.6: Surface-disturbing activities – including vehicle camping, parking and recreation-facilities – would be prohibited on undisturbed desert pavement or well developed cryptogamic crusts.

### Administrative Actions

- Update existing soils database on public lands that were formerly part of the BGR.
- Implement watershed improvement projects to increase ground cover to reduce erosion, sediment yield, and salinity contributions.

## **2.7.7. VEGETATION RESOURCES**

Management of vegetation resources (VM) on public lands requires the management of a variety of resources, including watersheds, vegetative communities, wildlife habitat, livestock forage, priority plant species, and noxious weeds. The BLM Land Use Planning Handbook (H-1601-1) requires that land-use plans identify desired future conditions (DFCs) for vegetative resources, provide provisions for wildlife habitats and livestock forage, identify areas of ecological importance, and protect priority plant species and habitats. The list of priority plant species may be found at the end of Appendix J, *Wildlife & Plant Priority Species* (p. 1235).

The basis for managing vegetative communities and invasive or noxious weeds on public lands can be found in the following Federal and State laws, regulations, and policy guidance:

- The Federal Land Policy and Management Act of 1976
- Arizona Native Plant Law of 1993
- Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (S&Gs) (BLM 1997)
- Clean Water Act of 1977
- EO 11990 Protection of Wetlands
- EO 11988 Floodplain Management
- Title 43 Code of Federal Regulations Part 4100
- The Sikes Act of 1974, as amended (16 U.S.C. 670 et seq.)
- BLM Manual 6500 – Wildlife, Fish and Plant Resources
- BLM Manual 6840 – Special Status Species
- BLM MS 1740 Renewable Resource Improvements and Treatments
- BLM Manual 9011 Chemical Pest Control
- BLM Manual 4180- Rangeland Health Standards EO 13112 Invasive Species Control
- Federal Noxious Weed Act of 1974
- Federal Advisory Committee Act, (5 U.S.C. App. 1)
- Public Rangelands Improvement Act of 1978
- Taylor Grazing Act of 1934 Vegetation Treatments using Herbicides on BLM Lands in Seventeen Western States Final EIS (September 2007)

### **2.7.7.1. Existing Management Decisions, Alternative A (No Action)**

The following decisions are extracted from the existing land use plans and amendments and are listed in chronological order. Because none of these current land use plans encompass the

entire Planning Area, very few of these decisions are being carried forward as common to all alternatives and are restated as new action alternatives where applicable.

***Lower Gila South Resource Management Plan (1989):***

- Continue to issue woodcutting permits for the Lower Gila Resource Area on a case-by-case basis.
- Developed spring storage and adjacent riparian habitat will be fenced to exclude livestock.

***Phoenix Resource Management Plan (1989):***

- Maintain and improve habitat and viable wildlife populations. (VM-01)

***Lower Gila South Resource Management Plan - Goldwater Amendment (1990):***

- Give priority to protecting vegetation from disturbances during land-based activities. (VM-1)
- Prohibit woodcutting and wood collection for commercial or domestic use on Barry Goldwater Range (BGR) lands. (VM-7; also included in Section 2.8.4, “Recreation Management (RM)” (p. 158))
- No vegetation material is to be removed, with the exception of specific cases deemed appropriate and properly permitted. (VM-8)
- Permit campfires on BGR lands using dead and down wood. Wood cannot be collected in ACECs and other areas specifically closed to wood collection by this RMP amendment or subsequent activity planning. (RR-17; also included in Section 2.8.4, “Recreation Management (RM)” (p. 158))

***Vegetation Treatments using Herbicides on BLM Lands in Seventeen Western States Final EIS (September 2007):***

Implement an integrated vegetation-treatment program for BLM-administered public lands. The VM management priorities are as follows:

- Priority 1 – Take actions to prevent or minimize the need for vegetation control when and where feasible considering the management objectives for the site.
- Priority 2 – Use effective nonchemical methods of vegetation control when and where feasible.
- Priority 3 – Use herbicides after considering the effectiveness of all potential methods or in combination with other methods of control.
- Follow the Herbicide Treatment Standard Operating Procedures from Appendix B of Vegetation Treatments using Herbicides on BLM Lands in Seventeen Western States Final EIS (Sept. 2007).

***Arizona Land Health Standards (1997):***

The Arizona Land Health Standards were derived from the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (1997) (Appendix L, *Guidelines for Grazing Administration* (p. 1253)). All BLM activities and management practices should allow for achievement of the Arizona Land Health Standards (See Chapter 2, *Alternatives* (p. 27), ???). These standards describe conditions needed for healthy sustainable public land and must be maintained by all users of the public land. In accordance with BLM policy, activities on public land must be evaluated against indicators developed for each standard.

### ***SDNM Current Management Guidance (2002):***

- Unauthorized removal of living or dead native plant material is prohibited by the SDNM Proclamation. (Not numbered)
- native plants as the first priority for all restoration projects. Non-intrusive, non-native plants may be used in limited, emergency situations where they may be necessary to protect the resources or when taking no action will further degrade the resources. This use will be allowed if it complies with the vegetation objectives and other management goals and objectives. In these situations, short-lived species (i.e., nurse-crop species) will be preferentially used and will be combined with native species to facilitate the establishment of native species. (Not numbered)

### **2.7.7.2. Action Alternatives for Vegetation Resources (VM)**

Within the Sonoran Desert National Monument, all of the vegetative communities are considered Monument objects as defined in Presidential Proclamation 7397. (See Table 1.3, “Land Use Planning Process” (p. 6). Plant communities are described in some form for Objects 1, 2, 3, 4, 5, 6, and 7 of the Presidential Proclamation.) Management and protection of vegetative resources in the Monument would also be provided under guidance from other resource management programs. The following vegetation communities and special status plants are specific biological objects (vegetative) that were identified in the Proclamation:

- Saguaro cactus forests (within palo verde-mixed cacti vegetation community)
- Woodlands (Sonoran mid-elevation desert scrub)
- Palo verde-mixed cacti vegetation community
- Acuña pineapple cactus
- Creosote bush-bursage vegetation community
- Desert washes (xero-riparian)

### **Program Goals**

- **Goal 1:** Ensure that the natural diversity and abundance of native vegetation occurs as expected for landform and ecological site, and within the SDNM ensure protection of the vegetative objects of the Monument.

- **Goal 2:** Ensure that populations of endangered, threatened, and special status plants are stable or increasing and that suitable habitat is available for future establishment and maintenance of the populations.
- **Goal 3:** Ensure that noxious and undesirable plant species do not occur on the landscape or, if they occur, they make up a sufficiently small percent of the vegetative community that they do not affect ecological processes.
- **Goal 4:** Protect native plants from over-collecting and other uses.
- **Goal 5:** Ensure that native plants occur at a natural abundance and distribution.
- **Goal 6:** Ensure that the Fred J. Weiler Green Belt will be a productive and functioning riparian system supporting healthy, diverse, and abundant populations of wildlife and riparian dependent plant species with an emphasis on migratory game birds.

**Management Actions and Allowable Uses**

<b>Goal 1 (Ecosystems):</b> <i>Ensure that the natural diversity and abundance of native vegetation occurs as expected for landform and ecological site, and within the SDNM, ensure protection of the vegetative objects of the Monument.</i>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1:</b> Maintain or restore vegetative communities to achieve desired future conditions (DFCs) as identified below:						
<b>DFCs common to all vegetative communities:</b>						
<ul style="list-style-type: none"> <li>● Vegetative communities will provide appropriate cover levels to protect soils from wind and water erosion. This will ensure properly functioning watersheds and ecological processes in order to sustain healthy biotic populations and communities (biological objects within the SDNM Planning Area).</li> <li>● Each vegetation community will be maintained within its natural range of variation in plant composition, structure, and cover at the landscape level. Site potentials (soil, climate, topography) establish the natural limits on what can be produced in terms of vegetation and related resource values like forage, wildlife habitat, and watershed characteristics.</li> </ul>						
<b>DFCs by specific vegetative community:</b>						
<p>The DFCs described below are general descriptions of the expected plant community makeup. Site potentials (based on ecological sites) and the development of specific desired plant community objectives for each vegetation type should be determined through the use of the Natural Resource Conservation Service’s (NRCS) ecological site descriptions, rangeland health reference sheets, or information collected from reference or comparison areas or a combination of the above. The ecological sites that correspond to each vegetation community are identified in ???.</p> <p>The vegetative communities listed below that occur within the SDNM are identified as biological objects of the Monument. Within the SDNM specific desired plant community objectives and site potentials were developed for each ecological site and corresponding vegetation type (biological object) through the land health evaluation process. These site potentials were determined through the use of a combination of the information collected from the BGR and Area A (comparison areas), the NRCS’s ecological site descriptions, and the rangeland health reference sheets for the ecological sites. Achievement of these desired plant community objectives would ensure that the biological objects of the Monument are being protected.</p> <ul style="list-style-type: none"> <li>● Creosote Bush–Bursage: (597,700 acres LS; 179,600 acres SDNM) The potential of this community is a shrub dominated site with desert scrub species, cacti and annual forbs and grasses.</li> <li>● Palo Verde-Mixed Cacti: (312,000 acres LS; 303,300 acres SDNM) This vegetative community should consist of more diverse vegetative composition and structure than that of the creosote bush- bursage community. It includes vegetation varying from small shrubs to large trees (such as ironwood, palo verde, and mesquite)</li> </ul>						

<b>Goal 1 (Ecosystems):</b> <i>Ensure that the natural diversity and abundance of native vegetation occurs as expected for landform and ecological site, and within the SDNM, ensure protection of the vegetative objects of the Monument.</i>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	

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 (*Carnegiea gigantea*). Where potential exists, saguaro cactus forests would support appropriate densities of saguaro, with all age classes represented to ensure recruitment.

- Riparian: (8,800 acres LS; 0 acres SDNM) Riparian habitats should contain a diversity of native riparian obligate trees (such as cottonwood [*Populus spp.*] and willow [*Salix spp.*]) of various age and size classes and herbaceous plants adapted to hydric soils to restore ecological conditions and function.
- Apacherian-Chihuahuan Upland Scrub: (3,400 acres LS; 400 acres SDNM) The potential for this community is a shrubland dominated community consisting of large desert scrub/trees including mesquites, acacias or junipers, and cacti. Perennial grass cover is typically low.
- Sonoran Mid-Elevation Desert Scrub (Woodlands): (1,800 acres LS; 2,000 acres SDNM) This vegetative community should consist of a diverse vegetative composition and structure, similar to that of the palo verde-mixed cacti community, but with an increase of perennial grasses, forbs and large shrub species (jojoba, crucifixion thorn, etc.) due to the increased precipitation.
- Mogollon Chaparral: (1,400 acres LS; 100 acres SDNM) This vegetative community should consist of woody species such as shrub live oak, mountain mahogany, desert ceanothus, and cliffrose interspersed with an understory of perennial grasses along with small shrub and forb species.
- Desert Grassland: (0 acres LS; 1,054 acres SDNM) Manage this plant community as a tobosa (*Pleuraphis mutica*)-dominated grassland while limiting the encroachment of mesquites and other shrubs.
- Desert Washes (xeroriparian): (1,658 miles in the LS; 970 miles in the SDNM\*) This community should have a multi-layered vegetative structure, as provided by perennial vegetation.
- Diverse vegetative composition and structure would include such species as foothills palo verde (*Cercidium microphyllum*), blue palo verde (*Cercidium floridum*), desert willow (*Chilopsis linearis*), ironwood (*Olneya tesota*), mesquite (*Prosopis spp.*), smoke tree (*Psoralea argophylla*), and catclaw acacia (*Acacia greggii*) of various sizes and growth forms appropriate to the ecological site.
- Ensure sufficient bank and floodplain vegetation (including along braided channel floodplains) provides for hydrologic function of the site.

* Based on USGS 1:100,000 scale topographic quadrangles						
LS	SDNM	B	C	D	E	<b>VM-1.1.1:</b> Activities would be evaluated on a case-by-case basis and impacts minimized, mitigated, or avoided to achieve land-health standards and vegetation community DFCs, and ensure protection of the vegetative objects of the Monument.
LS	SDNM	B	C	D	E	<b>VM-1.1.2:</b> Vegetation treatments could be conducted in order to make progress toward achieving land-health standards. Treatments would include, but would not be limited to, thinning, burning, seeding, transplanting, watering, seasonal closures, and seasonal use restrictions.

**Goal 2 (Special Status Plants):** *Ensure that populations of Priority Plants are stable or increasing and that suitable habitat is available for future establishment and maintenance of the populations.*

Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	

**Objective 2.1:** Identify and protect occupied and potential habitats for maintenance, restoration, or reestablishment of Acuña pineapple cactus and other endangered, threatened, or special status plants. Maintain the diversity and properly functioning ecological processes of natural plant communities that support rare or special status plant species.

LS	SDNM	B	C	D	E	VM-2.1.1: Authorized surface-disturbing activities within occupied Acuña cactus habitat areas would be avoided. Currently the only known areas of location are within the Coffeepot-Batamote and the very southern portion of the SDNM.
LS	SDNM	B	C	D	E	VM-2.1.2: Authorized surface-disturbing activities within habitat areas of any Endangered, Threatened, or Special Status Plants would be avoided to ensure stable populations.

**Goal 3 (Noxious Weeds):** *Ensure that noxious and undesirable plant species do not occur on the landscape or, if they occur, they make up a sufficiently small percent of the vegetative community that they do not affect ecological processes.*

Applicable Decision Area		Applicable Alternative				Management Actions
LS	SDNM	B	C	D	E	
<b>Objective 3.1:</b> Control invasive species using an integrated weed-management approach including mechanical, chemical, biological control methods, and prescribed fire where appropriate.						
LS	SDNM	B	C	D	E	VM-3.1.1: Proposed projects would use practices that avoid the introduction and spread of invasive species.
LS	SDNM	B	C	D	E	VM-3.1.2: Priority would be assigned to the control of invasive species that have a substantial and apparent impact on native plant communities and wildlife. When infestations are identified, they would be evaluated for their potential threat and scheduled for removal accordingly.
LS	SDNM	B	C	D	E	VM-3.1.3: Monitoring for invasive species would focus on likely vectors of invasion such as linear features (roads, canals, railroads, utility corridors, etc.), disturbed areas (construction or development areas), and areas where water is available or may pond (water-control structures, etc.).
LS	SDNM	B	C	D	E	VM-3.1.4: Certified weed-free feed would be required for all equestrian and stock animal uses authorized under special recreation permits. The general public would be encouraged to provide weed-free feed for their equestrian and stock animals.

**Goal 4 (Collection and Allowable Uses):** *Protect native plants from over-collection and other uses.*

Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 4.1:</b> Manage desert native vegetation for non-commercial uses in accordance with the Arizona Native Plant Law and BLM regulations.						
LS		B	C	D	E	VM-4.1.1: Collection of living or dead native plant material for commercial uses would be prohibited.
LS		B	C	D	E	VM-4.1.2: Collection of reasonable amounts of renewable native plant byproducts including flowers, leaves, fruit, seeds, nuts, cones, and berries, and dead and downed native vegetation for non-commercial, personal use would be allowed when conducted in accordance with the Arizona Native Plant Law.
LS		B	C	D	E	VM-4.1.3: Collection of living or dead native vegetation and byproducts that are Federally listed as threatened and endangered species or highly safeguarded native plants identified in the Arizona Native Plant Law would be prohibited.
LS		B	C	D	E	VM-4.1.4: Collection of saguaro cacti skeletons for personal use or campfire burning would be prohibited in the Planning Area.
LS				D		VM-4.1.5: Collection of all firewood would be prohibited at developed recreation sites. The collection of wood for on-site campfires is also addressed in the recreation ???.
LS		B	C	D	E	VM-4.1.6: Woodcutting would not be allowed for commercial or personal use. It may be authorized on a case-by-case basis as needed to meet management objectives, such as hazardous fuels reduction or native plant propagation.
LS		B	C	D	E	VM-4.1.7: The collection of other dead, down, and detached wood for personal campfire use while camping on public lands would be allowed unless specifically prohibited above.

<b>Goal 4 (Collection and Allowable Uses): Protect native plants from over-collection and other uses.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>VM-4.1.8:</b> Removal of all other vegetation material not specifically provided for would be prohibited without written authorization. Examples of authorizations include vegetation removal for Native American traditional uses, scientific research, educational uses, salvage, or meeting management objectives. Authorizations must be in accordance with the Arizona Native Plant Law.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>VM-4.1.9:</b> Removal of native vegetation for personal use or commercial landscaping may be allowed during authorized salvage operations where vegetation is destined to be destroyed, with written authorization from the BLM and a permit from the Arizona Department of Agriculture in accordance with the Arizona Native Plant Law. Priority would be given to utilizing salvage plants for restoration activities on public lands.
<b>Objective 4.2:</b> Protect SDNM vegetation by managing collection and uses consistent with the Monument proclamation.						
	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>VM-4.2.1:</b> Collecting or removing living or dead native vegetation including plant byproducts and woodcutting for commercial and personal uses would be prohibited within the SDNM without written authorization. Examples of authorizations include vegetation removal for Native American traditional uses, scientific research, educational uses, salvage, or meeting management objectives. Authorizations must be in accordance with the Arizona Native Plant Law.
	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>VM-4.2.2:</b> The collection of dead, down, and detached wood for personal campfire use while camping on public lands would be prohibited in the passage and front country recreation settings. The collection of wood for campfires is also addressed in the Section 2.8.4, "Recreation Management (RM)" (p. 158).

<b>Goal 5 (Rehabilitation): Ensure that native plants occur at a natural abundance and distribution.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 5.1:</b> Rehabilitate native plant communities after land disturbing activities where appropriate. Rehabilitation will be designed to achieve vegetative conditions (cover, composition, etc.) necessary to stabilize the site.						
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>VM-5.1.1:</b> Rehabilitation practices would be used to stabilize and rehabilitate sites impacted from new surface disturbing activities. Long-term restoration would occur through natural processes. In most cases, lands previously disturbed by historical uses would be allowed to recover through natural processes. Sites that may be appropriate for rehabilitation practices include:</p> <p>Recently disturbed sites that may respond quickly to rehabilitation practices, including damage caused by wildfire, immigrant traffic, or other illegal activities;</p> <ul style="list-style-type: none"> <li>● Severely damaged, rapidly deteriorating, or rapidly expanding sites</li> <li>● Placing adjacent resources at risk;</li> <li>● Prone to invasion by non-native species;</li> <li>● Heavily disturbed, such as mining sites;</li> <li>● Capable of improving habitat for T&amp;E species;</li> <li>● Management priorities that require accelerated restoration to meet selected management objectives.</li> </ul>

<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>VM-5.1.2:</b> Native plants would be used as the first priority for all rehabilitation projects. Non-intrusive, non-native plants may be used in limited urgent situations where it may be necessary to protect the resources or when taking no action would further degrade the resources. In these situations, short-lived species (i.e. nurse crop species) would be preferentially used and would be combined with native species to facilitate the establishment of native species.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>VM-5.1.3:</b> Rehabilitation and reclamation plans that describe the site restoration goals, considering the starting condition of the site, and restoration methods would be required for all surface disturbing activities commensurate with the amount of surface disturbance.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>VM-5.1.4:</b> Preliminary success criteria for a site would be when soil conditions are stabilized and approximately 50 percent or more of the desired vegetation conditions are met based on reference sites or vegetation-community DFCs. Vegetation would be considered established when it has survived (without assistance, e.g., watering) for two consecutive years.

## **2.7.8. VISUAL RESOURCES (VR)**

Outstanding scenic landscapes administered by the BLM provide a place to escape and enjoy the beauty of nature. They also are used for a multitude of other activities, including recreation, mining, grazing, and road development. Many of these activities have the potential to disturb the landscape and impact scenic values. Visual resource management (VRM) is a system for minimizing the visual impacts of surface-disturbing activities and maintaining scenic values for the future.

Federal laws requiring the protection of visual resources include the following stipulations:

- Public lands will be managed in a manner which protects the quality of the scenic (visual) values of these lands (43 U.S.C. 1701, Section 102 (a) (8)).
- Esthetically pleasing surroundings would be assured for all Americans (43 U.S.C. 4321, Section 101 (b)).

The BLM Visual Resource Program manages landscapes based on visual indicators defined in the Visual Resource Inventory Handbook H-8410-1. The handbook is used for guidance in activities related to management of visual resources.

According to the Visual Resource Inventory Handbook H-8410-1 the objectives of VRM management classes as:

- Class I: The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.
- Class II: The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen but should not attract attention from the casual observer.
- Class III: The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer.
- Class IV: The objective of this class is 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. These management activities may dominate the view and be the major focus of viewer attention.

The construction of campgrounds, energy and mineral development, vegetation treatments, and rights of way all will be evaluated for design to ensure consistency with the VRM classes. All permitted actions on public land are evaluated to minimize impacts on visual contrast with the landscape, including impacts on the night sky. VRM classes acknowledge existing visual contrasts, and more restrictive requirements would not be retroactively applied to existing projects.

### **2.7.8.1. Existing Management Decisions, Alternative A (No Action) for Visual Resources**

Decisions are listed in chronological order by plan. The following decisions are extracted from the existing land use plans and amendments and are listed in chronological order. Because none of these current land use plans encompass the entire Planning Area, very few of these decisions are being carried forward as common to all alternatives and are restated as new action alternatives where applicable.

#### ***Lower Gila North Management Framework Plan (1983):***

- Recognize areas proposed as Class II visual resource management areas as being an area where a contrast may be seen but should not attract attention. Manage visual resources using existing utility corridors (see the Lands and Realty for further detail on decisions regarding existing utility corridors) (RR-01).
- Recognize areas proposed as Class III visual resource management areas as those in which contrasts may be evident and begin to attract attention. Manage visual resources using existing utility corridors (RR-02).
- Recognize areas proposed as Class IV visual resource management areas as those in which a contrast may attract attention and be a dominant feature in the landscape. Manage visual resources by using existing utility corridors (RR-03).

#### ***Lower Gila South Resource Management Plan - Goldwater Amendment (1990):***

(Applies to the three relinquished Sentinel Plain, Sand Tank Mountains, and Ajo Airport parcels)

- Protect mountain vistas from visual intrusion by developing, during site or project specific activity planning, visual resource-management prescriptions needed to maintain appropriate visual resource management objectives (not numbered).
- Protect the visual resource quality on lands adjacent to the highways (Interstate 8 and State Route 85) by establishing portions of these roads as Scenic Byways in cooperation with Arizona Department of Transportation, the U.S. Air Force, and the U.S. Marine Corps; and 2) using the visual resource-management process during activity planning to maintain appropriate visual resource-management objectives established for these byways.

#### ***Lower Gila Resource Management Amendment (2005):***

- Management of recreation opportunities and developments will be evaluated using two inventory and management tools called the Recreation Opportunity Spectrum and Visual Resource Management (RR-1).
- Existing visual resource inventory classes of the RMP will be adopted as management classes (RR-3).
- All MFP visual resource management classes will be brought forward (RR-4).

- Visual resource-management classes will be reviewed and refined during future interdisciplinary planning (RR-5).
- All unclassified lands of the MFP and RMP Planning Areas are established as Visual Resource Management Class I and II areas, subject to review and refinement during future interdisciplinary planning (RR-8).

### 2.7.8.2. Action Alternatives for Visual Resources (VR)

#### Goals and Objectives

- **Goal 1:** Manage public lands that would maintain scenic quality, maintain natural landscapes, undisturbed views, and other high-quality visual resources;
- **Goal 2:** Maintain night sky condition;
- **Goal 3:** The natural splendor for which the SDNM was designated shall be maintained

#### Land Use Allocations Summary

The proposed VRM classes by alternative are presented in Table 2.6, “VRM Classes by Alternative” (p. 99) below.

**Table 2.6. VRM Classes by Alternative**

VRM Class	Alternative (BLM Acres)				
	A (No Action)	B	C	D	E (Preferred)
The following VRM classes would be allocated for each alternative to support management objectives for the various resources, such as designated wilderness, areas with wilderness characteristics, NHT segments, ACECs, WHAs and back country recreation settings.					
<b>Lower Sonoran</b>					
Class I	91,800	91,800	91,800	91,800	91,800
Class II	116,300	64,900	387,800	622,400	71,900
Class III	279,600	551,900	385,600	192,000	548,400
Class IV	442,500	221,600	65,000	24,000	218,100
<b>SDNM</b>					
Class I	158,700	158,700	158,700	457,900	158,700
Class II	91,600	219,000	267,300	28,500	246,500
Class III	116,400	108,700	60,400	None	81,200
Class IV	119,700	0	0	0	0

### 2.7.8.3. Management Actions and Allowable Uses

<b>Goal 1: Manage public lands that would maintain scenic quality, maintain natural landscapes, undisturbed views, and other high-quality visual resources.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 1.1:</b> Visual resources would be managed according to the class objectives set in the Visual Resource Inventory Handbook H-8410-1 and BLM Guidelines for a Quality Built Environment.						
LS	SDNM	B	C	D	E	<b>VR-1.1.1:</b> Designated wilderness areas would be allocated as VRM class I.
LS		B	C	D	E	<b>VR-1.1.2:</b> All other public lands within the Lower Sonoran would be allocated to the VRM Classes as depicted by alternative in .

<b>Goal 1: Manage public lands that would maintain scenic quality, maintain natural landscapes, undisturbed views, and other high-quality visual resources.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
LS	SDNM	B	C	D	E	<p><b>VR-1.1.3:</b> All surface disturbing projects or activities, regardless of size or potential impact, would incorporate visual design considerations consistent with the Visual Resource Contrast Rating Manual H-8431-1 to meet VRM class objectives for the area. Even activities in VRM class IV will consider designs that help reduce visual contrast between proposed project and landscape settings (color, texture, line and form).</p> <p>Measures to mitigate potential visual impacts could include the use of natural materials, screening, painting, project design, location siting, or restoration.</p>
LS	SDNM	B	C	D	E	<p><b>VR-1.1.4:</b> Restoration projects would ensure that visual impacts are minimized in the short term (5 years) and that VRM objectives in the project area are met in the long term (life of the project) when such projects are a) considered essential for public safety, achieving DFCs, or reducing hazardous fuels buildups and b) expected to be visually prominent.</p>
LS	SDNM	B	C	D	E	<p><b>VR-1.1.5:</b> The viewshed of the Juan Bautista de Anza NHT, Painted Rock, Agua Caliente and Ajo Scenic Loop roads, Highway 238 and Interstate 8 will be managed in a manner that exceeds or maintains the VRM objectives. VRM and scenic management prescriptions would be applied for their preservation and enhancement. The viewshed Anza NHT will be managed to maintain the historic landscape setting.</p>

<b>Goal 2: Maintain current night sky conditions.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 2.1:</b> Manage activities and projects on public lands that would contribute light or air pollution to maintain or improve dark, clear skies for stargazing and nighttime military training.						
LS	SDNM	B	C	D	E	<p><b>VR-2.1.1:</b> Permanent outdoor lighting would not be allowed in VRM Class I areas.</p>
LS	SDNM	B				<p><b>VR-2.1.2:</b> The use of dark-sky-friendly technology would be emphasized when placing facilities on public lands. Measures may include, but not be limited to: directing all light downward, using shielded lights, using only the minimum illumination necessary, using lamp types such as sodium lamps (less prone to atmospheric scattering), using circuit timers, using motion sensors, or using flight proximity detectors.</p>
LS	SDNM		C	D	E	<p><b>VR-2.1.3:</b> Development on public lands would be required to use dark-sky-friendly technologies in VRM classes I through IV and in the Sentinel Plain area to provide opportunities for stargazers and amateur astronomers and to maintain conditions favorable to nighttime military operations.</p>

<b>Goal 3: The natural splendor for which the SDNM was designated shall be maintained.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 3.1:</b> Visual resources of the SDNM would be managed to preserve or to retain the existing character of the landscape. The visual character of management activities will be managed according to the objectives described above and in VRM Handbook H-8410-1.						
	SDNM	B	C	D	E	<p><b>VR-3.1.1:</b> Public lands within the Monument would be allocated to the VRM Classes as depicted by alternative in to ensure visual landscapes as described in the Monument proclamation are protected.</p>

## Administrative Actions

- All surface-disturbing projects or activities, regardless of size or potential impact, will incorporate visual design considerations consistent with the Visual Resource Contrast Rating Manual H-8431-1 to meet VRM class objectives for the area.
- Participate in regional planning initiatives and comment on proposals for development on adjacent non-Federal lands to encourage future development to be compatible with VRM designations and protection of dark night skies on public lands.
- Develop user facilities (trailheads, non-motorized trails, campgrounds, roads, utilities, interpretive areas, etc.) to take advantage of views of scenic and historic landscapes in such a way that visual quality is protected.

## **2.7.9. WATER RESOURCES (WR)**

Surface-water resources in the Planning Area are limited to the perennial flow of the Gila River and treated effluent discharges into the Gila basin. Surface flow often ends near Highway 85, although flow may continue as far as Painted Rock Reservoir during periods of high precipitation. This section of the river has impaired water quality. An Arizona Department of Water Quality (AZDEQ) plan for improving water quality is scheduled to be completed in 2011. The BLM will be the designated management agency carrying out this plan, and the agency will participate along with other landowners and managers with land that drains into this segment of the Gila River. Currently, the agency's primary management actions on the river consist of fuels and habitat management associated with tamarisk-dominated riparian areas.

Water use in the Planning Area must fulfill two primary responsibilities:

- Comply with laws and regulations that protect the nation's and the State's water resources, and
- Take all legal and resource-development steps necessary to provide a supply of water of sufficient quality and quantity to meet BLM management needs.

Groundwater is the sole source of drinking water for every community in the Planning Area outside metropolitan Phoenix. Arizona state law limits the use of groundwater within the Phoenix Active Management Area (AMA), which includes the Lower Sonoran Decision Area north of the Gila River and west of Apache Junction. According to the State's 1980 Groundwater Management Act, groundwater use by the BLM and other pumpers in the AMA must not interfere with existing wells, and users must meet requirements for proving an assured supply. Groundwater pumping outside of the AMA by the BLM or its permittees and lessees is limited to "reasonable" amounts for a given use.

The water program administers public lands within a framework set by the following Federal laws and regulations:

***Federal Land Policy Management Act (FLPMA):*** authorizes the BLM to inventory and monitor the presence and condition of water resources on public land.

***Clean Water Act of 1972, as amended:*** requires that all water sources meet quality standards developed by the states with authority delegated by the EPA; charges the BLM (and other land-management agencies) with developing and implementing best management practices for the control of non-point source pollution; and requires a number of other actions in coordination with other agencies, such as participating in permitting to protect wetlands, stream channels, etc.

***Fundamentals of Rangeland Health (1995):*** . These require the BLM to apply for water rights in the name of the United States, where allowed by State law. These regulations, particularly those associated with grazing, also require public lands to meet or make progress toward land health standards, including meeting state water quality standards.

### **2.7.9.1. Existing Management Decisions, Alternative A (No Action) Water Resources (WR)**

Decisions are listed in chronological order by plan. The following decisions are extracted from the existing land use plans and amendments and are listed in chronological order. Because none of these current land use plans encompass the entire Planning Area, very few of these decisions

are being carried forward as common to all alternatives and are restated as new action alternatives where applicable.

***Phoenix Resource Management Plan (1989):***

- Maintain and enhance stream flows through activity plans in special management areas (WS-01).
- Ensure that all waters on public land meet or exceed Federal and state water quality standards. (WS-02)

***Lower Gila South Resource Management Plan - Goldwater Amendment (1990):***

[Applies to the three relinquished BGR parcels]

- Keep groundwater development and exploration to a minimum in Areas of Critical Environmental Concern (ACECs), other management areas, and other environmentally sensitive areas. (WS-1).
- Limit, all field activities relating to groundwater exploration and development to designated roadways and previously disturbed areas (WS-2).

**2.7.9.2. Action Alternatives for Water Resources (WR):**

**Program Goals**

- **Goal 1:** Assure physical and legal availability of water in sufficient quantity and quality to meet the management needs of the Lower Sonoran and Sonoran Desert National Monument Decision Areas.
- **Goal 2:** All surface water in the Planning Area will meet appropriate State water-quality standards or will have State-approved plans for water-quality improvement.

<b>Goal 1 (Water Availability): Assure physical and legal availability of water in sufficient quantity and quality to meet the management needs of the Lower Sonoran and SDNM Decision Areas.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1:</b> New water source developments will not adversely affect existing sources and uses. This will be determined prior to any new development activity, including issuance of landowner’s permission to drill required by the Arizona Department of Water Resources.						
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>WR-1.1.1:</b> All proposed new water uses and developments would be assessed to determine whether they will adversely affect springs, streams, tinajas, or seeps; decrease water availability at existing wells; or conflict with other resource management goals.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>WR-1.1.2:</b> The only proposed water developments that would be approved would be those with no adverse affects on or conflicts with other uses or management objectives, and for which proponent has a demonstrated need.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>		<b>E</b>	<b>WR-1.1.3:</b> Groundwater exploration and development would be restricted and damage mitigated in areas with ecological or cultural resources that are sensitive to disturbance.

<b>Goal 1 (Water Availability): Assure physical and legal availability of water in sufficient quantity and quality to meet the management needs of the Lower Sonoran and SDNM Decision Areas.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 1.2:</b> The BLM will take necessary steps to acquire all water rights allowed by law to properly manage the Lower Sonoran Planning Area, including the SDNM, and to protect the natural resources of Planning Area and the objects of the SDNM. Inventory work and at least one-half of water-rights filings will be completed within 5 years of issuing this plan.						
LS	SDNM	B	C	D	E	<b>WR-1.2.1:</b> Water would be inventoried and appropriate applications and claims filed for State water rights for all water sources and beneficial uses on public land in accordance with State law to ensure water availability to meet management needs and protect ecological functions.
	SDNM	B	C	D	E	<b>WR-1.2.2:</b> Inventory all water sources, including groundwater sources, within the three wilderness areas of the SDNM for quantification and assertion of Federal reserved water rights, and provide notice of these rights to ADWR.

<b>Goal 2 (Water Quality): All surface water in the Planning Area will meet State water-quality standards or will have state-approved plans for water-quality improvement.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 2.1:</b> Impaired water quality in stretches of the Gila River that run through the Planning Area will be improved or corrected within 5 years; the BLM will commit to the State schedule for water-quality improvement.						
LS		B	C	D	E	<b>WR-2.1.1:</b> The BLM would implement best management practices for grazing, mining, energy development, and other activities that have been specifically established to protect streams from non-point source pollution.
LS		B	C	D	E	<b>WR-2.1.2:</b> The BLM would be an active participant as the Arizona Department of Environmental Quality begins work on the Total Maximum Daily Load for the Gila River between the Salt River and Painted Rock Reservoir.
	SDNM	B	C	D	E	<b>WR-2.1.3:</b> No new water development that would divert water out of SDNM would be allowed.

## Administrative Actions

- Identify, evaluate, and assign priorities for restoring disturbed areas considering the potential for soil erosion and loss, damage to cultural or ecologically sensitive sites, and effects on water quality and quantity.
- Evaluate proposals for groundwater withdrawals on BLM-administered lands within an Active Management Area (AMA) in coordination with the Arizona Department of Water Resources (ADWR) and incorporate any restrictions or guidelines for the AMA.
- Work with county, state, and Federal agencies to monitor surface and groundwater quantity and quality on public lands. Correct problems as they are identified.
- Coordinate with the Arizona Game and Fish Department (AGFD) to be sure all wells within the BGR are registered with Arizona Department of Water Resources (ADWR). Inventory all water sources on BGR and enter them into the BLM water data management system. Coordinate water rights filings for water sources with the U.S. Air Force and AGFD. Applicable to the three relinquished BGR parcels

### **Specific to the SDNM Decision Area.**

- Work with county, state, and federal agencies and other partners to evaluate the quantity of groundwater available and predict the affect of future potential water withdrawals on the ability to provide adequate water availability for natural resource and multiple use goals within SDNM.
- Begin a dialogue with appropriate State of Arizona policy, legal, and water resources staff on the development of a cooperative agreement on the protection of water resources on SDNM.

## **2.7.10. WILD HORSE & BURRO MANAGEMENT (HB)**

In 1971, Congress passed The Wild Free-Roaming Horses and Burros Act (WFRHBA, or “The Act,” Public Law 92-195). It states, “It is the policy of Congress that wild free-roaming horses and burros shall be protected from capture, branding, harassment, or death; and to accomplish this they are to be considered in the area where presently found, as an integral part of the natural system of the public lands.”

After the passage of The Act, the BLM was required to survey public lands and delineate where wild horses and burros found habitat and forage, and designate these areas as “Herd Areas” (HAs). These Herd Areas established boundaries of where wild horses and burros were located at the passage of The Act. Later, Herd Management Areas (HMAs) were established within those Herd Areas to manage healthy, self-sustaining populations of wild horses and/or burros, in accordance with BLM land use plans (i.e. RMPs) and other decisions. Only one Herd Area, the Painted Rock Herd Area, is located in the Lower Sonoran Decision Area. No other HAs and no HMAs have been allocated within either Decision Area. The Herd Area is shown on Map 3-15.

The Painted Rock Herd Area has been administered as a herd area with a target population of zero wild horses and burros. This decision has been based on conflicts in the area with private landowners, agricultural interests, wildlife, such as bighorn sheep and other resources, and a lack of year-round water available for the wild horses and burros within the Herd Area. It is not possible to manage a healthy, self-sustaining horse or burro herd within the boundaries of a herd area that does not currently have a natural year-round source of water. A zero population requires removing all wild horses and burros from the herd area.

All previous planning documents, including the Lower Gila South RMP, referred only to wild burros in the area. However, in 1999, it was determined that horses were also present in the area in 1971 and subject to the protection by The Act. Protests and litigation of an RMP Amendment in the late 1990s resulted in a settlement agreement regarding the Painted Rock Herd Area. The BLM was instructed to conduct an analysis of the manageability of the Painted Rock herds and make a decision in the new RMP based on that analysis. The Painted Rock Herd Manageability Analysis can be found in Appendix M, *Painted Rock Burro Herd Manageability Analysis* (p. 1257) of this document, and the goals and objectives found below are based on that analysis.

In 1992, the BLM Lower Gila South Field Office determined through a review of the 1974 census and personal interviews that burros on the Barry Goldwater Range (BGR) had not used that area in 1971 at the passage of The Act, and therefore are not wild burros, but estrays or feral animals from the Tohono O’odham Reservation. Thus, the burros located on the BGR are not protected under the provisions of the WFRHBA. Likewise, none of the lands relinquished by the U.S. Air Force can be designated as a Herd Area, as defined by “The Act.” Any burros (or other livestock) found on the BGR are considered in trespass and subject to 43 CFR 4720.2. Coordination with the Tohono O’odham Nation and other affected agencies, such as the State Land Department, Arizona Game and Fish Department, U.S. Fish and Wildlife, and the U.S. Border Patrol, and the military, will continue to stress proper management of these burros within the boundaries of the reservation.

### **2.7.10.1. Existing Management Decisions, Alternative A (No Action)**

The following decisions are extracted from the existing land use plans and amendments and are listed in chronological order. Because none of these current land use plans encompass the

entire Planning Area, very few of these decisions are being carried forward as common to all alternatives and are restated as new action alternatives where applicable.

***Lower Gila South Resource Management Plan (Goldwater Amendment) (1990):***

(Applies to the three relinquished BGR parcels.)

- Inventory the burro population to determine herd size and ownership. (HB-1)
- Prepare a burro capture-and-removal plan in coordination with the U.S. Air Force, Tohono O’odham tribe and other affected parties. (HB-2)
- Adopt captured burros through the adoption program or impound and sell, whichever is appropriate according to the determination of their ownership. (HB-3)

***Approved Amendment to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan and Decision (2005):***

- This amendment deferred to subsequent resource management planning all decisions relating to the management of wild horses and burros that were proposed in the *Final Amendment and Environmental Assessment to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan*.
- Prepare a burro capture plan in consultation with appropriate government agencies and interest groups. All burros would be removed from the Painted Rock Reservoir area. Details for the burro capture program would be outlined in a herd management plan (HMP). (HB-06).

**2.7.10.2. Wild Horse & Burro (HB) Action Alternatives**

<b>Goal 1:</b> <i>Manage the Painted Rock Herd Area in accordance with The Wild Free-Roaming Horses and Burros Act and applicable BLM regulation, policies, and guidance.</i>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1:</b> Manage the Painted Rock Herd Area as a Herd Area with a target population of zero wild horses and burros.						
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>HB-1.1.1:</b> In response to the manageability analysis (Appendix M, <i>Painted Rock Burro Herd Manageability Analysis</i> (p. 1257)), the Painted Rock HA will not be managed as a HMA. Neither reproducing nor non-reproducing herds of wild horses or burros will be permissible. Wild horses and burros will be removed from the HA as funding is available with the target of maintaining a population of zero. Wild horses and burros straying off the HA onto private lands will be treated as nuisance animals and removed, in accordance with 43 CFR 4720.2.

## **2.7.11. WILDERNESS CHARACTERISTICS (WC)**

In order for an area to contain wilderness characteristics, it must exhibit sufficient size, naturalness, and outstanding opportunities for solitude and/or outstanding opportunities for primitive and unconfined recreation. Managing the wilderness resource is part of the BLM's multiple use mission. Consistent with FLPMA and other applicable authorities, the BLM will consider the wilderness characteristics of public lands when undertaking land use planning. Considering wilderness characteristics in the land use planning process may result in different outcomes across the Planning Area over the life of the plan, including:

- Emphasizing other multiple uses as a priority over protecting wilderness characteristics;
- Emphasizing other multiple uses while applying management restrictions, such as conditions of use or mitigation measures, to reduce impacts to some or all of the wilderness characteristics;
- Emphasizing the protection of some or all of the wilderness characteristics as a priority over other land uses.

Guidance used to inventory wilderness characteristics and consider wilderness characteristics in the Lower Sonoran/SDNM Draft RMP comes from BLM Land Use Planning Handbook (H-1601-1):

*Identify decisions to protect or preserve wilderness characteristics (naturalness, outstanding opportunities for solitude, and outstanding opportunities for primitive and unconfined recreation). Include goals and objectives to protect the resource and management actions necessary to achieve these goals and objectives. For authorized activities, include conditions of use that would avoid or minimize impacts to wilderness characteristics.*

Inventory is a process of gathering, identifying, and documenting information about the public lands and is not a decision to be proposed in the RMP. The existing inventory for wilderness characteristics is extensive, focused on wilderness characteristics, well documented, and includes years of public participation. The wilderness characteristics inventory is addressed further in Chapter 3, *Affected Environment* (p. 251).

The inventory, public scoping, and agency participation, contributed to development of a broad range of alternatives for lands managed to protect wilderness characteristics. The range of alternatives extends from no areas allocated to protect wilderness characteristics under Alternatives A and B, to Alternative D that proposes to allocate 429,500 acres as lands managed to protect wilderness characteristics. Alternative D includes an entire citizens' proposal. The remaining two alternatives propose portions of the Planning Area to be managed to protect wilderness characteristics: Alternative C (240,300 acres) and Alternative E (preferred alternative, 166,300 acres).

Alternative D is based on a citizen inventory. The citizen proposal presented in Alternative D overlaps and includes areas inventoried by BLM for Alternative C (240,300 acres), but also includes areas that have not yet received field inventory and a determination of the presence or absence of wilderness characteristics by the BLM. The entire citizens' proposal, including additional acreage inventoried by BLM, is analyzed as lands managed to protect wilderness characteristics under Alternative D (429,500 acres). Based on the BLM's knowledge of the

Planning Area, it may not necessarily be the case that all of the citizens' proposal in Alternative D contains wilderness characteristics as those characteristics are defined.

The preferred alternative or a new alternative in the Proposed RMP/Final EIS may be a combination of existing alternatives or an alternative within the spectrum of alternatives already analyzed.

The land use plan identifies a variety of measures to protect wilderness characteristics that will be carried forward as land use plan decisions for the life of the Resource Management Plan. Examples include establishing visual resource management (VRM) class objectives to guide analysis, placement or decisions (approval/disapproval) of features like roads, trails or facilities; identifying conditions of use for permitted uses; or designating lands as open, closed or limited to off highway vehicle (OHV) use.

## **Description of Alternatives**

The LS-SDNM planning area has a total of approximately 42,640 acres that were within three released WSAs. Proposals for lands managed to protect wilderness characteristics are presented under Alternatives C, D and E that include lands within these former WSAs. These areas are identified under each alternative and their acreage is provided. Specific public input on whether these areas are appropriate to manage to protect wilderness characteristics is requested.

Alternative C contains lands with wilderness characteristics inventoried by the BLM with 240,300 acres to be managed to protect wilderness characteristics. Lands managed to protect wilderness characteristics include Batamote Mountains East/West, Black Mountain, Face Mountain, Palo Verde Hills, Saddle Mountain, Sand Tank Mountains East/West, Saucedo Mountains, South Maricopa Mountains Addition, White Hills, and Yellow Medicine Butte.

Alternative D contains lands with wilderness characteristics inventoried by the BLM and lands proposed by citizens as having wilderness characteristics. All 429,500 acres of these lands would be managed to protect wilderness characteristics under Alternative D. Lands managed to protect wilderness characteristics include Batamote Mountains East/West, Black Mountain, Butterfield Stage Memorial, Cortez Peak, Cuerda de Lena, Face Mountain, Gila Bend Mountains, Margie's Peak, Oatman Mountain, Palo Verde Hills, Pozo Redondo, Saddle Mountain, Sand Tank Mountains East/West, Saucedo Mountains, Sentinel Plain, South Maricopa Mountains Addition, White Hills, Why, and Yellow Medicine Butte.

Alternative E contains lands with wilderness characteristics inventoried by the BLM with 166,300 acres to be managed to protect wilderness characteristics. Lands managed to protect wilderness characteristics include Batamote Mountains East/West, Saddle Mountain, Sand Tank Mountains East/West, Saucedo Mountains, and White Hills.

The Butterfield Stage Memorial, Face Mountain, and Saddle Mountain areas were in WSAs released by Congress in the Arizona Desert Wilderness Act of 1990 from the requirement of FLPMA section 603(c) that WSAs be managed in a manner that does not impair their suitability for preservation as wilderness.

### 2.7.11.1. Existing Management Decisions, Alternative A – No Action for Wilderness Characteristics

There are no existing management decisions for wilderness characteristics

### 2.7.11.2. Action Alternatives for Wilderness Characteristics (WC)

#### Land Use Allocations Summary

**Table 2.7. Acres of Lands Managed to Protect Wilderness Characteristics by Alternative**

Decision Area	Alternative (BLM Acres Rounded to Nearest Hundred)				
	A	B	C	D	E
Lower Sonoran	0	0	128,100	276,500	55,400
SDNM	0	0	112,200	153,000	110,900
Total	0	0	240,300	429,500	166,400

#### Management Actions and Allowable Uses

<b>Goal 1: Lands managed to protect wilderness characteristics should retain a high degree of naturalness where the imprint of humans on lands and resources is substantially unnoticeable. Furthermore, outstanding opportunities for solitude and primitive or unconfined types of recreation should be maintained or enhanced.</b>						
Applicable Decision Area		Applicable Alternatives				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 1.1: Lands managed to protect wilderness characteristics will have a high degree of naturalness and offer outstanding opportunities for solitude or primitive, unconfined recreation by reducing impacts to these values while considering manageability and competing resource demands.</b>						
LS	SDNM		C	D	E	<b>WC-1.1.1:</b> Public lands would be managed to protect wilderness characteristics as shown in Table 2.7, “Acres of Lands Managed to Protect Wilderness Characteristics by Alternative” (p. 110). (See Maps 2-4c, 2-4d and 2-4e).
LS	SDNM		C	D	E	<b>WC-1.1.2:</b> Private or state in-holdings, including subsurface, would be acquired when available from willing owners.
LS	SDNM		C	D	E	<b>WC-1.1.3:</b> Lands managed to protect wilderness characteristics would be managed as exclusion areas for placement of new utility scale renewable energy developments
LS	SDNM		C		E	<b>WC-1.1.4:</b> Lands managed to protect wilderness characteristics would be managed as avoidance areas for minor and nonlinear LUAs with the exception for law enforcement, public-safety or administrative purposes as approved by the authorized officer.
LS	SDNM			D		<b>WC-1.1.5:</b> Lands managed to protect wilderness characteristics would be managed as exclusion areas for minor and nonlinear LUAs with the exception for law enforcement, public-safety or administrative purposes as approved by the authorized officer.

<b>Goal 1: Lands managed to protect wilderness characteristics should retain a high degree of naturalness where the imprint of humans on lands and resources is substantially unnoticeable. Furthermore, outstanding opportunities for solitude and primitive or unconfined types of recreation should be maintained or enhanced.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternatives</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1: Lands managed to protect wilderness characteristics will have a high degree of naturalness and offer outstanding opportunities for solitude or primitive, unconfined recreation by reducing impacts to these values while considering manageability and competing resource demands.</b>						
<b>LS</b>	<b>SDNM</b>		<b>C</b>		<b>E</b>	<p><b>WC-1.1.6:</b> Any potential new minor and nonlinear LUAs, and maintenance of existing facilities, would be evaluated and allowed under the following circumstances:</p> <ul style="list-style-type: none"> <li>• When compatible with maintaining or enhancing wilderness characteristics or when needed to protect, manage, or improve natural or heritage resource conditions;</li> <li>• When meeting law enforcement, agency, or public safety needs;</li> <li>• When reconstruction, replacement, or major maintenance of existing facilities, or development of new projects, is consistent with this plan's objectives, VRM classes, and desired recreation, social, and managerial settings;</li> <li>• When the project site can be restored to its previous condition after the project is completed.</li> </ul>
<b>LS</b>	<b>SDNM</b>		<b>C</b>	<b>D</b>	<b>E</b>	<p><b>WC-1.1.7:</b> Existing facilities and projects no longer active would be removed if practicable.</p>
<b>LS</b>	<b>SDNM</b>		<b>C</b>	<b>D</b>	<b>E</b>	<p><b>WC-1.1.8:</b> Sites and locales with human-caused disturbances would be rehabilitated if such actions protect or enhance wilderness characteristics and natural/heritage resources, are practicable, meet management prescriptions and SOPs, and are addressed in a restoration plan.</p>
<b>LS</b>	<b>SDNM</b>		<b>C</b>	<b>D</b>	<b>E</b>	<p><b>WC-1.1.9:</b> Measurement standards would be developed and adopted for:</p> <ul style="list-style-type: none"> <li>• Trail conditions,</li> <li>• Facility conditions,</li> <li>• Visitor-to-visitor encounters,</li> <li>• Vegetation changes,</li> <li>• Vegetation and wildlife DRCs,</li> <li>• Other approved activities</li> </ul>
<b>LS</b>			<b>C</b>	<b>D</b>	<b>E</b>	<p><b>WC-1.1.10:</b> Mineral materials sales and free-use authorizations would be prohibited. A mining plan of operation and reclamation plan with appropriate stipulations would be required for all surface-disturbing exploration and development activities conducted under locatable mining laws and regulations.</p>

<b>Goal 1: Lands managed to protect wilderness characteristics should retain a high degree of naturalness where the imprint of humans on lands and resources is substantially unnoticeable. Furthermore, outstanding opportunities for solitude and primitive or unconfined types of recreation should be maintained or enhanced.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternatives</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1: Lands managed to protect wilderness characteristics will have a high degree of naturalness and offer outstanding opportunities for solitude or primitive, unconfined recreation by reducing impacts to these values while considering manageability and competing resource demands.</b>						
<b>LS</b>			<b>C</b>		<b>E</b>	<p><b>WC-1.1.11:</b> Lands managed to protect wilderness characteristics would be designated and managed as limited OHV use areas. Motorized vehicle use on roads, primitive roads, and motorized trails would be limited to designated roads and routes established through subsequent travel management plans and subject to the four prescriptions below. When this planning is completed, motorized travel and non-motorized vehicles (e.g., bicycles, hang gliders, other devices for conveyance and stock drawn carts/wagons) would be restricted to designated roads, primitive roads and trails.</p> <ul style="list-style-type: none"> <li>• Major arterial vehicle travel routes through wilderness character allocation areas would remain open for motorized travel.</li> <li>• Vehicle routes to range and wildlife developments would remain open to public use under most circumstances.</li> <li>• Vehicle spur roads and vehicle routes in washes would be closed to motorized travel and vehicle use.</li> <li>• Vehicle routes within wilderness character allocations would be designated open, closed, or limited to motorized-vehicle use on a case-by-case prescribed by subsequent travel management plans.</li> <li>• Until travel management plans are completed, motorized vehicle travel would be restricted to existing routes acknowledged by the BLM's current OHV route inventory.</li> </ul>
<b>LS</b>				<b>D</b>		<p><b>WC-1.1.12:</b> Lands managed to protect wilderness characteristics would be designated closed OHV areas. Motorized, non-motorized and mechanized vehicles (with the exception of game carriers) would be prohibited. Until travel management plans are completed, vehicle travel would be restricted to existing routes acknowledged by the BLM's current OHV route inventory.</p>
	<b>SDNM</b>		<b>C</b>		<b>E</b>	<p><b>WC-1.1.13:</b> Lands managed to protect wilderness characteristics would be designated limited OHV use areas. Motorized vehicles would be restricted to designated and primitive roads. Use by non-motorized and mechanical conveyances (with the exception of game carriers) would be restricted to designated trails.</p>
<b>LS</b>	<b>SDNM</b>		<b>C</b>	<b>D</b>	<b>E</b>	<p><b>WC-1.1.14:</b> Lands assessed for wilderness characteristics, but not allocated for protection of these characteristics, would be available to contain designated roads, primitive roads and trail assets. These assets would be identified and managed in travel management plans as completed.</p>
	<b>SDNM</b>			<b>D</b>		<p><b>WC-1.1.15:</b> Lands managed to protect wilderness characteristics would be designated closed OHV areas. Motorized, non-motorized and mechanized vehicles (with the exception of game carriers) would be prohibited.</p>
<b>LS</b>	<b>SDNM</b>		<b>C</b>	<b>D</b>	<b>E</b>	<p><b>WC-1.1.16:</b> Public or commercial collection of plant and mineral materials would be prohibited.</p>
<b>LS</b>	<b>SDNM</b>		<b>C</b>	<b>D</b>	<b>E</b>	<p><b>WC-1.1.17:</b> Wheeled game carriers would be allowed.</p>
<b>LS</b>	<b>SDNM</b>		<b>C</b>		<b>E</b>	<p><b>WC-1.1.18:</b> Closed vehicle routes could be converted, where appropriate, for use as bicycle, equestrian, and/or hiking trails.</p>

<b>Goal 1: Lands managed to protect wilderness characteristics should retain a high degree of naturalness where the imprint of humans on lands and resources is substantially unnoticeable. Furthermore, outstanding opportunities for solitude and primitive or unconfined types of recreation should be maintained or enhanced.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternatives</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1: Lands managed to protect wilderness characteristics will have a high degree of naturalness and offer outstanding opportunities for solitude or primitive, unconfined recreation by reducing impacts to these values while considering manageability and competing resource demands.</b>						
<b>LS</b>	<b>SDNM</b>		<b>C</b>		<b>E</b>	<b>WC-1.1.19:</b> New bicycle, equestrian, and/or hiking trails would be established when consistent with this plan's objectives; desired recreation, social, and managerial settings; and VRM classes.
<b>LS</b>	<b>SDNM</b>		<b>C</b>		<b>E</b>	<b>WC-1.1.20:</b> Special recreation permits, commercial recreation and vending operations, guided hunts, and concession leases would be allowed when they are landscape- and wilderness-character resource-dependent activities consistent with this plan's objectives; desired recreation, social, and managerial settings, and VRM classes.
<b>LS</b>	<b>SDNM</b>			<b>D</b>		<b>WC-1.1.21:</b> Closed vehicle routes would not be converted for use as bicycle, equestrian, and/or hiking trails.
<b>LS</b>	<b>SDNM</b>			<b>D</b>		<b>WC-1.1.22:</b> Development of new bicycle, equestrian, and/or hiking trails would be prohibited.
<b>LS</b>	<b>SDNM</b>			<b>D</b>		<b>WC-1.1.23:</b> Special recreation permits, including commercial, organized group and competitive activities, vending operations and concession leases, would be prohibited.

**Administrative Actions**

Projects will employ the least impacting methods for development that can be reasonably applied:

- Use design methods that cause the facility to blend into the landscape, including consideration of site selection and use of a low profile;
- Design facilities that will require minimal maintenance;
- Use best management practices to minimize surface and vegetation disturbance during construction;
- Decrease the visual effect of existing facilities during reconstruction, replacement, or major maintenance;
- Establish baseline standards to protect proper levels of recreational and landscape disturbance to protect wilderness characteristics.

## **2.7.12. WILDLAND FIRE MANAGEMENT (WF)**

Staff at the BLM's Lower Sonoran Field Office 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 that fall within the Planning Area. The Lower Colorado River subdivision of the Sonoran Desert is the predominant vegetation community within the Planning Area.

This vegetation community is neither fire-adapted nor fire-dependent. Historically, fire has never played a large role, in the development and maintenance of the ecosystem throughout the Planning Area. However, the invasion of non-native species has created areas that are now prone to high intensity fires with high rates of spread.

The Planning Area also contains wildland-urban interface (WUI) areas. These are places where manmade structures and infrastructure are intermingled with wildlands. Unplanned ignitions in WUIs could have adverse effects to the ecosystem and society unless some form of mitigation takes place. Wildfire management includes areas where mitigation and suppression are required to prevent direct threats to life or property. 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.

When applying fuels treatment methods, BLM policies, procedures, and plans are to be followed in all cases. The manual, chemical, biological, and fire-treatment methods that may be used are described in ????. There are several treatment methods and standard operating procedures that would be used in a vegetation treatment program. BLM policies and guidance for public land treatments would be followed in implementing all treatment methods.

### **2.7.12.1. Existing Management Decisions (Alternative A - No Action)**

Decisions are listed in chronological order by plan. The following decisions are extracted from the existing land use plans and amendments and are listed in chronological order. Because none of these current land use plans encompass the entire Planning Area, very few of these decisions are being carried forward as common to all alternatives and are restated as new action alternatives where applicable.

#### ***Arizona Statewide Land Use Plan Amendment for Fire, Fuels, and Air Quality Management (2003):***

Manage fire and fuels according to the current policies and requirements and to meet desired future conditions for other resource values.

#### ***Fire Management Plan, Phoenix District (2010 in press):***

Assigns public lands in two Fire Management Zone categories (1 or 2) based on ecological conditions and ecological risk, and determined by contrasting current with historical conditions and ecological risks associated with those changes. Category 1 lands are ecologically adapted to fire and Category 2 lands are not ecologically adapted to fire. Almost all of the lands located within the Lower Sonoran Field Office Planning Area fall into the Category 2 classification.

## 2.7.12.2. Action Alternatives for Wildland Fire Management (WF)

### Program Goals

- **Goal 1:** Ensure firefighter and public safety is the highest priority in every fire or fuels management activity.
- **Goal 2:** Wildland Fuels are managed to protect WUI areas and meet resource management objectives.
- **Goal 3:** Limit the extent of wildfires and the impact of fire suppression efforts on wildlife, plant communities, as well as natural and cultural features.

### Management Actions and Allowable Uses

<b>Goal 1: Ensure firefighter and public safety is the highest priority in every fire or fuels management activity.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1:</b> Set priorities among protecting residences, community infrastructure, and other manmade property and improvements.						
LS	SDNM	B	C	D	E	<b>WF-1.1.1:</b> Management Response (MR) for unplanned ignitions will be full suppression or modified suppression for all lands within the LFSO Planning Area.
LS	SDNM	B	C	D	E	<b>WF-1.1.2:</b> Implement a hazardous fuels reduction program that creates conditions conducive for safe and effective firefighting.
LS	SDNM	B	C	D	E	<b>WF-1.1.3:</b> With community partners implement the Pinal and Pima County Community Wildfire Protection Plans (CWPP).
LS	SDNM	B	C	D	E	<b>WF-1.1.4:</b> With community partners provide input into the development of the Pima and Gila County CWPPs.

<b>Goal 2: Wildland fuels are managed to protect WUI areas and to meet resource management goals.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 2.1: Fuels within WUI areas are proactively managed to improve the protection of life and property.</b>						
LS	SDNM	B	C	D	E	<b>WF-2.1.1:</b> Hazardous fuels around communities at risk and utility infrastructure (e.g. roads, power lines, and communication sites) within the WUI are reduced using mechanical, chemical, biological, and prescribed fire treatments, where applicable.
LS	SDNM	B	C	D	E	<b>WF-2.1.2:</b> Identify, prioritize, and implement WUI fuels treatments in the Planning Area. Fuel treatments to reduce wildland fire risk will focus on the WUI areas identified in the Planning Area CWPPs and those that are developed collaboratively with Planning Area partners.
LS	SDNM	B	C	D	E	<b>WF-2.1.3:</b> In consultation with cultural resource specialists develop fuels treatments to protect cultural resources that are susceptible to damage from wildfire.
LS	SDNM	B	C	D	E	<b>WF-2.1.4:</b> Analyze and implement where needed, hazardous fuels reduction in and around recreation sites to improve public and firefighter safety.

<b>Goal 3: Limit the extent of wildfires and the impact of fire suppression efforts on wildlife, plant communities as well as natural and cultural features.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>			<b>Management Actions and Allowable Uses</b>	
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>		
<b>Objective 3.1:</b> Reduce the frequency of human caused wildland fires and minimize the total number of acres burned within the Planning Area.						
LS	SDNM	B	C	D	E	<b>WF-3.1.1:</b> Management Response (MR) for unplanned ignitions will be full suppression or modified suppression for all lands within the Planning Area.
LS	SDNM	B	C	D	E	<b>WF-3.1.2:</b> Identify, prioritize, and implement non-WUI fuels treatments within the Planning Area. Prioritization will be given to fuels treatments that maintain areas in Fire Regime Condition Class I or have the ability to improve areas characterized as Fire Regime Condition Class II and III.
LS	SDNM	B	C	D	E	<b>WF-3.1.3:</b> Implement fuels treatments, suppression activities and prevention activities that target reducing the size and number of human caused wildland fires.
<b>Objective 3.2:</b> Fire all fire management activities (wildfire suppression, prescribed fire, and mechanical, chemical, and biological vegetation treatments), a focus will be to maintain or improve habitat for Federally threatened, endangered, proposed, and candidate (“Federally protected”) species.						
LS	SDNM	B	C	D	E	<b>WF-3.2.1:</b> Identify and implement post-fire stabilization and rehabilitation actions in burned areas to restore a functional landscape to meet the resource management objectives.
LS	SDNM	B	C	D	E	<b>WF-3.2.2:</b> For fire suppression activities, a protocol for consultation has been developed as described in Appendix K, <i>Conservation Measures from Fish and Wildlife Service Biological Opinions</i> (p. 1239). This programmatic consultation contains conservation measures and prescriptions for use during fire suppression activities. Emergency consultation should only be needed in the futures, if suppression actions fall outside of these prescriptions/measures.
LS	SDNM	B	C	D	E	<b>WF-3.2.3:</b> Use prescribed fire, chemical, mechanical, and biological treatments in areas of the Planning Area that fall in Fire Regimes 2 and 4 to reduce shrub and tree components.
LS	SDNM	B	C	D	E	<b>WF-3.2.4:</b> Hazardous fuel reduction projects will be integrated with riparian restoration projects to reduce the frequency and the extent of fires along the Gila River as well as improve the quality and quantity of native riparian vegetation communities.
LS	SDNM	B	C	D	E	<b>WF-3.2.5:</b> Utilize fuels management treatments including prescribed fire to manage decadent marsh vegetation improve habitat for Yuma Clapper Rail and other species that depend upon cattail and bulrush marsh for foraging and nesting habitat.
<b>Objective 3.3:</b> For all fire management activities efforts will be made to reduce the impacts on natural and cultural resources.						
LS	SDNM	B	C	D	E	<b>WF-3.3.1:</b> Conduct all fire management activities within the SDNM, ACECs and along the Anza Trail in a manner that will avoid or minimize degradation of these areas and values that have been identified in the respective legislative designations for these areas.
LS	SDNM	B	C	D	E	<b>WF-3.3.3:</b> As part of an integrated vegetation resources management strategy, install fuel breaks and complete hazardous fuels reduction activities within the Fred J. Weiler Green Belt to protect and restore mesquite bosques and native riparian woodlands.
LS	SDNM	B	C	D	E	<b>WF-3.3.5:</b> Ensure fire management activities in wilderness areas are compatible with the applicable wilderness plan.

### 2.7.12.3. Administrative Actions

- Coordinate invasive-species management, monitoring, control, and education efforts with the appropriate Federal, state, county, municipal, and tribal agencies and other partners.

Efforts will be coordinated through the Borderlands Cooperative Weed Management Area and other similar groups.

- Conduct floristic surveys and monitoring for populations of sensitive, candidate threatened, endangered, rare, or unique species. *Applicable to the three relinquished BGR parcels.*
- Update the existing botanical resources database and vegetation map. *Applicable to the three relinquished BGR parcels.*
- Adhere to the intent of the Arizona Native Plant Law, Endangered Species Act (ESA), and all other applicable laws and regulations to protect vegetative resources.
- Focus invasive species monitoring efforts on likely vectors of invasion, such as linear features (roads, canals, railroads, utility corridors, etc.), disturbed areas (construction or development areas), and areas where water is available or may pond (water control structures, etc.).
- Control of noxious weeds required by law will not be subject to a benefit-cost analysis; however, the most economical and efficient method will be analyzed along with the safety of the proposed kind of treatment.
- Rehabilitation procedures will follow the Phoenix District Reclamation Plan.
- (Environmental Assessments) Conduct an environmental analysis at the time of the pretreatment survey. An interdisciplinary team will review any analysis needed on individual projects or group of projects.
- (Cost-Benefit Analysis) Subject land treatments proposed for livestock forage improvement to a cost-benefit analysis to ensure total benefits gained will equal or exceed the cost of the treatments.
- Develop effective interagency and community interactions and cooperation to meet wildland-fire and fuel-management strategies and landscape-scale resource condition objectives across administrative boundaries.
- Include wildfire hazard mitigation strategies in the Fire Management Plan for the Planning Area by identifying appropriate areas for prescribed fire use and mechanical, biological, or chemical treatments to reduce hazardous fuels to minimize the adverse effects of uncharacteristic wildland fires and meet resource objectives. The plan will also identify areas for exclusion from fire (through fire suppression), chemical, mechanical, and biological treatments.
- Protect human life (both firefighters' and the public) and communities, property, and the natural resources on which they depend are. Firefighter and public safety are the highest priority in all fire management activities.
- Improved public awareness of the role of fire in ecosystem restoration, wildfire risk and mitigation strategies, and wildfire safe community, preparedness, and response planning.

## **2.8. RESOURCE USES**

### **2.8.1. LANDS & REALTY (LR)**

The lands and realty program for the Planning Area consists of three distinct parts: (1) land use authorizations (LUAs), which includes ROWs for utility-scale renewable energy development proposals; (2) land tenure (disposal and acquisition of lands); and (3) withdrawals, classifications, and segregations. The lands and realty program processes applications related to solar, wind, and biomass energy; while geothermal proposals are managed by the minerals program and are discussed in Section 2.8.3, “Minerals Management (MM)” (p. 151).

The lands and realty program administers uses on public lands within a framework of numerous laws and mandates, which are discussed below:

- The Federal Land Policy and Management Act of 1976 (FLPMA), as amended enables the BLM to accomplish a variety of lands actions, including but not limited to sales, withdrawals, acquisitions, exchanges, leases, permits, easements, and ROWs.
- Federal Land Exchange Facilitation Act (FLEFA) (102 Stat. 1087) established uniform rules for the resolution of appraisal disputes in the exchange process.
- Mineral Leasing Act of 1920 (MLA) (30 U.S.C. 185), as amended authorizes the BLM to process ROWs for pipelines for the transportation of oil, natural gas, synthetic liquid or gaseous fuels, or any refined product produced.
- Recreation and Public Purposes Act of June 14, 1926 (R & PP) (43 U.S.C. 869 et seq.), as amended authorizes the sale and/or lease of public lands for recreational and public service needs for parks and other related community buildings.
- Airway Improvement Act of 1982 (49 U.S.C. 2215) provides for the conveyance of public lands to public agencies for use as airports and airways.
- Various Federal Highway Acts codified in 23 U.S.C., Sections 17 and 317 established to build, improve, and maintain the Federal interstate highway system.
- Federal Land Transaction and Facilitation Act (FLTFA) (114 Stat. 613; 43 U.S.C. 2301 et seq.) of July 25, 2000 allows retention by the BLM of receipts received from the sale of or interests in land if 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, and encourages the expansion of nuclear energy.

#### **2.8.1.1. Land Use Authorizations (LUAs)**

This segment of the lands and realty program focuses on requests for rights-of-way (ROWs), permits, leases, and easements, which are all referred to as “land use authorizations (LUAs)” throughout this document. As a general rule, proponents need an LUA (grant, permit, or lease) whenever a surface disturbing activity takes place on public land. Some examples of land uses which require a LUA grant include: electric transmission lines, communication sites, roads,

highways, trails, telephone/fiber optic lines, canals, flumes, pipelines, reservoirs, and utility-scale renewable energy developments. Proponents do not need a LUA for so-called “casual uses.” Examples of casual uses include driving vehicles over existing roads, sampling, surveying, or collecting data to prepare an application for a ROW, and performing certain activities that do not cause any appreciable disturbance or damage to the public land, resources, or improvements.

The objective of the LSFO is to meet the public land use demands on public lands, while also minimizing unnecessary impacts to resources. The LSFO will meet this objective by organizing the LUA types the Planning Area is accustomed to processing (or anticipates to receive in the next twenty years) into defined LUA category types (which are dictated by the size and intensity of the surface disturbance of the proposed LUA). Management allocations from other resource specific program areas (such as priority wildlife, special designations, and cultural resources) set restrictions on certain LUA types or state whether or not they are avoided or excluded. These allocations have been consolidated and renamed by the Lands and Realty program, so that the public, future utility proponents, and current LUA holders can easily comprehend what LUA type is allowed or prohibited within a certain location of the Planning Area.

These LUA types and the Lands and Realty designation in which the LUA type is managed (allowed or excluded in a certain area), have been defined in Table 2.8, “Description of LUA Types ” (p. 119).

**Table 2.8. Description of LUA Types**

LUA Type	Description of LUA Type	Lands and Realty Designations managing the LUA type
Utility-scale Renewable Energy Development LUAs	Utility-scale renewable energy development ROWs where the proponent has signed a purchase power agreement with a utility company to sell power. These facilities typically produce more than 100MW of power and may include linear utility features such as access roads, transmission lines, and/or pipelines.	<p><b>Utility-scale Renewable Energy Development Exclusion Areas</b> (this type of LUA would be excluded in prohibited areas under all action alternatives) (refer to Map 2–7b, 2–7c, 2–7d, and 2–7e)</p> <p><b>Utility-scale Renewable Energy Development Avoidance Areas</b> (this type of LUA would be avoided in high and moderate sensitivity conflicts areas under all action alternatives) (refer to Map 2–7b, 2–7c, 2–7d and 2–7e)</p>
Major Linear LUAs	Linear LUAs that require a ROW width of more than 20 feet. These types of utilities include, but are not limited to: <ul style="list-style-type: none"> <li>• Transmission lines that are greater than 115 kV,</li> <li>• Pipelines (water or gas) greater than 10 inches in diameter, and</li> <li>• Primary paved roads (as defined by the Planning and Conducting Route Inventories Technical Reference Guide 9113-1 [2006]).</li> </ul>	<p><b>Utility Corridors</b> (this type of LUA (excluding roads) would be routed through these corridors under the no action alternative) (refer to Map 2–5a)</p> <p><b>Multiuse Utility Corridors</b> (this type of LUA would only be authorized within these corridors under all action alternatives) (refer to Map 2–5b, 2–5c, 2–5d and 2–5e)</p>

LUA Type	Description of LUA Type	Lands and Realty Designations managing the LUA type
Minor Linear LUAs	Linear LUA lines that require a ROW width of no more than 20 feet. These types of utilities include: <ul style="list-style-type: none"> <li>● Transmission lines that are 115kV or smaller,</li> <li>● Pipelines (water or gas) smaller than 10 inches in diameter,</li> <li>● Roads other than primary paved roads as defined by the Planning and Conducting Route Inventories Technical Reference Guide 9113-1 [2006]), and</li> <li>● Fiber optic or telephone lines</li> </ul>	<p><b>LUA Exclusion Areas</b> (this type of authorization would be excluded in these areas under all action alternatives) (refer to Map 2-5b, 2-5c, 2-5d, and 2-5e)</p> <p><b>LUA Avoidance Areas</b> (this type of authorization would be excluded in these areas under all action alternatives) (refer to Map 2-5b, 2-5c, 2-5d and 2-5e)</p>
Nonlinear LUAs	LUAs that are not linear in fashion and typically do not exceed five acres of surface disturbance. These LUAs do not produce or store more than 100MW of power. These types of LUAs include: <ul style="list-style-type: none"> <li>● Oil, natural gas, or water wells,</li> <li>● Cathodic protection utilities,</li> <li>● Communication facilities,</li> <li>● Meteorological devices (such as rain gauges),</li> <li>● Apiaries,</li> <li>● Wildlife waters,</li> <li>● Geophysical exploration facilities, and</li> <li>● Storage facilities.</li> </ul>	<p><b>LUA Exclusion Areas</b> (this type of authorization would be excluded in these areas under all action alternatives) (refer to Map 2-5b, 2-5c, 2-5d and 2-5e)</p> <p><b>LUA Avoidance Areas</b> (this type of authorization would be excluded in these areas under all action alternatives).</p> <p><b>Communication Sites</b> (proposed communication facilities would be encouraged to be authorized in this site under all action alternatives) (refer to Map 2-5b, 2-5c, 2-5d and 2-5e)</p>

## Utility-Scale Renewable Energy Development

Proposals for the development of utility-scale renewable energy facilities on BLM administered public lands fall under the authority of FLPMA as a land use authorization for a ROW, which are subject to environmental analysis under NEPA. The high demand for utility-scale renewable energy development (primarily solar development in the Western U.S.) has led to three parallel processes within the agency to respond to this rapid demand: an agency wide programmatic process, an Arizona BLM process, and the process being analyzed in detail for this planning effort at the field office level. Regardless of when each of these processes become final decisions, this resource management plan will be amended to meet the decisions set forth by both the agency wide and state level decisions. However, the preferred alternative within this planning effort would more than likely not conflict with the agency wide or state wide efforts.

The management actions set forth in this Plan were crafted from methods which were adopted from the Western Governors' Association and local utility companies' planning efforts through the Western Renewable Energy Zones (WREZ) initiative. For the Plan, 2010 BLM GIS data was used to categorize public lands into four sensitivity categories (prohibited, high sensitivity, moderate sensitivity, and low known sensitivity areas). These four categories indicate the level of conflict that utility-scale renewable energy development proposals would encounter on public lands, in regards to existing resources and management goals and objectives.

This conflict analysis categorization method (which is described in detail in Appendix N, *Analysis for Renewable Energy Sensitivity* (p. 1263)) was used to identify locations within the Lower Sonoran Decision Area where utility-scale renewable energy development would encounter some level of conflict, based on known resources and the allocations set forth in this plan. Management actions were then guided by this analysis to decipher which areas of the Planning area would be excluded or avoided to utility-scale renewable energy development. Map 2-7a, 2-7b, 2-7c, 2-7d and 2-7e displays the lands that fall under each of these sensitivity categories. Under all of the action alternatives, public lands that fall under the “prohibited” category would be areas where utility-scale renewable energy development proposals would be excluded and proposals that fall under the “high and moderate sensitivity” categories would be areas where these types of developments would be avoided. Applications within the Decision Area would still need site-specific environmental analysis no matter where they are proposed in the Decision Area. The polygons depicted on Maps 2-7a through 2-7e do not imply a preauthorization for utility-scale renewable energy development, but are simply an RMP level depiction of where conflicts exists. Other conflicts may be revealed as site-specific analysis are conducted.

According to Appendix B of the Wind Energy Development Final Programmatic EIS (June 2005), there is little known potential for wind energy development on public lands in the Planning Area; therefore, no management actions were developed to manage such developments. Proposals for wind energy development would be entertained in low sensitivity areas of Planning Area and must comply with the best management practices that are identified in the Programmatic EIS Record of Decision (ROD) for Wind Energy Development.

### **Utility Corridors and Multiuse Utility Corridors**

In order to minimize adverse environmental impacts and the proliferation of individual and isolated LUAs, utility corridors and multiuse utility corridors would be designated. Major linear LUA holders reserve to the BLM the right to grant additional major linear LUAs from other holders for compatible uses adjacent and at times within existing LUAs and designated utility corridors. Under existing management, there are ten designated utility corridors (now referred to as multiuse utility corridors in all four of the action alternatives, in an effort to stress that utilities, including transportation networks, are permitted in these corridors). Under current management, major linear transportation facilities are not required to be placed within the existing utility corridors. Multiuse utility corridor designations vary by each action alternative and are displayed on Map 2-5b, 2-5c, 2-5d and 2-5e, while the ten existing utility corridors are displayed on Map 2-5a.

Portions of the San Diego Gas and Electric, El Paso Natural Gas, and Tucson Electric Power multiuse utility corridors (which exist throughout all alternatives and can be identified on Maps 2-5a through 2-5e) will comply with the adopted interagency operating procedures (IOPs) and standards for Section 368 energy corridors, set by the Approved Resource Management Plan/Record of Decision (ROD) for Designation of Energy Corridors on BLM Administered Lands in 11 Western States. Sections 368 (of the Energy Policy Act of 2005) corridors are allocated for oil, gas, and hydrogen pipelines and electricity transmission and distribution facilities (energy corridors).

### **Land Use Authorization (LUA) Avoidance and Exclusion Areas**

LUA Avoidance Areas are areas with sensitive resource values where minor linear LUAs and nonlinear LUAs (such as ROWs, permits, leases, and easements) would be strongly discouraged and therefore “avoided”. Authorizations to be considered within avoidance areas must be compatible with the purpose for which the area was designated and not be otherwise feasible on lands outside the avoidance area. Authorizations approved within these areas would be required to meet additional mitigation measures set forth by individual program areas that manage the “avoided” designated allocation. For example, wildlife habitat areas (WHAs) call for the avoidance of LUAs. If LUAs are authorized within the WHA (or LUA Avoidance Area), the LUA would be required to meet the mitigation measures (or management actions) prescribed for that WHA in this Plan.

LUA Exclusion Areas are areas with sensitive resource values where minor linear LUAs and nonlinear LUAs (such as ROWs, permits, leases, and easements) would not be authorized. These areas have been determined to be unsuitable for a LUA because of (1) unique, highly valued, complex, or legally protected resources; (2) potentially significant environmental impacts resulting from conflicts with current land uses; or (3) areas posing substantial hazard to construction and/or operation of a linear facility (e.g., electric transmission line, pipeline, telephone line, fiber optic line). In these areas, LUAs would be granted only in cases where there is a legal requirement to provide such access or an immediate public safety concern.

LUA Avoidance and Exclusion Areas vary by alternative depending on the allocations established by other resources and program areas, BLM policy, or congressional/secretarial/presidential orders. These areas can be found on Maps 2-5a, 2-5b, 2-5c, 2-5d and 2-5e.

## **Communication Sites**

Communications sites are generally limited to designated areas with existing facilities on mountain peaks. Communications sites (a nonlinear LUA type) on public lands 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 is currently one designated communication site in the Planning Area at Oatman Mountain (refer to Map 2-5a), in which all proposed communication facilities would be encouraged to be placed. Throughout all of the alternatives, communication facilities would be placed outside of LUA Exclusion Areas on a case-by-case basis.

### **2.8.1.2. Land Tenure**

Land tenure focuses on disposing and acquiring lands or interests in lands. The land tenure segment of the lands and realty program specifies that BLM will (1) retain all public lands or interests in land that enhance multiple-use management, (2) acquire lands or interests in land that complement important resource values and further management objectives, and (3) dispose of lands or interests in lands that are difficult or uneconomical to manage or are no longer needed for Federal purposes.

## **Land Acquisition**

The Secretary of the Interior is delegated with the authority from FLPMA to acquire non-Federal lands or interests in lands. Lands acquired by the LSFO must accomplish at least one of the following:

- 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,
- Eliminate split-estate by acquiring either the surface or subsurface rights, if acquisition of rights would be in the public interest,
- Assist in the consolidation of large tracks of BLM administered lands, and/or
- Facilitate proper management within congressionally designated NLCS management units.

### **Lands Suitable for Disposal**

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. Federal lands can be disposed of through sale, exchange, or Recreation and Public Purposes Act (R & P P) patent. 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. Lands identified as being suitable for disposal are displayed on Maps 2-6a, 2-6b, 2-6c, 2-6d and 2-6e in green. Lands that are shaded in blue on Maps 2-6b through 2-6e are currently leased under the R & PP Act and could potentially be patented to these lease holders.

Public lands selected for disposal typically are those lands that meet the following criteria:

- Isolated and fragmented from larger tracks of BLM managed lands,
- Adjacent to urbanizing private and state lands, which could be subject to future development,
- Currently leased under the R&PP Act and are eligible to be patented, and/or
- Present an economic and management challenge to retain under public ownership,

The BLM would not transfer from Federal ownership the following:

- Designated or proposed critical habitat for a listed or proposed threatened, endangered or special status species; and/or
- Lands supporting listed or proposed threatened, endangered, or candidate species if such transfer would be inconsistent with recovery needs, objectives, and conservation measures or would likely affect the recovery of the species.

Exceptions to the above could occur if the recipient of the lands agrees to protect the species or critical habitat 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.

Disposal of lands would be made on a case-by-case basis and would be accomplished by the most appropriate disposal authority and after proper NEPA analysis. Should the authorizing official wish to dispose of lands not designated for disposal in this RMP, an RMP amendment would have to be made and the lands would need to meet the disposal criteria of the applicable laws and regulations.

No management actions related to land withdrawals, classifications are presented in this plan; therefore, each proposal would be analyzed on a case-by-case basis.

### **2.8.1.3. Withdrawals, Classifications & Segregations**

Withdrawn lands where another public agency manages the surface estate are displayed on Maps 2-5a, 2-5b, 2-5c, 2-5d and 2-5e. Withdrawn lands from congressional designations (such as wilderness areas) and proposed withdrawn lands from program area allocations (such as ACECs and public use and conservation for future use sites) where the BLM still manages the surface are also displayed on these maps.

The BLM is delegated the authority to process withdrawal actions for the BLM and other Federal agencies. Most of the existing plans for the subject Planning Area do not specifically address withdrawals, however, the following items are generally considered consistent:

- Review existing withdrawals on a case-by-case basis. Determine whether the use is consistent with the intent of the withdrawal and whether the withdrawal should be continued, modified, revoked or terminated.
- If it is determined by a withdrawal review that a withdrawal should be revoked or terminated or a withdrawal expires, the land does not automatically open to operation of the laws(s) to which the land was closed. An opening order will be published to notify the public when and to what extent the land will be opened. An opening order may be incorporated in a public land order or termination order that revokes or terminates a withdrawal or may be published in the Federal Register as a separate document.
- Land on which a withdrawal has expired or has been revoked or terminated will be managed in a consistent manner with adjacent or comparable public lands within the Planning Area.
- New withdrawals may be completed when existing laws or regulations cannot adequately protect or preserve the integrity of resources of rarity, significance, fragility, or irreplaceability, or when valuable capital improvements are involved. They must be shown to be at risk by current land management practices. New withdrawals may also be completed when land is needed by another Federal agency. Proposed withdrawals will be the minimum acreage consistent with the demonstrated need.

Classification of lands is the process of determining whether the lands are more valuable or suitable for transfer or use under Federal ownership for management purposes. The classification process is currently used for potential disposals under the Recreation & Public Purposes Act (R&PP). The segregation of lands is an action such as a withdrawal or allowed application (R&PP) that suspends the operation to entry under all or portions of the public land laws, including the mining and mineral leasing laws. Similar to withdrawals, classifications and segregations are not specifically addressed in all the applicable current land use plans, but are generally considered consistent with the following actions:

- Review existing and subsequent segregations on a case-by-case basis to determine whether the segregation is appropriate and should be continued, modified or terminated. A notice of termination and opening order will be published to notify the public when and to what extent the land will be opened. Land on which a classification or segregation has been terminated will be managed in a manner consistent with adjacent or comparable public land within the Planning Area.

No management actions related to land withdrawals, classifications are presented in this Plan; therefore, each proposal would be analyzed on a case-by-case basis.

#### **2.8.1.4. Existing Management Decisions (Alternative A — No Action) Lands & Realty**

Decisions are listed in chronological order by plan. The following decisions are extracted from the existing land use plans and amendments and are listed in chronological order. Because none of these current land use plans encompass the entire Planning Area, very few of these decisions are being carried forward as common to all alternatives and are restated as new action alternatives where applicable.

##### ***Lower Gila North Management Framework Plan (1983):***

- Establish the following seven \*multiple-use utility corridors along existing rights-of-way in Lower Gila North. In these corridors, all utility uses (including transportation, pipelines, and electrical transmission lines) will be allowed when the uses are compatible. (LR-07)
- Palo Verde-Devers\*: 2 miles (restricted between Burnt Mountain and Big Horn Mountains)
- El Paso Natural Gas Company\*: 2 miles (1 mile at Bill Williams River crossing) [\*Only the two corridors located within the Lower Sonoran Planning Area and are listed above.]
- Continue to allow small-utility distribution systems to be developed on an “as needed” basis throughout the Lower Gila North Planning Area. These small distribution systems will include all uses such as electrical lines, gas and water pipelines, and roads. These distribution systems will be authorized when consistent with environmental and land use considerations. (LR-08)

##### ***Lower Gila South Resource Management Plan (1989):***

- Designate 10 corridors within the Lower Gila South Planning Area (each one-mile-wide). (LR-13)

##### ***Phoenix Resource Management Plan (1989):***

- All major utilities *in the Phoenix RMP Planning Area* would be routed through designated corridors. (LR-02)
- All the corridors in the *Phoenix RMP Planning Area* [except for the Black Canyon corridor] would be 1 mile in width. (LR-03)
- Retain 6,880 acres in the San Tan Mountains, outside the Resource Conservation Areas (RCAs), as a Cooperative Recreation Management Area with state or local agencies. (LR-20)

- Acquire 480 acres of state land in the San Tan Mountains Cooperative Recreation Management Area. (LR-21)
- Designate 391,803 (remainder thereof) acres of Federal surface outside the seven RCAs as suitable for disposal through state indemnity selection, R & P P patent, or state or private exchange. (LR-29) *This now refers to two RCAs (which are now within the Bradshaw Harquahala RMP Area) based on the redesignation of BLM Field Office management boundaries. Therefore, all public lands from the Phoenix RMP Planning Area that are now within the Lower Sonoran Planning Area have been identified as suitable for disposal.*
- Designate 45,000 (remainder thereof) acres of Federal surface outside the seven RCAs as suitable for disposal through state indemnity selection, state or private exchange or sale. (LR-30) *This now refers to two RCAs (which are within the Bradshaw Harquahala RMP Area) based on redesignation of BLM Field Office management boundaries. Therefore, all public lands from the Phoenix RMP Planning Area that are now within the Lower Sonoran Planning Area have been identified as suitable for disposal.*
- Identify for disposal all subsurface mineral estate underlying Federal surface designated for disposal outside the seven RCAs, Cooperative Recreation Management Areas and R & P P lands. (LR-31) *This now refers to two RCAs (which are within the Bradshaw Harquahala RMP Area) based on the redesignation of BLM Field Office management boundaries. Therefore, all public lands from the Phoenix RMP Planning Area that are now within the Lower Sonoran Planning Area have been identified as suitable for disposal.*
- Transfer 1,140 acres in the Goldfield Area to the City of Apache Junction for park development under R & P P leases. (LR-32)
- On land retained or acquired, communication facility development would be limited to designated sites. (LR-52)
- Land identified for disposal would generally be left open for communication site development on a case-by-case basis. (LR-53)
- Communication site applications will continue to be considered on land identified for disposal until such time as disposal takes place. (LR-54)
- Land use authorizations (right-of-way, leases, permits, easements) will continue to be issued on a case-by-case basis. (LR-55)
- Rights-of-way will be issued to promote the maximum utilization of existing right-of-way routes, including joint use whenever possible. (LR-56)

***Lower Gila South Resource Management Plan (Goldwater Amendment)  
(1990):***

- Restrict construction of overhead transmission lines to paralleling the existing Gila Bend to Ajo 69kV transmission line. Underground facilities must be constructed on the west side of the Tucson Cornelia and Gila Bend railroad. All rights-of-way are subject to U.S. Air Force concurrence. (LR-3) *Applies only to the relinquished Ajo Airport parcel.*

- Communicate promptly to the public and other agencies, as necessary, new designations for land use, resource protection, safety and security. (LR-6) *Applicable to the three relinquished BGR parcels.*
- Prohibit new ROWs and other land use authorizations except those installed in the established Interstate 8 utility corridors; encourage the installation of below ground utility services within the corridor south of Interstate 8 unless overhead facilities are required due to technical and/or operational circumstances (Not Numbered).

### ***Lower Gila Resource Management Plan Amendment (2005):***

- Approximately 33,459 acres of public lands within the Planning Area are identified for disposal (LR-1; identified on Map 2-6a).
- Public lands in the Gila Bend Management Area adjacent to the White Tanks County Regional Park, described as T.2 N., R. 3 W., sections 4,5,8,9,14,15,17 through 22, 26 through 29, and 33 through 35; T. 2 N., R. 4 W., section 1; and T. 3 N., R. 4 W., sections 1, 11 through 14, 24, 25, and 36 will be retained in Federal ownership and will only be available for disposal to local or state governmental entities for recreation/park purposes. (LR-2)
- The BLM will continue to dispose of Federal subsurface estate under non-Federal surface estate on a case-by-case basis. (LR-3)
- Exchanges to re-position lands within all the management areas may occur if it has been determined that it would be in the public interest. (LR-4)
- Lands identified for disposal may be retained if significant resource values are found during evaluation. The policy is not to dispose of lands occupied by proposed or listed threatened or endangered species. If other public uses outweigh the value of a parcel as Federally owned threatened or endangered species habitat, disposal could be considered on a case-by-case basis. If a listed or proposed threatened or endangered species would be affected by a land disposal action, consultation or conferencing with the U.S. Fish and Wildlife Service will be required. Exchange for other parcels of habitat will be encouraged. Compensation for loss of habitat value would be required where such a policy exists. Other mitigation may also be required. These determinations would be made during preparation of the site-specific environmental assessments required for every disposal action. Environmental documentation must be in compliance with the National Environmental Policy Act prior to the approval of any lands action. (LR-5)
- Approximately 3,043,900 acres not listed in Appendix 3 or identified for specific purposes in this amendment will be retained in public ownership unless needed for recreation or public purposes. Such disposal proposals on lands not identified for disposal will be considered on a case-by-case basis. (LR-6)
- All non-Federal lands with high resource values within the boundaries of the management areas may be considered for acquisition. Acquisitions will occur primarily through the land exchange process in accordance with 43 CFR 2200 and the Federal Land Exchange Facilitation Act. Acquisition by donation and purchase using Land and Water Conservation Funds will also be considered when willing parties or available funds exist. All acquisitions will be negotiated with willing landowners only and must be in the public interest. There are approximately 288,800 acres of non-Federal land within the four management areas. (LR-7)

- The BLM will continue to acquire non-Federal subsurface estate under Federal surface estate on a case-by-case basis. (LR-8)

***Approved Resource Management Plan Amendments/Record of Decision (ROD) for Designation of Energy Corridors on BLM Administered Lands in 11 Western States (2009):***

- Section 368 directs the Secretary of the Interior (the Secretary) to designate energy transport corridors under existing authorities, such as those provided by Section 503 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1763) (FLPMA). By signing this ROD, the ASLM amends the affected BLM land use plans under the authority of FLPMA and in accordance with BLM planning regulations (43 CFR Part 1600). The approved plan amendments are consistent with the requirements of Section 368 of the Energy Policy Act of 2005. The decision also adopts IOPs to meet the Section 368 requirement to improve the ROW application process and to meet NEPA requirements to provide practicable means to avoid or minimize environmental harm which may result from future ROW grants within the designated 3 corridors. The approved BLM plan amendments are presented in Appendix A of this ROD and the IOPs are presented in Appendix B of this ROD. *This decision reallocates the El Paso Natural Gas, San Diego Gas and Electric, and Tucson Electric Powers Utility Corridors (identified on Maps 2-5a, 2-5b, 2-5c, 2-5d and 2-5e in this Plan) as a Section 368 energy transport corridor.*

### **2.8.1.5. Action Alternatives for Lands & Realty (LR)**

#### **Program Goals**

- **Goal 1:** Manage lands and realty actions to effectively support public needs and resource management objectives.
- **Goal 2:** Manage land tenure to meet natural resource management objectives, community needs, and to promote agency efficiency.

#### **Land Use Allocations Summary**

**Table 2.9. Lands and Realty Allocations For the Lower Sonoran Decision Area**

	Alt. A	Alt. B	Alt. C	Alt. D	Alt. E	
<b>LAND USE AUTHORIZATIONS</b>						
<b>Utility-scale Renewable Energy Avoidance and Exclusion Areas (Acres)</b>						
Acres avoided (moderate and high sensitivity conflict areas)	-	744,600	639,900	413,700	511,100	
Acres excluded (prohibited areas)	105,000	145,000	271,900	511,500	380,800	
<b>Utility Corridors (Miles)</b>						
	Width/ Length	Width/ Length	Width/ Length	Width	Length	Width
El Paso Natural Gas	1.0/49.2	1.0/49.2*	1.0/34.8	1.0	34.8	1.0
Palo Verde to Devers	1.0/8.8	1.0/8.8	1.0/8.8	—	—	1.0

	Alt. A	Alt. B	Alt. C	Alt. D		Alt. E
San Diego Gas and Electric	1.0/22.3	1.0/22.3	1.0/21.5	1.0	21.5	1.0
Palo Verde-Kyrene	1.0/8.1	1.0/8.1	1.0/7.6	1.0	7.6	1.0
Liberty-Gila Bend	1.0/9.2	1.0/9.2	1.0/9.2	1.0	9.2	1.0
Gila Bend-Ajo	1.0/0.5	1.0/0.5	—	—	—	—
Santa Rosa-Gila Bend	10.0/0.1	1.0/0.1	1.0/0.1	—	—	—
Interstate 8	1.0/22.9	1.0/22.9	1.0/24.4	1.0	20.5	1.0
Tucson Electric Power	1.0/34.4	1.0/34.4	1.0/15.6	1.0	15.6	1.0
Interstate 10	1.0/1.0	1.0/1.0	1.0/1.0	1.0	1.0	1.0
Total Corridor Acres	134,328 acres	134,328 acres	95,203 acres	72,153 acres		82,301 acres
Multiuse utility corridor widths and lengths are measured as they cross BLM administered lands only. Multiuse utility corridors are simply referred to as utility corridors within Alternative A and would not include transportation facilities.						
*Indicates that the multiuse utility corridor will only permit underground facilities in a certain portion of the corridor.						
<b>LUA Avoidance and Exclusion Areas (Acres)</b>						
LUA Avoidance Area Acres	-	520,900	604,300	328,600		310,200
LUA Exclusion Area Acres	105,100	126,500	126,500	510,700		380,100
<b>Communication Sites</b>						
The Oatman Mountain Communication Site is allocated in all alternatives.						
<b>LAND TENURE</b>						
Disposal Acres	27,400	38,200	36,200	19,400		30,500
R & PP Leased Acres	3,400	3,400	3,400	3,400		3,400
Acquisition Acres	Lands would be acquired from willing sellers on a case-by-case basis.					
Retention Acres	899,400	888,600	890,600	907,400		896,300

**Table 2.10. Lands and Realty Allocations For the SDNM Decision Area**

	Alt. A		Alt. B		Alt. C		Alt. D		Alt. E	
<b>LAND USE AUTHORIZATIONS</b>										
<b>Utility-scale Renewable Energy Avoidance and Exclusion Areas (Acres)</b>										
The SDNM is excluded from any potential utility-scale renewable energy development within all alternatives.										
<b>Utility Corridors (Miles)</b>										
	Width	Length								
Santa Rosa-Gila Bend	1	18.1	1.0	18.1	0.5*	17.9*	-	-	-	-
Interstate 8	1	21.1	1**	21.1	0.5*	21.1*	-	-	-	-
Tucson Electric Power	1	7.4	1.0	7.4	-	-	-	-	-	-
Total Corridor Acres	32,990		32,990		14,990		-		-	
Multiuse utility corridor widths and lengths are measured as they cross BLM administered lands only. Multiuse utility corridors are simply referred to as utility corridors within Alternative A and would not include transportation facilities.										
*Indicates that the multiuse utility corridor will only permit underground facilities.										
**Indicates that a portion of the multiuse utility corridor narrows to a ½ mile wide (south of the Interstate 8 highway centerline) as it passes along the length of the South Maricopa Mountains Wilderness (refer to Map 2-5b)										
<b>LUA Avoidance and Exclusion Areas (Acres)</b>										

Avoidance Area Acres	-	321,500	321,500	-	-
Exclusion Area Acres	164,900	164,900	164,900	486,400	486,400
<b>Communication Sites</b>					
No communication sites are designated in the SDNM.					
<b>LAND TENURE</b>					
Disposal Acres	No lands are designated as being suitable for disposal within the Monument. Exchanges for lands within the Monument for other private lands within the Monument’s boundaries would be permitted if they further improve the management of Monument objects and present no net loss to existing objects that will be impacted by the exchange.				
R&PP Leases Acres	No lands are presently leased under the R&PP Act within the SDNM, therefore no acres were identified.				
Acquisition Acres	Lands would be acquired from willing sellers on a case-by-case basis.				
Retention Acres	All 486,400 acres of public land would be retained.				

### Management Actions and Allowable Uses

<b>Goal 1 (Land Use Authorizations):</b> <i>Manage lands and realty actions to effectively support public needs and resource management objectives.</i>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>			<b>Management Actions and Allowable Uses</b>	
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>		
<b>Objective 1.1 (Utility-scale Renewable Energy Development LUAs):</b> Authorize utility-scale renewable energy development LUAs (as defined in Table 2.7, “Acres of Lands Managed to Protect Wilderness Characteristics by Alternative” (p. 110)) in locations that are found to be suitable due to limited conflicts with other management objectives.						
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>LR-1.1.1:</b> Utility-scale renewable energy development LUAs would be excluded on lands that fall under the “prohibited” area (refer to Map 2–7b, 2–7c, 2–7d, 2–7e and Appendix N, <i>Analysis for Renewable Energy Sensitivity</i> (p. 1263)).
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>LR-1.1.2:</b> Utility-scale renewable energy development LUAs would be avoided on lands that fall under the “high and moderate sensitivity” conflict areas (refer to Map 2–7b to Map 2–7e and Appendix N, <i>Analysis for Renewable Energy Sensitivity</i> (p. 1263)).
<b>Objective 1.2 (Major Linear LUAs):</b> Authorize major linear LUAs (as defined in Table 2.7, “Acres of Lands Managed to Protect Wilderness Characteristics by Alternative” (p. 110)) in locations that utilize designated multiuse utility corridors effectively.						
<b>LS</b>		<b>B</b>				<b>LR-1.2.1:</b> Ten 1 mile wide multiuse utility corridors would be designated, in which all compatible major linear utility LUAs (as defined in Table 2.7, “Acres of Lands Managed to Protect Wilderness Characteristics by Alternative” (p. 110)) would be allowed unless otherwise specified by the authorizing official. The corridors are listed below; also see Map 2-5b and Table 3.15, “Utility Corridors within the Lower Sonoran” (p. 308) for location descriptions:  A. El Paso Natural Gas ( <i>section from Ajo, AZ to the Tohono O’odham Nation would allow only underground facilities</i> ).  B. Palo Verde-Devers  C. San Diego Gas and Electric  D. Palo Verde-Kyrene  E. Liberty-Gila Bend

<b>Goal 1 (Land Use Authorizations): <i>Manage lands and realty actions to effectively support public needs and resource management objectives.</i></b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
						F. Gila Bend-Ajo G. Gila Bend-Santa Rosa H. Interstate 8 I. Tucson Electric Power J. Interstate 10
<b>LS</b>			<b>C</b>			<p><b>LR-1.2.2:</b> Nine 1-mile wide multiuse utility corridors would be designated in which all compatible major linear LUAs (as defined in Table 2.7, “Acres of Lands Managed to Protect Wilderness Characteristics by Alternative” (p. 110)) would be allowed unless otherwise specified by the authorizing official. The corridors are listed below; also see Map 2-5c:</p> <p>A. El Paso Natural Gas (<i>section from Ajo to the Tohono O’odham Nation would be removed</i>).</p> <p>B. Palo Verde Devers</p> <p>C. San Diego Gas and Electric</p> <p>D. Palo Verde-Kyrene</p> <p>E. Liberty-Gila Bend</p> <p>F. <i>Gila Bend-Ajo would be removed.</i></p> <p>G. Gila Bend-Santa Rosa (<i>underground facilities only</i>)</p> <p>H. I-8</p> <p>I. Tucson Electric Power (<i>section from Ajo, AZ to Tohono O’odham Nation would be removed</i>)</p> <p>J. I-10</p>
<b>LS</b>				<b>D</b>		<p><b>LR-1.2.3:</b> Seven 1-mile wide multiuse utility corridors would be designated in which all compatible major linear LUAs (as defined in Table 2.7, “Acres of Lands Managed to Protect Wilderness Characteristics by Alternative” (p. 110)) would be allowed unless otherwise specified by the authorizing official. The corridors are listed below; also see Map 2-5d:</p> <p>A. El Paso Natural Gas (<i>section from Ajo to the Tohono O’odham Nation would be removed</i>).</p> <p>B. <i>Palo Verde-Devers would be removed.</i></p> <p>C. San Diego Gas and Electric</p> <p>D. Palo Verde-Kyrene</p> <p>E. Liberty-Gila Bend</p> <p>F. <i>Gila Bend-Ajo would be removed.</i></p>

<b>Goal 1 (Land Use Authorizations): <i>Manage lands and realty actions to effectively support public needs and resource management objectives.</i></b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
						<p><i>G. Gila Bend-Santa Rosa would be removed.</i></p> <p>H. I-8</p> <p>I. Tucson Electric Power (<i>section from Ajo, AZ to Tohono O’odham Indian Reservation would be removed</i>)</p> <p>J. I-10</p>
<b>LS</b>					<b>E</b>	<p><b>LR-1.2.4:</b> Eight 1-mile wide multiuse utility corridors would be designated in which all compatible major linear LUAs (as defined in Table 2.7, “Acres of Lands Managed to Protect Wilderness Characteristics by Alternative” (p. 110)) would be allowed unless otherwise specified by the authorizing official. The corridors are listed below; also see Map 2-5e:</p> <p>A. El Paso Natural Gas (<i>section from Ajo to the Tohono O’odham Nation would be removed</i>).</p> <p>B. Palo Verde Devers</p> <p>C. San Diego Gas and Electric</p> <p>D. Palo Verde-Kyrene</p> <p>E. Liberty-Gila Bend</p> <p><i>F. Gila Bend-Ajo would be removed.</i></p> <p><i>G. Gila Bend-Santa Rosa would be removed.</i></p> <p>H. I-8</p> <p>I. Tucson Electric Power (<i>section from Ajo, AZ to Tohono O’odham Nation would be removed</i>)</p> <p>J. I-10</p>
<b>LS</b>		<b>B</b>	<b>C</b>		<b>E</b>	<p><b>LR-1.2.5:</b> Major linear LUAs (as defined in Table 2.7, “Acres of Lands Managed to Protect Wilderness Characteristics by Alternative” (p. 110)) may be authorized on case-by-case basis outside designated multiuse utility corridors if they are due and necessary in connecting a generating facility to the closest designated multiuse utility corridor.</p>
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>LR-1.2.6:</b> Portions of the El Paso Natural Gas, San Diego Gas and Electric, and Tucson Electric Powers Multiuse Utility Corridors (as shown in Maps 2-5a to 2-5e) would adhere to the decisions and IOPs set forth in the Approved Resource Management Plan Amendments / Record of Decision (ROD) for Designation of Energy Corridors on BLM Administered Lands in 11 Western States (2009).</p>

<b>Goal 1 (Land Use Authorizations): <i>Manage lands and realty actions to effectively support public needs and resource management objectives.</i></b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
	SDNM	B				<p><b>LR-1.2.7:</b> Three 1-mile wide multiuse utility corridors would be designated in which all compatible major linear LUAs (as defined in Table 2.7, “Acres of Lands Managed to Protect Wilderness Characteristics by Alternative” (p. 110)) would be allowed unless otherwise specified by the authorizing official. The corridors are listed below; also see Map 2-5b and Table 3.16, “Existing Utility Corridors within the SDNM” (p. 314) for location descriptions:</p> <p>G. Gila Bend-Santa Rosa</p> <p>H. I-8</p> <p>I. Tucson Electric Power</p>
	SDNM		C			<p><b>LR-1.2.8:</b> Two ½-mile wide multiuse utility corridors would be designated in which all compatible major linear LUAs (as defined in Table 2.7, “Acres of Lands Managed to Protect Wilderness Characteristics by Alternative” (p. 110)) would be allowed unless otherwise specified by the authorizing official. The corridors are listed below; also see Map 2-5c:</p> <p>G. Gila Bend to Santa Rosa (<i>underground facilities only</i>)</p> <p>H. I-8</p> <p><i>I. Tucson Electric Power would be removed.</i></p>
	SDNM			D	E	<p><b>LR-1.2.9:</b> No existing or future multiuse utility corridors would be designated within the Monument (see Map2-5d and 2-5e).</p>
<b>Objective 1.3 (Minor Linear and Nonlinear LUAs):</b> Authorize minor linear and nonlinear LUAs (as defined in Table 2.7, “Acres of Lands Managed to Protect Wilderness Characteristics by Alternative” (p. 110)) in locations that minimize resource impacts, are compatible with multiple use objectives, and do not compromise the existing rights of current holders.						
LS	SDNM	B	C	D	E	<p><b>LR-1.3.1:</b> Proposed minor linear and nonlinear LUAs would be prohibited in areas designated as LUA Exclusion Areas, unless they allow for:</p> <ul style="list-style-type: none"> <li>● Access to private property in holdings when there is no other reasonable access alternative across non-Federal land,</li> <li>● Authorized emergency, public safety and administrative uses, and</li> <li>● Authorized emergency, public safety and administrative uses, and</li> <li>● Uses that would further enhance the goals and objectives of the allocation, as permitted by the authorizing official.</li> </ul> <p>Exclusion areas for minor linear and nonlinear LUAs include:</p> <ul style="list-style-type: none"> <li>● The SDNM (Alternatives D and E only),</li> <li>● Designated wilderness areas (all alternatives),</li> <li>● The Juan Bautista de Anza National Historic Trail (all alternatives),</li> <li>● The Fred J. Weiler Green Belt (PLO 1015 lands) (all alternatives),</li> <li>● Sentinel Plain (military land relinquished to the BLM with restrictions related to public safety)(all action alternatives),</li> </ul>

<b>Goal 1 (Land Use Authorizations): <i>Manage lands and realty actions to effectively support public needs and resource management objectives.</i></b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
						<ul style="list-style-type: none"> <li>• Lands managed to protect wilderness characteristics (in Alternative D only)</li> <li>• ACECs (Alternative D and E only),</li> <li>• VRM Class I lands (all action alternatives) and</li> <li>• High-potential segments of the Butterfield Overland Stage Route (Alternative D only).</li> </ul>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>LR-1.3.2:</b> Proposed minor linear and nonlinear LUAs would be strongly discouraged in areas designated as LUA Avoidance Areas, unless they allow for / or are:</p> <ul style="list-style-type: none"> <li>• Authorized emergency, public safety, and administrative uses.</li> <li>• Uses that are compatible with the purpose for which the allocation was designated by meeting the restrictions set forth by the underlining program area allocation, an</li> <li>• Are not feasible on lands outside the avoidance area.</li> </ul> <p>LUA Avoidance Areas for minor and nonlinear LUAs include:</p> <ul style="list-style-type: none"> <li>• SDNM (Alternatives B and C only),</li> <li>• ACECs (Alternatives B and C only),</li> <li>• BLM threatened and endangered species habitats, including Sonoran desert tortoise habitats (all action alternatives),</li> <li>• Lands managed to protect wilderness characteristics (in Alternatives C and E only),</li> <li>• VRM Class II lands (all action alternatives),</li> <li>• SCRMAAs (Alternative D only),</li> <li>• Fred J. Weiler Green Belt (non-PLO 1015 lands) (all action alternatives),</li> <li>• Cultural sites allocated to a use category (such as public and conservation use sites)(all action alternatives),</li> <li>• High-potential segments of the Butterfield Overland Stage Route (Alternatives B, C, and E only), and</li> <li>• Back country recreation settings (Alternative D only).</li> </ul>
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>LR-1.3.3:</b> Proposed minor linear and nonlinear LUAs would continue to be authorized on an “as needed” case-by-case basis in areas outside of LUA Avoidance and Exclusion areas.</p>
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>LR-1.3.4:</b> Oatman Mountain would be designated as a communication site (see Map 2-5a through 2-5e).</p>

<b>Goal 1 (Land Use Authorizations): <i>Manage lands and realty actions to effectively support public needs and resource management objectives.</i></b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
LS		B	C	D	E	<b>LR-1.3.5:</b> Communication facilities would be encouraged to be authorized within the designated Oatman Mountain Communication Site.
LS		B	C	D	E	<b>LR-1.3.6:</b> Apiary special-use permits (a nonlinear LUA) would not be authorized within ¼ mile of a developed recreation facility or water sources such as livestock waters and springs.

<b>Goal 2 (Land Tenure): <i>Manage land tenure to meet natural resource management objectives, community needs, and to promote agency efficiency.</i></b>						
Decision Area		Alternative				Management Actions
LS	SDNM	B	C	D	E	
<b>Objective 2.1:</b> Determine interests in lands for consolidation, retention, disposal, and acquisition. Evaluate land tenure actions in accordance with the criteria established in the Arizona Land Tenure Adjustment Strategy (Appendix O, <i>Arizona Land Tenure Strategy</i> (p. 1267)).						
LS		B				<b>LR-2.1.1:</b> Approximately 41,600 acres would be suitable for disposal via any disposal method, including patent through the R&PP Act on a case-by-case basis (as shown on Map 2-6b).
LS			C			<b>LR-2.1.2:</b> Approximately 39,600 acres (including San Tan Mountain Regional Park) would be suitable for disposal via any disposal method, including patent through the R&PP Act on a case-by-case basis (as shown on Map 2-6c).
LS				D		<b>LR-2.1.3:</b> Approximately 22,800 acres (including San Tan Regional Park) would be suitable for disposal via any disposal method, including patent through the R&PP Act on a case-by-case basis (as shown on Map 2-6d).
LS					E	<b>LS-2.1.4:</b> Approximately 33,900 acres (including San Tan Regional Park) would be suitable for disposal via any disposal method, including patent through the R&PP Act on a case-by-case basis (as shown on Map 2-6e).
LS		B	C	D	E	<b>LR-2.1.5:</b> Land interests disposed of through the R&PP Act would be evaluated on a case-by-case basis. (Current R&PP leased lands are identified on Map 2-6b through 2-6e).
LS		B	C	D	E	<b>LR-2.1.6:</b> Disposal of 1,140 acres of R&PP leased lands near the City of Apache Junction to the City of Apache Junction would continue via any disposal method on a case-by-case basis.
LS		B	C	D	E	<b>LR-2.1.7:</b> Non-Federal interests for acquisition would be targeted on a case-by-case basis, with an emphasis on acquiring lands that adjoin or are near existing public lands that would increase the continuity of public lands, facilitate proper management, or protect an existing use.
LS		B	C	D	E	<b>LR-2.1.8:</b> Acquisition by donation and purchase would be considered when willing parties or available funds exist.
LS		B	C	D	E	<b>LR-2.1.9:</b> All acquisitions would be negotiated with willing landowners only and would have to be in the public interest.
LS		B	C	D	E	<b>LR-2.1.10:</b> Public lands bordering the Gila River Indian Reservation, which are identified as being suitable for disposal (as shown on Maps 2-6b, 2-6c, 2-6d and 2-6e), would only be available for disposal to local, state, federal, or tribal governmental entities.
LS	SDNM	B	C	D	E	<b>LR-2.1.11:</b> The BLM will continue to eliminate split estate situations by acquiring non-Federal subsurface estates that lies beneath Federal lands when there is a willing seller.
LS	SDNM	B	C	D	E	<b>LR-2.1.12:</b> The BLM will continue to eliminate split estate situations by disposing of Federal subsurface estates when there are no known mineral values.
LS	SDNM	B	C	D	E	<b>LR-2.1.13:</b> The BLM will not dispose of any subsurface mineral estates that lie under BLM managed surface estate.

<b>Goal 2 (Land Tenure): Manage land tenure to meet natural resource management objectives, community needs, and to promote agency efficiency.</b>						
<b>Decision Area</b>		<b>Alternative</b>				<b>Management Actions</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
	SDNM	B	C	D	E	<b>LR-2.1.14:</b> The BLM would seek land owners who are willing to sell private land interests within the Monument and proceed with acquiring these inholdings (surface and subsurface) as funding opportunities arise.
	SDNM	B	C	D	E	<b>LR-2.1.15:</b> The BLM would seek landowners who are willing to sell partial private land interests (i.e., “easements”) within the Monument in cases where the BLM cannot acquire fee-simple ownership in land interests, and proceed with securing the easements as funding opportunities arise.
	SDNM	B	C	D	E	<b>LR-2.1.16:</b> No lands are designated as being suitable for disposal within the Monument. Exchanges for lands within the Monument for other private lands within the Monument’s boundaries would be permitted if they further improve the management of Monument objects and present no net loss to existing objects that will be impacted by the exchange.

### **Administrative Actions**

- Continue to coordinate with the Maricopa County Department of Transportation (MCDOT), the Maricopa Association of Governments (MAG), Pinal County, Pima County, the Arizona Department of Transportation (ADOT), and the Federal Highway Administration for transportation activities that may affect public lands.
- Cooperate with the Western Utility Group and other industry groups to facilitate the exchange of information and coordinate planning efforts between federal agencies and utility providers through the western U.S.
- Whenever possible, promote energy transfer efficiency and support alternative energy sources such as the use of photovoltaic cells (solar energy) and wind power.
- Promptly communicate new designations for land use, resource protection, safety, and security to the public and other agencies, as necessary.
- Utility-scale renewable energy land use authorizations within designated multiuse utility corridors shall not conflict with existing and potential future linear facilities.

### **Specific to the SDNM Decision Area.**

- Activities to maintain existing facilities will be evaluated on a case-by-case basis, and if SDNM resources can be protected, approved.

## **2.8.2. LIVESTOCK GRAZING (GR)**

The livestock grazing program in the Planning Area is managed under Title 43 of the Code of Federal Regulations (CFR), section 4100, to carry out the intent of the Taylor Grazing Act of 1934, as amended and supplemented, the Federal Land Policy and Management Act of 1976, and the Public Rangelands Improvement Act of 1978. Grazing permits or leases are valid for up to 10 years and authorize grazing within grazing districts on public land and other land administered by the BLM under Section 3 of the Taylor Grazing Act, and outside of grazing districts under Section 15 of the Taylor Grazing Act.

The BLM evaluates allotments when leases or permits are scheduled for renewal consistent with 43 CFR 4100 (subpart 4180) and the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration, IM-AZ-98-013. Terms and conditions are specified in grazing permits or leases, which require lessees to meet management objectives, provide for proper range management, and assist in the orderly administration of the public rangelands. These terms and conditions are contained in 43 CFR 4100 (subpart 4130).

In Arizona, BLM rangelands and grazing allotments are classified as perennial, ephemeral, or perennial-ephemeral. These classifications correspond to the following types of designated rangelands:

- Perennial rangeland: consistently produces perennial forage to support a year-round livestock operation;
- Ephemeral rangeland: does not consistently produce enough forage to sustain a year-round livestock operation but may periodically produce large amounts of annual forage to accommodate livestock grazing; and
- Perennial-ephemeral rangeland: produces perennial forage each year and 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.

During the resource management planning process, *land use plan decisions* identify lands available or not available for livestock grazing. In contrast *implementation decisions* identify areas available for grazing, and then establish allotment-specific grazing management practices and livestock forage amounts, based on monitoring and assessment information. Grazing management practices and levels of livestock grazing use must achieve the desired outcomes outlined in the land use plan, including rangeland health standards (or comprehensive Land Health Standards), or must result in significant progress toward fulfilling rangeland health standards. They must also conform to the guidelines required under 43 CFR 4180.2(b).

### **Proposed Land Use Allocations for the Lower Sonoran Decision Area**

For both LS Decision Area, the proposed land use allocations are provided in Proposed alternatives for grazing allotments are as follows:

- Alternative A (No Action): Grazing allotments would continue to be allocated as perennial, perennial/ephemeral, or ephemeral, as appropriate to allotment-specific characteristics. Season of use adjustments on perennial allotments would be considered.

- Alternative B: Ephemeral grazing applications would continue to be considered, but perennial stocking rates would be reduced.
- Alternative C: Grazing allotments designated as perennial/ephemeral would be reclassified as perennial only, with no supplemental ephemeral grazing applications considered. This alternative does not apply to ephemeral-only allotments. Season of use adjustments on perennial allotments would be considered.
- Alternative D: All allotments currently open to livestock grazing would become unavailable as permits expire.
- Alternative E (Preferred): Grazing allotments would be allocated as perennial, perennial/ephemeral, or ephemeral, as appropriate to allotment-specific characteristics. Season of use adjustments on perennial allotments would be considered. Alternative E incorporates elements from each of the other alternatives.

Once the RMP is adopted for the Lower Sonoran Decision area, the BLM will evaluate allotments when leases or permits are scheduled for renewal consistent with 43 CFR 4100 (subpart 4180) and the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration, IM-AZ-98-013. These decisions will be implemented as directed pursuant to 43 CFR 4100.

### **Proposed Implementation Decisions for the SDNM Decision Area**

Within the SDNM Decision Area, the Proclamation for the Sonoran Desert National Monument requires the BLM to determine the compatibility of grazing “with the paramount purpose of protecting objects identified in this proclamation.” A draft grazing Compatibility Analysis which represents the BLM’s analysis of livestock grazing on 252,500 acres of public lands currently available for livestock grazing within the SDNM north of I-8, is available in Appendix E, *Draft Compatibility Analysis: Livestock Grazing on the Sonoran Desert National Monument* (p. 1039). The compatibility analysis is used to determine whether livestock grazing is compatible with the paramount purpose of the Monument, which is to protect the objects identified in the proclamation. Process steps for the compatibility analysis include:

- Identify the “objects” of the Monument.
- Conduct a literature review. The literature review helps identify potential effects of livestock grazing in the Sonoran Desert.
- Prepare a draft land health evaluation (LHE). The LHE documents if standards are achieved or not achieved, including causal factors for non-achievement.
- Analyze the effects of grazing on the biological and cultural Monument objects.
- Develop a draft grazing Compatibility Analysis.
- Develop a full range of Alternatives presented in this Resource Management Plan.

The results of the draft Compatibility Analysis indicate that, in some locations, current conditions on the SDNM’s six allotments are not achieving all of the Arizona Standards for Rangeland Health. Where standards are not being achieved, and grazing has been determined to be a contributing factor, the BLM has determined that current grazing practices are not compatible with protection of the objects of the Monument. Current livestock grazing practices were

determined to be a contributing factor of non-achievement of Standards in areas where forage utilization exceeded 41% (or “moderate” to “severe” utilization). In areas that showed negligible to light utilization (0–40%), yet did not achieve Land Health Standards, other causal factors (such as fire, drought, historic livestock use patterns, OHV use, or combinations thereof) were considered to be the contributing factor(s). The draft Compatibility Analysis indicates that livestock grazing is a contributing factor for non-achievement of Standard 3 on 8,498 acres of the 252,500 (3.4%) acres north of I-8, and these areas will be considered unavailable for livestock grazing in all of the action alternatives for the SDNM considered.

The LHE and the Compatibility Analysis will not be final until the RMP’s Record of Decision is approved.

For the SDNM Decision Area, implementation level allocations (see Table 2.13, “Proposed Permitted Animal Unit Months (AUMs) for the SDNM” (p. 143)) reflect the findings of the compatibility analysis. Based on the results of the compatibility analysis, livestock grazing has been determined to be compatible with protection of most biological and cultural objects of the Monument. The 8,498 acres determined to be incompatible with livestock grazing would be unavailable for grazing under all alternatives, except the no action alternative. This is to ensure that non-compatible areas are protected, per the Monument proclamation. Through this RMP/EIS process, a full range of alternatives and management actions will be considered that will allow for continued protection of the objects of the Monument and grazing management design features that will ensure continued compatibility.

The grazing Compatibility Analysis and Land Health Evaluation (Appendix E, *Draft Compatibility Analysis: Livestock Grazing on the Sonoran Desert National Monument* (p. 1039) and Appendix F, *Arizona Land Health Evaluation for the Sonoran Desert National Monument* (p. 1081), respectively) analyzed the effects of livestock grazing on the SDNM only. The alternatives presented are designed to provide the full range of the possible management scenarios for analysis.

The proposed alternatives and implementation decisions for the SDNM grazing allotment are summarized as follows:

- Alternative A (No Action Alternative): Livestock grazing permits south of I-8 are terminated. Livestock grazing north of I-8 would continue to be allocated as perennial, perennial/ephemeral, or ephemeral, as appropriate to allotment-specific characteristics, if determined to be compatible with protecting Monument resources. Season of use adjustments on perennial allotments would be considered.
- Alternative B: Stocking rates on grazing allotments north of I-8 would be allocated as perennial grazing and would be reduced by approximately 40 percent. Ephemeral grazing applications would continue to be considered. The approximately 8,500 acres determined to be incompatible with livestock grazing would be made unavailable for grazing by fencing off these specific areas.
- Alternative C: Grazing allotments in the SDNM north of I-8 would be allocated as perennial only, with no ephemeral grazing applications considered (this would not apply to the Arnold Allotment). Season of use adjustments on perennial allotments would be considered. Approximately 8,500 acres determined to be incompatible with livestock grazing, plus an additional 36,300 acres that connect and/or surround those 8,500 acres, would be made unavailable for grazing. Grazing management of these areas would be accomplished by using a combination of fencing and natural topographic barriers to make grazing enclosures,

rather than directly fencing off the incompatible areas. As part of the historic Anza NHT, approximately 10 acres around North Tank would be directly fenced.

- Alternative D: All allotments currently open to livestock grazing in the SDNM would become unavailable as permits expire.
- Alternative E (Preferred): Livestock grazing north of I-8 would continue to be allocated as perennial, perennial/ ephemeral, or ephemeral, as appropriate to allotment-specific characteristics. Grazing would be adjusted as needed, in accordance with grazing regulations and in response to the grazing determinations required by the Proclamation. This alternative reflects the fenced enclosures of Alternative C. Additionally, the SDNM portion of the Conley Allotment (which is the allotment with the largest departure from Standard 3 and has the most acreage found to be incompatible with grazing) would be unavailable for grazing.

### **2.8.2.1. Existing Management Decisions, Alternative A (No Action) Livestock Grazing**

Decisions are listed in chronological order by plan. The following decisions are extracted from the existing land use plans and amendments and are listed in chronological order. Because none of these current land use plans encompass the entire Planning Area, very few of these decisions are being carried forward as common to all alternatives and are restated as new action alternatives where applicable.

#### ***Lower Gila North Management Framework Plan (1983):***

- Construct 21 reservoirs, 32 wells, and develop nine springs in areas of low forage production. (RM-1.5) Applies only to those present in the Saddle Mountain area.
- Allocate forage on all (33) allotments based on preference. Initiate monitoring studies that include actual use, utilization, trend in condition, and climate, using the Bureau's Selective Management Policy (Appendix 34 of the Decision Source) to set priorities. These studies will be used to adjust stocking rates, either upward or downward to meet multiple-resource management objectives (GR-13). Only a few allotments in the northwestern part of the Phoenix South Planning Area are addressed in the Decision Source.

#### ***Eastern Arizona Grazing Environmental Impact Statement and Rangeland Program Summary (1985):***

- Land that is presently unleased for livestock use would remain unleased, with vegetation reserved for wildlife and non-consumptive use (GR-07). Applies only to those allotments in the eastern Lower Sonoran Planning Area covered by the Decision Source.
- Grazing management systems including rest rotation, deferred rotation, deferred, seasonal, short-duration or others which are various combinations of these would be implemented where needs are identified through monitoring (maintain and improve categorized allotments). On custodial allotments, grazing systems or season of use would be coordinated with the private landowners, State Land Department, or Soil Conservation Service (GR-11). Applies only to those allotments in the eastern Lower Sonoran Planning Area covered by the Decision Source.

- Fences would be needed to support grazing or land treatments and would be built to allow wildlife movement. Any fences that currently restrict wildlife movement would be modified to facilitate movement (GR-12). Applies only to those allotments in the eastern Lower Sonoran Planning Area covered by the Decision Source.
- Stocking additional animals would be allowed in the good ephemeral years where additional but unquantified animal-unit months (AUMs) of forage are available (GR-14). Applies only to those allotments in the eastern Phoenix South Planning Area covered by the Decision Source.
- Long-term target AUM figures (from increased vegetation production through revision of grazing systems already implemented, additional grazing systems and various land treatments) would be distributed on the basis of 40 percent to livestock and 60 percent to nonconsumptive uses (GR-18). Applies only to those allotments in the eastern Phoenix South Planning Area covered by the Decision Source.
- Grazing is authorized at the levels presented in the Range Program Summary (GR-19). Applies only to those allotments in the eastern Phoenix South Planning Area covered by the Decision Source.

### ***Lower Gila South Resource Management Plan (1989):***

- Institute grazing-management practices that would ensure perpetuation of botanical diversity within the Coffee Pot Botanical ACEC (GR-02).
- Livestock facilities will not be developed in Table Top area where that development would serve to increase livestock use within the area proposed for designation (GR-03).
- Improvement and maintenance of the rangeland will be accomplished through the construction of new rangeland developments (see Table 1 in Decision Source) and through livestock adjustments if needed (GR-05). The majority of allotments in the Lower Sonoran Planning Area are covered by this Decision Source.
- Livestock facilities will not be developed where that development would serve to increase livestock use within the Coffee Pot Botanical ACEC being proposed for designation (GR-07).

### ***Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (1997):***

- S&G Guideline 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 (GR-43).
- S&G Guideline 3-5: Grazing on designated ephemeral (annual and perennial) rangeland may be authorized if the following conditions are met (GR-44):
- 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 & Burro); and
- Monitoring is conducted during grazing to determine if objectives are being met.

### ***SDNM Current Management Guidance (2002):***

- Laws, regulations, and policies followed by the BLM in issuing and administering grazing leases on all lands under its jurisdiction shall continue to apply with regard to the lands in the Sonoran Desert National Monument;
- The grazing permits south of Interstate 8, in the SDNM, shall not be renewed at the end of their current term;
- Grazing in the SDNM north of Interstate 8 shall be allowed to continue only to the extent that the BLM determines that grazing is compatible with the paramount purpose of protecting the objects identified in the Proclamation (biological, scientific, and historic resources).

### ***Cameron Allotment Amendment to the Lower Gila South Resource Management Plan (2004):***

The above amendment approved decisions to protect the endangered Sonoran Pronghorn which affected grazing management for four allotments in the Ajo area, including the closure of the Cameron allotment in its entirety. See Section 2.7.5, “Priority Wildlife Species & Habitat (PS)” (p. 63) for specific decisions.

## **2.8.2.2. Action Alternatives for Livestock Grazing (GR)**

### **Program Goals:**

- **Goal 1:** Manage livestock grazing in the Lower Sonoran Decision Area to provide for multiple uses while maintaining healthy ecosystems.
- **Goal 2:** Manage livestock grazing in the SDNM Decision Area to provide for multiple uses while maintaining healthy ecosystems and protecting the Monument’s biological and cultural resources.

## **Land Use Allocations Summary for the Lower Sonoran**

**Table 2.11. Proposed Livestock Grazing Allocations for Lower Sonoran Decision Area**

Allocation by Decision Area	Alternatives (BLM Acres and Animal Unit Months)				
	A - No Action	B - Reduced Perennial	C - Perennial Only / No Ephemeral	D - Closed	E - Preferred
Available Acres	830,200	830,200	830,200	0	830,200
Unavailable Acres <sup>1</sup>	100,000	100,000	100,000	930,200	100,000
Total Acres	930,200	930,200	930,200	930,200	930,200

Total Proposed (AUMs) <sup>3</sup>	17,541	10,431 <sup>3</sup>	17,541	0	17,541
<p><sup>1</sup> Cameron allotment closure; Fred J. Weiler Green Belt, Sentinel Plain, Ajo parcels, lands leases, and other areas currently unallocated or unavailable to grazing within the Decision Area.</p> <p><sup>2</sup> Animal unit month (AUM) means the amount of forage necessary for the sustenance of one cow or its equivalent for a period of 1 month.</p> <p><sup>3</sup> Ephemeral AUMs are permitted on a case-by-case basis pursuant to the Special Ephemeral Rule. These AUMs are not included in the proposed perennial AUMs listed.</p>					

**Table 2.12. Proposed Livestock Grazing Allocations for the SDNM**

Allocation by Decision Area	Alternatives (BLM Acres and Animal Unit Months)				
	A - No Action	B - Reduced Perennial	C - Perennial Only / No Ephemeral	D - Closed	E - Preferred
Available Acres	252,500	244,000	207,700	0	157,210
Unavailable Acres <sup>1</sup> From RMP Decisions	233,900	8,500 <sup>2</sup>	44,800 <sup>3</sup>	252,500	95,290 <sup>4</sup>
Unavailable Acres from Proclamation	155,900	155,900	155,900	155,900	155,900
Unavailable Acres from Area A <sup>5</sup>	78,000	78,000	78,000	78,000	78,000
Total Acres	486,400	486,400	486,400	486,400	486,400
Total Proposed AUMs <sup>6</sup>	8,703	5,321 <sup>7</sup>	7,092	0	3,114
<p><sup>1</sup> In accordance with the Monument Proclamation the allotments or portions of allotments south of I-8, within SDNM, were made unavailable to livestock grazing when the permits expired.</p> <p><sup>2</sup> Acreage includes approximately 8,500 acres, or 3.4% of the area north of I-8 determined to be unavailable for livestock grazing through the compatibility analysis and would be fenced off (see Map 2-8b).</p> <p><sup>3</sup> Acreage includes the 8,500 acres found to be incompatible with Monument objects, plus 36,300 connected or surrounding acres, using a combination of fencing and topographic barriers and wilderness boundaries, for a total of 44,800 acres of unavailable acres under Alternative C (see Map 2-8c).</p> <p><sup>4</sup> Acreage includes all unavailable acreage identified in Alternative C (44,800 acres) plus the Conley Allotment (50,490 acres) from recommendations in the grazing Compatibility Analysis (Appendix E, <i>Draft Compatibility Analysis: Livestock Grazing on the Sonoran Desert National Monument</i> (p. 1039)). All unavailable acres will remain unallocated for livestock grazing, and its forage and other vegetation will be reserved for wildlife habitat.</p> <p><sup>5</sup> Relinquished lands in Barry M. Goldwater Range south of I-8.</p> <p><sup>6</sup> In Alternative A, AUMs are prorated and reduced by 7,884 from the total permitted use due to the allotment closures south of I-8. In Alternative B, final AUM numbers were prorated from the Lower Gila South RMP Resource Protection Alternative to the acres within the Monument for each allotment. Acres are rounded to the nearest hundred.</p> <p><sup>7</sup> Ephemeral AUMs are permitted on a case-by-case basis pursuant to the Special Ephemeral Rule.</p>					

**Table 2.13. Proposed Permitted Animal Unit Months (AUMs) for the SDNM**

Allotments	Applicable Alternative					
	A - Permitted AUMs	B - Reduced Perennial	C - Perennial Only – No Ephemeral	D - Closed	E – Proposed Preferred	% Reduction from Alt. A
SDNM						
Big Horn <sup>1</sup>	2,812	2,031	2,278	0	1,633	42%

Beloat	776	541	936	0	552	29%
Conley <sup>2</sup>	3,403	1,572	2,212	0	0	100%
Hazen	886	531	873	0	400	55%
Lower Vekol	826	646	793	0	529	36%
Arnold	0	0	0	0	0	0
Total AUMs <sup>3</sup>	8,703	5,321	7,092	0	3,114	64%

<sup>1</sup> The AUM's for the Big Horn allotment in Alternative A reflect the reduction in permitted use due to the closure of the portion of the allotment south of Interstate-8.

<sup>2</sup> Acres within the SDNM portion of the Conley allotment are proposed to be made unavailable for the following reasons:

- It has the largest departure from achieving Land Health Standard 3 of all other SDNM allotments,
- It has the most acreage found incompatible with the Monument proclamation, and
- Future management options for the remaining available portion will be limited due to the amount and location of pasture fencing that will be required to be placed around the non-achieving acres.

<sup>3</sup> In Alternative A, the total prorated permitted use is reduced by 7,884 AUMs due to the allotment closures south of I-8. In Alternative B, AUM's were prorated from the Lower Gila South RMP Resource Protection Alternative to the acres within the Monument for each allotment.

**Table 2.14. Proposed Livestock Grazing Acres for the SDNM North of Interstate 8 Only**

Allotment	Alternatives (BLM Acres) <sup>1</sup>									
	A-No Action		B-Reduced Perennial		C - Perennial Only		D - Closed		E - Preferred	
	Avail.	Un-avail.	Avail.	Un-avail. <sup>2</sup>	Avail.	Un-avail. <sup>3</sup>	Avail.	Un-avail.	Avail.	Un-avail.
Big Horn	92,204	0	86,687	5,517	78,230	16,974	0	92,204	78,230	16,974
Beloat	33,600	0	33,600	0	33,600	0	0	33,600	33,600	0
Conley	77,708	0	74,734	2,974	50,491	27,217	0	77,708	50,491	27,217
Hazen	31,926	0	31,926	31,926	31,926	0	0	31,926	31,926	0
Lower Vekol	15,409	0	15,402	7	14,802	607	0	15,409	14,802	607
Arnold	1,609	0	1,609	0	1,609	0	0	1,609	1,609	0
Total	252,456	0	243,958	8,498	207,658	44,798	0	252,456	207,658	44,798

<sup>1</sup> These numbers reflect the numbers from the Land Health Assessment and are estimated pending field GIS inventory verification. The totals shown in Table 2.12, "Proposed Livestock Grazing Allocations for the SDNM" (p. 143) were rounded up for the land use plan-level decisions.

<sup>2</sup> Alternative B unavailable numbers come from the acres determined to be incompatible with Monument objects from the Compatibility Analysis in Appendix E, *Draft Compatibility Analysis: Livestock Grazing on the Sonoran Desert National Monument* (p. 1039).

<sup>3</sup> Alternatives C and E unavailable numbers come from the acres determined to be incompatible with Monument objects from the Compatibility Analysis in Appendix E, *Draft Compatibility Analysis: Livestock Grazing on the Sonoran Desert National Monument* (p. 1039), and the acreage determined to become unavailable due to the projected boundary closures of the area based on fencing, topographic boundaries and wilderness boundaries.

## Management Actions and Allowable Uses (GR)

<b>Goal 1: Manage livestock grazing to provide forage for multiple uses while maintaining healthy ecosystems.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1: Livestock grazing use and associated practices will be managed in a manner consistent with other multiple use needs and other desired resource condition objectives to ensure that the health of rangeland resources and ecosystems are maintained or improved. Management will achieve, or make significant progress toward achieving, Land Health Standards and produce a wide range of public values such as wildlife habitat, livestock forage, recreation opportunities, clean water, and functional watersheds.</b>						
LS		B	C		E	<b>GR-1.1.1:</b> Public lands would be allocated and available for livestock grazing as shown in .
LS				D		<b>GR-1.1.2:</b> All public land acres currently available to grazing would become unavailable when current permits expire.
LS		B				<b>GR-1.1.3:</b> All perennial/ephemeral and perennial allotments available to grazing would receive a reduction in the authorized grazing preference as reflected in Table 2.11, “Proposed Livestock Grazing Allocations for Lower Sonoran Decision Area” (p. 142). Total proposed AUMs in the Lower Sonoran would be reduced by approximately 41%.
LS			C			<b>GR-1.1.4:</b> All perennial/ephemeral allotments that are available to grazing would be reclassified as perennial only. Ephemeral authorizations would not be permitted on these allotments or allotments currently classified as perennial.
LS				D		<b>GR-1.1.5:</b> No AUMs would be permitted for allotments currently available to grazing when permits expire.
LS					E	<b>GR-1.1.6:</b> All allotments that are currently available to grazing will remain open to grazing under their current classifications and permitted AUM’s as reflected in . (also see Appendix P, <i>Grazing Allotment Information</i> (p. 1281)).
<b>General Management Actions</b>						
LS		B	C		E	<b>GR-1.1.7:</b> The portion of the Santa Rosa allotment outside of SDNM would remain available for livestock grazing if fencing is built to exclude SDNM from the allotment.
LS		B	C		E	<b>GR-1.1.8:</b> The portion of the Big Horn allotment south of I-8 and outside of the SDNM would remain available for livestock grazing if fencing is built to exclude SDNM from the allotment.
LS		B	C		E	<b>GR-1.1.9:</b> The portion of the Table Top allotment south of Interstate 8 and outside of SDNM, would be unavailable for livestock grazing.
LS		B			E	<b>GR-1.1.10:</b> The portion of the Table Top allotment north of I-8, outside SDNM, would be classified as Perennial/Ephemeral. The authorized grazing preference will be 148 AUM’s.
LS	SDNM	B	C	D	E	<b>GR-1.1.11:</b> All existing water developments will be evaluated, and modified as necessary, to provide the maximum benefit and minimum impact to priority wildlife and special status species.
LS	SDNM	B	C		E	<b>GR-1.1.12:</b> Grazing management on allotments categorized as maintain and improve may include rest rotation, deferred rotation, deferred, seasonal, short duration or other management practices would be implemented where needs are identified through monitoring. On custodial allotments, grazing systems or season of use would be coordinated with the private landowners, Arizona State Land Department, or Natural Resource Conservation Service.
LS	SDNM	B	C		E	<b>GR-1.1.13:</b> If grazing availability or classification differs for the Big Horn, Conley, Lower Vekol, Hazen, Beloat, and Arnold allotments outside SDNM versus inside the Monument boundaries, fencing or other control mechanisms would be installed to allow for management of Monument lands separately from the rest of the allotment before grazing could continue.

<b>Goal 1: Manage livestock grazing to provide forage for multiple uses while maintaining healthy ecosystems.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>			<b>Management Actions and Allowable Uses</b>	
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>		
<b>Objective 1.1: Livestock grazing use and associated practices will be managed in a manner consistent with other multiple use needs and other desired resource condition objectives to ensure that the health of rangeland resources and ecosystems are maintained or improved. Management will achieve, or make significant progress toward achieving, Land Health Standards and produce a wide range of public values such as wildlife habitat, livestock forage, recreation opportunities, clean water, and functional watersheds.</b>						
<b>LS</b>	<b>SDNM</b>	<b>B</b>			<b>E</b>	<p><b>GR-1.1.14:</b> Allotments may be reclassified as ephemeral in accordance with the Special Ephemeral Rule published December 7, 1968 through Rangeland Health Assessments. The BLM has established criteria based upon the Special Rule through which allotments can be classified as ephemeral. These criteria include:</p> <ul style="list-style-type: none"> <li>• Rangelands are within the hot desert biome;</li> <li>• Average annual precipitation is less than eight inches;</li> <li>• Rangelands produce less than 25 pounds per acre of desirable forage grasses;</li> <li>• The vegetative community is composed of less than five-percent desirable forage species;</li> <li>• The rangelands are generally below 3,500 feet in elevation;</li> <li>• Annual production is highly unpredictable and forage availability is of a short duration;</li> <li>• Usable forage production depends on abundant moisture and other favorable climatic conditions; and</li> <li>• Rangelands lack potential to improve existing ecological status and produce a dependable supply of forage through intensive rangeland management practices.</li> </ul>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>		<b>E</b>	<p><b>GR-1.1.15:</b> The Arizona Guidelines for Grazing Administration, as approved in the Arizona Standards for Rangeland Health and Guidelines for Grazing Administration (1997), would apply where appropriate to all livestock grazing activities (Appendix L, <i>Guidelines for Grazing Administration</i> (p. 1253)).</p>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>		<b>E</b>	<p><b>GR-1.1.16:</b> Land not currently allocated for livestock use would remain unallocated for this use and its forage and other vegetation would be reserved for wildlife and non-consumptive uses.</p>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>		<b>E</b>	<p><b>GR-1.1.17:</b> If an evaluation of land health standards identifies an allotment where land health standards cannot be achieved under any level or management of livestock use and where current grazing use has been identified as the causal factor, then decisions identifying those areas as available for livestock grazing would be revisited.</p>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>		<b>E</b>	<p><b>GR-1.1.18:</b> Should a livestock grazing permit be relinquished the allotment and associated resources, and other resources and public uses would be evaluated to determine the appropriate allocation of available forage.</p>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>		<b>E</b>	<p><b>GR-1.1.19:</b> Within habitat for endangered species, livestock grazing allowable use would conform to the guidelines described in the “Not Likely to Adversely Affect” section of Guidance Criteria for Determinations of Effects of Grazing Permit Issuance and Renewal on T&amp;E Species (BLM and USFWS, Arizona and New Mexico, 1999), or any subsequent agreed upon amendment to these guidelines. Livestock grazing permits will be updated, as needed, to conform to this guidance.</p>

<b>Goal 1: Manage livestock grazing to provide forage for multiple uses while maintaining healthy ecosystems.</b>						
Applicable Decision Area		Applicable Alternative			Management Actions and Allowable Uses	
LS	SDNM	B	C	D		
<b>Objective 1.1: Livestock grazing use and associated practices will be managed in a manner consistent with other multiple use needs and other desired resource condition objectives to ensure that the health of rangeland resources and ecosystems are maintained or improved. Management will achieve, or make significant progress toward achieving, Land Health Standards and produce a wide range of public values such as wildlife habitat, livestock forage, recreation opportunities, clean water, and functional watersheds.</b>						
LS	SDNM	B	C		E	<b>GR-1.1.20:</b> One-time travel off designated routes may be approved with written authorization from the authorized officer to access sick or injured livestock.
LS	SDNM	B	C		E	<b>GR-1.1.21:</b> Construction of new livestock waters in Category I and Category II desert tortoise habitat and in bighorn sheep habitat will be addressed on a case-by-case basis.
LS	SDNM	B	C		E	<b>GR-1.1.22:</b> Range improvement permits and cooperative range improvement agreements shall specify the standards, design, construction and maintenance criteria for the range improvements and other additional conditions and stipulations or modifications deemed necessary. The extent, location and timing of such actions will be based on allotment-specific management objectives adopted through the evaluation process, interdisciplinary development and analysis of proposed actions, and funding.

<b>Goal 2: Manage livestock grazing to provide for multiple uses while maintaining healthy ecosystems and protecting the Monument's biological and cultural resources.</b>						
Applicable Decision Area		Applicable Alternative			Management Actions and Allowable Uses	
LS	SDNM	B	C	D		
<b>Objective 1.2: Public lands in SDNM north of I-8 available to livestock use will be managed to achieve or make significant progress toward achieving Land Health Standards to ensure that the health of the biological resources are maintained or improved. Livestock grazing use and associated practices will be managed in a manner consistent with other multiple use needs and other desired resource condition objectives to ensure that the health of rangeland resources and ecosystems are maintained or improved.</b>						
	SDNM	B	C	D	E	<b>GR-1.2.1:</b> Pursuant to the Monument Proclamation grazing permits for allotments within SDNM south of I-8, were not renewed upon expiration. The public lands South of I-8, within SDNM, will remain unavailable for livestock use. The grazing preferences for permitted use on the allotments that are attached to the base properties will be cancelled. Forage previously allocated for livestock grazing (7,255 AUMs) will be available for other resource uses such as wildlife habitat, watershed values, recreation, etc.
	SDNM	B				<b>GR-1.2.2:</b> Domestic goats or sheep would not be permitted within nine miles of suitable bighorn sheep habitat or within allotments that contain suitable bighorn sheep habitat.
	SDNM		C	D	E	<b>GR-1.2.3:</b> Domestic goats or sheep would not be permitted.
Implementation Level Decisions for the SDNM						
Available Acres by Allotment						
	SDNM	B				<p><b>GR-1.2.3:</b> Acres would become unavailable to livestock grazing use within allotments north of Interstate 8 that were found to be incompatible with the objects of the Monument due to current livestock use as specified in the Draft Compatibility Analysis. They are as follows (see Map 2-8b and Appendix E, <i>Draft Compatibility Analysis: Livestock Grazing on the Sonoran Desert National Monument</i> (p. 1039)):</p> <ul style="list-style-type: none"> <li>• 5,520 acres within the Conley allotment,</li> <li>• 2,970 acres within the Big Horn allotment, and</li> <li>• 10 acres within the Lower Vekol allotment.</li> </ul>

<b>Goal 2: Manage livestock grazing to provide for multiple uses while maintaining healthy ecosystems and protecting the Monument's biological and cultural resources.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>			<b>Management Actions and Allowable Uses</b>	
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>		
<b>Objective 1.2: Public lands in SDNM north of I-8 available to livestock use will be managed to achieve or make significant progress toward achieving Land Health Standards to ensure that the health of the biological resources are maintained or improved. Livestock grazing use and associated practices will be managed in a manner consistent with other multiple use needs and other desired resource condition objectives to ensure that the health of rangeland resources and ecosystems are maintained or improved.</b>						
	SDNM		C			<p><b>GR-1.2.4:</b> Through a combination of fencing and natural barriers, 44,800 acres would become unavailable to livestock grazing use within allotments north of Interstate 8 that were found to be incompatible with the objects of the Monument due to current livestock use. They are as follows (see Map 2-8c and Appendix E, <i>Draft Compatibility Analysis: Livestock Grazing on the Sonoran Desert National Monument</i> (p. 1039)):</p> <ul style="list-style-type: none"> <li>• 27,220 acres within the Conley allotment,</li> <li>• 16,970 acres within the Big Horn allotment, and</li> <li>• 610 acres within the Lower Vekol allotment.</li> <li>• (Total of 8,500 incompatible acres and 36,300 surrounding acres)</li> </ul>
	SDNM			D		<p><b>GR-1.2.5:</b> All public land acres currently available to grazing in the SDNM would become unavailable as current permits expire.</p>
	SDNM				E	<p><b>GR-1.2.6:</b> Acreage as described in Alternative C would become unavailable to livestock grazing use through a combination of fencing and natural barriers. Additionally, the closure of the SDNM portion of the Conley allotment as specified in the Draft Compatibility Analysis, for a total of 95,290 acres north of I-8. Specific reductions are as follows: (see Map 2-8e and Appendix E, <i>Draft Compatibility Analysis: Livestock Grazing on the Sonoran Desert National Monument</i> (p. 1039)):</p> <ul style="list-style-type: none"> <li>• 77,710 acres within the Conley allotment,</li> <li>• 16,970 acres within the Big Horn allotment, and</li> <li>• 610 acres within the Lower Vekol allotment.</li> <li>• (Total of 8,500 incompatible acres, 36,300 surrounding acres and the remaining 50,490 acres in Conley allotment)</li> </ul>
<b>Proposed AUMs by Allotment</b>						
	SDNM	B			E	<p><b>GR-1.2.6:</b> All perennial/ephemeral and perennial allotments that are available to grazing within the SDNM would receive a reduction in the authorized grazing preference. Reduction in permitted use would reflect reduced available acreage and prorated AUM's from resource protection alternative from the Lower Gila South RMP. Actions result in approximate 39% AUM reduction in Alternative B and 64% AUM reduction in alternative E due to closure of Conley allotment.</p> <p>Rationale for this includes:</p> <ul style="list-style-type: none"> <li>• Majority of desirable forage species are perennial browse species and winter/spring annuals;</li> <li>• Reduces competition with special status wildlife species considered Monument objects (Sonoran desert tortoise, Desert bighorn sheep, etc.);</li> </ul>

<b>Goal 2: Manage livestock grazing to provide for multiple uses while maintaining healthy ecosystems and protecting the Monument's biological and cultural resources.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>			<b>Management Actions and Allowable Uses</b>	
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>		
<b>Objective 1.2: Public lands in SDNM north of I-8 available to livestock use will be managed to achieve or make significant progress toward achieving Land Health Standards to ensure that the health of the biological resources are maintained or improved. Livestock grazing use and associated practices will be managed in a manner consistent with other multiple use needs and other desired resource condition objectives to ensure that the health of rangeland resources and ecosystems are maintained or improved.</b>						

						<ul style="list-style-type: none"> <li>• Supported by inventory and monitoring data; and</li> <li>• Supported by the Arizona Land Health Evaluation for the SDNM and the Draft Compatibility Analysis: Livestock Grazing on the SDNM, Arizona, April 2011 (Appendices E and F).</li> </ul>
	<b>SDNM</b>		<b>C</b>			<b>GR-1.2.7:</b> Perennial/ephemeral allotments that are available to grazing would be reclassified as perennial only and AUMs would be adjusted due to acreage reductions defined above (Map 2-8c). Ephemeral authorizations would not be permitted on any allotment classified as perennial. (See Table 3.13, “ Historical Fire Regimes Based on Fire Frequency and Severity” (p. 304)in Chapter 3, <i>Affected Environment</i> (p. 251) for actual ephemeral use from 1998 to 2007.)
	<b>SDNM</b>			<b>D</b>		<b>GR-1.2.8:</b> No AUMs would be permitted for allotments currently available to grazing when permits expire.
	<b>SDNM</b>				<b>E</b>	<p><b>GR-1.2.9:</b> The period and level of use (approximately 65 percent of permitted use) would be adjusted to primarily fall-winter season (Oct. 1 – April 30) and reduced use levels (approximately 35 percent of permitted use) during the summer season (May 1 – Sept. 30). The rationale for this includes:</p> <ul style="list-style-type: none"> <li>• Bimodal precipitation pattern provides more consistent and widespread rainfall during winter season, when the majority of the forage is produced;</li> <li>• Majority of desirable forage species are perennial browse species and winter/spring annuals;</li> <li>• Provides for rest period for key browse species;</li> <li>• Reduces competition with wildlife during critical hot summer months;</li> <li>• Reflects general pattern of current grazing management practices;</li> <li>• Supported by inventory and monitoring data; and</li> <li>• Supported by the Arizona Land Health Evaluation for the SDNM and the Draft Compatibility Analysis: Livestock Grazing on the SDNM, Arizona, April 2011 (Appendices E and F).</li> </ul>

**Administrative Actions**

- Existing range developments in areas not allocated for livestock use may be removed if not necessary for management of other resources.
- Develop a monitoring plan for allotments as needed to determine and track ecological condition and trend.

**Specific to the SDNM Decision Area**

Livestock management changes may be made based on assessment, inventory, or monitoring data. Except under Alternative D, develop and implement a monitoring plan on the SDNM to determine and track ecological condition and trend. The plan would include:

- Monitoring previously established study sites in allotments that will continue to be grazed, and establishing new key areas as needed. Data would be used to support grazing management decisions.
- Monitoring previously-established study sites in the allotments not to be grazed and establishing new sites as needed. Location of sites should be established based on resource management goals. Data would be used for comparison to grazed areas and historical data to track resource responses to management changes.
- Establish frequency and intensity of monitoring effort.

### **2.8.3. MINERALS MANAGEMENT (MM)**

The BLM supports mineral exploration and development on public lands in keeping with its multiple-use mandate. Unless otherwise restricted, all Federal mineral estates administered within the Planning Area would be available for orderly and efficient development of mineral resources. Exploration and development would be conducted in accordance with applicable laws, regulations, and policies, and in conformance with the approved resource-management plan. Restrictions and stipulations would be applied on a case-by-case basis.

Identified mineral resources are classified according to the BLM's system as described in Manual 3031 (BLM 1985) and Manual 3060 (DOI BLM undated). Mineral and mining laws and policy are implemented through the BLM's minerals management regulations which are contained in the 3000 series of volume 43 of the Code of Federal Regulations. A mineral resource potential report was prepared for the Planning Area (URS Corporation, 2004). Mineral resources are categorized as follows:

- **Locatable Minerals:** metallic minerals including, but not exclusively, gold, silver, copper, lead, zinc, and uranium, as well as some non-metallic minerals such as allunite, asbestos, barite, gypsum, and mica, and also unique and uncommon varieties of stone and other construction materials (43 CFR 3800 and 43 CFR 3715).
- **Leasable Minerals:** mostly, but not exclusively, energy minerals, including fluid minerals such as oil and gas and geothermal resources, and some solid minerals such as coal, sodium, and potash (43 CFR 3100 and 43 CFR 3200).
- **Mineral Material Disposals (saleables):** common varieties of construction materials such as sand, gravel, cinders, decorative rock, and building stone (43 CFR 3600).

#### **2.8.3.1. Existing Management Decision, Alternative A (No Action)**

Decisions are listed in chronological order by plan. The following decisions are extracted from the existing land use plans and amendments and are listed in chronological order. Because none of these current land use plans encompass the entire Planning Area, very few of these decisions are being carried forward as common to all alternatives and are restated as new action alternatives where applicable.

##### ***Lower Gila North Management Framework Plan (1983):***

- Restrict any actions or withdrawal in the Planning Area that would “segregate” leasable minerals unless there is strong evidence that the area is not conducive to mineralization. Leave the Planning Area open to mineral leasing. (MM-03) Applicable to the northwestern Lower Sonoran Planning Area near Saddle Mountain.
- Leave Planning Area open to mineral location and development. (MM-05) Applicable to the northwestern Lower Sonoran Planning Area near Saddle Mountain.
- Leave Planning Area open to mineral leasing. (MM-06) Applicable to the northwestern Lower Sonoran Planning Area near Saddle Mountain.

##### ***Lower Gila South Resource Management Plan (1989):***

- Mitigate mining practices that adversely impact unique botanical and animal habitat in Vekol Valley ACEC. (MM-15) Decision still applicable to area although not being carried forward as an ACEC.
- Demand for saleable minerals will be met by sales or free-use permits on a case-by-case basis. (MM-16)

### ***Phoenix Resource Management Plan (1989):***

- All land in the RMP/EIS area would remain open to leasing. Should exploration and/or development of leasable resources be pursued, special stipulations will be incorporated into the lease agreement after the results of site-specific environmental assessments for each action are known. (MM-02) Applies to the eastern Lower Sonoran Planning Area, including the Apache Junction and Globe/Miami areas.
- Mining activity within the Planning Area would continue to be administered on a case-by-case basis. (MM-09) Applies to the eastern Lower Sonoran Planning Area, including the Apache Junction and Globe/Miami areas.
- Sales of mineral materials to the public would continue to be administered on a case-by-case basis. (MM-10) Applies to the eastern Lower Sonoran Planning Area, including the Apache Junction and Globe/Miami areas.
- Free-use permits would continue to be issued to the state and local communities as the need arises. (MM-11) Applies to the eastern Lower Sonoran Planning Area, including the Apache Junction and Globe/Miami areas.

### ***SDNM Current Management Guidance***

- All Federal lands and interests in lands within the boundaries of the Monument are appropriated and withdrawn from all forms of entry, location, selection, sale, leasing, or other disposition under the public land laws, including but not limited to withdrawal from location, entry, and patent under mining laws, and from disposition under all laws relating to mineral and geothermal leasing. Unless otherwise specified in legislation or proclamation, all valid existing rights will be recognized in accordance with policy. Mining claims that predate the Monument designation have valid rights if those rights continue to be supported by a discovery. (Not numbered)

### ***Lower Gila Resource Management Plan Amendment (2005):***

- All lands in the Planning Area are considered open for oil and gas leasing unless specifically ruled closed. Approximately 375,000 acres of Federal minerals in wilderness are closed to oil and gas leasing. The approximately 1.6 million acres of Federal minerals remaining in the Planning Area are open to oil and gas leasing. Conditions of approval and special stipulations will be developed and incorporated as part of any operational permit after site-specific environmental analyses are completed and documented per the National Environmental Policy Act. Stipulations will mitigate impacts to special status species, cultural areas, and other resources affected by leasing-related activities. (MM-1)

## 2.8.3.2. Action Alternatives for Minerals Management (MM)

### Land Use Allocations Summary

Table 2.15, “Acres of Public Lands Available for Mineral Activity by Alternative” (p. 153) enumerates the acreages available for minerals activities for each category (locatables, leasables, mineral material [saleables]) under each alternative. Lands with BLM Federal reserved mineral estate and non-Federal surface (state, local government, and private lands) are shown only for Alternative A but remain the same under all alternatives. The BLM has limited authority to manage non-BLM surface and there are no proposals for the withdrawal of BLM managed mineral estate under non-Federal surface.

**Table 2.15. Acres of Public Lands Available for Mineral Activity by Alternative**

	A		B		C		D		E	
	Acres	Acres	%	Acres	%	Acres	%	Acres	%	
<b>Locatable Minerals</b>										
Existing Closed	625,000	625,000	47%	625,000	47%	625,000	47%	625,000	47%	625,000
Proposed Closures		2,350	<1%	2,350	<1%	381,500	28%	2,350	<1%	
Total Closure		627,350	47%	627,350	47%	1,006,500	75%	627,350	47%	
Open with standard stipulations		710,950	53%	710,950	53%	331,800	25%	710,950	53%	
Total Available	713,300	710,950	53%	710,950	53%	331,800	25%	710,950	53%	
<b>Leasable Minerals</b>										
Existing Closed	625,000	625,000	47%	625,000	47%	625,000	47%	625,000	47%	625,000
Proposed Closed		250	<1%	250	<1%	381,500	28%	53,700	4%	
Total Closure		625,250	47%	625,250	47%	1,006,500	75%	678,700	51%	
Open w/ NSO		7,100	<1%	61,400	5%	0	0%	15,400	1%	
Open with mitigation		276,500	21%	356,000	27%	206,800	15%	259,500	19%	
Open with Standard Stipulations		429,450	32%	295,650	21%	125,000	10%	384,700	29%	
Total Available	713,300	713,050	53%	713,050	53%	331,800	25%	659,600	49%	
<b>Mineral Material (Saleables)</b>										
Existing Closed	625,000	625,000	47%	625,000	47%	625,000	47%	625,000	47%	625,000
Proposed Closed		65,800	5%	184,800	14%	521,400	39%	192,300	14%	
Total Closure		690,800	52%	809,800	72%	1,146,000	86%	817,300	5%	
Open with Mitigation		0	0%	0	0%	0	0%	0	0%	
Open with Standard Stipulations		647,500	48%	528,500	39%	191,900	14%	521,000	39%	
Total Available	713,300	647,500	48%	528,500	39%	191,900	14%	521,000	39%	
Total Acreage	1,338,300 acres (all alternatives)									
<b>Acres of BLM Subsurface with Non-BLM Surface*</b>										
Closed (Total)	71,000 (34%)									
Open (Total)	139,000 (66%)									
Total	210,000 acres (Alternative A)									
*Includes land in State, local, and private lands.										
* Includes SDNM (461,000 acres), LS wilderness (89,200 acres) Sentinel Plain, Fred J Weiler Green Belt and Painted Rock Dam area (64,300 acres) and R&PP leases (10,500 acres).										

## Action Alternatives For Minerals Management (MM)

<b>Goal 1: Provide opportunities for exploration and development of energy and mineral resources.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1: Utilize mineral potential determinations (high, medium, and low) during the evaluation of all proposed actions for all resources. Reduce or mitigate hindrances to mineral development, particularly in areas of moderate to high potential. Mitigate impacts to other resource values.</b>						
<b>All Minerals</b>						
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>MM-1.1.1:</b> Minerals activities would be managed to provide maximum protection for other resources while attempting to allow sufficient mineral development to occur to meet public demand.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>MM-1.1.2:</b> Should lands now closed to mineral activity be opened, these lands, including the mineral estate, would be managed to be consistent with the decisions made in this plan.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>MM-1.1.3:</b> On split-estate lands where the BLM manages the Federal mineral estate but the surface is not in Federal ownership, the BLM will manage the minerals in accordance with existing laws and regulations while providing the surface owner input into the management process and state law.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>MM-1.1.4:</b> Within ACECs, WHAs, SCRMAAs, SRMAAs, and lands managed to protect wilderness characteristics, minerals-related actions would be approved in a manner and with mitigation that maintains the resource values for which the special designation or allocation was made while not denying valid existing rights for locatable minerals. Leasable or saleable minerals actions would be severely restricted or prohibited depending on the management allocation.
<b>Locatable Minerals</b>						
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>MM-1.1.5:</b> All public lands would be open to entry and location under the mining laws except lands with existing segregations or withdrawals as follows (Maps 2-9a, 2-9b, 2-9c, 2-9d, and 2-9e): Existing Segregations/Withdrawals (Alternative A):</p> <ul style="list-style-type: none"> <li>● Designated wilderness areas,</li> <li>● Fred J. Weiler Green Belt Resource Conservation Area,</li> <li>● Painted Rock Dam power site withdrawal area,</li> <li>● Sentinel Plain withdrawal area,</li> <li>● San Tan Mountains RMZ/SMA.</li> <li>● Proposed Withdrawals for all Alternatives unless otherwise noted:</li> <li>● Juan Bautista de Anza National Historic Trail,</li> <li>● Public Use and Conservation for Future Use Sites,                             <ul style="list-style-type: none"> <li>○ Sundad,</li> <li>○ Butterfield West,</li> <li>○ Painted Rock Petroglyph,</li> </ul> </li> <li>● Developed Recreation Sites,</li> <li>● Painted Rock Campground and surrounding lands,</li> <li>● Quartz Peak,</li> </ul>

<b>Goal 1: Provide opportunities for exploration and development of energy and mineral resources.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1: Utilize mineral potential determinations (high, medium, and low) during the evaluation of all proposed actions for all resources. Reduce or mitigate hindrances to mineral development, particularly in areas of moderate to high potential. Mitigate impacts to other resource values.</b>						
						<ul style="list-style-type: none"> <li>• Gunsight Wash (Alternatives B, C and E),</li> <li>• Ajo 40 acre open use OHV area (Alternatives B and E).</li> </ul>
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>MM-1.1.6:</b> Notices and plans of operations would be processed according to the 43 CFR 3802 and 3809 regulations.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>MM-1.1.7:</b> The use and occupancy of public lands would be managed to that which is reasonably incident to prospecting, mining or processing operations under the mining laws (43 CFR 3715).
<b>LS</b>				<b>D</b>		<p><b>MM-1.1.8:</b> The following lands are proposed for withdrawal or segregation from location (see Map 2-9d):</p> <ul style="list-style-type: none"> <li>• Sentinel Plain SRMA,</li> <li>• Cuerda de Lena ACEC,</li> <li>• Saddle Mountain ACEC,</li> <li>• Batamote-Coffee Pot ACEC,</li> <li>• Gila River and Lower Gila Historic Trails ACEC,</li> <li>• Lands Managed to Protect Wilderness Characteristics.</li> </ul>
<b>Leasable Minerals (Fluid energy minerals, including geothermal resources and sodium)</b>						
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>MM-1.1.9:</b> All public lands would be open for mineral leasing in accordance with resource-management objectives except lands with existing segregations or withdrawals (Maps 2-10a, 2—10b, 2–10c, 2–10d and 2–10e). Lands that would be closed are the following:</p> <ul style="list-style-type: none"> <li>• Sentinel Plain withdrawal area,</li> <li>• Cuerda de Lena ACEC,</li> <li>• Saddle Mountain ACEC,</li> <li>• Batamote-Coffee Pot ACEC,</li> <li>• Gila River and Lower Gila Historic Trails ACEC,</li> <li>• Lands Managed to Protect Wilderness Characteristics</li> </ul>
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>MM-1.1.10:</b> Leases would be issued for fluid energy minerals with appropriate stipulations. Site-specific actions would be addressed such as geophysical exploration, approval or disapproval of applications for permit to drill (APDs), well siting, tank-battery placement, and pipeline routing would be addressed on a case-by-case basis and include appropriate restrictions or conditions of approval.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>MM-1.1.11:</b> Mineral-use authorizations for non-energy leasables would be issued for prospecting permits, exploration licenses, preference-right leases, competitive leases, lease modifications, and use permits subject to appropriate restrictions and stipulations to protect other resources.
<b>Mineral Material Disposals (saleables)</b>						

<b>Goal 1: Provide opportunities for exploration and development of energy and mineral resources.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1: Utilize mineral potential determinations (high, medium, and low) during the evaluation of all proposed actions for all resources. Reduce or mitigate hindrances to mineral development, particularly in areas of moderate to high potential. Mitigate impacts to other resource values.</b>						
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>MM-1.1.12:</b> All public lands not withdrawn or segregated from minerals actions would be open to discretionary mineral materials disposal via sales or free-use permits on a case-by-case basis in accordance with resource-management objectives. Those lands unavailable for mineral materials disposal are as follows (for specific acreages for each alternative see above; see Maps 2-11a, 2—11b, 2-11c, 2-11d and 2-11e)</p> <ul style="list-style-type: none"> <li>• Lands with existing segregations or withdrawals,</li> <li>• Desert tortoise habitat; unless no net loss of habitat can be ensured,</li> <li>• Washes deemed suitable to support cactus ferruginous pygmy-owl,</li> <li>• Portions of the Gila River Terraces and Lower Gila Historic Trails SCRMAA and ACEC,</li> <li>• Sentinel Plain withdrawal area,</li> <li>• Cuerda de Lena ACEC,</li> <li>• Saddle Mountain ACEC,</li> <li>• Batamote-Coffee Pot ACEC,</li> <li>• Lands managed to protect wilderness Characteristics.</li> </ul>
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>MM-1.1.13:</b> Common-use areas and community pits would be established. Exploration for, and disposal of, mineral materials would also be allowed through exploration permits, free-use permits, and competitive and noncompetitive sales subject to appropriate restrictions and stipulations to protect other resources.</p>

## Administrative Actions

### Specific to the SDNM Decision Area.

- Recognize the superior right to explore for and mine mineral resources on those split estate lands where the BLM manages the surface and the subsurface estate is owned by the state of Arizona or private entities. Develop a MOU with the state to establish procedures to protect SDNM resources from the effects of exploration and mining on SDNM to the greatest extent possible.

### Locatable Minerals.

- The 43 CFR 3715 and 43 CFR 3809 regulations provide for the management of surface disturbance associated with mineral exploration and development including mining claim use and occupancy. The BLM 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 for land identified in a mining notice by the geologist, as well as an archeologist

and biologist if they are available. A site visit would generally be conducted by the BLM during the processing of a plan of operations.

- Mining plans and notice-level operations when mining claim occupancy is proposed are required to have the proper NEPA documentation prepared. The BLM will work with operators to ensure that notices and plans are processed efficiently and in a timely manner. Reclamation plans and bonds are required for each notice and plan per regulation. The amount of such bonds is for the full amount required to complete 100 percent of the required reclamation as if the BLM 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 laws require numerous other permits including but not limited to an aquifer protection permit and a national pollutant discharge elimination system permit, both issued by the Arizona Department of Environmental Quality; a Section 404 permit issued by the U.S. Army Corps of Engineers; and a flood-control permit issued by the County. In addition, 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. The BLM will cooperate with all interested agencies to ensure that operations conducted on BLM-administered lands are in full compliance with all Federal, State and local health, safety, and environmental laws as required by 43 CFR 3715.5.
- All occupancy of mining claims must meet the requirements of 43 CFR 3715 and must meet the specific requirements of 43 CFR 3715.2. At a minimum, all occupancies will meet the requirements and standard stipulations for occupancy contained in the BLM Arizona Programmatic Environmental Assessment for Mining Claim Use and Occupancy.
- Surface-disturbing activities at a level greater than casual use in wilderness areas, national Monuments, ACECs, and other areas identified in 43 CFR 3809.11 will require a plan of operations before mining can begin. Operations proposed for land that is withdrawn from mineral entry will cause the BLM to initiate a validity examination and will be allowed only on claims with a valid discovery and location existing before designation. Before the 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 that 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 viable mine.

### **Leasable Minerals.**

- Lease applications will be considered on a case-by-case basis. Leases will be issued with needed restrictions to protect resources. Stipulations to protect important surface values will be based on interdisciplinary review of individual proposals and environmental analysis.

### **Saleable Minerals.**

- The sale of minerals is discretionary on the part of the BLM under 43 CFR 3600 regulations and will be considered on a case-by-case basis.

## **2.8.4. RECREATION MANAGEMENT (RM)**

Recreation management in the BLM is guided by the allocation of recreation management areas (RMAs) and the corresponding decisions related to them. All BLM public lands are allocated to one of two types of RMAs: “extensive” or “special.” The process used to allocate public lands to RMAs has changed substantially during recent years. In an approach known as “benefits-based-management,” the BLM now integrates perceptions of visitor demand to produce market-based strategies for the provision of recreation opportunities and visitor services.

An extensive recreation management Area (ERMA) is an area of public land where the BLM has not identified a specific demand for structured recreation opportunities. In an ERMA, the BLM’s management strategy for recreation resources is primarily custodial, and major recreation program investments will not be authorized except to resolve use conflicts, assure visitor safety, and provide for protection of other resources; the BLM will not be managing to produce specific recreational opportunities, experiences, or outcomes. All tracts of BLM public land that are not allocated as part of a SRMA are, by default, an ERMA.

In contrast, a sSRMA is an area of public land where the BLM has identified a specific demand for structured recreation opportunities. The BLM’s management objective will be to produce the recreation opportunities, experiences, and outcomes indicated by this demand, which may be facilitated through major recreation program investments. These opportunities, experiences, and outcomes will be directed to a distinct recreation-tourism market for each SRMA.

Recreation-tourism markets can vary greatly; therefore, the strategies used to manage recreation resources in SRMAs also may vary greatly. The BLM uses three such strategies in response to recreation market demand:

- **Community:** The BLM intends to guide management decisions, actions, and recreation program investments to produce beneficial outcomes primarily for a community (or communities) that value the SRMA’s public lands for recreation, tourism and growth;
- **Destination:** The BLM intends to guide management decisions, actions, and recreation program investments to produce beneficial outcomes primarily for national or regional visitors who value the SRMA’s public lands as a recreation-tourism destination; and
- **Undeveloped:** The BLM intends to guide management decisions, actions, and recreation program investments to produce beneficial outcomes from the SRMA’s undeveloped, frontier-like nature, primarily for recreation-tourism markets that come to the SRMA seeking a freedom to choose where to go for their own adventure, preferring little direction, few services, and very unnoticeable facilities.

Recreation-tourism markets may also consist of unique segments known as niches. For example, some destination-oriented visitors may come to a SRMA to hike over its mountains while others may come to the same SRMA to float a river winding down from its mountains. Satisfying both market niches requires different natural recreation resources, such as high, scenic places with great vistas for one and the flowing river canyon with fewer contacts between visitors for the other. To manage different areas with different objectives intended to produce different products for different niches, SRMAs may be separated into RMZs. The RMZs serve to delineate, define, and “match up” the kinds of recreation opportunities, experiences and outcomes available for the various customers of a primary market.

The LSFO and SDNM have identified a spectrum of four generalized settings that describe the unique physical, social, and administrative environment required to achieve the management objective(s) of RMZs. These settings have been termed “community interface,” “passage,” “front country,” and “back country.” Definitions of these settings and further descriptions of opportunities, experiences and outcomes may be found in Appendix Q, *Recreation Settings and Descriptions* (p. 1285). The definitions do not change from alternative to alternative; however, the combination of settings and the amount of each is prescribed individually for each RMZ to achieve the desired outcomes of each alternative (see Appendix R, *Benefits Based Recreation Worksheets* (p. 1295)).

Finally, a very important concept to remember as you read the following proposed decisions is that managing an SRMA for a primary market does not mean managing for an exclusive market. Other uses will be allowable in SRMAs. However, these other uses will only be allowed up to the point where they conflict with the desired management, or the production of desired beneficial outcomes, as described below for each SRMA.

The plan alternatives would have the following emphasis for the recreation program:

- Alternative A represents current management guidance. The recreation resource would not be targeted to specific markets, and recreation benefits and outcomes would be actively produced only in four existing SRMAs.
- Alternative B would emphasize the production of commodities from public lands. The recreation resource would be managed to produce the greatest amount and diversity of recreation benefits, particularly with respect to motorized recreation, across the largest scale of public lands.
- Alternative C would manage for a balance of motorized and non-motorized recreational benefits while minimizing or mitigating impacts on sensitive natural and cultural resources.
- Alternative D would emphasize resource conservation and protection over commodity production. The recreation resource would be managed to produce the greatest amount of benefits derived from natural, undeveloped setting prescriptions.
- Alternative E would balance the production of commodities with conservation and protection of natural public resources. The recreation resource would be managed to produce diverse recreation benefits, including the most extensive system of motorized access and travel that would be compatible with large areas of undeveloped public lands.

These alternatives attempt to address all approaches or alternatives for management of recreation that were brought forward through public scoping and internal management analysis.

#### **2.8.4.1. Existing Management Decisions, Alternative A (No Action) For Recreation Management**

The following list is a comprehensive compilation of land-use planning decisions (and their identifying planning decision number) currently in effect that constitutes the existing management situation for the Decision Areas. *Because none of these current land use plans encompass the entire Planning Area, very few of these decisions are being carried forward as common to all alternatives. They are restated as new action alternatives where applicable.* Decisions specific to travel management will be found in Section 2.8.5, “Travel Management (TM)” (p. 180).

### ***Lower Gila South Resource Management Plan (Goldwater Amendment) (1990):***

(Applicable to public lands in the Sand Tank Mountains, “Area A” within the SDNM, lands south of Interstate 8 referred to as the Sentinel Plain, and selected parcels near the Ajo airport.)

- Establish the Sentinel Plain Lava Flow SRMA and prepare a recreation area management plan. Implement management prescriptions to maintain recreation, geologic, and educational features associated with the Sentinel Plain Lava Flow (SM-1).
- In the Sentinel Plain Lava Flow SRMA, prohibit new rights-of-way (ROWs) and other land use authorizations (LUAs) except those installed in the established I-8 utility corridor; encourage the installation of below ground utility services within the corridor south of I-8 unless overhead facilities are required due to technical and/or operational circumstances (SM-4).
- In the Sentinel Plain Lava Flow SRMA, minimize visual impacts on the area's geologic formations (from ROWs construction in the I-8 utility corridor) by application of visual resource management guidelines (SM-5).
- Issue a special recreation use permit for specific recreation uses on the public lands of the BGR when required by the BLM's special recreation permit policy. Permits would be issued only with the concurrence of the U.S. Air Force when such activity does not impair or damage natural or cultural resources or interfere with military operations (RR-6).
- Establish ERMA and implement appropriate management actions to facilitate compatible recreation use of each ERMA. (RR-10).
- Survey sites for primitive or undeveloped campgrounds in the ERMA (RR-13).
- Allow camping on all lands open to the public in accordance with standard operating procedures for camping on public lands, permit self-contained or vehicle-based camping within 50 feet of designated or established roads (RR-16).
- Allow campfires using dead and down wood (RR-17).

### ***Lower Gila North Management Framework Plan (1983):***

(Applicable to public lands in the Saddle Mountain area.)

- No new land will be acquired in this area (former Saddle Mountain Wilderness Study Area). If Saddle Mountain is rejected as a wilderness area, no new roads will be allowed, but it will be designated as a recreation and rock-hound area. (LGN-MFP-3-R-4.1)

### ***Lower Gila Resource Management Amendment (2005)::***

(Applicable to a portion of lands in the LSFO and all lands within the SDNM Planning Areas)

- Management of recreation opportunities and developments will be evaluated using two inventory and management tools called the Recreation Opportunity Spectrum (ROS). and Visual Resource Management (RR-1).

- Recreation opportunity spectrum (ROS) classifications will be reviewed, refined, and adopted during interdisciplinary planning (RR-2).
- Four SRMAs are established (Ajo, Gila Trail, Saddle Mountain, and Vulture Mountains) and one is revised (Sentinel Plain) (RR-19).
- The Gila Trail SRMA, to include lands surrounding the Gila Trail, the Butterfield Overland Stage Route, the Anza National Historic Trail (NHT), the Southern Overland Trail, the Mormon Battalion Trail, the Oatman Massacre Site, the Painted Rock Mountains, and associated cultural and recreational features, is established (RR-26).
  - Facilities and maintenance to protect resource values and improve visitor safety and recreational opportunities are authorized in areas classified as rural, roaded-natural, or semi-primitive motorized (RR-27).
  - Single-use and multiple-use trails to meet the demand for hiking, equestrian, and mountain biking opportunities will be developed (RR-28).
  - Surface-disturbing activities within one-quarter mile of historic and prehistoric trail segments will be mitigated (RR-29).
  - All OHV routes will be inventoried and designated (RR-30).
  - Signing, regulations, and brochures will be provided as needed (RR-31).
- The Saddle Mountain SRMA, to include the public lands containing Saddle Mountain and the Palo Verde Hills, is established to emphasize provision of geologic, cultural, and wildlife interpretive sites; protection of the area's scenic landscapes and vistas; and promotion of recreational opportunities (RR-32).
  - Facilities and maintenance to protect resource values and improve visitor safety and recreational opportunities are authorized for the northern and northeastern portions of the area (RR-33).
  - Single-use and multiple-use trails to meet the demand for hiking, equestrian, and mountain biking opportunities will be developed (RR-34).
  - Signing, regulations, and brochures will be provided as needed (RR-35).
  - The southern and western portions of the area will be maintained as remote and mostly undeveloped (RR-36).
- The Ajo SRMA, to include the entire Ajo Management Area, is established (RR-37).
  - Facilities and maintenance to protect resource values and improve visitor safety and recreational opportunities are authorized (RR-38).
  - Single-use and multiple-use trails to meet the demand for hiking, equestrian, and mountain biking opportunities will be developed (RR-39).
  - Signing, regulations, and brochures will be provided as needed (RR-40).
- The Sentinel Plain Lava Flow SRMA is restricted to entry by permit only. Existing boundaries may be adjusted through interdisciplinary planning to respond to changing land uses (RR-41).

- Existing prescriptions authorized by the Goldwater Amendment (BLM, 1990) will be brought forward without change (RR-42).
- Facilities and maintenance to protect resource values and improve recreational opportunities and visitor safety are authorized (RR-43).
- Single-use and multiple-use trails to meet the demand for hiking, equestrian, and mountain biking opportunities will be evaluated (RR-44).
- Signing, regulations, and brochures will be provided as needed (RR-45).
- Project level planning for the ERMA will be conducted on a case-by-case basis (RR-46).
  - Primitive facilities are authorized where needed for resource protection, visitor safety, improvement of the recreation experience, or increasing recreational opportunities (RR-47).
  - Camping locations, camping stay limits, OHV and special recreation vehicle use, and utilization of the existing natural resources will be established (RR-48).
  - Long- and short-term camping areas, commercial or competitive OHV and special recreation vehicle use areas, scenic turnouts, cultural interpretive sites, hiking, equestrian or mountain bike trails, road and portal signage, and road maintenance will be evaluated (RR-49).
  - A “designated routes only” OHV and special vehicle classification will be established on a site-specific basis when needed for resource protection or to maintain consistency with ROS classifications (RR-50).
- The existing 14-day camping stay limit and all associated policy will be maintained throughout the Planning Area unless otherwise designated by the authorized officer or through project planning. Areas may be closed for resource protection, rehabilitation, or to reduce conflicts with other uses (RR-51).
- Camping facilities and length-of-stay limits may be established as prescribed below for dispersed camping, long-term visitor areas, extended camping areas, and short-term camping areas (RR-52).
- Self-contained or vehicle-based camping will be permitted within 50 feet of the centerline of designated or existing routes. Cross-country travel to campsites is not permitted (RR-54).
- Trailhead facilities will be closed to overnight camping upon written approval of the field manager (RR-55).
- Long-term visitor areas (LTVAs) will be defined on the ground with fences or signs. Each LTVA will include designated roads, designated campsites, and amenities to support long-term camping occupancy (RR-56).
- The following resource factors will be considered for implementation and development of LTVAs (RR-57):
  - Permitted only in rural or roaded-natural ROS classes.

- Location on rocky or resilient soils.
- Well-maintained ingress and egress routes.
- Location within 30 miles of local community.
- Location outside of Category I or II desert tortoise habitat.
- Mitigation if located in Category III desert tortoise habitat.
- Location with no cultural resource conflicts.
- Location outside of burro HMAs.
- Location of developments in a manner that “is not likely to adversely affect” threatened or endangered species and their habitats.
- Location outside of riparian areas.
- Location outside of areas of critical environmental concern and wild and scenic river areas
- The following operating rules will be considered for LTVA development and use (RR-58):
  - Long term camping will be restricted to the term of the permit.
  - Long term camping will be restricted to designated sites.
  - Services may be provided by contract or local vendor, but the costs of services (firewood, sanitation, trash, water, etc.) will be the responsibility of each occupant.
  - Users will be required to comply with all other LTVA regulations.
  - LTVA users must comply with all local, state and Federal laws.
  - LTVA supplementary rules may be enacted as needed.
- The following operating rules will be considered for extended camping area development and use (RR-63):
  - Camping restricted to designated sites.
  - Services may be provided by contract or local vendor, but the costs of services (firewood, sanitation, trash, water, etc.) will be the responsibility of each occupant.
  - Extended camping area visitors must comply with all local, state, and Federal laws.
  - Extended camping area supplementary rules may be enacted as needed.
- Other regulations and conditions for extended camping area use will be identified as required during interdisciplinary project planning. If, during the planning process, the interdisciplinary project planning team determines that modifications need to be made to the guidelines listed above those modifications may be made without the need for a planning amendment. Other regulations and conditions identified during ongoing operation of extended camping areas will require public notification (RR-64).

- Short-term camping areas will be designated only where such use promotes resource protection and where all conflicts can be mitigated. Short-term camping areas will be defined on the ground with fences or signs (RR-65).
- Interdisciplinary planning will evaluate short-term camping areas where historic use patterns equate to this type of use, and potential new areas are identified that would be suitable for short-term camping (RR-66).
- The following resource factors will be considered for implementation and development of short-term camping areas (RR-67):
  - Primitive ingress and egress routes.
  - Location on rocky or resilient soils.
  - Mitigation if located in category I, II or III desert tortoise habitat.
  - Location with no cultural resource conflicts.
  - Location outside of burro HMAs.
  - Location of developments in a manner that “is not likely to adversely affect” threatened or endangered species and their habitats.
  - Location outside of wildernesses.
  - Location outside of areas of critical environmental concern and wild and scenic river areas.
- The following operating rules will be considered for short-term camping area development and use (RR-68):
  - Camping will be restricted to the terms and conditions of that campground.
  - Camping will be restricted to designated sites.
  - Services may be provided by contract or local vendor, but the costs of services (firewood, sanitation, trash, water, etc.) will be the responsibility of each occupant.
  - Camping area users must comply with all local, state and Federal laws.
  - Specific supplementary rules may be enacted as needed.
- Other regulations and conditions for short-term camping area use will be identified as required during interdisciplinary project planning. If, during the planning process, the interdisciplinary project planning team determines that modifications need to be made to the guidelines listed above those modifications may be made without the need for a planning amendment. Other regulations and conditions identified during ongoing operation of short-term camping areas will require public notification (RR-69).
- Interdisciplinary planning will evaluate and authorize development of special use areas within the management areas (RR-70).

## ***Sonoran Desert National Monument***

- Current management guidance for the Sonoran Desert National Monument is the same as for current management guidance for the Lower Sonoran Decision Area (presented above), except as modified by Presidential Proclamation 7397 as identified below.
- In order to protect the public during operations at the adjacent BGR and to continue management practices that have resulted in an exceptionally well preserved natural resource, the current procedures for public access to the portion of the Monument depicted as Area A shall remain in full force and effect except to the extent that the U.S. Air Force agrees to different procedures which the BLM determines are compatible with the protection of the objects identified in this proclamation.
- Unauthorized persons cannot appropriate, injure, destroy, or remove any feature of this Monument.

### 2.8.4.2. Action Alternatives for Recreation Management (RM)

#### Program Goals

To provide a diverse array of recreation settings, opportunities and experiences; manage recreation activities and settings consistent with other resource goals; enhance recreation quality and reduce conflicts amongst various users, the following goals were developed:

#### Lower Sonoran Decision Area:

- **Goal 1:** Provide quality recreation opportunities and experiences that are derived from public land resource values and responsive to visitor demand.
- **Goal 2:** Balance the provision of recreation opportunities and experiences with other resource uses.

#### Sonoran Desert National Monument Decision Area:

- **Goal 3:** Recreation opportunities and experiences are derived from the objects and resource values for which the SDNM was established.

#### Land Use Allocation Summary

**Table 2.16. Recreation Management Area and Zone Allocations**

SRMA	Alternative (BLM Acres)			
	B	C	D	E
<b>Lower Sonoran SRMAs</b>				
Ajo SRMA	177,800	174,800	-	177,800
Ajo Desert RMZ	132,500	155,300	-	155,700
Gateway RMZ	42,800	19,800	-	20,200
	2,500	2,500	-	2,500
Gunsight Wash RMZ				
Arlington Trails SRMA	60,600	-	-	60,600
Buckeye Hills SRMA	47,900	47,900	47,900	47,900
East RMZ	25,800	25,800	25,800	25,800
West RMZ	22,100	22,100	22,100	22,100

SRMA	Alternative (BLM Acres)			
	B	C	D	E
Gila Bend Mountains SRMA	253,800	314,800	-	259,800
Lower Gila Historic Trails SRMA	52,300	52,300	52,300	52,300
Gila River RMZ	42,300	42,300	42,300	42,300
Painted Rock RMZ	10,000	10,000	10,000	10,000
Painted Rock Mountains SRMA	41,300	-	-	-
Saddle Mountain SRMA	47,500	47,500	-	47,500
San Tan Mountains SRMA	6,800	-	-	-
<b>Lower Sonoran ERMA</b>				
San Tan Mountains ERMA	-	6,800	6,800	6,800
Sentinel Plain Lava Flow ERMA	20,800	20,800	20,800	20,800
<b>SDNM SRMA</b>				
Sonoran Desert SRMA	486,400	486,400	486,400	486,400
Desert Back Country RMZ	433,600	433,600	-	433,600
Anza National Historic Trail RMZ	52,800	52,800	-	52,800

## Management Actions and Allowable Uses by Alternative

<b>Goal 1: Provide quality recreation opportunities and experiences that are derived from public land resource values and responsive to visitor demand.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 1.1: Manage at least one destination location or area to attract regional or national tourism demand.</b>						
<b>Lower Gila Historic Trails SRMA</b>						
LS		B	C	D	E	<b>RR-1.1.1:</b> The Lower Gila Historic Trails SRMA would be established (52,300 acres), and would have a "Destination" primary strategy targeted to a regional/national market. The BLM would invest in facilities and visitor assistance, recognizing that national and regional visitors and constituents value the SDNM as a recreation-tourism destination.
LS		B	C	D	E	<b>RR-1.1.2:</b> The Gila River RMZ would be established (42,300 acres) for regional and national visitors seeking to discover, tour, and learn about the Juan Bautista de Anza National Historic Trail, Arizona history, and natural history of the Sonoran Desert.
LS		B	C	D	E	<b>RR-1.1.3:</b> The Painted Rock RMZ would be established (10,000 acres) for winter season camping, petroglyph viewing and interpretation of area history and as a portal to cultural attractions of regional and national interest.
LS		B	C	D	E	<b>RR-1.1.4:</b> Physical, social and administrative settings would be established as 100 percent front country for both RMZs.
<b>Management Actions and Allowable Uses for Gila River RMZ</b>						
LS		B	C	D	E	<b>RR-1.1.5:</b> When designated, the motor vehicle travel system would consist primarily of primitive roads maintained at levels 1 to 3, with up to 10 percent of the route network (approximately 16 miles) maintained at level 5 to provide two-wheel-drive passenger car access to public use cultural sites, day-use, and camping facilities.
LS		B	C	D	E	<b>RR-1.1.6:</b> Visitor and management infrastructure would respond to demand for facilities and access to the Juan Bautista de Anza NHT, Butterfield Overland Stage Route and other high-intensity trail segments and cultural properties.
LS		B	C	D	E	<b>RR-1.1.7:</b> Visitor and management infrastructure would generally be modest in scope and scale, but may include fully developed facilities with paved access, water, and sewer.
LS		B	C	D	E	<b>RR-1.1.8:</b> Activities, vehicles, and group sizes would be limited to designated sites and lengths of stay; types and speeds; and numbers as deemed necessary to provide access in balance with conservation of natural and cultural resources.

<b>Goal 1: Provide quality recreation opportunities and experiences that are derived from public land resource values and responsive to visitor demand.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
LS		B	C		E	<b>RR-1.1.9:</b> Facilities may be developed as needed for visitor use or public safety at public use sites.
<b>Management Actions and Allowable Uses for Painted Rock RMZ</b>						
LS		B	C	D	E	<b>RR-1.1.11:</b> The Painted Rock Petroglyph Site and Campground would be retained as a fee site per FLREA. Camping would remain limited to designated campsites. Fees would be adjusted or established as needed to meet business plan objectives.
LS		B	C	D	E	<b>RR-1.1.12:</b> The designated travel system would consist of roads suitable for two-wheel drive maintained at levels three to five. Routes away from the immediate vicinity of the Painted Rock Campground Petroglyph Site would be maintained at levels one to three.
LS		B	C	D	E	<b>RR-1.1.13:</b> At Painted Rock Campground, the camping-stay limit would be 14 days except Oct. 1 to April 30, when the stay limit would be increased to 90 days provided the campground does not remain at 100 percent capacity for three (3) consecutive nights. If this limit is reached, the 14 day limit will be placed into effect for the remainder of the fiscal year.
LS		B	C	D	E	<b>RR-1.1.14:</b> Public lands adjacent to Painted Rock Petroglyph Campground (T4S, R7W, Sections 30-32; T4S, R8W, Sections 13, 14, 24, 25; T5S, R7W, Sections 5-8, 17, 20; and T5S, R8W, Sections 1-3, 10-12; approximately 10,000 acres) would remain closed to camping and motorized access.
LS		B	C	D	E	<b>RR-1.1.15:</b> The Painted Rock Petroglyph Campground and public use site (approximately 300 acres) would be closed to all locatable minerals exploration and development, geophysical exploration, and mineral material sales. Public lands would be recommended for withdrawal to all mineral location and entry.
LS		B	C	D	E	<b>RR-1.1.16:</b> Public lands adjacent to Painted Rock Petroglyph Campground (T4S, R7W, Sections 30-32; T4S, R8W, Sections 13, 14, 24, 25; T5S, R7W, Sections 5-8, 17, 20; and T5S, R8W, Sections 1-3, 10-12; approximately 10,000 acres) would be closed to seismic exploration and mineral material sales.
LS		B	C	D	E	<b>RR-1.1.17:</b> The Painted Rock Petroglyph Campground and surrounding area (approximately 10,000 acres) would remain open to all non-renewable leasable minerals actions (including geothermal and sodium), but any lease would contain a No surface occupancy stipulation
<b>Objective 1.2:</b> In areas with recreation-dependant economies, manage recreation resources in cooperation with local communities.						
<b>Ajo SRMA (Alternatives B, C and E)</b>						
LS		B	C		E	<b>RR-1.2.1:</b> The Ajo SRMA would be established (177,800 acres) with a “Community” market strategy. The market is local and seasonal residents who use this rural southwest Arizona locale as a gateway to public lands, other Federal lands and Mexico.
LS		B	C		E	<b>RR-1.2.2:</b> The Ajo Desert RMZ would be established (155,500 acres) for self directed opportunities for motorized and non-motorized exploration of the Sonoran Desert.
LS		B	C		E	<b>RR-1.2.3:</b> For the Ajo Desert RMZ, the physical, social and administrative settings would be 14 percent front country, 3 percent passage and 83 percent back country.
LS		B	C		E	<b>RR-1.2.4:</b> The Gateway RMZ would be established (19,900 acres) for local attractions and opportunities that highlight the surrounding public lands.
LS		B	C		E	<b>RR-1.2.5:</b> For the Gateway RMZ, the physical, social and administrative settings would be 100 percent community interface.
LS		B	C		E	<b>RR-1.2.6:</b> The Gunsight Wash RMZ would be established (2,500 acres) for remote winter camping and portal to adjacent public lands.

<b>Goal 1: Provide quality recreation opportunities and experiences that are derived from public land resource values and responsive to visitor demand.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
LS		B	C		E	<b>RR-1.2.7:</b> For the Gunsight Wash RMZ, the physical, social and administrative settings would be 100 percent front country.
LS				D		In Alternative D, recreation of the Ajo Block would be managed as an ERMA; see <b>RR-2.1.1</b> .
<b>Management Actions and Allowable Uses for Ajo Desert RMZ</b>						
LS		B	C		E	<b>RR-1.2.8:</b> The designated travel system would predominately consist of roads maintained at levels 1 to 3. Major access roads and pullouts could be maintained at level 5.
LS		B	C		E	<b>RR — 1.2.9:</b> A maximum camping stay would be established of seven days per party. Persons may occupy any one site or multiple sites within a 25 mile radius on public lands not closed or otherwise restricted to camping for a total period of not more than seven (7) days within a 28 day period. When the seven (7) day limit has been reached, the party must move 25 miles from site of last occupation, or off of public land. The authorized officer may give written permission for extension of the seven (7) day limit.
LS		B	C		E	<b>RR-1.2.10:</b> Competitive motorized speed events would not be authorized.
<b>Management Actions and Allowable Uses for Gateway RMZ</b>						
LS		B	C		E	<b>RR-1.2.11:</b> The designated travel system would predominately consist of roads suitable for two wheel drive maintained at levels 1 to 3, with up to 5 percent (6 to 9 miles) of the route network maintained at level 5 to provide access for dispersed camping and motorized sightseeing and hiking opportunities.
LS		B	C		E	<b>RR-1.2.12:</b> Visitor and management infrastructure would generally be moderate in scope and scale, but may include developed facilities which would include a system of primitive roads and trails that meet the desired recreation setting.
LS		B	C		E	<b>RR-1.2.13:</b> A 40-acre open area to accommodate motorized opportunities, such as unrestricted motocross bike riding, would be established with the provision that local partners would be sought to monitor and provide on-site management and educate users in environmental stewardship.
LS		B	C		E	<b>RR-1.2.14:</b> The Ajo Scenic Loop road would be established to interpret and educate local and seasonal visitors on adjacent public lands with the provision that local partners would be sought to monitor and provide on-site management and educate users in environmental stewardship.
LS		B	C		E	<b>RR-1.2.15:</b> Competitive motorized speed events would be authorized in the 40-acre open area.
LS		B	C		E	<b>RR-1.2.16:</b> The 40-acre open use motocross site would be closed to mineral material sales and recommended for withdrawal from mineral location.
LS		B	C		E	<b>RR-1.2.17:</b> The 40-acre open use motocross site would remain open to all non-renewable leasable minerals actions, but any lease would contain a No Surface Occupancy stipulation with no exceptions, waivers, or modifications geothermal resources and sodium.
<b>Management Actions and Allowable Uses for Gunsight Wash RMZ</b>						
LS		B	C		E	<b>RR-1.2.18:</b> The Gunsight Wash area (T14S, R5W, Sections 2-4 and 9-11; approximately 2,500 acres) would be developed as a managed campground. Camping would be limited to designated sites. Fees could be established as needed per the FLREA to meet objectives that would be addressed in a subsequent activity/business plan.
LS		B				<b>RR-1.2.19:</b> The designated travel system would predominately consist of roads suitable for two-wheel-drive access for RVs with at least 90 percent (8 miles) maintained at levels 3 to 5 to provide access for dispersed camping and motorized sightseeing and hiking opportunities.

<b>Goal 1: Provide quality recreation opportunities and experiences that are derived from public land resource values and responsive to visitor demand.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
LS		B				<b>RR-1.2.20:</b> At the Gunsight Wash Campground, the camping stay limit would be 14 days except during October 1 – April 30 when the stay limit would be increased to 120 days provided the campground does not remain at 100 percent capacity for three (3) consecutive nights. If this limit is reached the 14-day limit will be placed into effect for the remainder of the fiscal year.
LS		B	C		E	<b>RR-1.2.21:</b> The Gunsight Wash Campground would be closed to locatable minerals exploration and development, geophysical exploration, and mineral material sales. Public lands would be recommended for withdrawal to all mineral location and entry.
LS		B	C		E	<b>RR-1.2.22:</b> The Gunsight Wash Campground would remain open to all non-renewable leasable minerals but any lease would contain a No Surface Occupancy stipulation.
LS		B	C		E	<b>RR-1.2.23:</b> Controlled access, such as a center turning lane on Highway 85, would be secured with ADOT.
LS		B				<b>RR-1.2.24:</b> Standard and expanded amenity infrastructure would be provided.
LS			C		E	<b>RR-1.2.25:</b> At the Gunsight Wash Campground, the camping stay limit would be 14 days except during October 1 – April 30 when the stay limit would be increased to 60 days provided the campground does not remain at 100 percent capacity for three (3) consecutive nights. If this limit is reached the 14-day limit will be placed into effect for the remainder of the fiscal year.
LS			C		E	<b>RR-1.2.26:</b> Infrastructure would be limited to standard amenities.
LS			C		E	<b>RR-1.2.27:</b> The designated travel system would predominately consist of roads suitable for two-wheel-drive access for RVs with at least 40 percent (4 miles) maintained at levels 3 to 5 to provide access for dispersed camping and motorized sightseeing and hiking opportunities.
<b>Buckeye Hills SRMA</b>						
LS		B	C	D	E	<b>RR-1.2.28:</b> The Buckeye Hills SRMA would be established (47,900 acres) with a “Community” market strategy for residents of western Maricopa County.
LS		B				<b>RR-1.2.29:</b> The Buckeye Hills East RMZ would be established (25,800 acres) with an emphasis on motorized recreation opportunities adjacent to the communities of Buckeye, Avondale and Goodyear.
LS			C		E	<b>RR-1.2.30:</b> The Buckeye Hills East RMZ would be established (25,800 acres) for a balanced mix of motorized and non-motorized recreation opportunities adjacent to the communities of Buckeye, Avondale and Goodyear.
				D		<b>RR-1.2.31:</b> The Buckeye Hills East RMZ would be established (25,800 acres) with an emphasis on non-motorized recreation opportunities adjacent to the communities of Buckeye, Avondale, and Goodyear.
LS		B			E	<b>RR-1.2.32:</b> The physical, social, and administrative settings for the Buckeye Hills East RMZ would be 100 percent community interface.
LS			C	D		<b>RR-1.2.33:</b> The physical, social, and administrative settings for the Buckeye Hills East RMZ would be 100 percent front country.
LS		B	C		E	<b>RR-1.2.34:</b> The Buckeye Hills West RMZ would be established (22,100 acres) for dispersed recreational opportunities adjacent to the Buckeye Hills Recreation Area Regional County Park and the nearby Robbins Butte State Wildlife Area. The RMZ would be managed in partnership with Maricopa County and Arizona Game and Fish Department.
LS				D		<b>RR-1.2.35:</b> The Buckeye Hills West RMZ would be established (22,100 acres) for dispersed recreational opportunities and would be managed by the BLM in cooperation with Maricopa County and Arizona Game and Fish Department.
LS		B			E	<b>RR-1.2.36:</b> Physical, social and administrative settings for the Buckeye Hills West RMZ would be 100 percent front country.

<b>Goal 1: Provide quality recreation opportunities and experiences that are derived from public land resource values and responsive to visitor demand.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
LS			C		E	<b>RR-1.2.37:</b> Physical, social and administrative settings for the Buckeye Hills West RMZ would be 40 percent front country, 58 percent back country and 2 percent passage zone.
LS				D		<b>RR-1.2.38:</b> Physical, social and administrative settings for the Buckeye Hills West RMZ would be 96 percent back country and 4 percent passage zone.
<b>Management Actions and Allowable Uses for Buckeye Hills East RMZ</b>						
LS		B	C		E	<b>RR-1.2.39:</b> The RMZ would be established as a Special Management Area (SMA) and an Individual Special Recreation Permit (ISRP) program may be established to allow for special management and protection of the SMA in partnership with Maricopa County and the Arizona Game and Fish Department. Through a Cooperative Management Agreement, partners may be authorized to share in the collection and management of fees.
LS		B	C		E	<b>RR-1.2.40:</b> The designated travel system would predominately consist of roads maintained at levels 1 to 3. Access roads could be maintained at level 5.
LS		B				<b>RR-1.2.41:</b> Up to six staging/parking areas may be developed with standard amenity facilities such as gravel surface, picnic tables, and fire rings (up to 30 acres). Up to two large staging areas could be developed not to exceed 10 acres each.
LS			C		E	<b>RR-1.2.42:</b> Up to six staging/parking areas may be developed with standard amenity facilities such as gravel surface, picnic tables, and fire rings (up to 30 acres). One large staging area could be developed not to exceed 10 acres.
LS				D		<b>RR-1.2.43:</b> Up to four staging/parking areas may be developed with standard amenity facilities such as gravel surface, picnic tables, and fire rings (up to 20 acres).
LS		B	C	D	E	<b>RR-1.2.44:</b> Vehicle-based camping would be limited to existing or designated sites.
LS		B	C		E	<b>RR-1.2.45:</b> Primitive roads or trails, especially connector and loop routes, would be developed for a diversity of users
LS				D		<b>RR-1.2.46:</b> Up to 50 percent of the primitive roads (approximately 63 miles) would be converted to non-motorized trails. Trails could be developed to provide connector and loop opportunities for non-motorized users.
<b>Management Actions and Allowable Uses for Buckeye Hills West RMZ</b>						
LS		B	C		E	<b>RR-1.2.47:</b> The RMZ would be established as a Special Management Area (SMA) and an Individual Special Recreation Permit (ISRP) program may be established to allow for special management and protection of the SMA in partnership with Maricopa County and the Arizona Game and Fish Department. Through a Cooperative Management Agreement, partners may be authorized to share in the collection and management of fees.
LS		B	C		E	<b>RR-1.2.48:</b> Fees may be established as needed to meet activity or business plan objectives in accordance with the FLREA.
LS		B	C		E	<b>RR-1.2.49:</b> The designated travel system would predominately consist of roads maintained at levels 1 to 3.
LS		B	C		E	<b>RR-1.2.50:</b> Primitive roads or trails, especially connector and loop routes, would be developed for a diversity of users.
LS			C		E	<b>RR-1.2.51:</b> Overnight camping would be prohibited unless specifically authorized.
LS				D		<b>RR-1.2.52:</b> An SMA and ISRP program would not be established.
LS				D		<b>RR-1.2.53:</b> The designated travel system would predominately consist of primitive roads maintained at level 1.
<b>Saddle Mountain SRMA (Alternatives B, C and E)</b>						

<b>Goal 1: Provide quality recreation opportunities and experiences that are derived from public land resource values and responsive to visitor demand.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>			<b>Management Actions and Allowable Uses</b>	
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>		
LS		B	C		E	<b>RR-1.2.54:</b> The Saddle Mountain SRMA would be established (47,500 acres) with a “Community” market strategy for the community market strategy for residents of Maricopa County.
LS		B				<b>RR-1.2.55:</b> The Saddle Mountain RMZ would be established (47,500 acres) for motorized and non-motorized recreation opportunities.
LS		B				<b>RR-1.2.56:</b> For the Saddle Mountain RMZ, the physical, social and administrative settings would be 5 percent community interface, 83 percent front country, 10 percent back country and 1 percent passage.
LS			C		E	<b>RR-1.2.57:</b> The Saddle Mountain RMZ would be established (47,500 acres) for non-motorized recreation opportunities.
LS			C			<b>RR-1.2.58:</b> For the Saddle Mountain RMZ, the physical, social and administrative settings would be 0 percent community interface, 54 percent front country, 45 percent back country and 1 percent passage.
LS					E	<b>RR-1.2.59:</b> For the Saddle Mountain RMZ, the physical, social and administrative settings would be 5 percent community interface, 83 percent front country, 11 percent back country and 1 percent passage.
LS				D		<b>RR-1.2.60:</b> In Alternative D, recreation for Saddle Mountain would be managed as an ERMA; see <b>RR-2.1.1</b> .
<b>Management Actions and Allowable Uses for Saddle Mountain RMZ</b>						
LS		B				<b>RR-1.2.61:</b> The designated travel system would predominately consist of primitive roads maintained at levels 1 to 3 with up to 5 percent maintained at level 5 (approximately 5 miles) to provide access for motorized recreation opportunities.
LS			C		E	<b>RR-1.2.62:</b> The designated travel system would emphasize primitive access to non-motorized trail opportunities. Roads would predominately be maintained at level 1 with up to 10 percent maintained at level 3 (approximately 9 miles).
LS		B				<b>RR-1.2.63:</b> Primitive roads and trails would be developed to provide sustainable opportunities for motorized and non-motorized trail opportunities.
LS			C		E	<b>RR-1.2.64:</b> Non-motorized trails would be developed, or converted from motorized roads, to meet demand for hiking, equestrian, and mountain biking. Primitive roads would only be developed if needed to redirect motorized use from the Saddle Mountain.
LS			C		E	<b>RR-1.2.65:</b> Vehicle-based camping would be limited to existing or designated sites.
LS			C		E	<b>RR-1.2.66:</b> SRPs would not be authorized for motorized or non-motorized competitive events.
LS			C		E	<b>RR-1.2.67:</b> Motorized technical and specialized uses, such as rock-crawling and rock-hopping, would be prohibited.
<b>San Tan Mountains SRMA</b>						
LS		B				<b>RR-1.2.68:</b> The San Tan Mountains SRMA would be established (6,800 acres) with a “Community” market strategy. The market is residents and visitors to Pinal and eastern Maricopa counties.
LS		B				<b>RR-1. 2.69:</b> The San Tan Mountains RMZ would be established (6,800 acres) for non-motorized trails and associated outdoor recreation activities.
LS		B				<b>RR-1.2.70:</b> For the San Tan Mountains RMZ, the physical, social and administrative settings would be 69 percent front country and 31 percent back country.
LS				D		<b>RR-1.2.71:</b> In Alternatives D, recreation for San Tan Mountains would be managed as an ERMA; see <b>RR-2.1.1</b> .
<b>San Tan Mountains RMZ</b>						

<b>Goal 1: Provide quality recreation opportunities and experiences that are derived from public land resource values and responsive to visitor demand.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>			<b>Management Actions and Allowable Uses</b>	
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>		
LS		B				<b>RR-1.2.72:</b> The RMZ would be established as a Special Management Area (SMA) and an Individual Special Recreation Permit (ISRP) program would be established to allow for special management and protection of the SMA in partnership with Maricopa and Pinal Counties. Through a Cooperative Management Agreement, partners would be authorized to share in the collection and management of fees.
LS		B				<b>RR-1.2.73:</b> Fees would be established as needed to meet activity or business plan objectives in accordance with the FLREA.
LS		B				<b>RR-1.2.74:</b> The designated travel system would predominately consist of roads maintained at levels 3 to 5 based on visitor expectations.
<b>Objective 1.3: Manage 70 percent or more of the Lower Sonoran Planning Area recreation opportunities dependent on vast, open and undeveloped public lands.</b>						
<b>Gila Bend Mountains SRMA</b>						
LS		B			E	<b>RR-1.3.1:</b> The Gila Bend Mountains SRMA would be established (253,800 acres), and would have an “Undeveloped” primary strategy targeted to desert explorers from western Maricopa County. To better manage dispersed recreation opportunities the BLM may provide major investments in visitor services however investments in visitor facilities would be minor.
LS			C			<b>RR-1.3.2:</b> The Gila Bend Mountains SRMA would be established (314,300 acres), and would have an “Undeveloped” primary strategy targeted to desert explorers from western Maricopa County. To better manage dispersed recreation opportunities the BLM may provide major investments in visitor services however investments in visitor facilities would be minor.
LS		B			E	<b>RR-1.3.3:</b> The Gila Bend Mountains RMZ would be established (253,700 acres) for visitors primarily seeking non-motorized dispersed recreation experiences in a remote back country setting.
LS			C			<b>RR-1.3.4:</b> The Gila Bend Mountains RMZ would be established (314,300 acres) for visitors primarily seeking non-motorized dispersed recreation experiences in a remote back country setting.
LS		B	C		E	<b>RR-1.3.5:</b> Physical, social and administrative settings would be established, with 15 percent front country, 82 percent back country, and 3 percent passage.
LS				D		<b>RR-1.3.6:</b> In Alternative D, recreation for the Gila Bend Mountains would be managed as an ERMA; see <b>RR-2.1.1</b> .
<b>Gila Bend Mountains RMZ</b>						
LS		B	C		E	<b>RR-1.3.7:</b> To provide a rugged primitive motorized experience, 90 percent of the designated motor vehicle travel system (324 – 465 miles) would consist of primitive roads maintained at level 1, but up to 3 percent (11-16 miles) could be maintained at level 3-5 to allow for two-wheel-drive access.
LS		B	C		E	<b>RR-1.3.8:</b> Standard camping amenities, interpretive displays, and improved access would be constructed at the Sundad public use site to facilitate visitation.
LS		B	C		E	<b>RR-1.3.9:</b> Areas of disturbance greater than 2 acres would be rehabilitated back to natural condition and group limits may be established to prevent further resource degradation.
<b>Arlington SRMA</b>						
LS		B			E	<b>RR-1.3.10:</b> The Arlington SRMA would be established (60,600 acres), and would have a “Destination” primary strategy targeted to visitors primarily seeking dispersed motorized recreation or a family oriented riding experience in a remote Sonoran desert landscape.
LS		B			E	<b>RR-1.3.11:</b> The Arlington RMZ would be established (60,600) for visitors primarily seeking dispersed motorized recreation or a family oriented riding experience in a remote Sonoran desert landscape.

<b>Goal 1: Provide quality recreation opportunities and experiences that are derived from public land resource values and responsive to visitor demand.</b>						
Applicable Decision Area		Applicable Alternative			Management Actions and Allowable Uses	
LS	SDNM	B	C	D		
LS		B			E	<b>RR-1.3.12:</b> Physical, social and administrative settings for the Arlington RMZ would be comprised of 100 percent front country.
<b>Arlington RMZ</b>						
LS		B			E	<b>RR-1.3.13:</b> The designated motor vehicle travel system would consist of primitive roads maintained at level 1 with up to 10 percent of the network (19 miles) maintained at level 3 and up to 30 percent (60 miles) maintained at level 5 to allow for two-wheel-drive access.
LS		B			E	<b>RR-1.3.14:</b> Up to 25 miles of new roads may be constructed as needed to connect loop routes to provide opportunities for a family riding experience. Existing roads could be re-aligned to improve resource management or public safety.
LS		B			E	<b>RR-1.3.15:</b> Up to two staging areas would be developed with standard amenity facilities and limited to a maximum of 10 acres each.
<b>Painted Rock Mountains SRMA</b>						
LS		B				<b>RR-1.3.16:</b> The Painted Rock Mountains SRMA would be established (approximately 41,300 acres), and would have an “Undeveloped” primary market strategy targeted to the local/regional communities. The BLM would invest in visitor services but make minimal investment in facilities, recognizing that visitors value recreational opportunities of the Painted Rock Mountains that are produced by the vast undeveloped and remote character of the landscape.
LS		B				<b>RR-1.3.18:</b> Physical, social and administrative settings would be established with front country comprising 100 percent of the SRMA.
LS		B				<b>RR-1.3.19:</b> The designated motor vehicle travel system would consist primarily of primitive roads maintained at levels 1 to 3, but up to 5 percent of the route network could be maintained at level 5 to provide two-wheel-drive passenger car access to public use cultural sites, day-use, and camping facilities.
LS		B				<b>RR-1.3.20:</b> One parking / staging area, not exceeding five acres in size, would be constructed.
LS			C	D	E	<b>RR-1.3.21:</b> In Alternatives C, D, and E, recreation for Painted Rock Mountains would be managed as an ERMA; see <b>RR-2.1.1</b> .

<b>Goal 2: Balance the provision of recreation opportunities and experiences with other resource uses.</b>						
Applicable Decision Area		Applicable Alternative			Management Actions & Allowable Uses	
LS	SDNM	B	C	D		
<b>Objective 2.1:</b> Upon entry to the LSFO area, 75 percent of visitors will become aware they are on public lands and 95 percent of visitors will be satisfied with their recreation opportunities and experiences.						
LS				D		<b>RR-2.1.1:</b> Recreation of the Ajo, Gila Bend Mountains, Arlington, Painted Rock Mountains, and Saddle Mountain areas would be managed as an ERMA. Recreation opportunities and amenities would not be proactively managed and developed except in the case of conflict with other resource uses.(for example a campground would not be developed at Gunsight Wash unless a biological opinion indicated continued dispersed camping was harming a priority wildlife species)
LS			C		E	<b>RR-2.1.2:</b> The San Tan Mountains area would be managed for recreation resources by Maricopa County.
LS		B	C	D	E	<b>RR-2.1.3:</b> The Sentinel Plain area would be established and managed as a special management area within an ERMA. Access to the area would require the Barry M. Goldwater Air Force Range entry and public safety permit (for the BLM, these are managed as Individual Special Recreation Permit.

<b>Goal 2: Balance the provision of recreation opportunities and experiences with other resource uses.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions &amp; Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>LS</b>				<b>D</b>		<b>RR-2.1.4:</b> The designated travel system would predominately consist of roads maintained at levels 1 to 3. Major access roads and pullouts could be maintained at level 5.
<b>LS</b>				<b>D</b>		<b>RR-2.1.5:</b> Public lands within the Cuerda de Lena ACEC near Ajo would be closed to public access for all recreation uses including SRPs, during March 15 – July 15 or as determined by the Sonoran Pronghorn Recovery Team.
<b>General Recreation Management Actions and Allowable Uses</b>						
<b>Camping</b>						
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>RR-2.1.6:</b> Camping on all lands open to the public would be allowed in accordance with 43 CFR 8365.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>RR-2.1.7:</b> Except as otherwise provided, camping would continue to be limited to no more than a period of 14 days within any period of 28 consecutive days and, after the 14th day of occupation, the camper would be required to move outside of at least a 25-mile radius of the previous location until the 29th day since initial occupation.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>RR-2.1.8:</b> Self-contained or vehicle-based camping would be permitted within 100 feet of the centerline of designated or existing routes. Cross-country travel to campsites would not be permitted.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>RR-2.1.9:</b> LTVAs would not be allocated.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>RR-2.1.10:</b> Camping facilities and length-of-stay limits may be developed and adjusted to sustain the prescribed settings and attain the desired objectives of the RMA(s) for dispersed camping, extended camping areas, and short-term camping areas.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>RR-2.1.11:</b> Collection of saguaro cacti skeletons for personal use or campfire burning would be prohibited.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>RR-2.1.12:</b> Collection of dead, downed and detached ironwood and mesquite for any use would be limited to three pieces at any one time unless otherwise restricted.
<b>LS</b>				<b>D</b>		<b>RR-2.1.13:</b> Collection of firewood would be prohibited at developed recreation sites.
<b>Target Shooting</b>						
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>RR-2.1.14:</b> Discharge of firearms would be allowed on BLM public lands except as specifically restricted in this land use plan or prohibited by state law. This activity may be restricted or prohibited in specific areas where public safety and resource conflicts exist.
<b>Special Recreation Permits (SRPs)</b>						
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>RR-2.1.15:</b> At the discretion of the authorized officer, special recreation permits (SRPs) would be authorized on a case-by-case basis as outlined in 43 CFR 2930.5. See Appendix R, <i>Benefits Based Recreation Worksheets</i> (p. 1295) for general permit guidance.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>RR-2.1.16:</b> Certified weed-free feed would be required for all equestrian and stock animal uses authorized under SRPs.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>RR-2.1.17:</b> Except as otherwise provided, motorized competitive speed events would not be permitted.
<b>Paintball Activities</b>						
<b>LS</b>		<b>B</b>	<b>C</b>		<b>E</b>	<b>RR-2.1.18:</b> Paintball activities would not be allowed in WA's, ACECs and SRMAs. Paintball activities will be allowed beyond 0.25 miles of any established facility or site, campground, residence, trailhead, road, staging area, Special Designation and other areas as posted. Paintball activities would be restricted in accordance with any applicable local and state law.
<b>LS</b>				<b>D</b>		<b>RR-2.1.19:</b> Paintball activities would be prohibited.
<b>Geocaching Activities</b>						

<b>Goal 2: Balance the provision of recreation opportunities and experiences with other resource uses.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions & Allowable Uses
LS	SDNM	B	C	D	E	
LS		B	C		E	<b>RR-2.1.20:</b> An SRP would not be required if the geocaching activity is non-commercial, complies with land use decisions and designations, does not award cash prizes, is not publicly advertised, poses minimal risk for damage to public land or related water resource values, and generally requires no monitoring.
LS				D		<b>RR-2.1.21:</b> Geocache activities would be prohibited.

<b>Goal 3: Recreation opportunities and experiences are derived from the objects and resource values for which the SDNM was established.</b>						
Applicable Decision Area		Applicable Alternatives				Management Actions & Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 3.1:</b> Upon entry to the SDNM, all visitors realize they are in an important natural and historic landscape.						
<b>Sonoran Desert National Monument (SDNM) SRMA</b>						
	SDNM	B	C		E	<b>RR-3.1.1:</b> The SDNM SRMA would be established (approximately 486,400 acres) and would have a “Destination” primary market strategy targeted to a regional/national market. The BLM would invest in facilities and visitor assistance, recognizing that national and regional visitors and constituents value the SDNM as a recreation-tourism destination.
	SDNM	B	C		E	<b>RR-3.1.2:</b> The Anza NHT RMZ would be established within the SDNM SRMA (approximately 52,800 acres). This management zone would be directed at visitors seeking to discover, tour, and learn about the Anza National Historic Trail, Arizona history, and natural history of the Sonoran Desert.
	SDNM	B	C		E	<b>RR-3.1.3:</b> A “desert back country” RMZ would be established within the SDNM SRMA (approximately 433,600 acres). This management zone would be directed at visitors seeking an undeveloped, back country experience with resource-dependent activities such as hunting, camping, hiking, sightseeing, and four-wheel-drive touring.
	SDNM			D		<b>RR-3.1.4:</b> The SDNM would be established as a SRMA (approximately 486,400 acres) and would have an “Undeveloped” primary market strategy targeted to a regional/national market. The BLM would invest in visitor assistance but make only minimal investments in facilities, recognizing that national and regional visitors and constituents value recreational opportunities of the SDNM that are produced by the vast, undeveloped, and remote character of the landscape.
	SDNM			D		<b>RR-3.1.5:</b> Separate zones of management for the Juan Bautista de Anza National Historic Trail and remainder of the SDNM would not be established. The SDNM SRMA would be managed in its entirety as a RMZ for visitors seeking an undeveloped, back country experience along a historic trail, and for resource-dependent activities such as hunting, camping, hiking, sightseeing, and four-wheel-drive touring.
	SDNM	B				<b>RR-3.1.6:</b> Physical, social and administrative settings would be established for the Anza National Historic Trail RMZ, with front country comprising approximately 27 percent, back country 72 percent, and passage 1 percent.
	SDNM		C			<b>RR-3.1.7:</b> Physical, social, and administrative settings would be established for the Anza National Historic Trail RMZ, with front country comprising approximately 31 percent, back country 67 percent, and passage 2 percent.
	SDNM				E	<b>RR-3.1.8:</b> Physical, social, and administrative settings would be established for the Anza National Historic Trail RMZ, with front country comprising approximately 45 percent, back country 55 percent, and passage 1 percent.
	SDNM	B				<b>RR-3.1.9:</b> Physical, social, and administrative settings would be established for the Desert back country RMZ, with front country comprising approximately 16 percent, back country 84 percent, and passage 3 percent.

<b>Goal 3: Recreation opportunities and experiences are derived from the objects and resource values for which the SDNM was established.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternatives</b>			<b>Management Actions &amp; Allowable Uses</b>	
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>		
	SDNM		C			<b>RR-3.1.10:</b> Physical, social, and administrative settings would be established for the Desert back country RMZ, with front country comprising approximately 9 percent, back country 91 percent, and passage 3 percent.
	SDNM				E	<b>RR-3.1.11:</b> Physical, social, and administrative settings would be established for the Desert back country RMZ, with front country comprising approximately 13 percent, back country 87 percent, and passage 2 percent.
	SDNM			D		<b>RR-3.1.12:</b> Physical, social, and administrative settings would be established for the Sonoran Desert National Monument RMZ, with front country comprising approximately 8 percent of the SRMA. The back country setting would comprise approximately 92 percent and passage 2 percent of the remainder of the Monument.
<b>Anza National Historic Trail RMZ</b>						
	SDNM	B	C		E	<b>RR-3.1.11:</b> The motor vehicle travel system would consist primarily of primitive roads maintained at levels 1 to 3, but up to 20 percent of the route network would be maintained at level 5 to provide two-wheel-drive passenger car access to public use cultural sites, day-use, and camping facilities.
<b>Desert Back Country RMZ</b>						
	SDNM	B	C		E	<b>RR-3.1.12:</b> The motor vehicle travel system would consist primarily of primitive roads maintained at levels 1 to 3, but up to 5 percent of the route network would be maintained at level 5 to provide two-wheel-drive passenger car access to public use cultural sites, day-use, and camping facilities.
<b>Sonoran Desert National Monument RMZ</b>						
	SDNM			D		<b>RR-3.1.13:</b> The designated motor vehicle travel system would consist entirely of primitive roads maintained at levels 1 to 3. Maintenance would not be provided for two-wheel-drive passenger car access.
<b>Objective 3.2: Impacts to Monument objects resulting from recreation use do not exceed 2001 levels.</b>						
<b>General Recreation Management Actions &amp; Allowable Uses</b>						
<b>Camping and Facilities</b>						
	SDNM	B	C	D	E	<b>RR-3.2.1:</b> Unless otherwise regulated, camping length-of-stay is limited to no more than 14 days within any period of 28 consecutive days. After the 14th day of occupation, the camper would be required to move at least 25 miles from the previous location.
	SDNM	B	C	D	E	<b>RR-3.2.2:</b> Collection of native vegetation as firewood would be prohibited in front country and passage settings.
	SDNM	B	C	D	E	<b>RR-3.2.3:</b> Visitor and management infrastructure would be constructed and maintained to achieve the primary market strategy and outcome objective(s).
	SDNM	B	C	D	E	<b>RR-3.2.4:</b> Visitor and management infrastructure would be constructed and maintained to accommodate visitation in balance with protection of Monument objects; would be modest in scope and scale; and would be designed to blend with the dominant features of the landscape.
	SDNM	B	C	D	E	<b>RR-3.2.5:</b> Visitor and management infrastructure would be placed on non-Monument lands, where possible.
	SDNM	B	C	D	E	<b>RR-3.2.6:</b> Activities, vehicles, and group sizes would be limited to designated sites and lengths of stay; types and speeds; and numbers as deemed necessary to protect Monument objects.
	SDNM	B	C	D	E	<b>RR-3.2.7:</b> The designated non-motorized travel system would consist primarily of existing vehicle routes; however, construction of short segments of new vehicle routes to provide experience opportunities consistent with the outcome objective(s) of management zones would be allowed.
	SDNM	B	C	D	E	<b>RR-3.2.8:</b> Standards for the management of recreation impacts to objects of the SDNM will be established and monitored by the limits of acceptable change (LAC) method.

<b>Goal 3: Recreation opportunities and experiences are derived from the objects and resource values for which the SDNM was established.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternatives</b>				<b>Management Actions &amp; Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Special Recreation Permits (SRPs)</b>						
	SDNM	B	C	D	E	<b>RR-3.2.9:</b> At the discretion of the authorized officer, SRPs would be authorized on a case-by-case basis as outlined in 43 CFR 2930.5 as well as the decisions below and as described in Appendix Q, <i>Recreation Settings and Descriptions</i> (p. 1285).
	SDNM	B	C	D	E	<b>RR-3.2.10:</b> Competitive motor sports would not be allowed in the SDNM SRMA.
	SDNM	B	C	D	E	<b>RR-3.2.11:</b> Organized groups numbering greater than 25 participants will require a special recreation permit.
	SDNM	B	C	D	E	<b>RR-3.2.12:</b> To assure protection of Monument objects, permits will not be issued for organized groups of more than 200 participants at one site.
	SDNM	B	C	D	E	<b>RR-3.2.13:</b> All commercial, other competitive, and vendor activities would be permitted on a case-by-case basis if Monument objects are protected.
	SDNM	B	C		E	<b>RR-3.2.14:</b> A SRP is not required for geocaching if the activity is not commercial, complies with land use decisions and designations, does not award cash prizes, is not publicly advertised, poses minimal risk for damage to public land or related water resource values, and generally requires no monitoring.
	SDNM	B	C	D	E	<b>RR-3.2.15:</b> Certified weed-free feed would be required for all equestrian and stock animal uses authorized under SRPs.
	SDNM	B	C	D	E	<b>RR-3.2.16:</b> The Sand Tanks Mountains area of the SDNM commonly known as “Area A” would continue to be managed as a special management area that requires a Barry M. Goldwater Air Force Range entry and public safety permit for access (for the BLM, these are managed as Individual Special Recreation Permit).
<b>Paintball Activities</b>						
	SDNM	B	C		E	<b>RR-3.2.17:</b> Paintball activities would be prohibited on the SDNM.
<b>Geocaching Activities</b>						
	SDNM			D		<b>RR-2.1.18:</b> Geocache activities would be prohibited on the SDNM.

<b>Recreation Management Implementation Actions for the SDNM</b>						
<b>Recreational Target Shooting</b>						
	SDNM	B				<b>RR-3.2.18:</b> Recreational target shooting would be prohibited on approximately 389,989 acres, or 80.2 percent, of the SDNM determined to be unsuitable for this activity due to a prevalence of Monument objects. Recreational target shooting would continue on approximately 96,411 acres, or 19.8 percent, of the SDNM where Monument objects are not prevalent. Hunting would be allowed in accordance with applicable federal, state and local laws. See Map 2–13b and Appendix G, <i>Sonoran Desert National Monument Recreational Target Shooting Analysis</i> (p. 1183).
	SDNM		C			<b>RR-3.2.19:</b> Recreational target shooting would be prohibited on approximately 485,264 acres, or 99.8 percent, of the SDNM determined to be unsuitable for continued recreational target shooting. Recreational target shooting would continue in five areas totaling 1,136 acres, or 0.2 percent, of the SDNM where it was found to be potentially moderately or highly suitable. Hunting would be allowed in accordance with applicable federal, state and local laws. (See Map 2–13c and Appendix G, <i>Sonoran Desert National Monument Recreational Target Shooting Analysis</i> (p. 1183).)
	SDNM			D	E	<b>RR-3.2.20:</b> Recreational target shooting would not be allowed in the SDNM SRMA. Hunting would be allowed in accordance with applicable federal, state and local laws.

**Allocation Summaries**

Summaries of allocations, by market strategy and setting character, of SRMAs and ERMAs for the Planning Areas are shown in Table 2.17, “Recreation Allocations by Decision Area for LSFO and SDNM” (p. 178) and Table 2.18, “Recreation Settings by Decision Area” (p. 178). While existing land use plans allocated public lands to SRMAs (Alternative A), these allocations were not made to specific market strategies and thus are described as “undefined.”

**Table 2.17. Recreation Allocations by Decision Area for LSFO and SDNM**

Recreation Market Strategy	Alternative (BLM Acres)				
	A	B	C	D	E
<b>LSFO</b>					
Undefined SRMA	285,000 (30%)	-	-	-	-
Destination	0	112,900 (12%)	52,300 (6%)	52,300 (6%)	112,900 (12%)
Community	0	280,000 (30%)	273,200 (29%)	47,900 (5%)	273,200 (29%)
Undeveloped	0	253,700 (27%)	314,300 (34%)	-	253,700 (27%)
ERMA	645,200 (70%)	283,600 (31%)	290,400 (31%)	830,000 (89%)	290,400 (31%)
<b>SDNM</b>					
Undefined SRMA	146,600 (30%)	-	-	-	-
Destination	-	486,400 (100%)	486,400 (100%)	-	486,400 (100%)
Undeveloped	-	-	-	486,400 (100%)	-
ERMA	339,800 (70%)	-	-	-	-

**Table 2.18. Recreation Settings by Decision Area**

Setting	Alternative (BLM Acres)			
	B	C	D	E
<b>LSFO</b>				
Community Interface	71,300 (9%)	19,900 (3%)	-	48,600 (8%)
Front Country	263,300 (34%)	186,300 (29%)	78,100 (78%)	244,000 (38%)
Back Country	347,200 (45%)	423,100 (66%)	21,600 (22%)	345,100 (53%)
Passage	98,000 (13%)	11,000 (2%)	500 (0.005%)	8,800 (1%)
<b>SDNM</b>				
Community Interface	-	-	-	-
Front Country	107,200 (22%)	55,500 (11%)	39,000 (8%)	78,700 (16%)
Back Country	377,600 (78%)	429,000 (88%)	446,200 (92%)	406,500 (84%)
Passage	1,600 (2%)	1,600 (3%)	1,300 (2%)	1,200 (2%)

## **Administrative Actions**

- Coordinate with partners and nearby land owners/managers to develop joint campgrounds on and off public lands to provide for public camping needs.
- Develop partnerships and volunteer opportunities with local clubs, organizations, and communities to maintain and monitor routes, recreation sites, and other areas.
- Develop brochures, maps, and information sheets to disseminate recreation use information to the public
- Coordinate with adjoining landowners; Maricopa, Pima, and Pinal counties; and local communities to enhance visitor and resident safety, improve resource protection, and manage recreation use and access that is compatible with protecting resources.

- Plan, designate, and develop recreation areas, routes, trails, tours, and management strategies through interdisciplinary plans with community and user input. Project plans will establish use indicators and standards for monitoring and evaluation. All development must be compatible with SRMAs, RMZs, VRM classes, and resource management objectives. Areas may be developed as needed for the following purposes:
  - Protecting resources,
  - Improving visitor safety,
  - Maintaining desired recreational setting and experiences.

**Specific to the SDNM Decision Area.**

- Coordinate with partners and nearby land owners/managers to develop regional shooting ranges outside the SDNM boundaries to support concentrated recreational target-shooting activities.
- Coordinate with partners and nearby land owners/managers to develop joint campgrounds outside the SDNM boundaries to provide for public camping needs.

## **2.8.5. TRAVEL MANAGEMENT (TM)**

Comprehensive travel management (TM) strives to provide manageable access to public lands while balancing resource protection. The allocation of areas as open, closed or limited to OHV, also described as “off-road vehicles” in 43 CFR 8340-8342, directs the management approach for vehicular travel on public lands. Implementation-level actions such as designating routes as part of a planned network help create a balance between human use and resource protection. Administrative uses of vehicles such as military, fire, or police actions are expressly defined as not being an off-road vehicle and are therefore exempt from vehicle regulations 43 CFR 8342.

Open-area allocation, where cross-country travel is allowed, is largely unused in central Arizona due to resource constraints presented by efforts to protect Sonoran Desert Tortoise, other wildlife disturbance; and concerns about public safety, such as those presented by abandoned mines. Several policies issued by national and Arizona State Office BLM direct local offices to be sensitive to resources/resource uses that may be affected by route designation. These policies include direction to:

- Complete route designation within 5 years of RMP completion (BLM Land Use Planning Handbook 1600-1).
- Follow archaeological and biological policies to ensure land health and compliance with protection laws. Specifically, IM-2007-030 and State manual supplements address National Historic Preservation Act Section 106 compliance for archaeological survey requirements where the Federal action of designating the route network would have an effect on cultural resources.
- Not designate routes within wilderness study areas or lands managed to protect wilderness characteristics. Specifically, IM 2009-132 addresses the designation of routes in these areas, indicating that routes will not be designated as roads, trails or primitive roads and would remain as “routes” with no maintenance requirements compiled by the BLM’s Facilities and Asset Management System (FAMS) for future funding or specific management would occur.
- Implement travel management (IM-2008-014) by addressing all routes, motorized and non-motorized, for designation for public or administrative use.
- Designate transportation assets as roads, primitive roads, and trails using the travel-management process (IM 2006-014). (See Appendix U, *Definition of Transportation Asset Type, Functional Class, Maintenance Intensity* (p. 1321)).

In this plan, the inventoried routes in the SDNM would be the basis for transportation assets designations as roads, primitive roads, or trails as defined in Appendix U, *Definition of Transportation Asset Type, Functional Class, Maintenance Intensity* (p. 1321). Routes in the Lower Sonoran Decision Area, outside the SDNM, would be designated within 5 years of RMP approval. Currently, all routes in the Lower Sonoran have been evaluated for potential conflict with the goals and objectives of resource programs and for their necessity for public use. Model route networks have been created for Alternatives B and D to assess the possible impacts to the resource programs when the actual route designations are completed. No individual route designations have been enacted, not even for ACECs or special wildlife management areas.

### ***Current Temporary Closure on the SDNM:***

A temporary closure is currently in place in the SDNM to restore damaged lands predominately located north of SR 238 in the vicinity of the Anza NHT. No camping or vehicle use is permitted on 54,817 acres, including 89 miles of existing primitive roads. This temporary closure began on June 13, 2008 and is now under a court ordered settlement agreement. It is to remain in effect until the RMP is approved or when the damaged lands are restored-whichever is later.

### **2.8.5.1. Existing Management Decisions, Alternative A — No Action For Travel Management**

Decisions are listed in chronological order by plan. The following decisions are extracted from the existing land use plans and amendments and are listed in chronological order. Because none of these current land use plans encompass the entire Planning Area, very few of these decisions are being carried forward as common to all alternatives and are restated as new action alternatives where applicable.

#### ***Goldwater Amendment – Lower Gila South Resource Management Plan (1990):***

(Applicable to public lands in the Sand Tanks Mountains “Area A” within the SDNM and lands south of Interstate 8 named the Sentinel Plains.)

- Maintain and enforce public access permit requirements for visitation into Area A (Sand Tank Mountains) and other areas as required under Public Law 99-606.
- Designate the Sand Tank Mountains (Area A) and Sentinel Plain areas, and other lands under BLM jurisdiction, as limited off-road vehicle use areas, with vehicle use restricted to designated routes in ACECs and established roads elsewhere.
- Develop transportation plan for Area A.
- Permit no open or unrestricted OHV use areas or competitive OHV use or events.
- Prohibit public off-road travel or cross-country vehicle use in all areas.
- Adopt the U.S. Air Force General Vehicle Operating Rules.

#### ***Lower Gila North Management Framework Plan (1983):***

(Applicable to public lands in the Saddle Mountain area.)

- No new roads would be allowed in the Saddle Mountain block of public land. About 5,500 acres area’s center encompassing Saddle Mountain would be established as a recreation and rock hound area if Congress did not designate the lands as wilderness (RR-12).

#### ***Lower Gila Resource Management Plan Amendment (2005):***

(Applicable to a portion of lands in the LSFO and all lands within the SDNM Planning Areas.)

- The Vekol Valley Grassland and Coffee Pot Botanical Area ACECs will be closed to recreational OHV use in accordance with 43 CFR, Part 8340, and Subpart 8342. (Not numbered)
- All public lands described in the MFP and RMP are designated as “limited” except wilderness, which is closed to motor vehicles, and relinquished portions of the BGR, which remain restricted to entry by permit only. OHV and special-recreation vehicles are limited to existing designated roads and vehicle routes. No unauthorized cross-country vehicle travel is permitted. Creation of unauthorized new trails, as well as widening or extension of existing trails, is not permitted (RR-9).
- Single- or multiple-use OHV and special-recreation vehicle areas, routes, and management strategies will be designated and developed through interdisciplinary plans. Planning shall address limits of acceptable change indicators and standards, conflicts, issues, and solutions to vehicle-management problems (RR-10).
- Roads and trails used as race courses will be evaluated for no action, closure, rehabilitation, or modification and authorization as race courses (RR-11).
- Site-specific inventories will be conducted to delineate existing roads and vehicle routes as requested by the authorized officer (RR-12).
- Approved hiking and equestrian trails are closed to unauthorized motorized use (RR-13).
- Road or area closures will be enacted where OHV or special-recreation vehicle use is determined to be inconsistent with established ROS classifications or such use is causing harm to natural or cultural resources (RR-14).
- Cross-country vehicle travel will be permitted only when specifically authorized to complete a task requiring such use, and only in areas where such use will not cause unnecessary or undue resource impacts (RR-15).
- OHV designations for relinquished portions of the BGR are retained – a permit is required for entry to these lands, and motorized travel is limited to designated, established routes (RR-16).
- Wilderness is closed to mechanized use. The provisions of existing wilderness-management plans and wildlife operations and maintenance plans pertaining to motorized and mechanized administrative uses in wilderness will remain in effect (RR-17).
- Self-contained or vehicle-based camping will be permitted within 50 feet of the centerline of designated or existing routes. Cross-country travel to campsites is not permitted (RR-54).

### ***Phoenix Resource Management Plan (1989):***

(Applicable to public lands in the extreme eastern part of the Planning Area.)

- The RMP presented both area designations and included language for route designations.
- The 6,800-acre San Tan Mountains Regional Park was retained as a Cooperative Recreation Management Area in association with Maricopa County Parks and Recreation. (Travel management decisions were addressed subsequently in the San Tan Mountains Regional Park Master Plan). This agreement expires in 2013.

### ***SDNM Current Management Guidance (2002):***

(Applicable to lands in the Sonoran Desert National Monument)

- For the purpose of protecting Monument objects, all motorized and mechanized vehicle use off road will be prohibited, except for emergency or authorized administrative purposes.
- In order to protect the public during operations at the adjacent BGR and to continue management practices that have resulted in an exceptionally well preserved natural resource, the current procedures for public travel and access to the portion of the Monument depicted as Area A shall remain in full force and effect, except to the extent that the USAF agrees to different procedures which the BLM determines are compatible with the protection of the objects identified in this proclamation.

### **2.8.5.2. Action Alternatives for Travel Management (TM)**

#### **Program Goals**

- **Goal 1:** All public land should be classified as open, closed or limited per 43 CFR 8342.1.
- **Goal 2:** Public use, resource management, and regulatory needs are met by development of a travel management plan and implementation of a travel management system.
- **Goal 3:** Protect Monument objects and purposes from human impacts associated with motorized and non-motorized travel within the SDNM.
- **Goal 4 :** Protect Monument objects and resources, meet conservation and restoration goals, ensure sustainable public use and enjoyment, and satisfy public safety and regulatory requirements by developing a travel management plan and implement a sustainable and compatible travel management system.
- **Goal 5:** Manage the travel management system for the LSFO area to protect resources and maintain desired recreation experiences.

#### **Land Use Allocations Summary**

**Table 2.19. Off-Highway Vehicle Area Designations by Alternative**

Classification	Alternative (BLM Acres)				
	A	B	C	D	E
<b>LSFO</b>					
Open	0	40	0	0	40
Closed	110,700	101,800	101,800	378,300	152,800
Limited to existing roads and trails	819,500	0	0	0	0
Limited to Designated Routes	0*	828,360	828,360	551,900	777,360
<i>Totals</i>	<i>930,200</i>	<i>930,200</i>	<i>930,200</i>	<i>930,200</i>	<i>930,200</i>
<b>SDNM</b>					
Open	0	0	0	0	0
Closed	161,200	157,700	157,700	310,700	157,700

Limited to existing roads and trails	325,200	0	0	0	0
Limited to Designated Routes	0*	328,700	328,700	175,700	328,700
<i>Totals</i>	<i>486,400</i>	<i>486,400</i>	<i>486,400</i>	<i>486,400</i>	<i>486,400</i>

\*The amount of closed lands is less in B-D alternatives than in alternative A because the Vekol ACEC, which is currently closed to motorized use, is not proposed to be carried forward, thereby adding the total of lands in the limited classification category.

**Table 2.20. Proposed Route Designation Table by Alternative**

	Applicable Alternative				
	A	B	C	D	E
Total Route Inventory (Miles)	631.5	631.5	631.5	631.5	631.5
Total Proposed Route System (Miles) <sup>1</sup>	624.9	567.5	456.6	261.2	432.9
Road Closures (Miles) <sup>2</sup>	6.6	72	174.9	370.3	206.6
Route Closure Percentage <sup>3</sup>	1.0%	11.4%	27.7%	58.6%	32.7%
<b>Current Asset Type</b>	<b>(miles)</b>	<b>(miles)</b>	<b>(miles)</b>	<b>(miles)</b>	<b>(miles)</b>
Road - Maintained	17.7	32.6	24.6	24.6	32.6
Open	17.7	24.2	24.2	24.2	24.2
Limited to Admin Use Only	0	0.4	0.4	0.4	0.4
Closed	0	0	0	0	0
New	0	8	0	0	8
Primitive Road – Unmaintained	576.8	569.9	569.9	570.1	569.9
Open	570.2	494.4	358.1	200.0	331
Seasonally Limited (Closed April 1 to Sept. 15)	0	0	0	0	32.7
Seasonally Limited (Closed Feb. 1 to Sept.15)	0	0	37.3	0	0
Limited to vehicles 50” wide or less	0	3.9	0	0	0
Limited to Non-Motorized Use <sup>4</sup>	0	2.1	7.2	11	8.3
Limited to Admin Use Only	0	0	17.1	36.9	4.3
Closed	6.6	69.5	150.2	322	193.6
Trail	37	37	37	37	37
Open to non-motorized/ non-mechanized travel (wilderness trails)	37	37	37	37	37

<sup>1</sup> Total Proposed Route System (Miles) equals the sum of open roads, primitive roads, trails (including those limited by season, width, and non-motorized use), and new roads. The total excludes roads and primitive roads limited to administrative use. See Maps 2–15a, 2–15b, 2–15c, 2–15d, and 2–15e.

<sup>2</sup> Road Closures (Miles) equals the sum of closed roads, primitive roads, trails, primitive roads limited to administrative use, and primitive roads limited to non-motorized use.

<sup>3</sup> Route Closure Percentage equals the miles of road closure divided by the total route inventory (631.5 miles). Note: Primitive roads limited to non-motorized use are included here because no vehicular use would be permitted.

<sup>4</sup> Applies to the Anza NHT, where bicycles and handcarts would be allowed, but not motor vehicles.

## **Management Actions and Allowable Uses**

<b>Goal 1: All public land should be classified as open, closed or limited per 43 CFR 8342.1.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1:</b> Manage areas to sustain experiences of unstructured travel throughout the life of the plan using the OHV area allocation open.						
<b>LS</b>		<b>B</b>			<b>E</b>	<b>TM-1.1.1:</b> 40 acres would be designated as an open motorized and mechanized vehicle-use area in the Ajo SRMA (T12S R6W Sec4; Map 2-14b). Within this area, vehicles would not be restricted to vehicle routes. The area would be signed and fenced. Local partners would be sought to monitor use, provide on-site management, and educate users in environmental stewardship.
<b>LS</b>		<b>B</b>			<b>E</b>	<b>TM-1.1.2:</b> Within the 40-acre open area described under TM-1.1.1, campsite access would be allowed by any travel mode to any location.
<b>Objective 1.2:</b> Manage areas for resource protection, conservation, restoration, and public safety using the OHV area allocation closed.						
<b>LS</b>		<b>B</b>	<b>C</b>			<b>TM-1.2.1:</b> Approximately 101,800 acres would be closed to motorized use. These areas would include designated wilderness, an area around Painted Rock Campground and dam, and the Coffeepot Botanical ACEC.
<b>LS</b>				<b>D</b>		<b>TM-1.2.2:</b> Approximately 378,300 acres would be closed to motorized use. These areas would include designated wilderness areas, an area around Painted Rock Campground and dam, and allocated lands managed to protect wilderness characteristics.
<b>LS</b>					<b>E</b>	<b>TM-1.2.3:</b> Approximately 152,800 acres would be closed to motorized use. These areas would include designated wilderness, an area around Painted Rock Campground and dam, and allocated lands managed to protect wilderness characteristics.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>TM-1.2.4:</b> Camping would be allowed in closed areas when accessed by non-motorized, non-mechanized means.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>TM-1.2.5:</b> The use of wheeled game carriers would be prohibited in wilderness areas. Elsewhere, non-motorized, hand-powered, wheeled game carriers would be permitted to travel cross-country for the purpose of retrieving downed game. Retrieval of downed game by cross-country motor vehicle use is prohibited.
<b>Objective 1.3:</b> Manage areas by structuring travel for visitor use and enjoyment, resource protection, conservation, and restoration using the OHV area allocation limited over the lifetime of the plan.						
<b>LS</b>		<b>B</b>	<b>C</b>			<b>TM-1.3.1:</b> Approximately 828,360 acres would be limited to existing roads and trails (based on current BLM route inventories) until such time as route designations are completed. When this is completed, travel would be restricted to designated roads, primitive roads and trails. Non-motorized vehicles (e.g., bicycles, hang gliders, other devices for conveyance and stock drawn carts/wagons) would be limited to designated roads, primitive roads and trails.
<b>LS</b>			<b>C</b>			<b>TM-1.3.2:</b> The 40-acre parcel in the Ajo SRMA (T12S, R6W, Sec.4) used for motocross riding would be managed the same as the surrounding area where motorized and mechanized vehicles would be restricted to designated routes. The “motocross experience” area would be signed and fenced. A “motocross experience” primitive road would be designated within the fenced area. Local partners would be obtained to monitor use and provide training in environmental stewardship to users of the area and provide on-site management.
<b>LS</b>				<b>D</b>		<b>TM-1.3.3:</b> Same as alternative C except 551,900 acres would be limited to existing roads and trails until such time as route designations are completed. When this is completed, travel would be restricted to designated roads, primitive roads and trails.
<b>LS</b>				<b>D</b>		<b>TM-1.3.4:</b> The “motocross experience” primitive road in the 40-acre parcel (T12S, R6W, Sec.4) would be closed and rehabilitated. Motorized use in the 40-acre area would be limited to existing roads and trails until such time as route designations are completed. At that time, travel would be limited to designated primitive roads.

<b>Goal 1: All public land should be classified as open, closed or limited per 43 CFR 8342.1.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>LS</b>					<b>E</b>	<b>TM-1.3.5:</b> Same as Alternative B except motorized use of 777,360 acres would be limited to existing roads and trails until such time route designations are completed, at which time travel would be restricted to designated roads, primitive roads and trails.
<b>LS</b>		<b>B</b>	<b>C</b>		<b>E</b>	<b>TM-1.3.6:</b> One-time travel off of designated routes may be approved with written authorization from the authorized officer to access sick or injured livestock. Use of vehicles for livestock herding in a cross-country manner is prohibited.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>TM-1.3.7:</b> The use of motorized or mechanized vehicles off designated routes would be prohibited in OHV areas designated as limited to designated routes, closed for motorized vehicles, and in all travel-management areas designated for non-motorized vehicles except as noted below:</p> <ul style="list-style-type: none"> <li>• Motorized vehicles would be allowed to pull off 100 feet on either side of the centerline of a designated route for the purpose of camping as long as soils, drainages, and woody vegetation are not damaged. This use shall be monitored on a continuing basis. If monitoring results show effects that exceed limits of acceptable change, motorized vehicles will not be allowed to pull off a designated route 100 feet on either side of the centerline.</li> <li>• Motorized uses would be required to stay within the designated route, with reasonable use of the shoulder and immediate roadside allowing for vehicle passage, emergency stopping, or parking unless otherwise posted.</li> <li>• Outside of wilderness, hand-powered, non-motorized wheeled game carriers would be allowed to travel cross-country for the purpose of retrieving downed game.</li> <li>• Motorized cross-country use will only be permitted with written authorization from the BLM authorized officer, or when necessary for emergency situations involving public health and safety.</li> </ul>
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>TM-1.3.8:</b> Retrieval of downed game by cross-country motor vehicle use is prohibited.
<b>Objective 1.4:</b> Secure legal access to public lands at all designated entry points to public land within ten years of completing route designations.						
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>TM-1.4.1:</b> The BLM would enter into access agreements for long-term legal access.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>TM-1.4.2:</b> The BLM would acquire easements or real property from private land owners or other jurisdictions as necessary to maintain or reestablish access to public lands.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>TM-1.4.3:</b> Access to public lands along urban interface areas would be limited to designated legal access routes as established by travel management planning.

<b>Goal 2: Public use, resource management, and regulatory needs are met by development of a Travel Management Plan and implementation of a travel management system.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Action and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 2.1:</b> Complete the designation of roads, primitive roads, and trails within 5 years of plan completion.						
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>TM-2.1.1:</b> A standardized method for identifying uses and impacts to routes and areas would be employed following established selection criteria and proposing route designations. An example of such a process is shown in Appendix S, <i>Route Evaluation Methodology &amp; Impact Analysis</i> (p. 1311).

<b>Goal 2: Public use, resource management, and regulatory needs are met by development of a Travel Management Plan and implementation of a travel management system.</b>																																				
Applicable Decision Area		Applicable Alternative				Management Action and Allowable Uses																														
LS	SDNM	B	C	D	E																															
LS		B	C	D	E	<b>TM-2.1.2:</b> Criteria to guide route designations would be established based on management actions for recreation wildlife, vegetation, cultural resources, lands/realty, mining, and other resources or resource uses as appropriate. (See Section H.2.5, “Travel Management” (p. 1225)).																														
LS		B	C	D	E	<b>TM-2.1.3:</b> Mitigation strategies would be identified and used to reduce the impacts of travel routes and their use on the resources. Examples of typical actions are shown in Appendix T, <i>Route Mitigations</i> (p. 1319).																														
LS		B	C	D	E	<b>TM-2.1.4:</b> Route-designation decisions would be incorporated into planning for all resources or resource uses and would be based on the route networks portrayed on final designation maps and written guidance contained within travel management plans.																														
<b>Objective 2.2:</b> Delineate areas where community interests or a manageable geographic boundary exists and address landscape issues in a programmatic manner.																																				
LS	SDNM	B	C	D	E	<p><b>TM-2.2.1:</b> The following travel management areas (TMAs) would be created. (See Maps 2-14b, 2—14c, 2-14d and 2-14e.)</p> <table border="1"> <thead> <tr> <th colspan="3">Table 2.21: Travel Management Areas (Acres)</th> </tr> <tr> <th>TMA</th> <th>Total</th> <th>BLM</th> </tr> </thead> <tbody> <tr> <td>Ajo</td> <td>190,200</td> <td>177,800</td> </tr> <tr> <td>SDNM</td> <td>496,400</td> <td>486,400</td> </tr> <tr> <td>Gila Bend Mountains</td> <td>744,900</td> <td>517,500</td> </tr> <tr> <td>Globe/Miami</td> <td>119,600</td> <td>5,600</td> </tr> <tr> <td>Rainbow Valley</td> <td>349,100</td> <td>108,400</td> </tr> <tr> <td>Buckeye Hills</td> <td>219,700</td> <td>55,500</td> </tr> <tr> <td>East Valley</td> <td>497,700</td> <td>15,000</td> </tr> <tr> <td>Saddle Mountain</td> <td>184,100</td> <td>50,400</td> </tr> </tbody> </table>	Table 2.21: Travel Management Areas (Acres)			TMA	Total	BLM	Ajo	190,200	177,800	SDNM	496,400	486,400	Gila Bend Mountains	744,900	517,500	Globe/Miami	119,600	5,600	Rainbow Valley	349,100	108,400	Buckeye Hills	219,700	55,500	East Valley	497,700	15,000	Saddle Mountain	184,100	50,400
Table 2.21: Travel Management Areas (Acres)																																				
TMA	Total	BLM																																		
Ajo	190,200	177,800																																		
SDNM	496,400	486,400																																		
Gila Bend Mountains	744,900	517,500																																		
Globe/Miami	119,600	5,600																																		
Rainbow Valley	349,100	108,400																																		
Buckeye Hills	219,700	55,500																																		
East Valley	497,700	15,000																																		
Saddle Mountain	184,100	50,400																																		

<b>Goal 3: Protect Monument objects and purposes from human impacts associated with motorized and non-motorized travel within the SDNM.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 3.1:</b> Close areas of the SDNM to motorized-vehicle activities for the purposes of protecting Monument objects and resources; and meeting associated conservation, restoration, and public safety goals over the lifetime of the plan.						
	SDNM	B	C		E	<b>TM-3.1.1:</b> Approximately 157,700 acres of designated wilderness would remain closed to motorized use.
	SDNM			D		<b>TM-3.1.2:</b> Approximately 310,700 acres would be closed to motorized use. These acres include designated wilderness and lands managed to protect wilderness characteristics.
<b>Objective 3.2:</b> Limit motorized vehicle use in certain SDNM areas to designated roads, primitive roads to minimize impacts to Monument objects; other resources; and to reduce or eliminate resource, visitor, and behavior-based conflicts over the lifetime of the plan.						
	SDNM	B	C		E	<b>TM-3.2.1:</b> Approximately 328,700 acres would be limited to designated roads, primitive roads and trails. All other vehicles (e.g., bicycles, hang gliders, stock drawn carts/wagons, and other devices for conveyance) would be limited to primitive roads designated as open for such use.
	SDNM			D		<b>TM-3.2.2:</b> Same as Alternative C except motorized travel and bicycle use in 175,700 acres would be limited to designated, primitive roads.

<b>Goal 3: Protect Monument objects and purposes from human impacts associated with motorized and non-motorized travel within the SDNM.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
	SDNM	B	C	D	E	<b>TM-3.2.3:</b> Motorized vehicles would be required to be “street legal” (licensed and registered), display a valid Arizona OHV sticker, be compliant with current or future state, county or local licensing, certification or authorization requirements, and be operated by licensed drivers.
	SDNM			D		<b>TM-3.2.4:</b> The following vehicle types: all-terrain (ATV, UTV and quad), motorcycle (dirt and dual-sport), and vehicles weighing less than 1,800 pounds, would be prohibited on primitive roads.

<b>Goal 4: Provide a comprehensive travel management system that supports protection of Monument objects, facilitates resource protection, and provides sustainable public use and enjoyment.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 4.1:</b> Pursue and secure legal access when possible over the lifetime of the plan.						
	SDNM	B	C	D	E	<b>TM-4.1.1:</b> Legal or permissive access would be secured to all identified access points to designated routes within 10 years of final route designation.
	SDNM	B	C	D	E	<b>TM-4.1.2:</b> Access to public lands would be restricted along urban interface as needed to protect Monument values and objects or at the request of adjoining land owners.
<b>Objective 4.2:</b> Assign BLM road maintenance intensity levels on designated roads as a part of travel management planning and make adjustments as needed as maintenance of the travel management plans.						
	SDNM	B	C	D	E	<b>TM-4.2.1:</b> Roads and primitive roads could be redeveloped to meet either Level 5 maintenance intensity (the highest BLM standard) or the Level 3 standard as necessary to satisfy Objective 4.2 and prescriptions in TM-4.2.2 or TM-4.2.3. Level 1 roads are primitive and would not be maintained except to correct safety hazards or resource problems such as erosion.
	SDNM	B	C			<p><b>TM-4.2.2:</b> Over the life of the plan, up to 20 percent of designated Monument roads/primitive roads could be assigned to Level 5 maintenance standards (passenger-car access) or Level 3 maintenance standards. Level 5 and 3 maintenance level assignments would be adjusted or assigned as necessary to ensure that motorized travel routes:</p> <ul style="list-style-type: none"> <li>• Are compatible with protection of Monument objects and resources;</li> <li>• Achieve the Monument’s desired social and managerial recreation settings;</li> <li>• Meet established limits of acceptable change indicators and standards;</li> <li>• Satisfy biological and ecological land health standards;</li> <li>• Protect or mitigate effects on cultural resources;</li> <li>• Ensure visitor and agency staff safety;</li> <li>• Resolve erosion, air quality or resource-damage issues;</li> <li>• Offer sustainable access to popular Monument features, as well as recreation and national historic trail attractions; and</li> <li>• Meet water-quality standards for influenced drainages and watersheds.</li> </ul> <p>See Table 2.22: SDNM Road Maintenance Intensity Level Model (p. 189) for a model of potential maintenance level assignments for each alternative.</p>

<b>Goal 4: Provide a comprehensive travel management system that supports protection of Monument objects, facilitates resource protection, and provides sustainable public use and enjoyment.</b>						
Applicable Decision Area		Applicable Alternative			Management Actions and Allowable Uses	
LS	SDNM	B	C	D		
	SDNM			D	E	<b>TM-4.2.3:</b> Over the life of the plan, up to 10 percent of designated Monument roads/primitive roads could be assigned to Level 5 maintenance standards (passenger-car access) or Level 3 maintenance standards. Level 5 and 3 maintenance level assignments would be adjusted or assigned as necessary to ensure that motorized travel routes: (1) are compatible with protection of Monument objects and resources; (2) achieve the Monument’s desired social and managerial recreation settings; (3) meet established limits of acceptable change indicators and standards; (4) satisfy biological and ecological land health standards; (5) protect or mitigate effects on cultural resources; (6) ensure visitor and agency staff safety; (7) resolve erosion, air quality or resource-damage issues; (8) offer sustainable access to popular Monument features, as well as recreation and national historic trail attractions; and (9) meet water-quality standards for influenced drainages and watersheds. See Table 2.22: SDNM Road Maintenance Intensity Level Model (p. 189) for a model of potential maintenance level assignments for each alternative.
	SDNM	B	C		E	<b>TM-4.2.4:</b> One-time travel off of designated routes may be approved with written authorization from the authorized officer to access sick or injured livestock. Use of vehicles for livestock herding is prohibited.
	SDNM	B	C	D	E	<b>TM-4.2.5:</b> Roads and primitive roads could be redeveloped to meet either Level 5 maintenance intensity (the highest BLM standard) or the Level 3 standard as necessary to satisfy Objective 4.2 and prescriptions described in TM-4.2.1 or TM-4.2.2. Level 1 roads are primitive and would not be maintained except to correct safety hazards.

<b>Table 2.22: SDNM Road Maintenance Intensity Level Model &amp; Potential BLM Road Maintenance Intensity Levels/Maximum Miles By Alternative</b>										
Maintenance Intensity Levels	A		B		C		D		E	
	5 or 3	1								
Road miles maintained	18	0	106	0	81	0	27	0	41	0
Primitive road miles (not maintained)	0	578	0	423	0	355	0	246	0	363
<i>Total road miles available for travel*</i>	568		531		403		235		404	
*From Table 2.20: Proposed Route Designation Table by Alternative (p. 184): the Total Proposed Route System minus Trail Miles equals the Total Road Miles Available for Travel.										

**Objective 4.3:** Minimize the effects of the route system on the Monument and its objects and implement mitigation strategies as needed to resolve conflicts.

LS	SDNM	B	C	D	E	Management Actions and Allowable Uses
						<b>TM-4.3.1:</b> Mitigation strategies would be identified and required to reduce the effects of routes and their use. Examples of typical actions are shown in Appendix S, <i>Route Evaluation Methodology &amp; Impact Analysis</i> (p. 1311).

**Goal 5: Manage the travel management system to protect resources and maintain desired recreation experiences.**

Applicable Decision Area		Applicable Alternative			Management Actions & Allowable Uses	
LS	SDNM	B	C	D		
<b>Objective 5.1:</b> Determine the compatibility of emerging issues such as new vehicle technology or new or proposed recreation uses or use areas such as technical vehicle-use sites or motorcycle-observed trails. Proposals for using new recreation technologies or activities would be evaluated and a decision made to proceed or deny the use or proposal as funding and staffing allows.						
LS		B	C	D	E	<b>TM-5.1.1:</b> Technical vehicle use sites or other specialized recreation sites would be delineated through activity level planning.

<b>Goal 5: Manage the travel management system to protect resources and maintain desired recreation experiences.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions &amp; Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>TM-5.1.2:</b> Technical vehicle use sites would be evaluated and established on a case-by-case basis with community and user input. Sites would be developed as needed to ensure visitor safety, meet enthusiast needs, improve recreation experiences, and increasing recreation opportunities. Site plans would establish limits of acceptable change indicators and standards. All sites would be compatible with social and managerial recreation settings and VRM standards; would satisfy biological and ecological land health standards; would protect or mitigate cultural resources; and would meet water-quality standards for influenced drainages and watersheds.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>TM-5.1.3:</b> Travel Management assets or their maintenance intensity shall not be changed without NEPA and a travel plan amendment. Road maintenance activities can only be completed with approval of the authorized BLM officer. This includes all permitted activities that use designated routes such as ranching, mining and other authorized activities.
<b>Objective 5.2:</b> Proposals for new recreation technologies and activities would be evaluated when presented to determine impacts on Monument objects and resources. Such uses would be prohibited until research and analysis determines the use is fully compatible with Monument objects and resources. The BLM would respond to proposals immediately upon detection and determine their compatibility with Monument objects and resources as funding and staffing allows.						
	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>TM-5.2.1:</b> New travel technologies and uses would be evaluated on a case-by-case basis with community and user input. Compatibility evaluations would be developed as needed to ensure protection of Monument objects and resources, provide compatible and sustainable experiences based on Monument Objects and resources, and visitor safety. The compatibility analysis would establish limits of acceptable change indicators and standards. All uses would be compatible with protection of Monument objects, the Monument’s social and managerial recreation settings and VRM standards; the Monuments biological and ecological land health standards; protection of cultural resources; and water-quality standards for influenced drainages and watersheds.
<b>Goal 6: Protect Monument objects and resources, meet conservation and restoration goals, ensure sustainable public use and enjoyment, and satisfy public safety and regulatory requirements by developing a travel management plan and implementing a sustainable and compatible travel management system.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 6.1:</b> Plan and implement a networked system of roads, primitive roads and trails within 1 year of plan completion.						
	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>TM-6.1.1:</b> The use of motorized or mechanized vehicles off designated roads or primitive roads would be prohibited with the following management restrictions:</p> <ul style="list-style-type: none"> <li>• Motorized and mechanized use would be limited to areas within the designated route with reasonable use of the shoulder and immediate roadside allowing for vehicle passage, emergency stopping, or parking unless otherwise posted. For the purposes of this plan, a reasonable use will be defined as up to 25 feet.</li> <li>• Motorized and mechanized vehicles would be allowed to pull off a designated route 25 feet either side of centerline for the purpose of camping as long as soils, drainages, or woody vegetation are not damaged. This use shall be monitored on a continuing basis and if monitoring results show effects that exceed limits of acceptable change the 25 feet distance may be reduced.</li> </ul>

<b>Goal 6: Protect Monument objects and resources, meet conservation and restoration goals, ensure sustainable public use and enjoyment, and satisfy public safety and regulatory requirements by developing a travel management plan and implementing a sustainable and compatible travel management system.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
						<ul style="list-style-type: none"> <li>• Non-motorized, hand-powered wheeled game carriers would be permitted to travel cross-country (except in wilderness areas) for the purpose of retrieving downed game on public lands.</li> </ul>
	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>TM-6.1.2:</b> A travel management plan would be developed and implemented upon plan approval, including designating roads, primitive roads and trails that are open, closed or limited by use type or time, and allocating maintenance class.
<b>Travel Management Implementation Actions for the SDNM</b>						
	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>TM-6.1.3:</b> A network of routes would be designated upon plan approval to include roads, primitive roads and trails that are open, closed or limited in their use as specified in Table 2.20, “Proposed Route Designation Table by Alternative” (p. 184). (For route locations, refer to the route maps on the CD, web site, or hard copies by request to the LSFO.)
	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>TM-6.1.4:</b> Prepare and implement a travel management plan, including designating routes within five years of the SDNM’s Record of Decision (ROD).
	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>TM-6.1.5:</b> Legal or permissive access will be secured to all designated routes within 10 years of final designation.
Note: Any additional implementation-level actions will be considered and addressed in the TMP.						

## Administrative Actions

### General.

- The development of standards for monitoring the route system will be directed by compliance with laws, regulations, and travel management plan goals and objectives
- Areas affected by legal off-route travel, such as law enforcement-pursuit and wildfire suppression, will be restored within one year of the incident.
- Agreements with local interest groups and communities will be established for long-term route maintenance and community support.
- Participate in regional or municipal transportation planning and promote appropriate legal access consistent with the land-use plan.
- Establish a framework for reviewing the travel management program and make necessary changes to meet land health standards, area management, and recreation goals.
- Casual and authorized recreational uses of the travel system will be addressed when authorizing actions. Where major arteries in the recreational route network would be truncated or considerably altered by the authorization, mitigation will be required
- Consider adjustments to route designations, including adding, removing, and redeveloping routes and access, when necessary. Criteria for route designation adjustments can be found in Section H.2.5, “Travel Management” (p. 1225).

- Develop brochures, maps, access guides, and information sheets to disseminate targeted recreation opportunity information to the public.
- Develop and maintain a monitoring system to support implementation and management of motorized and non-motorized use of the public lands, including routes and access points.
- Create an acquisition plan including a list of parcels where legal access needs to be secured.
- Implement route-mitigation techniques when designing and implementing the route system.
- Identify and manage for a wide range of issues in travel management areas.
- In areas where access permits are required, coordinate with other agencies that issue use permits on public lands to provide reasonable access for their permitted activities. For example, the BLM and AGFD will coordinate hunter access into permit-required access areas for hunters with valid hunting licenses for the affected hunting unit.
- Promote the establishment of additional areas open to motorized and/or non-motorized vehicle use outside of public lands if regional public demand for off-road motorized and/or non-motorized vehicle recreation would support such activities.
- Support the development and implementation of regional or municipal transportation plans that protect or promote appropriate legal access to public lands and are consistent with resource and use objectives.
- Establish relationships and enter into agreements with local OHV groups and other groups and communities for long-term route maintenance and community support.
- Respect valid existing rights.

#### **Specific to the Lower Sonoran Decision Area.**

- Publish a map of the approved travel system depicting the route designation and associated access points for public access.
- Sign routes and associated access points as needed to identify public lands and disseminate information.
- Partner with neighboring BLM offices, counties, municipalities and user groups to identify, plan, implement, and maintain long-distance motorized routes and non-motorized trail systems.
- Apply route-mitigation techniques when designing and implementing the route system.
- Assess the level of success in managing designated access points and unauthorized routes at least bi-yearly.
- Conduct condition assessments of designated and unauthorized routes and associated access points relative to the standards prescribed by the travel management plan.
- Identify use patterns, including the types, frequency, intensity, and distribution of authorized and unauthorized travel and transportation activities.
- Improve visitor compliance with outdoor ethics through education.

- Identify public-safety issues related to the travel system.
- Publish policies and procedures for travel-system administration.
- Establish the travel system as an asset and consider its values when authorizing land-use actions and other activities. All land-use authorizations, permits, and other activities would be required to use designated routes. The BLM would authorize new roads or cross-country use for land-use authorizations only as a last resort.
- As part of the TMP implementation, develop fences, signs, gates, and other methods to manage access, address public safety concerns, and eliminate use of vehicles off of designated routes.

**Specific to the SDNM Decision Area.**

- Support development and implementation of regional and municipal transportation plans that protect or provide appropriate legal access to the SDNM and protect its resources and management objectives.
- Where needed, the SDNM boundary should be identified with appropriate fencing, signs, and other structures.
- Portions of the SDNM may be closed as needed to accommodate safety, climate, resource protection, specific projects, or staffing constraints.

## **2.9. SPECIAL DESIGNATIONS**

### **2.9.1. AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACEC)**

Areas of critical environmental concern (ACECs) are sections of public land that require special management to prevent irreparable damage to important historic, cultural, or scenic values; wildlife resources; other natural systems or processes; and to protect life and provide safety from natural hazards.

Authority to designate ACECs is provided for in FLPMA and in Title 43 CFR, Part 1610.7. Not only must ACECs require special management; they must meet relevance and importance criteria. In accordance with FLPMA, to qualify as ACECs areas must have substantial significance and value, including qualities “of more than local significance and special worth, consequence, meaning, distinctiveness, or cause for concern.” These values are considered the highest and best use for those lands, and protecting them takes precedence over the BLM’s mandate to manage public lands for multiple uses.

According to law, areas with the potential for designation and associated management protection actions must be identified during the land-use planning process. In the preferred action (Alternative E) this plan proposes to designate four new ACECs in the Lower Sonoran, carry forward one existing ACEC, and withdraw the existing Vekol Valley Grasslands ACEC. Evaluations for all ACECs can be found in Appendix V, *Areas of Critical Environmental Concern (ACEC) Evaluations* (p. 1325).

#### **2.9.1.1. Existing Management Decisions, Alternative A (No Action)**

Decisions are listed in chronological order by plan. The following decisions are extracted from the existing land use plans and amendments and are listed in chronological order. Because none of these current land use plans encompass the current Planning Area, very few of these decisions are being carried forward. Instead they are restated as new action alternatives where applicable.

##### ***Lower Gila South Resource Management Plan (1989):***

- Closes Vekol Valley ACEC to recreational off-road vehicle use in accordance with 43 CFR, Part 8340, and Subpart 8342. (RR-08)
- Closes the Coffee Pot ACEC to recreational off-road vehicle use in accordance with 43 CFR, Part 8340, and Subpart 8342. (RR-09)
- Requires the BLM to place special emphasis on the protection of four significant botanical areas important in studying the original plant communities in the Sonoran Desert: Eagletail Mountains, Coffee Pot Botanical, Table Top area, and Sierra Estrella area. (SM-17)
- Does not designate the Sierra Estrella area as an ACEC. (SM-18)
- Does not designate Table Top area as an ACEC. (SM-19)

- Designates two areas within the Lower Gila South Planning Area boundaries as ACECs: Vekol Valley grassland and the Coffee Pot Botanical area. The purpose is to provide more intensive management and protection for existing and potential resource values. Management plans, which are to identify specific resource management practices, are required for each ACEC. (SM-20)

***Lower Gila South Resource Management Plan (Goldwater Amendment) (1990) (Applies to the three relinquished Sentinel Plain, Sand Tank Mountains, and Ajo Airport parcels):***

- Prohibits woodcutting and collection of dead and down wood in ACECs. (no number)

**Table 2.21. ACEC Acres Based on Alternative**

ACEC Name	Alternative (BLM Acres)				
	A	B	C	D	E
<b>Lower Sonoran</b>					
Coffeepot Botanical	8,900	8,900	Not designated		
Coffeepot-Batamote	Not designated		63,300	77,600	61,300
Cuerda de Lena	Not designated			58,500	58,500
Lower Gila Terraces & Historic Trails	Not designated			82,500	82,500
Saddle Mountain ONA	Not designated			48,500	48,500
<b>SDNM</b>					
Vekol Valley Grasslands	3,500	Withdrawn from ACEC designation			

**2.9.1.2. Action Alternatives for Areas of Environmental Concern (AC)**

<b>Goal 1: Provide increased protection for cultural resources, outstanding and scenic features, and priority and special status species while continuing to provide the public access to enjoy these resources.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Common to All Unless Otherwise Noted in Specific ACEC Section</b>						
LS			C	D	E	AC-1.1.1: All public lands within the ACEC would be retained and available private and state lands would be acquired.
LS			C	D	E	AC-1.1.2: Core roadless areas would be maintained for wildlife while new facilities, including motorized routes, non-motorized trails, and trailheads that concentrate or increase use in these areas would be avoided.
LS			C	D	E	AC-1.1.3: Maintaining and managing the biological, geological, and cultural resources would be emphasized and given priority.
LS			C	D	E	AC-1.1.4: Areas would be managed to protect the natural landscape and visual values that provide the visitor with an opportunity to appreciate the character of the area.
LS			C	D	E	AC-1.1.5: Opportunities for recreation would be provided with an emphasis on undeveloped, dispersed recreation, where it is compatible with protecting the natural and cultural resources.
LS			C	D	E	AC-1.1.6: The visual and scenic values of the area would be managed to maintain the natural character, including designating appropriate visual resource management (VRM) classes.
LS			C	D	E	AC-1.1.7: Treatments of invasive species would be allowed within the ACECs if they can be designed to have a minor or negligible impact to resource values within the ACEC.

<b>Goal 1: Provide increased protection for cultural resources, outstanding and scenic features, and priority and special status species while continuing to provide the public access to enjoy these resources.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
LS				D	E	<b>AC-1.1.8:</b> The construction of non-motorized trails would be permitted if they are consistent with ACEC and resource objectives and do not conflict with botanical resources or wildlife and T&E management.
LS			C			<b>AC-1.1.9:</b> All LUAs, including utility-scale renewable energy development, would be avoided, mitigated, and otherwise managed to be consistent with management objectives. Recreation developments may be allowed if necessary to manage public use or provide for public safety.
LS				D	E	<b>AC-1.1.10:</b> ACECs would be exclusion areas for utility-scale renewable energy development and exploration, and multiuse utility corridors
LS				D	E	<b>AC-1.1.11:</b> New major linear LUAs would be excluded outside of the corridors. Utilities would be required to be installed underground within the existing multiuse utility corridors to retain the viewshed.
LS				D		<b>AC-1.1.12:</b> ACECs would be closed to all locatable and leasable minerals exploration and development and mineral material disposals including free-use permits. Public lands in the ACECs would be recommended for withdrawal.
LS					E	<b>AC-1.1.13:</b> ACECs would be open to all locatable and leasable minerals exploration and development unless otherwise restricted. (Lower Gila Terraces and Historic Trails ACEC is open with No Surface Occupancy and Cuerda de Lena is closed February 1 to September 15).
LS					E	<b>AC-1.1.14:</b> ACECs would be closed to mineral material disposals including free use permits, except for the former free use site in the Saddle Mountain ACEC (see AC-1.1.46).
<b>Coffeepot Botanical ACEC</b>						
LS		B				<b>AC-1.1.15:</b> The Coffeepot Botanical ACEC designation of approximately 8,900 acres would be retained to protect the outstanding botanical diversity of the native and rare plant communities such as the Acuña cactus (Map 2-16b). All management actions (including remaining open to lands and minerals actions) would be the same except the ACEC would not be closed to OHV use.
LS		B				<b>AC-1.1.16:</b> Livestock facilities would not be developed where they would increase livestock use within the area.
LS			C	D	E	<b>AC-1.1.17:</b> In alternatives C, D and E the Coffee Pot Botanical ACEC would not be designated. Instead, this area would be incorporated into the Coffee Pot-Batamote ACEC. (See below.)
<b>Coffeepot-Batamote ACEC</b>						
LS			C			<b>AC-1.1.18:</b> An area of approximately 63,400 acres would be designated as the Coffeepot Botanical ACEC to protect for outstanding botanical diversity of the native and rare plant communities (including the Acuña cactus); lesser long-nosed bat, cactus ferruginous pygmy-owl and desert bighorn sheep habitat; and other wildlife populations along with unique landscape and scenic features (Map 2-16c).
LS			C			<b>AC-1.1.19:</b> The route system would be designated to limit wildlife habitat fragmentation, wildlife disturbance, and vegetation damage. Motorized vehicle routes that conflict with maintenance of wildlife habitat and cultural resources would be closed, limited, or mitigated. New route construction would not be allowed except for resource protection.
LS			C			<b>AC-1.1.20:</b> Routes within washes would be prohibited.
LS				D		<b>AC-1.1.21:</b> The ACEC would be open to leasable exploration and development but closed to mineral materials disposals including free-use permits.

<b>Goal 1: Provide increased protection for cultural resources, outstanding and scenic features, and priority and special status species while continuing to provide the public access to enjoy these resources.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>			<b>Management Actions and Allowable Uses</b>	
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>		
LS				D	E	<b>AC-1.1.22:</b> Motorized vehicle use would be prohibited in washes that contain, or are found to contain cactus ferruginous pygmy-owls habitat to protect pygmy-owls during the breeding, nesting, and dispersal season.
LS				D		<b>AC-1.1.23:</b> Recreational development would be limited to the minimum required to protect resources and provide for public safety.
LS					E	<b>AC-1.1.24:</b> Motorized vehicle use would be restricted in washes that are known to be occupied or found to be occupied, cactus ferruginous pygmy-owls habitat from February 1 to September 15 to protect pygmy-owls during the breeding, nesting, and dispersal season. All other areas would be limited to existing or designated routes.
LS					E	<b>AC-1.1.25:</b> Livestock facilities could be developed to improve natural resource conditions by improving livestock distribution. Adaptive management and best management practices would be utilized to avoid conflicts with wildlife resources.
LS					E	<b>AC-1.1.26:</b> The ACEC would be open to leasable minerals exploration and development however surface disturbance would be minimized through mitigation measures and special stipulations.
<b>Cuerda de Lena ACEC</b>						
LS				D	E	<b>AC-1.1.27:</b> An area of 58,500 acres would be designated as the Cuerda de Lena ACEC. Its purpose would be to protect the endangered Sonoran pronghorn; habitat for other wildlife species, including the cactus ferruginous pygmy-owl; and to protect cultural resources (Maps 2-16d and 2-16e).
LS				D	E	<b>AC-1.1.28:</b> In addition to the exclusions addressed in the common to all section, the ACEC would be closed to the public for general recreational use during pronghorn fawning between March 15 and July 15 or as determined annually by the Sonoran pronghorn antelope recovery team. Minor non-linear LUAs would also be prohibited unless deemed necessary by the authorized officer. Federal, State and local government employees and permit holders operating within the scope of their authorizations would be exempt from the closure.
LS				D	E	<b>AC-1.1.29:</b> Camping would be limited to dispersed and undeveloped sites.
LS				D	E	<b>AC-1.1.30:</b> Developed recreational sites would be prohibited within the ACEC except for small, non-intrusive-information, and interpretation facilities.
LS				D	E	<b>AC-1.1.31:</b> Tertiary, single-track, and reclaimed vehicle routes that fragment habitat would be closed; however, access would be provided for administrative use and public safety.
LS				D	E	<b>AC-1.1.32:</b> Routes in washes would be prohibited except to provide legal access for law enforcement and other authorized use. New travel routes in washes would be prohibited. New routes would only be considered if deemed necessary for emergency or other authorized administrative uses.
<b>Lower Gila Terraces and Historic Trails ACEC</b>						
LS				D	E	<b>AC-1.1.33:</b> An area of 79,100 acres would be designated as the Lower Gila Terraces and Historic Trails ACEC.
LS				D		<b>AC-1.1.34:</b> Additional public use sites would not be allocated.
LS				D		<b>AC-1.1.35:</b> Scientific research would be permitted only if it is not ground disturbing.

<b>Goal 1: Provide increased protection for cultural resources, outstanding and scenic features, and priority and special status species while continuing to provide the public access to enjoy these resources.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>			<b>Management Actions and Allowable Uses</b>	
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>		
LS				D		<b>AC-1.1.36:</b> Existing developments and disturbed areas that are damaging or incompatible with the trail integrity would be evaluated and removed, rehabilitated or mitigated, or otherwise managed to diminish the overall disturbance area.
LS					E	<b>AC-1.1.37:</b> Public use sites would be allocated if they could be designed to have negligible or minor impacts.
LS					E	<b>AC-1.1.38:</b> The ACEC would remain open to all leasable minerals actions but any lease would contain a No Surface Occupancy stipulation.
LS					E	<b>AC-1.1.39:</b> Portions of the ACEC would be closed to seismic exploration and mineral material disposals. The remaining portion of the ACEC would be open to mineral material disposals however surface disturbance would be minimized where possible through mitigation measures and special stipulations.
LS					E	<b>AC-1.1.40:</b> Selected parcels along the historic trails corridor within the ACEC, would be closed to locatable mineral exploration and development.
LS					E	<b>AC-1.1.41:</b> Scientific research, including excavation, that enhances our understanding of the cultural resources would be permitted and encouraged if approved research design and qualified researcher by BLM standards.
<b>Saddle Mountain ACEC</b>						
LS				D	E	<b>AC-1.1.42:</b> An area of 48,500 acres would be designated as the Saddle Mountain ACEC.
LS				D	E	<b>AC-1.1.43:</b> Sites containing natural or cultural resources or geological and wildlife resources would be developed for interpretation and environmental education when research opportunities and resource values can be protected.
LS					E	<b>AC-1.1.44:</b> Vehicle-based camping would be limited to existing or designated sites..
LS					E	<b>AC-1.1.45:</b> The ACEC would be open to leasable minerals exploration and development. Surface disturbance would be minimized where possible through mitigation measures and special stipulations.
LS					E	<b>AC-1.1.46:</b> The ACEC would be closed mineral material disposals with the exception of the former free use permit site (Courthouse Pit; T2N, R7W, Sec. 31). A new permit could be allowed provided the proposed disturbance area remains within the previously authorized area.
<b>Vekol Valley Grasslands ACEC</b>						
LS	SDNM		C	D	E	<b>AC-1.1.47:</b> The 3,500-acre Vekol Valley Grasslands ACEC would be withdrawn from ACEC status because Monument designation provides adequate protection for the resources of the grassland.

## Administrative Actions

### Inventory.

- Perform proactive cultural inventories on ACECs, with a special emphasis on the Lower Gila Terraces and Historic Trails ACEC and the Saddle Mountain ACEC and thoroughly document the cultural resources.

### Monitoring.

- Continue to work with and support the Arizona Site Steward Program to assure adequate monitoring of the sites on the ACECs.
- Implement procedures for systematic monitoring of selected cultural sites within the ACEC's.

### **Restoration.**

- Perform mitigation and / or landscape restoration in priority areas of the ACECs, where incompatible activities have altered the natural and cultural landscape and visual settings.

### **Research.**

- Complete documentary research and oral histories to gain a better understanding of the cultural history of the ACEC's, relates to homesteading, mining, ranching, and prehistoric archaeological occupations.

### **Interpretation and Education.**

- Develop interpretive materials and facilities for selected sites and topics.
- Provide educational materials and opportunities to the public pertaining to the ACEC resources.

### **Tribal Consultation.**

- Continue to consult with the Gila River Indian Community, the Ak-Chin Indian Community, the Salt River Pima-Maricopa Indian Community, the Tohono O'odham Nation, the Hopi Tribe, Fort Yuma – Quechan Tribe, and other interested Indian tribes to identify places of traditional importance and to collaborate on issues and projects affecting the ACEC's.

### **Partnerships.**

- Coordinate with partner groups, interest groups, interested individuals, local communities, and other stakeholders on ACEC issues and projects.

## **2.9.2. NATIONAL BYWAYS (NB)**

The National Byways program was established by the U.S. Department of Transportation/Federal Highway Administration 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 and guidance is found in BLM Handbook H-8357-1. In accordance with the handbook, BLM Back Country and Scenic Byway designations are approved by the State Director within the parameters established for the State byway program.

The primary objectives of the program are to showcase the BLM's multiple-use mission and potential contributions to local or regional economies through increased travel and tourism.

To be eligible for designation, a road must have attractions that are important on a State and national basis. Attractions may include historical, recreational, cultural, archaeological, scientific, and/or natural features. Cooperation with all local, State, and Federal agencies that have jurisdiction over road segments and legal access for any private land segments is also necessary.

### **2.9.2.1. Existing Management Decisions, Alternatives A (No Action) National Byways**

Decisions are listed in chronological order by plan. The following decisions are extracted from the existing land use plans and amendments and are listed in chronological order. Because none of these current land use plans encompass the entire Planning Area, very few of these decisions are being carried forward as common to all alternatives and are restated as new action alternatives where applicable.

#### ***Lower Gila Resource Management Plan Amendments (2005):***

- Scenic corridors and potential back country byways will receive priority evaluation of visual resources to determine appropriate future classifications. (RR-6)

#### ***Lower Gila South Resource Management Plan - Goldwater Amendment (1990):***

[Applies to the three relinquished BGR parcels]:

- Protect the visual resource quality on lands adjacent to the highways (I-8 and SR-85) by:
- Establishing portions of these roads as scenic byways in cooperation with the Arizona Department of Transportation, the USAF, and the U.S. Marine Corps
- Use the VRM process during activity planning to maintain appropriate visual resource-management objectives established for these byways. (Not numbered)

### **2.9.2.2. Action Alternatives for National Byways (BY)**

#### **Program Goals:**

- **Goal 1:** Provide opportunities for the American public to see and enjoy unique scenic and historic landscapes on public lands deemed to have State or national significance.
- **Goal 2:** Promote regional development of eco- and recreational tourism through designation of BLM National Scenic and Back Country Byways and by managing public lands along potential byway corridors to protect the quality of scenic values.

**Land Use Allocations Summary**

Potential byways to be evaluated by alternative are presented in Table 2.22, “Potential Byway Designations by Alternative” (p. 201) below.

**Table 2.22. Potential Byway Designations by Alternative**

Proposed Byway	BLM Miles by Alternative				
	A (No Action)	B	C	D	E (Preferred)
<b>Lower Sonoran</b>					
Agua Caliente (not paved)	0	21	21	0	21
<b>SDNM</b>					
Interstate 8 (paved)	0	21	0	0	21
H-238-Maricopa Road (paved)	0	18	18	0	18

**Management Actions & Allowable Uses**

<b>Goal 1: Provide opportunities for the American public to see and enjoy unique scenic and historic landscapes on public lands deemed to have State or national significance.</b>						
Applicable Decision Area		Applicable Alternative			Management Actions and Use Allocations	
LS	SDNM	B	C	D		
<b>Objective 1.1:</b> Identify and evaluate potential roads that meet nomination criteria for BLM National Scenic or Back Country Byway designation.						
LS		B	C		E	<b>NB-1.1.1:</b> Approximately 21 miles of Agua Caliente Road would be evaluated as a potential BLM national back country byway (Maps 2-16b and 2-16c).
	SDNM		C	D	E	<b>NB-1.1.2:</b> Approximately 18 miles of Highway 238 (Maricopa Road) would be evaluated as a scenic byway (Maps 2-16c, 2-16d and 2-16e).
	SDNM			D	E	<b>NB-1.1.3:</b> Approximately 21 miles of I-8 would be evaluated as a scenic byway (Maps 2-16d and 2-16e).

<b>Goal 2: Promote regional development of eco- and recreational tourism through designation of BLM National Scenic and Back Country Byways and by managing public lands along potential byway corridors to protect the quality of scenic values.</b>						
Applicable Decision Area		Applicable Alternative			Management Actions	
LS	SDNM	B	C	D		
<b>Objective 1.1:</b> Maintain open space and the undeveloped natural character of landscapes within the specified byway corridor. Desert landscapes provide visitors with unique scenic and back country experience while traversing the diverse Sonoran Desert, including saguaro cactus stands, rugged mountains, and vast valleys. These landscapes also offer glimpses of traditional western uses, including historic trail corridors, mining, agriculture, and ranching.						
LS	SDNM	B	C	D	E	<b>NB-1.1.1:</b> Surface disturbing uses and activities along byways would exceed or at minimum maintain the visual quality consistent with the established VRM setting through project design or mitigation.

<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>NB-1.1.2:</b> Protective measures would be provided in wildlife-movement corridors to protect wildlife. Measures may include setting speed limits, installing speed bumps or other speed-limiting devices, and installing cautionary signs.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>NB-1.1.3:</b> No motorized competitive speed events would be authorized on the byways.
<b>LS</b>		<b>B</b>	<b>C</b>		<b>E</b>	<p><b>NB-1.1.4:</b> Road design and maintenance would be coordinated with the county to retain the character of the byway and ensure it remains suitable for passenger car- and truck-based sightseeing. Prescriptions would include:</p> <ul style="list-style-type: none"> <li>• No paving</li> <li>• No widening beyond existing widths unless required for public safety</li> <li>• Stabilize road surfaces to maintain air quality</li> <li>• Install speed-limit, directional, and vehicle-safety signs where appropriate.</li> </ul>

### 2.9.3. NATIONAL TRAILS (NT)

The National Trails System Act, 16 USC 1241, was enacted in 1968 to bring the national scenic, historic, and recreational trails into one unified system. The Juan Bautista de Anza National Historic Trail (Anza NHT) was established in 1990. It is one of 30 national scenic and historic trails designated by Congress to “provide for maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural qualities of the areas through which such trails may pass” (P.L. 90-543, as amended through P.L. 109-418). The national historic trails are “extended trails which follow as closely as possible and practicable the original trails or routes of travel of national historical significance” (ibid.).

The National Park Service (NPS) administers the trail but works in partnership with Federal, state, and local government agencies, as well as private landowners who manage or own lands along the trail route. Because the Anza expedition moved along the trail on horses and pack animals more than 200 years ago, no reliable trail signature remains to be seen in the modern era. Historians have studied the diaries and journals of Juan Bautista de Anza and Father Font and have determined a wide corridor through which the trail route originally passed. Today we face the challenge of conserving the natural visual setting along the trail corridor and constructing a recreational retracement route for non-motorized use in the future.

In the SDNM Presidential Proclamation 7397, the Anza NHT corridor and its natural historic landscape settings are named as Monument objects to be protected. The Butterfield Overland Stage Route and the Mormon Battalion Trail both lie within portions of the same corridor and are Monument objects as well. These national trails enjoy a special designation that highlights the importance of the trails as connections to communities and our history as a nation. Protection of the Monument objects is critical as we strive to share the story through interpretive developments.

#### 2.9.3.1. Existing Management Decisions, Alternative A (No Action)

No specific management prescriptions for National Trails are included in the existing LUPs.

#### 2.9.3.2. Management Actions for National Trails (NT) Action Alternatives

<b>Goal 1: Manage the Juan Bautista de Anza National Historic Trail corridor through the LSFO through focused management strategies.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1. 1:</b> Manage the historic trail corridor on the Lower Sonoran to enhance the experience of visitors, maintain the integrity of the historic trail and associated trail sites, and the visual setting throughout the life of the plan.						
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>NT-1.1.1:</b> The Juan Bautista de Anza NHT would be managed in concert with the Southern Trail SRMA. Management would be consistent with the National Park Service (NPS) management plan and in cooperation with the NPS (Map 2-16a).
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>NT-1.1.2:</b> The Painted Rock Petroglyph Site and the adjacent segment of Anza NHT would be allocated to public use for heritage tourism and interpretation.
<b>LS</b>		<b>B</b>	<b>C</b>		<b>E</b>	<b>NT-1.1.3:</b> The Anza NHT corridor would remain open to leasable minerals exploration and development actions but any proposed action would contain a No Surface Occupancy stipulation.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>NT-1.1.4:</b> The Anza NHT corridor would be closed to all mineral material disposals.

<b>Goal 1: Manage the Juan Bautista de Anza National Historic Trail corridor through the LSFO through focused management strategies.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>			<b>Management Actions</b>	
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>		
<b>LS</b>				<b>D</b>		<b>NT-1.1.5:</b> The Anza NHT corridor would be closed to all mineral activities including locatables, leasables, mineral materials exploration and development actions including free use permits.
	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>NT-1.1.6:</b> The Anza NHT corridor would remain closed to all minerals actions.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>NT-1.1.7:</b> The Anza NHT corridor would be an exclusion area for major utility-scale renewable energy development and new major linear LUAs. In the Lower Sonoran, utility development could continue on a case-by-case basis in existing utility multiuse corridors and only if impacts are determined to have a negligible to minor effect to resources.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>NT-1.1.8:</b> The Anza NHT corridor would be an exclusion area for all minor linear and nonlinear LUAs except as described in the Lands & Realty section (See Section 2.8.1, "Lands & Realty (LR)" (p. 118)). LUAs would be mitigated to be consistent with management objectives and prescriptions, and only if impacts are determined to have a negligible to minor effect to resources.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>NT-1.1.9:</b> Cultural sites along the NHT would be identified and developed as allocated in the appropriate use categories and according to management actions and prescriptions identified in the Cultural & Heritage Resources section for all use categories. (See Section 2.7.3, "Cultural & Heritage Resources" (p. 52))
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>NT-1.1.10:</b> Recreation opportunities would be provided consistent with the ANZA NHT. Facilities would be developed and placed outside the corridor when feasible to protect resource values, provide for visitor safety, and support selected use opportunities. Facilities would be developed within the trail corridor only when needed to protect trail integrity and resources.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>NT-1.1.11:</b> The management corridor would be managed in concert with the Lower Gila Terraces and Historic Trails SCRMA, the Sonoran Desert SCRMA and the Anza Historic Trail RMZ as identified in the Cultural & Heritage Resource and Recreation Management sections (See Section 2.7.3, "Cultural & Heritage Resources" (p. 52) and Section 2.8.4, "Recreation Management (RM)" (p. 158)).
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>NT-1.1.12:</b> The historic landscape and visual values would be protected to provide the visitor with an opportunity to appreciate the historic character of the area.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>NT-1.1.13:</b> Vegetation would be rehabilitated and restored consistent with the natural resource restoration objectives to restore or maintain the integrity of the landscape.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>NT-1.1.14:</b> A strategy would be developed to encourage scientific and historical research as appropriate with management prescriptions and only if designed to have a negligible or minor affect to resources.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>NT-1.1.15:</b> Scientific and historical studies of cultural landscapes, sites, historic trails, and other resources, including excavation, would be allowed by qualified researchers on a case-by-case basis and with written authorization from the BLM.
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>NT-1.1.16:</b> Heritage tourism would only be allowed at the Painted Rock Petroglyph Sites and along the Anza NHT auto route when such use is compatible with protecting the cultural and historical resources and visual values.

<b>Goal 1: Manage the Juan Bautista de Anza National Historic Trail corridor through the LSFO through focused management strategies.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>			<b>Management Actions</b>	
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>		
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>		<b>E</b>	<b>NT-1.1.17:</b> The Anza NHT auto route would be marked and promoted as appropriate and consistent with Cultural & Heritage Resource and Travel Management actions designations and prescriptions identified in this plan. (See Sections Section 2.7.3, “Cultural & Heritage Resources” (p. 52) and Section 2.8.5, “Travel Management (TM)” (p. 180))
<b>LS</b>	<b>SDNM</b>			<b>D</b>		<b>NT-1.1.18:</b> The Anza NHT auto route would be marked, but not promoted, as appropriate and consistent with Cultural & Heritage Resource and Travel Management actions designations and prescriptions identified in this plan (See Section 2.7.3, “Cultural & Heritage Resources” (p. 52) and Section 2.8.5, “Travel Management (TM)” (p. 180)).
	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>NT-1.1.19:</b> The management corridor of the Anza NHT within the SDNM would be managed to retain, and restore where appropriate, the physical integrity of the sites and trails through inventory, evaluation, rehabilitation and restoration of vegetation.

**Administrative Actions:**

**Inventory.**

- Perform field inventories, document, and map historic trail resources and associated cultural resources along the Anza NHT.
- Perform recreational inventories along the Anza NHT to identify high potential sites and segments. Make determinations of suitability for installation of recreational trail tread and interpretive developments.
- Perform viewshed analysis on selected Anza NHT segments with priority given to high potential route segments.
- Collect GPS data to BLM standards on the Anza NHT resources and use GIS mapping (BMP).
- Identify and apply for rights-of-way on selected areas of the Anza NHT corridor.

**Monitoring.**

- Perform condition assessments on selected segments of the Anza NHT, with a priority on the high potential route segments.
- Identify important access routes into the Anza NHT.
- Implement procedures for systematic monitoring of the Anza NHT management corridor, including associated sites and trail resources.

**Restoration.**

- Perform mitigation and/ or landscape restoration in priority areas along the Anza NHT, where incompatible activities have altered the historic landscape and visual setting of the trail.

**Research.**

- Perform archival research on the history and subsequent uses of the Anza NHT.
- Establish collaborative partnerships with academic institutions, professional and non-profit organizations, individual scholars, tribes, and other entities to perform research on Anza NHT related topics.

### **Interpretation and Education.**

- Develop interpretive materials and facilities for selected sites.
- Provide educational materials and opportunities to the public pertaining to the Anza NHT
- Identify auto tour route segments and mark with official NPS Anza NHT auto route signage.

### **Tribal Consultation.**

- Continue to consult with the Gila River Indian Community, the Ak-Chin Indian Community, the Salt River Pima-Maricopa Indian Community, the Tohono O'odham Nation, the Hopi Tribe, Fort Yuma – Quechan Tribe, and other interested Indian tribes to identify places of traditional importance.

### **Partnerships.**

- Coordinate with partner groups, interest groups, interested individuals, local communities, and other stakeholders on Anza NHT issues and projects.
- Consult and collaborate with the NPS, the administrator of the Anza NHT.

## **2.9.4. FRED J. WEILER GREEN BELT RESOURCE CONSERVATION AREA (GB)**

The Fred J. Weiler Green Belt along the Gila River was established as a resource conservation area (RCA) in 1970 and allocated for management of wildlife, recreation, and cultural resources. The parts of the green belt that fall within the Planning Area include 45,978 acres of the Gila River channel and floodplain from Sierra Estrella Park on the east to the Planning Area boundary on the west. Approximately 20,000 additional acres fall within the BLM's Yuma Field Office for a total of approximately 63,000 acres in the green belt. Only the acres that fall within the Planning Area will be discussed further in this document.

Within the area now known as the Green Belt, Public Land Order 1015 (PLO 1015) withdrew 6,896 acres of land from the Department of the Interior (DOI) to the USFWS in 1954. At this time, the USFWS entered into a cooperative management agreement with the AGFD to manage these withdrawn lands for wildlife, notably waterfowl and migratory birds. These lands were segregated from all forms of appropriation under the public land laws, including the mining laws but not the mineral leasing laws. Grazing and existing withdrawals for power purposes were specifically exempted from the segregation.

In 1967, approximately 63,000 acres in the Gila River floodplain, including the PLO 1015 lands, were studied, and it was determined that they would be retained under the Classification for Multiple Use Act of 1964. A classification for multiple use was placed on the subject lands, segregating the 63,000 acres from appropriation under the public land and mining laws. Mineral leasing, however, was not excluded. The multiple-use classification was established to allow for the management of nesting areas for white-winged dove, mourning dove, and songbirds; public recreation; historical significance; and flood and erosion control. In 1970, the 63,000 acres were designated as the Fred J. Weiler Green Belt Resource Conservation Area.

Since the Green Belt was designated in 1970, the AGFD has continued to manage the PLO 1015 lands within the Green Belt as part of their Lower Gila River Wildlife Management Area Complex. However over the past 30 years new laws have been enacted, along with the implementation of new policy and guidance, and the cooperative agreements between the BLM, USFWS and AGFD have not been updated accordingly. The jurisdictional management responsibility remains unclear for certain resources and uses, such as cultural resources and travel management. The BLM believes that management of some of these still belong to the BLM and certain management decisions have been made in this Draft RMP with that assumption. Between the writing of the draft and the proposed RMP, a legal opinion will be requested from the Federal Solicitors Office and any proposed management actions that need to be changed will be done so in the proposed RMP. The BLM will work in cooperation with the AGFD to ensure that access to, and management of, their wildlife management complex will not be impacted by designations or management actions in the final RMP.

### **2.9.4.1. Existing Management Decisions, Alternative A (No Action)**

No specific management prescriptions the Fred J. Weiler Green Belt RCA are in existing LUPs.

## 2.9.4.2. Management Actions for Resource Conservation Area (RCA) Action Alternatives

<b>Goal 1:</b> <i>Ensure that the Fred J. Weiler Green Belt is a productive and functioning riparian system supporting healthy, diverse, and abundant populations of wildlife and riparian dependent wildlife and plant species with an emphasis on migratory birds.</i>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions</b>
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1:</b> Manage the Fred J. Weiler Green Belt to support migratory birds and other native wildlife and plant species.						
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>GB-1.1:</b> The Fred J. Weiler Green Belt would continue to be managed as a Resource Conservation Area (RCA) as designated in 1970 (63,000).
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>GB-1.2:</b> The Green Belt would be managed consistent with the Lower Gila Terraces and Historic Trails SCRMA.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>GB-1.3:</b> The use of mechanical, chemical, and biological treatment methods would be coordinated with AGFD and USFWS to remove invasive plants such as tamarisk in the Green Belt for the purpose of restoring ecological conditions and function and reducing fuel hazards.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>GB-1.4:</b> The Green Belt would be managed with an emphasis on protection and restoration, and treatments would focus on reestablishment of willows and cottonwoods, as well as other riparian vegetation, to support migratory game birds and other wildlife species.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>GB-1.5:</b> The existing withdrawal for locatable mineral entry and all public land laws within the PLO 1015 portions of the Green Belt would remain in effect.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>GB-1.6:</b> The Green Belt would be closed to mineral leasing and mineral material disposals including sales and free use permits. The three inactive free use community pits (Buckeye Hills in T1S, R3W. Secs. 20 &30; T1S, R4W, Sec. 25) would be terminated, and the former free use site (Narramore Pit in T1S, R3W, Sec. 24) would not be available for reauthorization.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>GB-1.7:</b> The Green Belt would be an exclusion area for utility-scale renewable energy development and exploration, and multiuse utility corridors.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>GB-1.8:</b> The Green Belt would be an avoidance area for minor LUAs and utility-scale renewable energy development and exploration, and multiuse utility corridors.
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>GB-1.9:</b> The Green Belt would be an exclusion area for utility-scale renewable energy development and exploration and major linear LUAs (multiuse utility corridors).
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>GB-1.10:</b> The portions of the Green Belt outside of the PLO 1015 lands would be an avoidance area for minor linear and nonlinear LUAs. Permits would be approved on a case-by-case basis if management objectives of the area are mitigated.

## **2.10. TRIBAL INTERESTS, PUBLIC SAFETY, & SOCIAL AND ECONOMIC CONDITIONS**

### **2.10.1. HAZARDOUS MATERIALS & PUBLIC SAFETY**

There are many Federal, state and local laws and regulations, in addition to bureau policies and guidance which govern public safety, hazardous materials and solid wastes. Federal laws and regulations include:

- The Comprehensive Environmental Response Compensation & Liability Act (CERCLA; 42 USC 9601 et seq.);
- Federal Aid Highways Act (23 USC 317);
- Federal Compliance with Pollution Control Standards (EO 12088, October 13, 1978);
- Federal Compliance with Right to Know Laws and Pollution Prevention Requirements (EO 12856, August 3, 1993);
- Federal Environmental Pesticide Control Act (7 USC 136); Pollution Prevention Act (42 USC 13101 et seq.);
- Resource Conservation and Recovery Act (42 USC 6901 et seq.);
- Solid Waste Disposal Act (42 USC 6901 et seq.);
- Superfund Implementation (EO 12580, January 23, 1987) and
- Toxic Substances control Act (15 USC 2601 et seq.)

The BLM has to address many public health and safety concerns within the LSFO-SDNM. The primary concerns in the Planning Area are: Abandoned Mines, Unexploded Ordnance (UXO), International Border issues and Hazardous Materials and Solid Waste. See Chapter 3, *Affected Environment* (p. 251) for a full discussion of these issues. The BLM will continue to respond to all known, or reports of, illegal activities related to these issues and evaluate all proposed actions to minimize impacts to public health and safety and future occurrences of hazardous materials and dumping on public lands.

#### **2.10.1.1. Existing Management Decisions, Alternative A (No Action) for Hazardous Materials & Public Safety**

Since most actions are governed by existing laws and regulations, there were no valid existing management decisions from previous land use plans.

#### **2.10.1.2. Action Alternatives for Hazardous Materials & Public Safety (PS)**

##### **Program Goals**

- **Goal 1:** Manage hazards and public use to protect public health and safety.

## Land Use Allocations Summary

Not applicable.

### 2.10.1.3. Management Actions and Allowable Uses

<b>Goal 1: Manage hazards and/or public use to protect public health and safety.</b>						
<b>Applicable Decision Area</b>		<b>Applicable Alternative</b>				<b>Management Actions and Allowable Uses</b>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	
<b>Objective 1.1: Identify naturally occurring or manmade public safety hazards on public lands and take appropriate action to protect public health and safety.</b>						
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>PS-1.1.1:</b> Priorities for remediation of physical safety hazards will be set using the following criteria:</p> <ul style="list-style-type: none"> <li>• Where a death or injury has occurred;</li> <li>• Where site is on or in immediate proximity to a recreation site or a known high use area;</li> <li>• Where a formal risk assessment has determined a high or extremely high risk level.</li> <li>• The site is eligible for listing in the Abandoned Mines Cleanup Module of Protection and Response Information System</li> </ul>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>PS-1.1.2:</b> Priorities for remediation due to water quality issues will be set using the following criteria:</p> <ul style="list-style-type: none"> <li>• The State has identified the watershed as a priority based on: water laws or regulations, threat to public health or safety, threat to environment;</li> <li>• The project is a collaborative effort among multiple agencies or jurisdictions.</li> </ul>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>PS-1.1.3:</b> Post signs to identify hazardous situations when warranted to protect public safety. Emphasize the risks to visitors of entering public lands and taking responsibility for their own safety.</p>
<b>LS</b>	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>PS-1.1.4:</b> If illegal activities threaten the safety of the public or BLM employees, or damage Monument objects, areas can be closed to access by the authorized officer. The area can be closed for up to 90 days pending a study or review of the level of impacts and longer term actions may be necessary to provide public safety</p>
<b>LS</b>		<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>PS-1.1.5:</b> The Sentinel Plain area south of I-8 is restricted to entry by permit only to protect the public from possible unexploded ordinances.</p>
	<b>SDNM</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<p><b>PS-1.1.6:</b> The Sand Tank Mountains south of I-8, formerly known as “Area A,” is restricted to entry by permit only.</p>

<b>Goal 2: Protect public safety by dealing appropriately with all hazardous materials and solid wastes on public lands.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 2.1: Investigate all reported hazardous-materials and solid-wastes sites. Plan necessary containment and/or cleanup responses on a case-by-case basis as soon as possible upon report.</b>						
LS	SDNM	B	C	D	E	<b>PS-2.1.1:</b> Establish priorities for investigating releases and planning/implementing responses based on the order in which releases are discovered unless other factors, such as the immediacy of the public-health threat, elevate the response urgency.
LS	SDNM	B	C	D	E	<b>PS-2.1.2:</b> Identify the probable scope of needed containment and clean-up efforts.
LS	SDNM	B	C	D	E	<b>PS-2.1.3:</b> Rank all sites according to relative priority for treatment planning and action. Priorities to consider include: <ul style="list-style-type: none"> <li>• High levels of heavy metals in waste,</li> <li>• Ground- or surface-water quality degradation,</li> <li>• Ongoing, active resource damage,</li> <li>• Safety hazards near established recreation areas or other areas frequented by public land users,</li> <li>• Other site-specific factors</li> </ul>
LS	SDNM	B	C	D	E	<b>PS-2.1.4:</b> Inspect mining and milling sites to determine appropriate management for hazardous materials.
LS	SDNM	B	C	D	E	<b>PS-2.1.5:</b> Conduct active investigations to identify potentially responsible parties and recover planning, containment, cleanup, monitoring, investigation, and enforcement costs associated with spill/release responses.
LS	SDNM	B	C	D	E	<b>PS-2.1.6:</b> Complete site-specific inventories when lands are being disposed or acquired. It is departmental policy to minimize potential liability of the DOI and its bureaus by acquiring property that is not contaminated unless directed by Congress, court mandate, or as determined by the Secretary.

<b>Goal 3: Minimize or eliminate the potential for intentional or accidental releases of hazardous materials or wastes and solid waste.</b>						
Applicable Decision Area		Applicable Alternative				Management Actions and Allowable Uses
LS	SDNM	B	C	D	E	
<b>Objective 3.1: Pursue locations of solid waste and wildcat dumpsites. Remove hazardous materials and solid waste, remediate, and, if appropriate, restore sites.</b>						
LS	SDNM	B	C	D	E	<b>PS-3.1.1:</b> Investigate all reported hazardous-materials and solid-waste sites.
LS	SDNM	B	C	D	E	<b>PS-3.1.2:</b> Establish a reporting system and encourage other agencies and citizens to report suspected spill and dump sites or suspected dumping activities.
LS	SDNM	B	C	D	E	<b>PS-3.1.3:</b> Establish an inventory of known historic and active mining sites and other areas on public lands where hazardous materials or solid wastes are known or suspected to be present.
LS	SDNM	B	C	D	E	<b>PS-3.1.4:</b> Evaluate all BLM actions (including land use authorizations, mining and milling activities, and unauthorized land uses) for their potential to prevent production or dumping of hazardous or solid wastes on public lands.  Minimize releases of hazardous materials through compliance with current regulations.  Identify appropriate mitigation for activities associated with all types of hazardous materials and waste management and all types of fire management.

## **Administrative Actions**

- Provide public safety information through BLM visitor-use brochures, websites, the BGR/Cabeza Prieta NWR/Sand Tank Mountains visitor-entry permit system, and various direct contacts with members of the public. Include information on hazards associated with abandoned mines, recreational shooting, unexploded ordnance, smuggler and undocumented alien (UDA) traffic, other criminal activities, natural resource conditions, or other conditions.
- Post signs in the field to identify certain hazardous situations when warranted to protect public safety. Emphasize visitor acceptance of the risks of entering public lands and responsibility for their own safety.
- To reduce human-caused fires, the BLM will undertake education, enforcement, and administrative fire-prevention measures. Education measures will include various outreach efforts, including a signing program, information as to the natural role of fire within local ecosystems, and participation in fairs, parades, and public contacts. Enforcement will be accomplished by providing training opportunities for employees interested in fire cause determination. Administration includes expanded prevention and education programs with other cooperator agencies.

## **2.11. SCIENTIFIC RESEARCH, EDUCATION & PUBLIC OUTREACH**

### **2.11.1. SCIENTIFIC RESEARCH**

The BLM will partner with agencies and the academic and scientific community to develop a strategy for orderly scientific research of public lands. Scientific research will be evaluated and approved on a case-by-case basis. A priority will be placed on research likely to enhance management and understanding of public land resources and public uses. Researchers will be required to coordinate with the BLM, including providing a research plan, on proposed research and provide reports and supporting data that describe the outcome of the research.

Approved scientific research will contribute to management of natural and cultural resources and achieving desired future conditions. The collection of any objects in the Monument is authorized only by permit for scientific research or use to ensure compatibility and reporting of results. A reasonable amount of disturbance to soils and/or vegetation may occur during approved research activities in order to meet the research goals. Effects of disturbance are likely to be transient or may require mitigation or rehabilitation of sites.

Collaborative research partnerships will be established with interested organizations, such as local scientific museums or organizations, agencies, academic institutions, professional and nonprofit organizations, vocational organizations, and other entities, for an orderly process of research, recordation, and education about public land resources and uses. These partnerships will support survey, evaluation, recordation, mitigation, protection, and management of various resources, including biological, cultural, scenic, paleontological, geologic, and caves, and public uses including recreation, grazing, mining, and others.

By developing a strategy to encourage scientific research and inventory, the understanding of resources and management needs will improve. A priority will be placed on the development and implementation for inventory, recording, and evaluation of the Monument, ACECs, and other sensitive areas and resources.

Increased monitoring of public use, vegetation and wildlife habitat, cultural sites, and other resources, with particular focus on sensitive resources and easily accessible and regularly visited areas, would help to ensure the integrity of resources are maintained. Monitoring of public uses, wildlife, and other resources would be enhanced by the use of volunteers, scientific and academic organizations, and other interested groups.

### **2.11.2. INTERPRETATION, ENVIRONMENTAL EDUCATION & OUTREACH**

The BLM will work with partners in agencies, academia, and other organizations to develop an effective environmental education and outreach strategy to enhance public understanding and appreciation of public land resources, and help the BLM achieve its mission and the desired outcomes of this DRMP.

The BLM will support existing educational and interpretive programs and initiatives such as Project Archaeology, Leave No Trace, Tread Lightly!™, Project Learning Tree, and other proven

national, State, regional, and local programs. An emphasis will be placed on reuse of existing educational materials.

Additionally, the BLM will work with partners to pursue interpretation and environmental education opportunities, outreach, development, and implementation of on site and off-site programs for adults and children. The office will work with willing staff from schools, school districts, and other learning institutions to develop curricula that incorporate various learning styles in program design and delivery and focus on the BLM's mission.

To help disseminate information to the public, websites, brochures, maps, access guides, and information sheets would be developed. BLM personnel would also participate in public events, such as fairs and open houses, with information and displays showing public land management. Information would emphasize Leave No Trace and Tread Lightly!<sup>TM</sup> practices.

Topics may include:

- Resource protection and management,
- Recreational access,
- Use etiquette,
- OHV rules and regulations,
- Public safety,
- Fire,
- OHV and special recreation vehicle information,
- Other information as needed.

### **2.11.2.1. Resources Education**

Throughout the area, (with particular focus sensitive resource areas, including the Monument, ACECs, WHAs, SCRMAAs, and T&E species habitat), emphasis would be placed on resource importance through interpretation, education, signing, and/or brochures.

A public education program would accomplish the following:

- Provide information about resources and their importance,
- Provide information directly related to procedures to be followed if sensitive resources are found,
- Provide safety information to the public and identify any resource protection actions required for public use,
- Specify any pertinent fines for resource damage.

### **2.11.2.2. Public Uses and Visitor Information**

Visitor information would be developed to guide recreational uses in the Decision Areas. Information could include identifying recreational opportunities, locations where certain uses are or are not appropriate, an appreciation and respect for other public land users and uses, and methods to avoid conflict.

### **2.11.2.3. Public Safety and Fire Education**

Educational material would be available regarding public safety, definitions of hazardous materials and solid wastes, and regulations controlling the use and disposal of hazardous materials and solid wastes on public lands. Methods to disseminate information may include brochures at recreational sites, websites, signs at known or likely dumping sites, BGR/Cabeza Prieta NWR/Sand Tank Mountains visitor entry permit system, and various types of direct contact with visitors. Information on hazards associated with abandoned mines, recreational shooting, unexploded ordnance, smuggler and UDA traffic, natural resource or other conditions also may be included.

To protect public safety, when warranted, signs will be posted to identify certain hazardous situations.

Visitor acceptance of the risks of entering public land and responsibility for their own safety would be emphasized.

The BLM will undertake education, enforcement, and administrative fire prevention mitigation measures to reduce human-caused fires. Education measures may include various media, including signs, information on the natural role of fire within local ecosystems, participation in fairs or parades, and other public contacts. Enforcement would be accomplished by providing training opportunities for employees interested in fire caused determinations. Administration includes expanded prevention and education programs with other cooperating agencies.

## **2.12. IMPLEMENTATION, ADAPTIVE MANAGEMENT & MONITORING**

### **2.12.1. IMPLEMENTATION & PARTNERSHIPS**

Many LUP decisions are implemented or become effective upon approval of the RMP's record of decision (ROD). These decisions include:

- Goals and objectives,
- Land use allocation decisions,
- All special designations, such as ACECs.

Management actions that require more site-specific project planning would require further environmental analysis. Decisions to implement site-specific projects are subject to administrative review when such decisions are made.

To succeed in achieving the goals, objectives, and actions of this plan, the BLM, along with other agencies, organizations, and the public, must make a long-term commitment of working together.

Implementation of this plan will require the involvement of many partners. The BLM invites citizens to help the implementation of this plan and achieve the goals laid out. The BLM will continue to involve and collaborate with the public while implementing this plan. Opportunities to become involved in the plan implementation and monitoring will include development of partnerships and community-based citizen working groups. The BLM and citizens can collaboratively develop site-specific implementation plans that mutually benefit public land resources, local communities, and the people who live, work or play on public lands.

To succeed in achieving the goals, objectives, and actions of this plan, the BLM, along with other agencies, organizations, and the public, must make a long-term commitment of working together. Implementation of this plan will require the involvement of many partners. The BLM invites citizens to help the implementation of this plan and achieve the goals laid out. The BLM will continue to involve and collaborate with the public while implementing this plan. Opportunities to become involved in the plan implementation and monitoring will include development of partnerships and community-based citizen working groups. The BLM and citizens can collaboratively develop site-specific implementation plans that mutually benefit public land resources, local communities, and the people who live, work or play on public lands.

- Motorized route and non-motorized trail maintenance and monitoring;
- Development, maintenance, and monitoring of recreational facilities;
- Development of interpretive materials;
- Restoration of wildlife habitat;
- Monitoring of biological and cultural resources;
- Prevention and restoration of areas impacted by litter/dumping;
- Development of community support;
- Delivery of environmental and resource education.

Collaborative efforts may help ensure consistent management between partners, enhance the public experience, maintain open space, provide use opportunities, and protect natural and cultural resources. By engaging a diverse group of stakeholders in a collective effort to conserve and manage the ecological, cultural, open space, recreation, and other use values, resources can be sustainably managed for the long-term, and the area remain a place where people want to live, work, and recreate.

### **2.12.2. ADAPTIVE MANAGEMENT**

Adaptive management is a formal, systematic, and rigorous approach to learning from the results of management actions, accommodating change, and improving management. It involves synthesizing existing knowledge, exploring alternative actions, and making explicit forecasts about their results. Management actions and monitoring programs are carefully designed to generate reliable feedback and clarify the reasons underlying results. Actions and objectives are then adjusted based on this feedback and improved understanding to try to achieve the desired outcomes. In addition, decisions, actions, and results are carefully documented and communicated to others so that knowledge gained through experience is passed on, rather than

lost when individuals move or leave the organization. Desired outcomes (goals and objectives), as well as the boundaries of land use allocations or special designations are not adaptable and require an RMP amendment to change. Actions to achieve the desired outcomes may be adapted to achieve the desired outcomes. Implementation or activity level decisions also may be adapted.

This DRMP recommends an adaptive management strategy. This process is flexible and generally involves four phases: planning, implementation, monitoring, and evaluation. As the BLM works with partners to obtain new information, it is able to evaluate monitoring data and other resource information to periodically refine and update management decisions and actions. This allows for the continual refinement and improvement of management prescriptions and practices.

### **2.12.3. MONITORING & PARTNERSHIPS**

Monitoring of actions related to implementing LUPs is an important part of adaptive management because it provides information on the relative success of strategies. Monitoring is the collection and analysis of repeated observations to track the status of a variable or system, and can be used to determine whether management actions are being implemented as written (implementation monitoring) or to evaluate success in achieving desired outcomes (effectiveness monitoring).

Adaptive management relies on monitoring that is sufficiently sensitive to detect relevant ecological changes. Ongoing monitoring helps to adjust management decisions and strategies related to implementing LUPs. The BLM monitors many activities and events; grazing utilization and vegetation trends are measured to support decisions on allotment Standards and Guidelines evaluations. OHV events are monitored to determine if permit stipulations are followed and necessary site rehabilitation undertaken.

This DRMP recognizes that many monitoring needs will require further design and planning. There are several ways to design an effectiveness-monitoring program. Model-based approaches rely on a small number of sites to represent an ecosystem class; however, it can be exceedingly difficult to find these, and it sometimes is difficult to draw broad conclusions from those sites. Design-based approaches rely on a carefully planned sampling. In this approach, the sample size must be large enough to make reliable references, which may be costly. A significant challenge in designing a program to monitor ecological conditions is integrating habitat monitoring with the species of special interest. Additionally, the BLM faces the challenge of monitoring uses on public lands. The BLM invites citizens and partners to help it develop an effective monitoring and evaluation plan for implementation decisions on public land resources, local communities, and users.

## **2.13. REQUIREMENTS FOR FURTHER ENVIRONMENTAL ANALYSIS**

This Draft RMP/EIS is a programmatic statement describing the impacts of implementing the LUP decisions and management actions described for the Planning Area.

Decisions that are implemented upon approval of the RMP do not require any further environmental analysis or documentation. Whenever implementation-level plans (e.g., ACEC management plans) are prepared, more environmental analysis and documentation is required. Individual management actions or projects requiring more site-specific project planning require more environmental analysis.

Site-specific environmental analysis and documentation, including the use of categorical exclusions and determinations of NEPA adequacy, where suitable, may be prepared for one or more individual projects in accordance with management objectives and decisions established in the approved LUP. In addition, the BLM will ensure that the environmental review process includes evaluation of all critical elements to include cultural resources and T&E species, and completes required USFWS Section 7 consultations and coordination with SHPO in accordance with the BLM Cultural Resources National Programmatic Agreement and Arizona's BLM-SHPO Protocol.

Interdisciplinary impact analysis will be based on this and other applicable EISs. If the analysis prepared for site-specific projects finds potential for significant impacts not already described in an existing EIS, another EIS or supplement may be warranted.

Upon providing public notice of a decision, supporting environmental documentation will be sent to all affected interests and made available to other publics on request. Decisions to implement site-specific projects are subject to administrative review when such decisions are made.

## **2.14. INTERRELATIONSHIPS**

The BLM conducts many activities that require coordination between itself and State or other Federal agencies. Coordination has been ongoing throughout this planning effort. Coordination is required when implementing LUP decisions through project development and site-specific activities.

As a part of this planning effort and implementing on-the-ground activities, the BLM conducts Section 7 consultation with the USFWS, as prescribed under the ESA. In 2003, the BLM and USFWS finalized a consultation agreement to establish an effective and cooperative Section 7 consultation process. The agreement defines the process, products, actions, schedule, and expectations of the BLM and USFWS on project consultation. One biological assessment (BA) will be prepared to determine the effect of the preferred alternative on all relevant listed, proposed, and candidate species and associated critical habitat. The BA will disclose all expected environmental effects, conservation actions, mitigations, and monitoring, including analysis of all direct and indirect effects of plan decisions and any interrelated and interdependent actions. As this plan's decisions are implemented, actions determined through environmental analysis to potentially affect listed or candidate species would initiate more site-specific consultation on those actions.

Consultation with the Arizona SHPO is also conducted in compliance with Section 106 of the NHPA. The BLM's actions would also comply with other Federal environmental legislation, existing programmatic environmental analyses, LUPs, and vegetation treatment documents, such as the Clear Air Act, Clean Water Act, Safe Drinking Water Act, and with State and local government regulations (Appendix B, *Applicable Laws, Regulations, and Policies* (p. 1003)).

The Sikes Act (16 USC 670 et seq.) authorizes the DOI, in cooperation with State agencies responsible for administering fish and game laws, to plan, develop, maintain, and coordinate programs for conserving and rehabilitating wildlife, fish, and game on public lands within its jurisdiction. The plans must conform to overall land use and management plans for the land involved. The plans could include habitat-improvement projects and related activities, and adequate protection for species of fish, wildlife, and plants considered endangered or threatened.

The BLM must also coordinate with suitable State agencies in managing State-listed plant and animal species when the State has formally made such designations.

The BLM is responsible for managing wildlife habitats on public lands, while AGFD is responsible for managing wildlife populations and game harvest. Proclamation 7397 states, “Nothing in this proclamation shall be deemed to enlarge or diminish the jurisdiction of the State of Arizona with respect to fish and wildlife management.” Continued efforts would be made to coordinate with AGFD to enhance wildlife habitat, species diversity, and riparian health. Coordination occurs between the agencies on management plans and activities to achieve the optimum health of wildlife species and populations. Currently, coordination efforts are conducted consistent with a statewide MOU. In addition, an MOU has been signed giving AGFD cooperating agency status on RMP efforts in Arizona. To further promote interagency coordination, a cooperative agreement was signed between the agencies, establishing a liaison position in the AGFD. This liaison is assigned coordination responsibility on all ongoing LUPs and spends a portion of his/her work schedule in the Arizona State Office.

Regional transportation planning and construction of roadways and highways is generally conducted by State or regional agencies, such as ADOT, county departments of transportation, and city transportation departments. Coordination efforts will be consistent with MOUs (e.g., ADOT, BLM, or FHWA MOUs) or other documents in effect at the time of the project. When these agencies plan and develop roadways that cross public lands, the BLM is involved in their design and contributes to environmental impact analysis. In that process, the BLM would coordinate with the responsible agency to develop design features that minimize the fragmenting effect of the planned roadway. It would work with the responsible agency to evaluate and incorporate safe and effective wildlife crossings to ensure long-term species viability and maintain habitat connectivity. Where planned roadways potentially fragment other resources, such as but not limited to recreation routes, grazing allotments or mining operations, the BLM will work with the responsible agency to provide continued connectivity for those purposes as well. The BLM also would work with the agency to provide continued safe access to public land from any developed roadway for recreation and other public uses.

## 2.15. COMPARISON OF IMPACT INTENSITIES

In an effort to demonstrate the intensity of an impact, a range of qualitative terms have been created to summarize impacts from one management program on another. Some programs have specifically defined these terms for their managed resource or resource use with clearly outlined thresholds. Program specific intensity definitions can be found in the beginning of each program’s impacts analysis in Chapter 4, *Environmental Consequences* (p. 371), while the general definitions of these terms can be found in Section 4.1.5, “Qualitative Terms for the Intensity of Impacts” (p. 375). Table 2.23, “Comparison of Impact Intensities” (p. 219) compares the intensities by alternative. *For impacts that reach the major intensity level, a summary of those impacts is provided within the tables.*

**Table 2.23. Comparison of Impact Intensities**

From:	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
<b>IMPACTS ON AIR RESOURCES</b>					
Air Quality	<u>Lower Sonoran</u> : None; <u>SDNM</u> : None				

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Cave Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cultural and Heritage Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Paleontological Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Soil Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Vegetation Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Visual Resource Management	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Water Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wild Horse & Burro Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wilderness Characteristics	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wildland Fire Management	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor				
Lands and Realty	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor			<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible	
Livestock Grazing Management	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor			<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor
Minerals Management	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible				
Recreation Management	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Minor to Moderate		<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Negligible
Travel Management	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Minor to Moderate			<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Minor to Moderate
Special Designations	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Public Safety and Hazardous Materials	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				

From:	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
<b>IMPACTS ON CAVE RESOURCES</b>					
No caves and cave resources have been identified in the Decision Areas, though Paleozoic limestone outcrops and lava tubes do exist.					
<b>IMPACTS ON CULTURAL AND HERITAGE RESOURCES</b>					
Air Quality	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cave Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cultural and Heritage Resources	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Negligible to Minor
Paleontological Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Minor		<u>Lower Sonoran</u> Negligible;  <u>SDNM:</u> Negligible		<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Minor
Soil Resources	<u>Lower Sonoran</u> Negligible; <u>SDNM:</u> Negligible				
Vegetation Resources	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> None	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> None			
Visual Resource Management	<u>Lower Sonoran:</u> Negligible to Moderate;  <u>SDNM:</u> Negligible to Moderate		<u>Lower Sonoran:</u> Negligible to Major;  <u>SDNM:</u> Negligible to Moderate	<u>Lower Sonoran:</u> Negligible to Moderate;  <u>SDNM:</u> Negligible to Moderate	<u>Lower Sonoran:</u> Negligible to Moderate;  <u>SDNM:</u> Negligible to Moderate
Water Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wild Horse & Burro Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wilderness Characteristics	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u> Minor to Moderate		<u>Lower Sonoran</u> Negligible;  <u>SDNM:</u> Negligible		
Wildland Fire Management	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Lands and Realty	<u>Lower Sonoran</u> : Minor to Major; <u>SDNM</u> : Minor to Moderate				
Livestock Grazing Management	<u>Lower Sonoran</u> : Negligible to Minor; <u>SDNM</u> : Negligible to Moderate	<u>Lower Sonoran</u> : Minor to Moderate; <u>SDNM</u> : Negligible to Minor	<u>Lower Sonoran</u> : Negligible to Minor; <u>SDNM</u> : Negligible to Moderate	<u>Lower Sonoran</u> : Negligible; <u>SDNM</u> : Negligible	<u>Lower Sonoran</u> : Negligible to Minor; <u>SDNM</u> : Negligible to Moderate
Minerals Management	<u>Lower Sonoran</u> : Minor to Moderate; <u>SDNM</u> : Minor to Moderate			<u>Lower Sonoran</u> : Negligible to Minor; <u>SDNM</u> : Minor to Moderate	<u>Lower Sonoran</u> : Minor to Moderate; <u>SDNM</u> : Minor to Moderate
Recreation Management	<u>Lower Sonoran</u> : Negligible to Minor; <u>SDNM</u> : Negligible to Moderate		<u>Lower Sonoran</u> : Minor; <u>SDNM</u> : Negligible to Moderate	<u>Lower Sonoran</u> : Minor; <u>SDNM</u> : Negligible to Minor	<u>Lower Sonoran</u> : Negligible to Minor; <u>SDNM</u> : Negligible to Moderate
Travel Management	<u>Lower Sonoran</u> : Negligible to Major; <u>SDNM</u> : Negligible to Minor	<u>Lower Sonoran</u> : Minor; <u>SDNM</u> : Negligible to Moderate		<u>Lower Sonoran</u> : Negligible; <u>SDNM</u> : Negligible to Minor	<u>Lower Sonoran</u> : Minor; <u>SDNM</u> : Negligible to Moderate
Special Designations	<u>Lower Sonoran</u> : Negligible; <u>SDNM</u> : Negligible	<u>Lower Sonoran</u> : Negligible to Moderate; <u>SDNM</u> : Minor to Moderate	<u>Lower Sonoran</u> : Minor; <u>SDNM</u> : Minor	<u>Lower Sonoran</u> : Negligible; <u>SDNM</u> : Negligible	
Public Safety and Hazardous Materials	<u>Lower Sonoran</u> : Negligible to Moderate; <u>SDNM</u> : Negligible to Moderate				
<b>IMPACTS ON PALEONTOLOGICAL RESOURCES</b>					
Limited paleontological resources have been found in the Planning Area; therefore impacts on these resources are not discussed in detail.					
<b>IMPACTS ON PRIORITY WILDLIFE SPECIES AND HABITAT MANAGEMENT</b>					
Air Quality	<u>Lower Sonoran</u> : None; <u>SDNM</u> : None				

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Cave Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cultural and Heritage Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Paleontological Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Negligible to Moderate;  <u>SDNM:</u> Negligible to Moderate		<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Minor.	
Soil Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Vegetation Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Visual Resource Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Water Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wild Horse & Burro Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wilderness Characteristics	<u>Lower Sonoran:</u> None;  <u>SDNM:</u> None		<u>Lower Sonoran:</u> Negligible to Minor ;  <u>SDNM:</u> Negligible		
Wildland Fire Management	<u>Lower Sonoran:</u> Negligible to Major; <u>SDNM:</u> Negligible to Major				
Lands and Realty	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Minor.	<u>Lower Sonoran:</u> Negligible to Moderate;  <u>SDNM:</u> Negligible to Minor		<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible	
Livestock Grazing Management	<u>Lower Sonoran:</u> Negligible to Major.  <u>SDNM:</u> Negligible to Moderate	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Negligible to Major;  <u>SDNM:</u> Negligible to Moderate	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Minor
Minerals Management	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Negligible to Minor				<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Recreation Management	<u>Lower Sonoran:</u> Negligible to Major; <u>SDNM:</u> Negligible to Moderate		<u>Lower Sonoran:</u> Negligible to Major ; <u>SDNM:</u> Negligible to Minor		
Travel Management	<u>Lower Sonoran:</u> Negligible to Major; <u>SDNM:</u> Negligible to Moderate	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Negligible to Moderate	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Negligible to Moderate	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Moderate	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Negligible to Minor
Special Designations	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> None			
Public Safety and Hazardous Materials	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
<b>IMPACTS ON SOIL RESOURCES</b>					
Air Quality	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cave Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cultural and Heritage Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Paleontological Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible			
Soil Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Vegetation Resources	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible	
Visual Resource Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Water Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				

From:	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
Wild Horse & Burro Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wilderness Characteristics	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wildland Fire Management	<u>Lower Sonoran:</u> Negligible to Major; <u>SDNM:</u> Negligible to Major				
Lands and Realty	<p><u>Lower Sonoran:</u> Major: Blading of large acreages for solar energy facilities, estimated at greater than 150,000 acres over the life of the plan, is likely to disrupt drainage patterns, and cause surface disturbance and soil compaction over a large enough area to be a moderate impact. Use of large quantities of ground water, may be needed for renewable energy production and may affect soil resources by causing subsidence in localized areas. Assuming that the solar energy development proposals to be built under this plan are mostly the solar energy concentration facilities, the overall impact of ROWs for this use would be moderate, although it would be major in the localized construction area.</p> <p style="text-align: center;"><u>SDNM:</u> Minor to Major</p>		<p><u>Lower Sonoran:</u> Major (same impacts as discussed in Alternatives B through C).</p> <p style="text-align: center;"><u>SDNM:</u> Negligible to Major</p>	<p><u>Lower Sonoran:</u> Major (same impacts as discussed in Alternatives B through C).</p> <p style="text-align: center;"><u>SDNM:</u> Minor to Major</p>	
Livestock Grazing Management	<p><u>Lower Sonoran:</u> Minor;</p> <p style="text-align: center;"><u>SDNM:</u> Negligible to Minor</p>	<p style="text-align: center;"><u>Lower Sonoran:</u> Minor;</p> <p style="text-align: center;"><u>SDNM:</u> Minor</p>	<p><u>Lower Sonoran:</u> Minor to Major;</p> <p style="text-align: center;"><u>SDNM:</u> Negligible</p>	<p><u>Lower Sonoran:</u> Minor;</p> <p style="text-align: center;"><u>SDNM:</u> Negligible to Minor</p>	
Minerals Management	<p><u>Lower Sonoran:</u> Major: Impacts of mineral development on soil resources include potential disturbances including soil displacement and loss or burial of upper soil horizons. This would reduce water holding capacity (possibly permanently), loss of vegetation leading to increased erosion, and new roads. If a large mine with leach pads, open pits and tailings piles were developed, major impacts on soils would occur. Much of the mine footprint would experience a long-term loss of soil productivity.</p> <p style="text-align: center;"><u>SDNM:</u> Negligible to Major</p>		<p><u>Lower Sonoran:</u> Negligible to Moderate;</p> <p style="text-align: center;"><u>SDNM:</u> Negligible to Major</p>	<p><u>Lower Sonoran:</u> Negligible to Major;</p> <p style="text-align: center;"><u>SDNM:</u> Negligible to Major</p>	
Recreation Management	<p><u>Lower Sonoran:</u> Minor;</p> <p style="text-align: center;"><u>SDNM:</u> Minor</p>	<p><u>Lower Sonoran:</u> Minor to Moderate;</p> <p style="text-align: center;"><u>SDNM:</u> Minor</p>	<p style="text-align: center;"><u>Lower Sonoran:</u> Minor;</p> <p style="text-align: center;"><u>SDNM:</u> Minor</p>	<p><u>Lower Sonoran:</u> Minor to Moderate;</p> <p style="text-align: center;"><u>SDNM:</u> Minor</p>	

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Travel Management	<u>Lower Sonoran:</u> Major: Overall impacts on soils from travel on mostly unsurfaced roads would be moderate with some areas of sensitive soils or higher road densities having major impacts. As road density increases, soil surface and vegetation disturbance, including disturbance to the 100 foot parking area on each side of the road prism, and total compacted surface area exposed to erosion during storm water runoff all increase.  <u>SDNM:</u> Minor to Major				
Special Designations	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Public Safety and Hazardous Materials	<u>Lower Sonoran:</u> Major: Soils affected by a spill of hazardous materials are usually removed. Delays in cleanup could result in infiltration of hazardous materials into groundwater, possibly causing major impacts and costly groundwater treatment.  <u>SDNM:</u> Negligible to Major				
<b>IMPACTS ON VEGETATION RESOURCES</b>					
Air Quality	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cave Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cultural and Heritage Resources	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				
Paleontological Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Negligible;  <u>SDNM:</u> Negligible to Minor		
Soil Resources	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				
Vegetation Resources	<u>Lower Sonoran:</u> Negligible to Moderate;  <u>SDNM:</u> Negligible to Minor				
Visual Resource Management	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible		<u>Lower Sonoran:</u> Negligible;  <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Minor
Water Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wild Horse & Burro Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Wilderness Characteristics	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None		<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible		<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible
Wildland Fire Management	<u>Lower Sonoran:</u> Moderate to Major; <u>SDNM:</u> Moderate to Major				
Lands and Realty	<u>Lower Sonoran:</u> Negligible to Major; <u>SDNM:</u> Negligible to Minor		<u>Lower Sonoran:</u> Negligible to Major; <u>SDNM:</u> Negligible to Moderate	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Negligible	
Livestock Grazing Management	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Negligible to Moderate	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Minor		<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Negligible Minor
Minerals Management	<u>Lower Sonoran:</u> Negligible to Major; <u>SDNM:</u> None			<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> None	<u>Lower Sonoran:</u> Negligible to Major; <u>SDNM:</u> None
Recreation Management	<u>Lower Sonoran:</u> Negligible to Major; <u>SDNM:</u> Negligible to Moderate	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Negligible to Minor		<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Negligible to Minor
Travel Management	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible to Moderate		<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible
Special Designations	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				
Public Safety and Hazardous Materials	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
<b>IMPACTS ON VISUAL RESOURCES MANAGEMENT</b>					
Air Quality	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cave Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Cultural and Heritage Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Paleontological Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Soil Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Vegetation Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Visual Resource Management	<u>Lower Sonoran:</u> Negligible to Moderate;  <u>SDNM:</u> Moderate	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Minor;	<u>Lower Sonoran:</u> Negligible to Moderate;  <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible to Major; <u>SDNM:</u> Negligible to Minor
Water Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wild Horse & Burro Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Characteristics	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wildland Fire Management	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor				
Lands and Realty	<u>Lower Sonoran:</u> Negligible to Moderate;  <u>SDNM:</u> Negligible to Minor		<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Minor		
Livestock Grazing Management	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor				
Minerals Management	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u> None				
Recreation Management	<u>Lower Sonoran:</u> Moderate to Major; <u>SDNM:</u> Minor			<u>Lower Sonoran:</u> Negligible to Major; <u>SDNM:</u> Minor	
Travel Management	<u>Lower Sonoran:</u> Negligible to Moderate;  <u>SDNM:</u> Negligible to Major	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Moderate	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Minor		
Special Designations	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Public Safety and Hazardous Materials	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				

From:	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
<b>IMPACTS ON WATER RESOURCES</b>					
Air Quality	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				
Cave Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cultural and Heritage Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Paleontological Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> None	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> None			
Soil Resources	None				
Vegetation Resources	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> None			<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> None	
Visual Resource Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Water Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wild Horse & Burro Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wilderness Characteristics	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wildland Fire Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Lands and Realty	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u>  Minor to Moderate	<u>Lower Sonoran:</u> Negligible to Moderate;  <u>SDNM:</u>  Minor to Moderate	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u>  Minor to Moderate	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Negligible
Livestock Grazing Management	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u> Negligible to Minor

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Minerals Management	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Negligible to Moderate	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Negligible
Recreation Management	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor		<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Minor		<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible
Travel Management	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Moderate;  <u>SDNM:</u> Moderate
Special Designations	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor			<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Minor
Public Safety and Hazardous Materials	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
<b>IMPACTS ON WILD HORSE &amp; BURRO MANAGEMENT</b>					
The intent of the existing decisions and proposed alternative decision is to remove all wild horses and burros from the Painted Rock Herd Area, and any impacts from other program areas on the Wild Horse & Burro program would be negligible. Therefore, impacts from other resources will not be discussed in detail.					
<b>IMPACTS ON WILDERNESS CHARACTERISTICS</b>					
Air Quality	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				
Cave Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cultural and Heritage Resources	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Minor			<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor
Paleontological Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Negligible to Minor		<u>Lower Sonoran:</u> Negligible;  <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Negligible to Minor

From:	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
Soil Resources	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Vegetation Resources	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Negligible		<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible	
Visual Resource Management	<u>Lower Sonoran:</u> Moderate; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Negligible to Minor
Water Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wild Horse & Burro Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wilderness Characteristics	<u>Lower Sonoran:</u> Negligible to Major; <u>SDNM:</u> Negligible to Major		<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor
Wildland Fire Management	<u>Lower Sonoran:</u> Negligible to Major; <u>SDNM:</u> Negligible to Major				
Lands and Realty	<p><u>Lower Sonoran:</u> Major: In subject areas with wilderness characteristics, naturalness and opportunities for solitude and primitive and unconfined recreation could be subject to major impacts, potentially completely foregone due to the development of renewable energy facilities. These impacts would be located in the lower elevations of the Gila Bend Mountains and Saddle Mountain, with the effects mainly occurring on the lower desert plains and bajadas (areas with 5% elevation slope or less).</p> <p>Permanent transportation and associated right-of-way corridors within or next to lands with wilderness characteristics could prospectively cause major degradation of wilderness characteristics. These impacts would mainly be found in wilderness characteristics areas within the Gila Bend Mountains</p>		<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible to Minor

From:	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
	and Saddle Mountain areas, with road corridors sited in less mountainous terrain, and probably impinging on the same lands subject to the solar and energy developments described previously.  <u>SDNM</u> : Moderate				
Livestock Grazing Management	<u>Lower Sonoran</u> : Minor to Moderate; <u>SDNM</u> : Negligible to Moderate		<u>Lower Sonoran</u> : Minor; <u>SDNM</u> : Minor	<u>Lower Sonoran</u> : Negligible; <u>SDNM</u> : Negligible	<u>Lower Sonoran</u> : Minor to Moderate; <u>SDNM</u> : Negligible to Moderate
Minerals Management		<u>Lower Sonoran</u> : Negligible to Moderate; <u>SDNM</u> : Negligible to Moderate		<u>Lower Sonoran</u> : Negligible to Minor; <u>SDNM</u> : Negligible to Moderate	<u>Lower Sonoran</u> : Negligible to Moderate; <u>SDNM</u> : Negligible to Moderate
Recreation Management	<u>Lower Sonoran</u> : Negligible to Minor; <u>SDNM</u> : Negligible to Moderate		<u>Lower Sonoran</u> : Negligible to Minor; <u>SDNM</u> : Negligible to Minor	<u>Lower Sonoran</u> : Negligible; <u>SDNM</u> : Negligible	<u>Lower Sonoran</u> : Negligible to Moderate; <u>SDNM</u> : Negligible to Minor
Travel Management	<u>Lower Sonoran</u> : Moderate; <u>SDNM</u> : Moderate		<u>Lower Sonoran</u> : Minor to Moderate; <u>SDNM</u> : Minor to Moderate	<u>Lower Sonoran</u> : Minor; <u>SDNM</u> : Minor	<u>Lower Sonoran</u> : Minor to Moderate; <u>SDNM</u> : Minor to Moderate
Special Designations	<u>Lower Sonoran</u> : None; <u>SDNM</u> : None				
Public Safety and Hazardous Materials	<u>Lower Sonoran</u> : Negligible; <u>SDNM</u> : Negligible				
<b>IMPACTS ON WILDLAND AND FIRE MANAGEMENT</b>					
Air Quality	<u>Lower Sonoran</u> : None; <u>SDNM</u> : None				
Cave Resources	<u>Lower Sonoran</u> : None; <u>SDNM</u> : None				
Cultural and Heritage Resources	<u>Lower Sonoran</u> : None; <u>SDNM</u> : None				
Paleontological Resources	<u>Lower Sonoran</u> : None; <u>SDNM</u> : None				

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Soil Resources	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor				
Vegetation Resources	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Visual Resource Management	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible			<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor	
Water Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wild Horse & Burro Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wilderness Characteristics	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None		<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor		
Wildland Fire Management	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor				
Lands and Realty	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor			<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Minor
Livestock Grazing Management	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor		<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible
Minerals Management	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible			<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible
Recreation Management	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Minor to Moderate		<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Travel Management	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor		<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Minor to Moderate	<u>Lower Sonoran:</u> Moderate; <u>SDNM:</u> Moderate	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Minor to Moderate
Special Designations	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Public Safety and Hazardous Materials	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
<b>IMPACTS ON LANDS AND REALTY MANAGEMENT</b>					
Air Quality	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				
Cave Resources	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Cultural and Heritage Resources	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Minor to Moderate	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor	
Paleontological Resources	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor		<u>Lower Sonoran:</u> Moderate; <u>SDNM:</u> Negligible		
Soil Resources	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Minor				
Vegetation Resources	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Minor				
Visual Resource Management	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Minor to Moderate	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Moderate	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Moderate
Water Resources	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor				
Wild Horse & Burro Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wilderness Characteristics	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None		<u>Lower Sonoran:</u> Moderate; <u>SDNM:</u> Moderate		
Wildland Fire Management	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				

From:	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
Lands and Realty	<p><u>Lower Sonoran:</u> Negligible to Major;</p> <p><u>SDNM:</u> Minor to Major</p>	<p><u>Lower Sonoran:</u> Minor to Major;</p> <p><u>SDNM:</u> Minor to Major</p>	<p><u>Lower Sonoran:</u> Major: Under Alternatives D, over half of the Decision Area would be excluded or avoided to LUA and utility-scale renewable energy development and the least amount of multiuse utility corridors would be allocated, possibly increasing the amount of LUAs rejected from being processed within the Decision Area.</p> <p><u>SDNM:</u> Major: The entire Monument would be an exclusion area to all LUAs, including utility-scale renewable energy development, and no multiuse utility corridors would be allocated, thus forcing all proposed applications for LUAs to be rejected within the Monument.</p>	<p><u>Lower Sonoran:</u> Moderate to Major;</p> <p><u>SDNM:</u> Major: The entire Monument would be an exclusion area to all LUAs, including utility-scale renewable energy development, and no multiuse utility corridors would be allocated, thus forcing all proposed applications for LUAs to be rejected within the Monument.</p>	
Livestock Grazing Management	<p><u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible</p>				
Minerals Management	<p><u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Minor</p>				

From:	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
Recreation Management	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Moderate; <u>SDNM:</u> Minor		<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor
Travel Management	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Moderate; <u>SDNM:</u> Moderate		<u>Lower Sonoran:</u> Major: Alternative D would be the most restrictive alternative to LUAs, due to the fact that the most amount of acres are closed to vehicle use, potentially increasing the access limitations in certain areas of the Lower Sonoran.  <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Moderate to Major;  <u>SDNM:</u> Negligible
Special Designations	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Moderate to Major;  <u>SDNM:</u> Negligible		<u>Lower Sonoran:</u> Major: All special designations would be exclusion areas for all LUAs and would restrict all uses to designated multiuse utility corridors, thus increasing the amount of rejected LUA applications within the Decision Area.  <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Negligible
Public Safety and Hazardous Materials	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
<b>IMPACTS ON LIVESTOCK GRAZING MANAGEMENT</b>					
Air Quality	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				

From:	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
Cave Resources	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Cultural and Heritage Resources	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor		<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible to Minor
Paleontological Resources	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible		<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible
Soil Resources	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> None				
Vegetation Resources	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Minor				
Visual Resource Management	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible to Major			<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible to Major	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible to Major
Water Resources	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> None				
Wild Horse & Burro Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wilderness Characteristics	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None		<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor
Wildland Fire Management	<u>Lower Sonoran:</u> Negligible to Major; <u>SDNM:</u> Negligible to Major				
Lands and Realty	<u>Lower Sonoran:</u> Negligible to Major; <u>SDNM:</u> Negligible to Moderate	<u>Lower Sonoran:</u> Minor to Major; <u>SDNM:</u> Negligible		<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor to Major; <u>SDNM:</u> Negligible

From:	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
Livestock Grazing Management	<p><u>Lower Sonoran:</u> Negligible to Major;</p> <p><u>SDNM:</u> Negligible to Moderate</p>	<p><u>Lower Sonoran:</u> Major: Managing perennial grazing allotments with a reduction in the authorized grazing preference could have a major impact by reducing the long-term viability of some livestock operations. The reduction in livestock numbers could leave some operators with herd sizes too small to support their current operations. Operators would have to acquire additional lands in order to support a viable operation.</p> <p><u>SDNM:</u> Major (Impacts would be the same as described under the Lower Sonoran)</p>	<p><u>Lower Sonoran:</u> Moderate to Major;</p> <p><u>SDNM:</u> Moderate to Major</p>	<p><u>Lower Sonoran:</u> Major: All allotments would be closed to grazing when current permits expire. This would eliminate livestock grazing, which would be a major impact to permittees who would be required to turn to other means to sustain their herds.</p> <p><u>SDNM:</u> Major (Impacts would be the same as described under the Lower Sonoran)</p>	<p><u>Lower Sonoran:</u> Negligible to Major;</p> <p><u>SDNM:</u> Negligible to Major</p>
Minerals Management	<p><u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible</p>			<p><u>Lower Sonoran:</u> Negligible;</p> <p><u>SDNM:</u> Negligible</p>	<p><u>Lower Sonoran:</u> Minor;</p> <p><u>SDNM:</u> Negligible</p>

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Recreation Management	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Negligible to Moderate;  <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u> Minor to Moderate	<u>Lower Sonoran:</u> Negligible;  <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u> Minor
Travel Management	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor			<u>Lower Sonoran:</u> Negligible;  <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor
Special Designations	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor				
Public Safety and Hazardous Materials	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
<b>IMPACTS ON MINERALS MANAGEMENT</b>					
Air Quality	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor				
Cave Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cultural and Heritage Resources	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u> Minor			
Paleontological Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Moderate to Major;  <u>SDNM:</u> Moderate to Major	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u> Minor to Moderate	
Soil Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Vegetation Resources	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Minor to Moderate				
Visual Resource Management	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u> Minor to Moderate	<u>Lower Sonoran:</u> Moderate to Major;  <u>SDNM:</u> Moderate to Major	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u> Minor to Moderate	
Water Resources	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Wild Horse & Burro Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wilderness Characteristics	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None	<u>Lower Sonoran:</u> Moderate; <u>SDNM:</u> Moderate	<u>Lower Sonoran:</u> Moderate to Major; <u>SDNM:</u> Moderate to Major	<u>Lower Sonoran:</u> Moderate; <u>SDNM:</u> Moderate	
Wildland Fire Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Lands and Realty	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Livestock Grazing Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Minerals Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Recreation Management	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				
Travel Management	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				
Special Designations	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Moderate; <u>SDNM:</u> Moderate			
Public Safety and Hazardous Materials	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor				
<b>IMPACTS ON RECREATION MANAGEMENT</b>					
Air Quality	<u>Lower Sonoran:</u> Moderate to Major; <u>SDNM:</u> Moderate to Major				
Cave Resources	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Cultural and Heritage Resources	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Major; <u>SDNM:</u> Major	<u>Lower Sonoran:</u> Moderate; <u>SDNM:</u> Moderate	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor	
Paleontological Resources	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> Minor to Major; <u>SDNM:</u> Minor to Major				
Soil Resources	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				
Vegetation Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Visual Resource Management	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Water Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Wild Horse & Burro Management	Lower Sonoran: None; <u>SDNM</u> : None				
Wilderness Characteristics	<u>Lower Sonoran</u> : None; <u>SDNM</u> : None		<u>Lower Sonoran</u> : Minor; <u>SDNM</u> : Minor		
Wildland Fire Management	<u>Lower Sonoran</u> : Minor; <u>SDNM</u> : Minor				
Lands and Realty	<u>Lower Sonoran</u> : Minor; <u>SDNM</u> : Minor				
Livestock Grazing Management	<u>Lower Sonoran</u> : Minor to Moderate; <u>SDNM</u> : Minor to Moderate	<u>Lower Sonoran</u> : Minor; <u>SDNM</u> : Minor	<u>Lower Sonoran</u> : Minor to Moderate; <u>SDNM</u> : Minor to Moderate	<u>Lower Sonoran</u> : Negligible; <u>SDNM</u> : Negligible	<u>Lower Sonoran</u> : Minor to Moderate; <u>SDNM</u> : Minor to Moderate
Minerals Management	<u>Lower Sonoran</u> : Negligible to Minor; <u>SDNM</u> : Negligible				
Recreation Management	<u>Lower Sonoran</u> : Negligible to Minor; <u>SDNM</u> : Moderate	<u>Lower Sonoran</u> : Moderate; <u>SDNM</u> : Minor to Major	<u>Lower Sonoran</u> : Moderate; <u>SDNM</u> : Moderate	<u>Lower Sonoran</u> : Negligible; <u>SDNM</u> : Negligible	<u>Lower Sonoran</u> : Moderate; <u>SDNM</u> : Moderate
Travel Management	<u>Lower Sonoran</u> : Minor; <u>SDNM</u> : Minor	<u>Lower Sonoran</u> : Minor; <u>SDNM</u> : Negligible to Moderate			
Special Designations	<u>Lower Sonoran</u> : Negligible; <u>SDNM</u> : Negligible	<u>Lower Sonoran</u> : Moderate; <u>SDNM</u> : Negligible		<u>Lower Sonoran</u> : Moderate to Major; <u>SDNM</u> : Negligible	<u>Lower Sonoran</u> : Moderate; <u>SDNM</u> : Negligible
Public Safety and Hazardous Materials	<u>Lower Sonoran</u> : Minor; <u>SDNM</u> : Minor				
<b>IMPACTS ON TRAVEL MANAGEMENT</b>					
Air Quality	<u>Lower Sonoran</u> : Negligible to Moderate; <u>SDNM</u> : Minor	<u>Lower Sonoran</u> : Negligible to Major; <u>SDNM</u> : Minor to Moderate		<u>Lower Sonoran</u> : Minor; <u>SDNM</u> : Minor	<u>Lower Sonoran</u> : Negligible to Major; <u>SDNM</u> : Minor

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Cave Resources	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Cultural and Heritage Resources	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Moderate	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Moderate	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor to Moderate	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor
Paleontological Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> Moderate;  <u>SDNM:</u> Minor to Moderate	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u> Minor to Moderate	<u>Lower Sonoran:</u> Moderate;  <u>SDNM:</u> Negligible to Major	<u>Lower Sonoran:</u> Moderate;  <u>SDNM:</u> Moderate	<u>Lower Sonoran:</u> Moderate to Major;  <u>SDNM:</u> Minor
Soil Resources	<u>Lower Sonoran:</u> Negligible to Moderate;  <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Moderate;  <u>SDNM:</u> Moderate		<u>Lower Sonoran:</u> Moderate;  <u>SDNM:</u> Moderate to Major	<u>Lower Sonoran:</u> Moderate;  <u>SDNM:</u> Moderate
Vegetation Resources	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor to Moderate		<u>Lower Sonoran:</u> Moderate; <u>SDNM:</u> Moderate		
Visual Resource Management	<u>Lower Sonoran:</u> Negligible;  <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor			<u>Lower Sonoran:</u> Negligible;  <u>SDNM:</u> Minor
Water Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wild Horse & Burro Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				

From:	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
Wilderness Characteristics	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None		<u>Lower Sonoran:</u> Moderate; <u>SDNM:</u> Minor to Moderate	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u> Major: This alternative creates the maximum amount of solitude and unconfined recreation of all the alternatives through the closure of existing primitive roads and trails, having a major effect by greatly restricting vehicular access to areas around the Sand Tank Mountains, Javelina Mountain, and Margie's Peak.	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Minor
Wildland Fire Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Lands and Realty	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> None	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor to Moderate	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Minor
Livestock Grazing Management	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> None			<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> None
Minerals Management	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Moderate				<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Negligible

From:	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E
Recreation Management	<p><u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor</p>		<p><u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor to Moderate</p>	<p><u>Lower Sonoran:</u> Moderate to Major; <u>SDNM:</u> Moderate</p>	<p><u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor to Moderate</p>
Travel Management	<p><u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Negligible to Moderate</p>	<p><u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor to Major</p>	<p><u>Lower Sonoran:</u> Minor to Major; <u>SDNM:</u> Minor to Major</p>	<p><u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Major: Allocating 175,700 acres as limited to designated routes and allocating 310,700 acres to OHV closed area would have a major effect on the travel system, by closing areas greater than 10,000 acres to vehicular use. Conversely, large areas for non-motorized access are dramatically increased in size, having a major effect on this travel mode as well. As compared to the No-Action Alternative, where 161,200 acres are closed, this alternative closes much more area to vehicular access.</p>	<p><u>Lower Sonoran:</u> Minor to Major; <u>SDNM:</u> Minor to Major</p>
Special Designations	<p><u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor</p>	<p><u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible</p>	<p><u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Moderate</p>	<p><u>Lower Sonoran:</u> Major; <u>SDNM:</u> Moderate</p>	<p><u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Moderate</p>

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Public Safety and Hazardous Materials	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
<b>IMPACTS ON SPECIAL DESIGNATIONS</b>					
Air Quality	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cave Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cultural and Heritage Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Paleontological Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Soil Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Vegetation Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Visual Resource Management	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u>  Minor to Moderate	<u>Lower Sonoran:</u> Moderate;  <u>SDNM:</u> Moderate	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u> Minor to Moderate	<u>Lower Sonoran:</u> Minor to Negligible;  <u>SDNM:</u> Minor to Negligible	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor
Water Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wild Horse & Burro Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wilderness Characteristics	<u>Lower Sonoran:</u> None;  <u>SDNM:</u> None		<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible		
Wildland Fire Management	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Negligible to Moderate				
Lands and Realty	<u>Lower Sonoran:</u> Minor to Moderate;  <u>SDNM:</u>  Minor to Moderate	<u>Lower Sonoran:</u> Moderate;  <u>SDNM:</u> Moderate	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Negligible;  <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor
Livestock Grazing Management	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor			<u>Lower Sonoran:</u> Negligible;  <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor
Minerals Management	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Minor				

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Recreation Management	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Moderate; <u>SDNM:</u> Moderate		<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor	
Travel Management	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Moderate; <u>SDNM:</u> Moderate		<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor	
Special Designations	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Public Safety and Hazardous Materials	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
<b>IMPACTS ON HAZARDOUS MATERIALS &amp; PUBLIC SAFETY</b>					
Air Quality	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cave Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cultural and Heritage Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Paleontological Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Soil Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Vegetation Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Visual Resource Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Water Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wild Horse & Burro Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wilderness Characteristics	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wildland Fire Management	<p><u>Lower Sonoran:</u> Major: Fires kill and remove native vegetation, allowing disturbed landscapes to be easily invaded by opportunistic non-native invasive plants and weeds like buffelgrass. This is a potentially severe and permanent impact if Sonoran Desert fires convert fire-intolerant native desert habitats to non-native fire tolerant grasslands. In summary, all the actions described can degrade or diminish naturalness over the long term and are considered major both in scope, scale and severity.</p> <p><u>SDNM:</u> Major (Impacts are the same as those discussed in the Lower Sonoran.)</p>				

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Lands and Realty	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor		<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor
Livestock Grazing Management	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor			<u>Lower Sonoran:</u> Negligible;  <u>SDNM:</u> Negligible	<u>Lower Sonoran:</u> Minor;  <u>SDNM:</u> Minor
Minerals Management	<u>Lower Sonoran:</u> Minor to Major; <u>SDNM:</u> Minor to Major				
Recreation Management	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Minor to Moderate				
Travel Management	<u>Lower Sonoran:</u> Moderate; <u>SDNM:</u> Moderate				
Special Designations	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				
Public Safety and Hazardous Materials	<u>Lower Sonoran:</u> Minor to Major; <u>SDNM:</u> Moderate.				
<b>IMPACTS ON SOCIOECONOMICS</b>					
Air Quality	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Cave Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cultural and Heritage Resources	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				
Paleontological Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor				
Soil Resources	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Vegetation Resources	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Visual Resource Management	<u>Lower Sonoran:</u> Negligible to Moderate;  <u>SDNM:</u> Negligible to Moderate	<u>Lower Sonoran:</u> Negligible to Minor;  <u>SDNM:</u> Negligible to Minor			
Water Resources	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Wild Horse & Burro Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Wilderness Characteristics	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Minor to Moderate		<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Minor to Moderate	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Minor to Moderate	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Minor to Moderate
Wildland Fire Management	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Lands and Realty	<u>Lower Sonoran:</u> Negligible to Major; <u>SDNM:</u> Negligible to Minor				
Livestock Grazing Management	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Minor	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible		<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible to Minor
Minerals Management	<u>Lower Sonoran:</u> Negligible to Moderate; <u>SDNM:</u> Negligible				
Recreation Management	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Moderate; <u>SDNM:</u> Negligible to Minor			
Travel Management	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible to Minor	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor			
Special Designations	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Public Safety and Hazardous Materials	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
<b>IMPACTS ON TRIBAL INTERESTS</b>					
Air Quality	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cave Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Cultural and Heritage Resources	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor				
Paleontological Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Priority Wildlife Species and Habitat	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor				
Soil Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				

<b>From:</b>	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>	<b>Alternative E</b>
Vegetation Resources	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor				
Visual Resource Management	<u>Lower Sonoran:</u> Minor to Moderate; <u>SDNM:</u> Minor to Moderate				
Water Resources	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wild Horse & Burro Management	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				
Wilderness Characteristics	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Wildland Fire Management	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Lands and Realty	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				
Livestock Grazing Management	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				
Minerals Management	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				
Recreation Management	<u>Lower Sonoran:</u> Negligible; <u>SDNM:</u> Negligible				
Travel Management	<u>Lower Sonoran:</u> Negligible to Minor; <u>SDNM:</u> Negligible to Minor				
Special Designations	<u>Lower Sonoran:</u> Minor; <u>SDNM:</u> Minor				
Public Safety and Hazardous Materials	<u>Lower Sonoran:</u> None; <u>SDNM:</u> None				